



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



**Project Name:** Shingletown WUI Fuels Treatments

**Project Tracking Number:** 20-FP-SHU-0009

**Project Description Summary:** Please provide a paragraph summarizing proposed project including the location, habitable structures, acres treated, etc. (Please type in blank space below. Please note there is no space limitations).

Lassen Fire Safe Council's landscape-scale WUI hazardous fuel reduction project, including community treatments of overstocked trees, is being implemented as a mentoring effort for the new Shasta County Fire Safe Council, and in partnership with the Shingletown Fire Safe Council. The project is generally located along the Highway 44 corridor from Inwood on the west, Viola on the east and Manton on the south. The area includes over 2,000 habitable structures. The project expands, substantially, the Governor's Highway 44 fuels treatment project. If fully funded, we will be strategically treating 11,000 acres of forest stands on a landscape scale around communities and will dedicate \$800,000 toward community treatment, estimated to cover 800 acres. All the treatments will occur within the SRA and the vast majority of the project lies within a Very High Hazard Fire Severity Zone. The project covers priority areas in the Shasta County CWPP.

**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.

The project is generally located along the Highway 44 corridor from Inwood on the west, all of Shingletown, Lake McCumber, Viola on the east and Manton on the south. The area includes over 2,000 habitable structures.

2. Describe the goals, objectives, and expected outcomes of the project.

The Goals of the project are to:

- Reduce threats to communities from large, severe wildfires by clearing vegetation from critical locations to reduce wildfire intensity and rate of spread on the landscape. Our priorities will be the expansion of treatments off the Governor's Highway 44 project, the highest priority in the state in 2019, and other fuel breaks implemented by SPI, WM Beaty and PG&E (Primary Partners) to trend toward the landscape-scale level. Areas where large blocks of our Primary Partners properties abut communities will also be a high priority.

- Reduce fire hazard in and near the communities of Inwood, Shingletown, Manton, Lake McCumber, and Viola and protect critical infrastructure.
- Provide Mentorship to the recently established Shasta County Fire Safe Council as to how to plan for, acquire funds for, and implement large, landscape-scale fire prevention and forest health treatments.
- Improve ingress and egress along roads used by the public and used during fire suppression activities.
- Increase the capacity of the Shingletown Fire Safe Council to implement their community defensible space assistance, Special Needs Assistance and their green waste disposal programs.

The measurable project Objectives are to:

- Successfully acquire funds and implement treatments. Mechanically thin trees on the greater landscape to open canopies and remove surface and ladder fuels on 8,000 acres through biomass utilization treatments; favor large trees for retention. Process the removed material as logs or chips for renewable energy.
- Remove dense understory and surface and ladder fuels by mastication on 3,000 acres on the greater landscape and along roadways.
- Follow-up mastication treatments with emergent brush (herbicide) treatments to make these sustainable for 10 years.
- Thin up to 700 acres within the densely inhabited communities to reduce threats to public and private infrastructure including powerlines with \$700,000 of our requested funds.
- Provide hand work and community chipping under Shingletown Fire Safe Council's defensible space and Special Needs Assistance Programs (SNAP) to help our elderly and/or infirm bring their property to minimum defensible space conditions (100 acres of treatment). In addition, a portion of the \$100,000 requested for this community work will support Shingletown FSC's program permitting neighbors to deposit their defensible space clearings at the Shasta County and Waste Management Transfer Station where the piles mellow before they are disposed of in the spring of the following year.
- Improve and Expand Shingletown FSC's SNAP and community chipping program through the purchase and use of a self-propelled chipper (\$100,000) and trailer to haul the chipper (\$15,000).

The following Outcomes are expected by the end of the project period:

- *Creation of a fire resistant and resilient forested landscape.* Treatment of 11,000 acres will result in a landscape that is more resistant and resilient to wildfire and other disturbances such as drought, pests, and climate change.
- *Reduced risk of large, damaging wildfires.* Fuel removal treatments would reduce expected fire intensity, severity, and spread. Following treatment, fires would be more likely to burn as surface fires. Canopy base height and torching index would increase following treatment, and therefore, the probability of a surface fire spreading upward to the canopy, and resulting in passive crown fire, would decrease.
- *Reduction of wildland fire risk to Inwood and the low-income communities of Shingletown, Manton, and Viola* and over 2,000 habitable structures within project's area of influence. Reduced hazardous fuel loads on lands surrounding communities will reduce the potential for ember showers raining down on the project communities.

- *Reduced risk of utility-caused ignitions in the communities.*
- *Reduction of wildland fire risk for the public that traverses the Highway 44 corridor.*
- *A safer and more effective environment for suppression resources to operate in the event of a wildland fire.* The treated landscape would provide a safer and more efficient environment for fire crews to take action on wildland fires that could potentially spread and destroy private property, communities, watersheds, and wildlife. Treatments would result in reduced flame lengths if a fire were to occur, and therefore, would provide fire suppression personnel a safer location from which to take action against a wildfire, as well as reduce expected fire intensity and severity. Suppression efficiency would be improved within the project area by creating an environment where wildfires would burn at lower intensities.
- *Safer evacuation routes* for community residents and visitors to the Lassen National Forest and Park.
- *Avoidance of carbon losses to catastrophic wildfire.*
- *Minimization of project-related GHG emissions.* Chipping and mastication, rather than hand-thinning with piling and burning, were chosen as fuel-reduction methods.
- *Healthy forests that are more effective at sequestering carbon.* Improved forest health will lead to increased carbon uptake by remaining trees.
- *Implementation and expansion, through landscape-scale fuel treatments, of the goals, objectives, and treatments detailed in the Shasta County Community Wildfire Protection Plan and the recommendations of the local FIREWISE Community's Action Plan.*
- *Increased community resiliency.* Community engagement in project planning and creating defensible space will increase resiliency of these communities, especially under anticipated future climate conditions where drought and weather that is more conducive to fire ignition and spread.
- *Improved capacity for planning and implementing landscape-scale projects.* LFSC is using the Shingletown Project as an opportunity to mentor the Shasta Fire Safe Council in the development and implementation of landscape-scale treatments.

3. Provide a clear rationale for how the proposed project will reduce the risks associated with wildfire to habitable structures in the WUI.

The entire project area lies within the WUI. The majority of the project area consists of overstocked forest stands that are at high risk of wildfire. This includes not only the forests that surround the project's communities, but the forest within the communities themselves. In this project our primary focus is work out on the landscape where we can get "the most bang for the buck". But it is also important to begin needed treatments within the communities where we are dedicating about 10% of our project funds where we can engage residents to open up the forest and reduce hazardous fuel loads. By implementing treatments both on landscape and the communities, wildfire risk will be greatly reduced. This same strategy helped CALFIRE put down the Hog Fire last year before it could reach Lake Forest.

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.

Assets at risk to wildfire that will benefit from our project include: domestic and irrigator water supplies, powerlines and power facilities, communication facilities, private

campgrounds, two schools, houses of worship, a community center, 2 fire stations, and the Shingletown commercial district.

5. Is the scale of the project appropriate to achieve the stated goals, objectives and outcomes discussed in Item 2 above?

This is a large-scale project. We have developed solid partnerships with WM Beaty, SPI and PG&E that make a project of this scale possible. With the communities spread across Shingletown Ridge in a very high fire risk area this is the size and scale needed to meet our goals and objectives.

In the event that CAL FIRE needs to reduce our funding request we will want to retain the amount requested for community treatments and equipment and implement our landscape scale treatments based on the priorities outlined in this application. These priorities include prioritizing treatments from the community out so if we are awarded only:

\$3,000,000 we would be able to conduct all the community targeted work plus approximately 5,000 acres of landscape scale treatments surrounding the community.

At \$5,000,000 we would be able to conduct all the community targeted work plus approximately 8,000 acres of landscape scale treatments surrounding the community.

If our full request is granted, we would be able to conduct all the community targeted work plus approximately 14,000 acres of landscape scale treatments surrounding the community.

As we have stated, we are more than able to implement all the treatments we have proposed and this would provide the optimum level of fire prevention treatments. If we are partially funded, we will make additional subsequent requests in the future in order to complete the entire project.

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?

Our Project will utilize left over woody biomass. The majority of the project's removed material will be delivered to Shasta SRM, a biomass processing facility that will utilize the chips that will be produced by our project for the production of electricity. This will 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. (Please type in blank space below. Please note there is no space limitations).

### **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? (Please type in blank space below. Please note there is no space limitations).

#### **The project supports the following goals and objectives of the 2018 California Strategic Fire Plan:**

Goal 1: Our project has identified and evaluated wildland fire hazards and recognized life, property and natural resource assets at risk, including watershed, habitat, social, and other values of functioning ecosystems. It has facilitated the sharing of all analyses and data collection across all ownerships for consistency in type and kind. In addition, our project specifically addresses Objective (h)<sup>1</sup> through Cal Fire's participation in the planning process with local stakeholder groups (e.g., SPI, W.M Beatty, PG&E, BLM, Shasta County, Western Shasta RCD, Shasta SRM, Shingletown Fire Department, Shingletown Fire Safe Council, Shasta County Fire Safe Council, and community members) to validate and prioritize the assets at risk.

Goal 2: The project promotes and supports local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities. Project planning has been a collaborative effort among individual landowners, private and federal land managers, and representatives from local agencies.

Goal 3: The project supports and participates in the collaborative development and implementation of wildland fire protection plans and other local, county and regional plans that address fire protection and landowner objectives, as outlined under Goals 1 and 2 above and in

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<sup>1</sup> Goal 1, Objective h.) Engage and participate with local stakeholder groups (e.g., fire safe councils and others) to validate and prioritize the assets at risk.

the community support section in this Scope of Work. The project supports objective (a)<sup>2</sup>; it is a priority project of both the Lassen County Community Wildfire Protection Plan and of the CAL FIRE Lassen Modoc Unit Fire Plan. In addition, the project supports objectives (b) and (e)<sup>3</sup> of Goal 3 as it is a community-based collaborative initiative that uses public/private partnerships. Shasta Forest Village in Shingletown is a FIREWISE community. The project was inspired by a field trip to LFSC's Big Valley Mountain Project (18,000 acres of treatments) attended by the Shasta County Fire Safe Council, and representatives from CAL FIRE and the Shasta County Board of Supervisors. Representatives of CAL FIRE and Shasta County Board of Supervisors encouraged mentorship of Shasta County Fire Safe Council by LFSC to train this new council in the implementation of large, landscape-scale treatments (rather than fuel breaks alone).

Goal 4: Our project will increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage, and impacts to natural resources from wildland fires. Education objectives (a), (b), and (c)<sup>4</sup> are accomplished through the active Shingletown Fire Safe Council (FSC). Education objectives will be accomplished through Shingletown FSC meetings (when resumed) and from the publicity that will be generated from the media coverage we will promote during our project's implementation. This project has been developed in collaboration with the Shasta County and Shingletown Fire Safe Councils. Both entities have been, and will continue to be, assisting with our efforts to keep the communities informed. We have been, and will continue to use, social media for our outreach. We will be conducting several public field trips of the project area each year. We will also issue press releases related to the CCI/FP Grant on a regular basis in an effort to continually engage the public. A project sign will be erected near State Highway 44. We will also be conducting Risk Assessment in the Home Ignition Zone class for the residents in the Shingletown area (funded by Shasta County Title III funds). This class focuses on what residents can do to reduce structural ignitability. It will be held as soon as COVID-19 restrictions allow for large, >50 person, gatherings to be held. Shingletown FSC is a volunteer organization with a high number of volunteer hours that focuses on educating landowners and facilitating creation of defensible space within the community (e.g., by helping older residents create defensible space, running a community chipping program where residents can bring green waste to the dump to be chipped by volunteers).

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<sup>2</sup> Goal 3, Objective a.) Coordinate Unit Fire Plans with regional and county fire plans or Community Wildfire Protection Plans to encourage and support one consistent approach.

<sup>3</sup> Goal 3, Objective b.) Create and support venues in which individual community members can be actively involved in local fire safe councils, community emergency response teams, FIREWISE, collaboratives, and other community-based efforts to develop readiness plans and educate landowners to mitigate the risks and effects of wildland fire.

Goal 3, Objective e.) Maximize available resources to strengthen planning and increase implementation efforts through the development of public/private partnerships.

<sup>4</sup> Goal 4, Objective a.): Educate landowners, residents, and business owners about the risks and their incumbent responsibilities of living in the wildlands, including applicable regulations, impacts to natural resources, and prevention measures and preplanning activities.

Goal 4, Objective b.) Educate landowners, residents, fire safe councils, and business owners to understand that fire prevention is more than defensible space, including why structures ignite, the role embers play in such ignitions, and the importance of fire safe building materials, designs, and retrofits.

Goal 4, Objective c.) Facilitate activities with individuals and organizations, as appropriate, to assist individual property owners in complying with fire safe regulations, including utilizing social media and emerging technologies.

Goal 5: Our project integrates fire and fuels management practices with landowner and land-manager priorities. More specifically, the project supports Objectives b, e, f, g and h<sup>5</sup> as follows:

- Objective b.): Landowners have been key partners in the planning process since project initiation; partners have since identified and pursued opportunities to plan, fund, and implement projects.
- Objective e.): The project will provide an opportunity for LFSC to mentor the Shasta County Fire Safe Council on all aspects of administering large, landscape-scale projects.
- Objective f.): The project will improve forest health, contribute to sustainable commercial forest management, promote commercial forestry through the sale of forest products and use of local contractors, and will provide a biomass stream to a local power facility.
- Objective g.): Shingletown FSC meetings are a forum to increase public education and awareness in support of ecologically sensitive and economically efficient vegetation management activities, including prescribed fire, grazing, forest thinning, and other fuels treatment projects.
- Objective h.): The project is a multi-agency public-private collaboration with the goal of implementing cross-boundary fuel treatments at the landscape level to make the forest and watersheds within and surrounding Shingletown more resilient, and thereby to reduce their wildfire risk.

The project supports and exceeds the goals and objectives of the CAL FIRE Unit Fire Plan and the Shingletown/Manton Chapter of the Shasta County CWPP. The project will complement and implement high priority projects identified in the Shasta County CWPP for the Shingletown/Manton Planning Area by creating the firebreaks identified in the plan and building upon these firebreaks to create landscape-scale treatments which will be more effective at reducing the severity, spread, and scale of wildfires. These projects include A-Line Viola North, 100 Road FB (north), 100 Road FB (east), McCumber Flat-B Line Road, Ponderosa Way #3-Grace Resort, and Shingletown Ridge Phase 2.

The project also supports CAL FIRE's strategic plan. The project supports Goal 1 (Improve Our Core Capabilities) and its corresponding Objective 3 of the California Strategic Fire Plan. Specifically, the project supports CAL FIRE's dedication to the protection of the State's wildland ecosystem services including watershed health, wildlife habitat, and recreation areas by implementing landscape-scale treatments to protect these resources (see project co-benefits). The project also supports Goal 1 though contributing to pre-fire management activities

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<sup>5</sup> Goal 5, Objective b.): Increase support of landowner-initiated fuels reduction by using all available authorities and programs.

Goal 5, Objective e.): Assist collaborative partners by education, increasing grant funding and administration capacity, providing technical assistance, and other means that achieve fuels reduction work on the landscape.

Goal 5, Objective f.): Promote forest and rangeland health and resilience through fuels reduction, and sustainable commercial forest management. Improve markets for and utilization of all forest products, including dead trees, waste, and biomass.

Goal 5, Objective g.): Increase public education and awareness in support of ecologically sensitive and economically efficient vegetation management activities, including prescribed fire, grazing, forest thinning, and other fuels treatment projects.

Goal 5, Objective h.): Expand the development of collaborative multi-agency/landowner fuels reduction policies, plans and activities at the watershed and fireshed level.

(specifically, creation of fuel breaks and removal of hazardous vegetation) identified in the CAL FIRE Shasta Trinity Unit (SHU) Fire Plan.

The project contributes to Goal 1, Objective 3 to “Expand forestry and fire prevention through effective natural resource management programs, education, inspections, and land use planning,” by proactively reducing wildfire threats through fuels reduction, forest management, and promotion of forest resilience through projects that not only encompass treatments prioritized in the SHU Unit Fire Plan, but by also expanding these treatments to create fire resistant and resilient landscapes. The project was planned with the input from SHU CAL FIRE Unit.

The project will also further the goals of the California Forest Carbon Plan, California’s Natural and Working Lands Implementation Plan and the Global Warming Solutions Act of 2006 Climate Change Scoping Plan as described below.

Global Warming Solutions Act of 2006 (AB 32): The project is consistent with the Global Warming Solutions Act of 2006 as it will contribute to the reduction of GHGs statewide; specifically, it will reduce CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions from wildfire. The project will also help mitigate risks associated with climate change to natural landscapes and expand the use of renewable energy sources. The project will also contribute to meeting the AB 32 goals of developing and implementing California’s Natural and Working Lands Climate Change Implementation Plan (NWL CCIP) and the California Forest Carbon Plan (FCP) to achieve GHG reductions.

NWL CCIP and FCP: The NWL CCIP, FCP, and the Shingletown project share the goals of: improving forest health and resilience; increasing the pace and scale of forest health project implementation; increasing biomass utilization by using harvested biomass to produce renewable energy; supporting partnerships among varied stakeholders (key partners are: Shasta RCD, County and Local Fire Safe Councils, private land managers) to identify landscape-scale project needs and collaboratively plan and implement projects; creating capacity for collaborative planning and implementation at the landscape scale (LFSC is using the Shingletown Project as an opportunity to mentor the Shasta County Fire Safe Council in the development and implementation of landscape-scale treatments); reducing GHG emissions from wildfire; reducing wildfire severity; enhancing carbon storage in forested ecosystems; leveraging and supporting technical assistance providers (the Shasta Resource Conservation District (RCD) is a key partner in the project); leveraging local funding (local funds provided as project match (chip value) will help pay for part of the treatment cost); and increasing the resilience of rural communities and economies - while at the same time seeking to protect and improve resources provided by CA’s forestlands including air quality, water quality and quantity, wildlife habitat, and recreation resources. Examples of how the project will support these goals are detailed below under project co-benefits.

In addition, the Shingletown Project will implement the key strategies for managing forests in the Sierra Cascades and Eastside Region identified in the NWL CCIP which are to: improve forest health and reduced wildfire severity; and increase biomass utilization

### **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)

The 98% of our project treatments will be implemented within the Very High Fire Hazard severity zone.

2. Describe the geographic proximity of the project to structures at risk to damage from wildfire in the WUI. (Please type in blank space below. Please note there is no space limitations).

All our project's treatments will be implemented within the Shingletown/Manton WUI. The project is located along Shingletown Ridge which has been identified as an area of very high fire risk and concern; high enough that the Governor's Highway 44 project was ranked the #1 project in the state. The southern aspect of the project with its high brush fields is of particular concern. Any ignition there has the potential to rapidly race up the slope in to the communities and structures above. The project's treatments surround and are within the communities above, making for effective remedy.

#### **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?

Our Project includes matching funds and in-kind contributions that will extend its impact as follows:

The project will utilize chip revenue, estimated to be \$6,160,000 from Shasta SRM to pay for the portion of the implementation treatments that are not paid for with CCI/FP grant funds.

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.

This project has been developed in collaboration with the Shasta County and Shingletown Fire Safe Councils. Both entities have been, and will continue to be, assisting with our efforts to keep the communities informed. We have been, and will continue to use, social media for our outreach. We will be conducting several public field trips of the project area each year. We will also issue press releases related to the CCI/FP Grant on a regular basis in an effort to continually engage the public. A project sign will be erected near State Highway 44.

We will also be conducting Risk Assessment in the Home Ignition Zone class for the residents in the Shingletown area. This class focuses on what residents can do to reduce structural ignitability. It will be held as soon as COVID-19 restrictions allow for large, >50 person, gatherings to be held.

3. Describe any plans to maintain the project after the grant period has ended.

The majority of the CCI/FP Grant funds will occur on lands owned by private timber companies and PG&E. They have committed to maintaining the benefits of our treatments for a minimum of 10 years.

The balance of our project work will occur on private land within the communities where forests will be thinned and dead and dying trees and trees that pose a threat to community infrastructure in the event of a wildfire will be removed. Much of this work in the residential setting is self-maintaining in that once these trees are gone, they are gone.

4. Does the proposed project work with other organizations or agencies to address fire hazard reduction at the landscape level?  
(Please type in blank space below. Please note there is no space limitations).

Our project has been developed in partnership with the Shasta County and Shingletown Fire Safe Councils. The Shasta County Board of Supervisors has been actively engaged in our project's development, including the allocation of Title III funds awarded to Lassen County Fire Safe Council to help pay for the cost of writing this application and to conduct a Risk Assessment in the Home Ignition Zone class for the residents in the Shingletown area. Western Shasta Resource Conservation District (WSRCD) has agreed to act as our Lead Agency for CEQA clearances for activities not covered by the California Forest Practice Act.

In addition to all the above the community conducted both in person and online petition drives that acquired 474 signatures in support of the project. Copies of the petitions are included in the Letters of Support folder in SharePoint.

## **E. Project Implementation**

1. Discuss the anticipated timeline for the project. Make sure to take seasonal restrictions into account.

It should be noted that our project can be subject to wet weather in the winter and fire weather restrictions in the summer and fall.

2021	August:	Execution of our Grant Agreement with CAL FIRE Begin the development of a community landowner data base to be used in landowner sign-ups. Begin Bidder outreach for treatments. Begin resources evaluations for WSRCD CEQA Exemptions of work not conducted under the Forest Practice Act landowner sign-ups Advertise for bids for <b>landscape scale biomass &amp; mastication treatments (LSBMT)</b>
	September:	Receive bids for LSBMT
	October:	Award bids for LSBMT Forest Practice Act Exemptions begin to be filed by our major partners and treatments begin under those exemptions Begin landowner sign-ups within the communities (continue through 2024 or 2025)

	November:	Complete resource evaluation and obtain CEQA clearance for work not conducted un the California Forest Practice Act.
2022	April-November:	LFSC RPFs file Forest Practice Act Exemptions Conduct LSBMT treatments Begin Community treatments (LFSC & SFSC)
2023	April-November:	Continue LSBMT treatments Continue Community treatments (LFSC & SFSC) Emergent Brush Treatments of 2022 Mastication Work
2024	April-November:	Conduct LSBMT treatments Continue Community treatments (LFSC & SFSC) Emergent Brush Treatments of 2023 Mastication Work
2025 (or 2026)	March 15 <sup>th</sup> :	Project Closeout

**2. Verify the expected timeframes to complete the project will fall under the March 15, 2025 (or 2026) deadline.**

Our timeline above ensures that with at least 3 full operating seasons we will be able to complete our project within our projected timeline.

**3. Verify the expected timeframes to complete the project will fall under the March 15, 2025 deadline.**

LFSC will complete our project by either March 15, 2025 or March 15, 2026 based on what pot of funds CAL FIRE may have available to fund our request.

**4. Describe the milestones that will be used to measure the progress of the project.**

Execution of CAL Fire Contract  
Issue Press Release on Project Award  
Advertise for Bids for LSBMT  
Begin Community Landowner Sign-up  
Receive Bids for LSBMT  
Award Contracts for LSBMT  
CEQA Clearance for Work not Conducted under California Forest Practice Act  
Award Contracts for Community Treatments  
Set-up Pretreatment Monitoring Transects w/photos  
Implement Treatments (2021-2025 or 2026)  
Press Releases during Implementation  
Post Treatment Monitoring w/photos  
Project Closeout  
Project Completion Press Release

**5. Describe measurable outcomes (i.e., project deliverables) that will be used to measure the project's success.**

8,000 acres of biomass thinning treatments will be completed  
3,000 acres of mastication treatments will be completed  
112,000 BDT of chips delivered for generation of electricity  
800 acres of community treatments  
3 project field trips will be conducted  
4 project press releases will be issued  
1 final report will be issued

6. If applicable, how will the requirements of the California Environmental Quality Act (CEQA) be met?  
(Please type in blank space below. Please note there is no space limitations).

For work covered by the California Forest Practice Act CEQA requirements will be met by the filing of Timber Harvest Permits or Exemptions. For work within the communities LFSC consulting RPFs will file Exemptions, with a preference for multi ownership Forest Fire Prevention Exemptions. For work on SPI, WM Beaty and PG&E, Forest Practice Permits or Exemptions will be filed by their RPFs. In some cases, work may be accomplished under one of their filed or amended THPs.

There are currently THPs within the proposed treatment areas and the potential for additional THPs during the duration of the Grant. The Grant funds will not be utilized to complete any work required for compliance within a THP or the Forest Practice Act in association with the THPs. If a current THP covers any area where we will conduct treatments it will either be closed out in full compliance with the Forest Practice Act and a new Plan, Permit or Exemption will be filed, or; the THP will have to obtain a partial work completion report from CAL FIRE for those portions of the THP where work is proposed within grant, prior to the start of any grant work within the THP area.

Work not cover by California Forest Practice Act CEQA clearance will be obtained through a Notice of Exemption issued by the Western Shasta Resource Conservation District. They have agreed to be our CEQA Lead Agency.

## **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.

Over the past 18 years Lassen Fire Safe Council, Inc. (LFSC) has treated and restored over 80,000 acres of forests and watersheds. Over the past 2 years we have averaged 9,000 acres a year in treatments and we are on track to reach an additional 9,000 acres of treatment in 2021. LFSC was awarded over \$18,000,000 in grant funds in the 2018 round of CCI grants. We will expend all these funds and exceed the projects' deliverables by year's end. LFSC has a proven track record of delivering.

LFSC has a unique focus for a Fire Safe Council: Landscape Scale treatments. While we do conduct treatments around homes in most of our projects, we also believe in conducting treatments on a landscape scale both around communities, often for 2-3 miles out, and on stand-alone projects. Our largest project to date, and nearing completion, is our Big Valley Mountain project (18,000 acres). We also do NEPA and CEQA clearance work for our federal partners including the Bureau of Land Management and the U.S. Forest Service. LFSC has Master Stewardship Agreements with the Lassen (LNF) and Plumas (PNF) National Forests. On the LNF we are nearing completion of the 4,500-acre USFS portion of our Diamond Mountain Initiative. On the PNF we have just completed the NEPA and CEQA phase of our 4,233-acre Bootsole project and we are just beginning the NEPA/CEQA phase of our 10,000+ acre Lone Spring project. Both of these projects are part of our Thompson Peak Initiative.

The key to our success lies in our well-rounded Board of Directors, experienced staff and our project contractors. The Chair of our Board is retired CALFIRE Region Chief Lloyd Keefer. Our Managing Director, Tom Esgate, is a Certified Conservation Planner with wildland firefighter experience who has been with LFSC for 18 years. His assistant, Katlyn Lonergan, has a Master's Degree in Community Engagement and joined our organization a year ago. We employ a PhD Ecologist, four Registered Professional Foresters and a botanist/biologist. In addition, we have an experienced group of treatment contractors who have worked with us for years including one, Tubit Enterprises, Inc., who has been with us for 18 years. They want to work for LFSC because they believe in our mission and because we make great efforts to pay them promptly, often within 48 hours of invoice. At the peak of last season LFSC employed 150 people in the forest products industry. We expect a similar level of employment this year.

We have long-established relationships with Sierra Pacific Industries, PG&E and WM Beaty and Associates which have greatly increased our capacity to implement landscape-scale treatments. Together we have developed trust and methods that allow for LFSC to plan for and implement projects that reduce fuel loads and protect resources and communities. This ensures that our Shingletown project, which is being implemented on SPI, PG&E and WM Beaty managed lands, will have a successful outcome.

LFSC has built up our capacity to treat and restore 9,000+ acres per year. This is an amount in excess of what many National Forests can accomplish. Being awarded this grant will help us keep up this pace and scale. We have the experience and track record to bring this project and all the other 2021 CCI projects we have applied for to a successful outcome.

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. (Please type in blank space below. Please note there is no space limitations).

LFSC Managing Director, our administrative assistant and a soon to be hired accounts specialist, with Board of Directors oversight, will track project expenses and maintain records. LFSC uses Generally Accepted Accounting Principles procedures, follows adopted Policies and Procedures, uses QuickBooks accounting software and Project Tracking Spreadsheets, and engages the services of a CPA Bookkeeper and a CPA Accounting Firm.

## **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.

For our CCI/FP Grant:

82% of grant funds will be used to pay for Contractor Treatments

3% of grant funds will be used to pay for Project Management

1.7% of grant funds will be used to pay for RPF Services

0.1% of grant funds will be used to pay for vehicle mileage reimbursements

1.3% of grant funds will be used to purchase a chipper & trailer

10.7% of the grant funds will cover Indirect Charges

Total = 100% (rounded)

Our purchased chipper and trailer will be utilized by Shingletown Fire Safe Council for their Defensible Space and Special Needs Assistance Program through and beyond the grant term. They have sufficient funds within their annual budget to provide for the maintenance of the chipper.

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.

With regard to our biomass utilization chipping costs and tree removal: Our contractor/s will retain the ownership of the removed material as partial compensation for the services they are providing. Based on our past projects and the forest products industry markets for our area, we know that the value of the material alone will not pay for the treatments. Therefore, contractors will bid on a project subsidy to perform the work with the best and lowest bidder awarded the contract. Based on recent bids for other projects, and the current economic conditions we feel that our budget is reasonable.

Our percentages for the project costs for management and administrative functions, and indirect are very low compared with similar projects.

3. Is the total project cost appropriate for the size, scope, and anticipated benefit of the project?

When considering the impacts of a large catastrophic fire and its threat to the communities, our proposed landscape scale treatments and community treatments are exactly what is necessary to reduce wildfire risk to the greater Shingletown area.

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).

Project administrative expenses will cover cost allocated project portions of expenses that must be allocated across all LFSC projects such as our office, vehicles, insurance, accounting & bookkeeping services, invoice and payment processing, audits, office supplies, postage, etc. per the LFSC Cost Allocation Plan. All of these costs are necessary for successful project implementation.

5. Explain each object category in detail and how that would support meeting the grant objectives.  
(Please type in blank space below. Please note there is no space limitations).

Assistant Project Manager: Develops Landowner Database; Conducts Landowner Sign-ups; Assists with Project Management; All critical aspects of the project's successful implementation.

CEQA Clearance Work: Needed to expend CAL FIRE Funds on aspects of the project that may not be able to be conducted under the California Forest Practice Act. This would cover any needed archaeology, botany, biology/wildlife surveys, etc.

Biomass Proceeds to be used Toward Treatments: The project will utilize chip revenue, estimated to be \$6,160,000 from Shasta SRM to pay for the portion of the implementation treatments that are not paid for with CCI/FP grant funds. Our contractors gain ownership of the removed material as partial compensation for the services they provide. They bid on a per acre subsidy to fully cover their costs

RPF Services: Registered Professional Forester Services as required by the California Forest Practice Act.

Project Management & Monitoring: Necessary for the overall success of our project which is scheduled to run up to four years at 500 hours per year dedicated to this project.

Biomass Utilization Treatments: Through our major project partners, WM Beaty, SPI, PG&E and BLM we have 14,681 acres for potential treatments. We will implement these treatments on 8,000 acres based on the priorities we have spelled out in our application.

Mastication Treatments: Through our major project partners, WM Beaty, SPI, PG&E and BLM we have 14,681 acres for potential treatments. We will implement these treatments on 3,000 acres based on the priorities we have spelled out in our application and where fuels don't warrant Biomass Utilization Treatments.

Emergent Brush Treatments: The application of herbicide on all masticated ground to make these treatments sustainable for at least 10 years.

Community Treatments: These treatments will take place in the developed portions of the communities and will be at higher costs than the landscape scale treatments due to the challenges of working around homes an infrastructure. They are divided up as follows:

1. Treatments conducted by our partner the Shingletown Fire Safe Council in their defensible space and SNAP programs. \$100,000 is allocated for this over the grant term. Initially SFSC planned to apply for their own CCI grant but we decided to work together as a team.
2. Biomass thinning (where achievable) on the community level, hand crew thinning treatments (where Biomass thinning treatments are not feasible) and hazard tree removal around homes and infrastructure. There is a great need for this work in the Shingletown area communities and we look at this as a first step at meeting these needs. We plan to leverage our CCI funds to acquire additional grant funds for this work. \$700,000 is allocated toward these treatments.

We feel it is critical to have community involvement in the overall project and community treatments are a great way to accomplish this.

Travel/Mileage: Reimbursement for the travel mileage necessary to implement the project over the grant term. We have estimated 15,000 miles will be driven on this project over the grant term.

Equipment: A self-propelled chipper and trailer will be purchased for the use of the Shingletown Fire Safe Council on their community treatment programs. Over the years they have struggled finding chipping contractors and they feel they'd be better off running their own chipper. They have a lot of capable volunteers who are willing to learn how to operate and maintain the chipper.

Indirect: In order to keep our organization afloat we need to have our overhead covered which includes an office we own, utilities and all the other costs that are not tied exclusively to the project. Project administrative expenses will cover cost allocated project portions of expenses that must be allocated across all LFSC projects such as insurance, accounting & bookkeeping services, invoice and payment processing, audits, office supplies, postage, etc. per the LFSC Cost Allocation Plan. All of these costs are necessary for successful project implementation.

## **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?

The project will reduce GHG emissions primarily through avoiding emissions from future wildfires and minimizing loss to pests. Additional benefits from the project will accrue through carbon sequestration by trees retained within the project area. We are willing and able to work with CAL FIRE during implementation to calculate project emissions.

2. Is the project located in a Low-Income or Disadvantaged Community? If not, does the project benefit those communities. Please explain.



Most of the project area lies within a low-income census tract and will benefit the Low-Income Communities of Shingletown, Manton, and Viola.

3. What are the expected co-benefits of the project/activity (i.e., environmental, public health and safety, and climate resiliency)?

Co-benefits of the project include:

*Reduced risk of damage to watersheds associated with catastrophic wildfire.* Unnaturally large or severely burned areas pose a problem to watershed health. In terms of reduced cover and denuded soils, they are at a significant risk to deleterious rates of erosion. The combination of no cover or stabilizing vegetation, loose ash and soil, and the potential for rapid snow melt in burned and regenerating areas can result in harmful quantities of sediment reaching watercourses in and around these areas.

*Improved long-term surface water quality.* Reducing wildfire risk will reduce risk of concomitant decreases in water quality.

*Increased quantity of water available for recharging surface and ground waters.* Thinning canopies that are currently 60-90% to 40-50% canopy cover will result in 16-40% less precipitation (primarily snow) intercepted by and evaporated from canopies and less water lost to transpiration. By reducing water loss from overstocked forest, flows to surface waters and deep drainage will increase modestly, which is expected to increase downstream water delivery.

*Improved air quality and reduced risk of associated air quality concerns associated with smoke.* Potential impacts from smoke inhalation in the event of a catastrophic wildfire would be lessened or avoided. The project will also minimize effects to air quality by chipping and masticating thinned materials rather than piling and burning.

*Reduced risk to wildlife, fish, and native plant habitat* from adverse effects associated with catastrophic wildfire.

*Improved local socioeconomic conditions.* The economy will be supported by using local contractors to complete work and sustaining local bioenergy facilities.

*Increased biomass utilization and production of renewable energy.* The project will produce biomass fuel to produce renewable energy at a local biomass generation facility, Shasta SRM Power.

*Expansion of completed hazardous fuels work in the area.* Proposed treatments will expand upon prior work on of the Governor's Highway 44 Project and fuel breaks implemented by WM Beaty, SPI and PG&E.

*Implementation of locally-driven solutions; and employment of strong partnerships* among federal, state, local, and private entities to develop greater awareness of wildfire threats in the local communities, address the key drivers of catastrophic fires, and increase the acreage treated to improve the resilience of ecosystems and threatened communities.

*Protection of working forest and agricultural landscapes* adjacent to the project area from wildfire.

*Protection of recreation resources* from wildfire damage. The greater Shingletown area is used heavily for recreation during the summer months; private campgrounds will also be protected (Lake McCumber Campground and Mt. Lassen/Shingletown KOA).

4. When are the Greenhouse Gas emissions and/or co-benefits expected to occur and how will they be maintained?  
(Please type in blank space below. Please note there is no space limitations).

Co-benefits are expected to occur upon project implementation. The majority of GHG benefits from the project will result from avoidance of carbon lost to pests and wildfire. Benefits associated with conversion of biomass to renewable energy will occur between treatment initiation in 2021 and completion in 2026. Additional GHG benefits will accrue as treated stands continue to take up carbon over time. The majority of the CCI/FP Grant funds will occur on lands owned by private timber companies and PG&E and they have committed to maintain the benefits of the proposed treatments for a minimum of 10 years.