

# Plumas County Fire Safe Council



The LaPorte Road Hazardous Fuel Reduction Project (LRHFR) was developed as part of the Plumas County Fire Safe Council's (PCFSC) strategy to reduce hazardous fuel conditions surrounding communities at risk. The project is located in the general LaPorte Road area, T24N, R10E, within Sections 20,21,27 & 28, MDBM, in Plumas County. Access is available from State Highway 70/89 to LaPorte Road. Approximately 95 acres has been identified for hazardous fuels reduction, including biomass and hand treatments. No sawlogs are to be removed. This prospectus is intended to solicit potential contractors interested in performing hazardous fuel reduction tasks to the specifications provided below.

It is the goal of the PCFSC to remove excess surface and ladder fuels to create a fire resilient stand. While it is desirable that biomass generated by the project be delivered to a local biomass energy plant, PCFSC is not limiting the treatment types or methods utilized for fuel reduction. The PCFSC will accept non-commercial bids for this project (for example, mastication, broadcast chipping, etc).

Biomass material would go to SPI, Quincy. Approximately 800 BDT of chips are estimated to be available to be harvested during operations. *These numbers are estimates based on timber cruise data and previous per-acre harvest averages for similar stand types.*

Project funding has been provided by the State of California Community Assistance Grant, Proposition 40.

## **Project Permit Specifications:**

The 2008 California Forest Practice Rules shall govern operations. A Negative Declaration has been filed with CalFire to meet CEQA compliance requirements. If biomass is to be removed from the project, the appropriate Exemption will be filed with Cal Fire prior to operations.

## **Treatment Area Designation:**

A Registered Professional Forester (RPF) or supervised designee has identified all treatment areas on the ground. Each treatment area is flagged with surveyor's ribbon. Color codes and significance are as follows:

Solid Red with Solid White Flagging: Property boundary, do not cross.

Solid Blue: Equipment Exclusion Zone – Watercourse Protection

Blue and White Candy-Striped: Equipment Limitation Zone – Watercourse Protection.

Red and White Candy-Striped: Arch site, equipment exclusion.

Fluorescent Pink: Out area, no operations.

Solid Yellow: Special Treatment area (privacy buffer).

Solid Orange: Underground utility, well heads, other similar improvements.

External boundaries of treatment areas have been established with solid red and white flagging. Operations shall not extend beyond the external boundary.

Power lines exist in the LaPorte Road area. Any tree sufficiently tall enough to reach the power line right-of-way ( 10' each side of distribution pole line, 20' for transmission) that meets the Public Resource Code definition of a hazard tree, or a dead/dying tree, **greater than the PCFSC diameter limit**, will be reported to Plumas-Sierra Rural Electric. If this tree is less than or equal to 10" dbh the operator should remove as part of the spacing guidelines, provided it's outside the 10' clearance limit. PSREC will remove oversized hazard trees under their own separate authority.

## **Vegetation Treatment Specifications:**

### ***Surface Fuels Layer:***

Treated surface fuel conditions would not contribute to initiating a crown fire and would have projected flame lengths of less than 4 feet. The resulting stand would appear well thinned, with the main carrier of fire being needles, litter, and/or grasses. In a treated setting, when a fire passes through, there may be occasional torching of brush or smaller trees in openings where larger trees don't exist, but there would generally be a continuous horizontal and vertical break of the forest canopy over light surface fuels.

### ***Treatment:***

- Slash resulting from operations *and* slash and dead fuels present prior to operations must be removed, masticated, and/or chipped, to achieve a post-harvest depth of 9 or less.
- Post harvest surface fuels should generally lack continuity. Single specimens of down woody debris is acceptable when isolated from other down debris and vegetation according to the treatment guidelines herein.

### ***Understory Vegetation:***

Conifer stands would be thinned from below to increase the distance between surface fuels and the lower branches of the overstory, as well as tree spacing. The distance from the lower branches of post-harvest dominant and codominant trees to the top of understory and/or surface fuels shall meet a minimum of 8'. There should be less than 20% brush or small trees remaining post-treatment that would contribute to elevating a surface fire into the crowns of the desired leave stand.

### ***Treatment:***

- Trees 10" DBH and less shall be designated for mastication or cutting by description. Trees under the diameter limit should be selectively thinned and left in openings where they would not create a fuel ladder condition that could lead to the initiation of a crown fire. Brush and small trees could be treated by cutting, mastication, chipping, or piling for burning to reduce fuel height and volume.
- In areas where the stand is predominantly trees in the 10-inch and smaller diameter classes, trees will be thinned to an average spacing of 20 feet. Conifer spacing shall not exceed 25 feet regardless of DBH class.
- Conifer retention priority shall be in the following order: sugar pine, ponderosa pine, Douglas-fir, incense-cedar, white fir. Black oak trees shall generally be retained.
- Residual timber (leave trees) shall consist of healthy, vigorous dominant and co-dominant trees with full crowns, having greater than 40% live crown, that are free of defect, and are of the best physical examples of the pre-harvest stand tree species.
- Ladder and surface fuels shall be spaced to achieve a minimum vertical clearance distance of 8 feet, measured from the base of the live crown of the post harvest dominant and co-dominant trees to the top of the surface fuels.
- Trees shall be severed no higher than 4" above ground as measured from the uphill side of the tree.
- Dead, dying, and diseased trees 10 inches DBH and under shall be removed regardless of spacing.
- Cut trees shall be felled away from unit boundaries, roads, utility lines and ROWs, fences, and watercourses. Any tree falling in such area shall be removed immediately.
- Brush shall generally be removed. Occasional specimens of small trees and/or brush may be retained, providing that they do not contribute to the potential of fire laddering into the canopy of the leave stand.
- Stocking shall be met by retaining 75 square feet of conifer basal area per Forest Practice Rules for Site III timberlands where the average stand diameter is 14 inches or greater. For stands where the average diameter is less than 14 inches, stocking shall be met by retaining an average point count of 300 per acre for Site III timberlands.

### ***Understory Treatment, con't:***

- Commercial timber operations are not permitted within the standard protection zone of all Class I and Class II watercourses.

- Non-commercial treatment (mastication, broadcast chipping, hand thinning) may occur within the standard Equipment Limitation Zone of all Class III watercourses, provided 50% of the understory vegetation present before treatment is left in a well-distributed fashion throughout the protection zone.

*Special Treatment Area:*

Two special treatment areas (privacy buffers) exist in Unit A, flagged in yellow and shown on the attached map. Within these areas, surface fuel treatment specifications remain the same. The following horizontal clearance distance and diameter restrictions apply within the special treatment areas:

**Special Treatment Area Horizontal Tree Spacing Guideline**

<b>DBH</b>	<b>Spacing</b>
0"-10"	10'

The 2008 California Forest Practice Rules shall govern operations.

All forest products generated from operations shall remain the property of the Plumas Corporation. The contractor is prohibited from removing or selling any products from this project to defer costs or generate income in any way.

Compliance will be inspected by the RPF and Cal Fire. Compliance with the above fuel treatment standards shall be determined by a combination of physical measurements, observations, and comparison to established photo series examples for Sierran Mixed Conifer forest types, copy attached, on the web at [www.bof.fire.ca.gov/pdfs/fuelbreak.pdf](http://www.bof.fire.ca.gov/pdfs/fuelbreak.pdf).

**Project Summary:**

<b>Unit</b>	<b>Treatment Acres</b>	<b>Treatment Method</b>	<b>Unit Details</b>
<b>A</b>	<b>39.0</b>	<b>Mechanical</b>	Overhead power lines; 2 Special Treatment Zones; 5 acres of Firewood Component
<b>B</b>	<b>34.3</b>	<b>30.3 acres Mechanical 4.0 acres Hand Treatment</b>	Arch site with designated crossings; Class II Equipment Exclusion Zones; Hand Treatment Areas;
<b>C</b>	<b>8.0</b>	<b>Mechanical</b>	None
<b>D</b>	<b>9.2</b>	<b>Mechanical</b>	0.5 acre Firewood Component above house (16 firewood trees total).
<b>E</b>	<b>4.5</b>	<b>Hand Treatment with Chipping Option</b>	Hand Treatment required; Slopes exceed 50% - No equipment operations allowed on slopes over 50%. Class I Watercourse; Arch Site;
<b>Totals</b>	<b>95.0</b>		

**Item #1: Mechanical Fuel Reduction, approximately 86.5 acres:**

Unit A = 39 acres  
Unit B = 30.3 acres  
Unit C = 8 acres  
Unit D = 9.2 acres  
Unit E = 4.5 acres

Mechanical mastication, hand cutting, or chipping, targets small conifer trees 10" DBH and less, brush, and surface fuels for the purpose of reducing fuel loading, and the modification of vegetative density/arrangement for fire hazard reduction. Treatment within this item shall meet the vegetation treatment specifications listed on pages 2 and 3. Disposal of treated material through burning shall not be permitted.

No equipment operations on slopes over 50%.

The contractor shall select the highest quality conifer then remove all surrounding, competing conifers to create the designated spacing below. Residual timber (leave trees) shall consist of healthy, vigorous dominant and codominant trees with full crowns, greater than 40% live crown, free of defect and the best phenotypes of the pre-harvest stand. The operator shall generally maintain the pre-harvest species composition. Conifer retention priority shall generally be in the following order: Sugar Pine, Ponderosa Pine, Douglas-fir, Incense Cedar, and White Fir. Black Oak shall generally be retained.

**Spacing for Conifers 10" DBH and Less:**

<u>DBH</u>	<u>Target Spacing</u>
0 – 10"	20'

Chipping

If chipping is used for disposal of treated material, the following specifications shall be adhered to:

1. Chips may be removed from the site or blown evenly across the ground during operations.
2. Treated stumps and stems shall be no longer than 4" from the ground as measured on the uphill side
3. At no time shall concentrations of chips exceed six (6) inches in depth or be concentrated into a pile or piles.

Mastication

If mechanical mastication is used to treat the area, the following specifications shall be adhered to:

1. Masticated material shall be evenly distributed across the project area to a target depth of 6" or less, in the most feasible way possible.
2. Masticated material shall not be piled against residual vegetation.
3. Treated stumps and stems shall be no longer than 4" from the ground as measured on the uphill side.
4. Mastication equipment shall not operate between the hours of 1:00 p.m. and 8:00 p.m. on days designated as "Red Flag Fire Watch" by the National Weather Service. The Redding Fire Weather Forecast Shall be consulted each evening for the next days forecast. For fire suppression reasons, the operator shall visually observe the area where operations have occurred once every 15 minutes. A designated observer shall observe the entire area in which operations have occurred for a minimum of two hours after shutdown.

**Item #1 con't:**

Firewood Component (Firewood component acres are included in overall treatment acres above).

As indicated on the map, two parcels have a firewood component in addition to the basic fuel reduction treatment in Units A and D. Vegetative treatment within this item shall meet the ladder and surface fuel treatment specifications above, in addition to firewood component specifications below. Disposal of treated material through burning shall not be permitted.

1. Trees cut on parcel that are greater than 5" diameter shall be left for firewood; Within Unit A, a 5-acre parcel has been designated for firewood. Within Unit D, only a 0.5-acre area has been designated for firewood. All tree within Unit D to be cut for firewood purposes have been flagged at breast-height with yellow and black striped flagging (16 trees total).
2. Boles to be limbed and bucked into lengths less than 8 feet and placed perpendicular to slope so as to reduce roll out.
3. All tops and limbs of firewood trees shall be treated by LTO according to the vegetation treatment specifications
4. Upon completion, this parcel shall meet the ladder and surface fuel specifications described on page 2.

**Item #2: Hand Treatment (Thin/Pile/Burn) approximately 8.5 acres:**

Unit B = 4.0 acres  
Unit E = 4.5 acres

Treatment within this item targets small conifer trees (< 10"), brush, and surface fuels for the purpose of reducing fuel loading, and the modification of vegetative density/arrangement for fire hazard reduction. Treatment within this item shall meet the vegetation treatment specifications listed on pages 2 and 3.

**Maximum spacing for Conifers 10" DBH and Less:**

<u>DBH</u>	<u>Target Spacing</u>
0 – 10"	15 - 20'

Slopes within Unit E exceed 50%. Equipment use will not be allowed on slopes within this unit. However, equipment will be allowed within the parcel's established driveway. A chipper can be staged within the driveway, allowing for disposal of a portion of treated material via chipping. However, heavy equipment will not be allowed on the slope for any purposes.

The western hand treatment area of Unit B lies within a Class II Equipment Exclusion Zone. No equipment will be allowed within this zone.

Chipping

If chipping is used for disposal of treated material, the following specifications shall be adhered to:

1. Chips may be removed from the site or blown evenly across the ground during operations.
2. At no time shall concentrations of chips exceed six (6) inches in depth or be concentrated into a pile or piles.

## **Item #2 con't:**

### Hand Piling and Burning

If piling and burning is used for slash disposal, the following specifications shall be adhered to:

#### 1. Burn Pile Construction:

Burn piles shall be constructed free of dirt and non-combustible material to ensure a clean safe burn. Other requirements:

- a. Piles will be located away from stumps, tree crowns, and sufficient distance away from remaining trees or other vegetation to reduce scorch.
- b. Piles will be constructed with a height of 1.5 times higher than their width (at base). However, pile height shall not exceed 6 feet unless there are limited openings for piles to avoid residual tree scorch, due to the amount of material to be disposed and by approval of RPF.
- c. Compactness. Each pile containing material protruding greater than 3 feet will be trimmed back and placed on pile.
- d. Minimum piece size for piling is 1-inch diameter x 3-foot length.
- e. Covering piles. Each pile will have plastic or kraft paper placed (preferably during its construction) on at least 50% of pile surface. Small logs or slash shall secure covering.

#### 2. Burning of Piles:

In order to achieve an efficient and safe burn, contractor shall allow for sufficient wet conditions before ignition and thus decrease the degree of burn creep and/or escape. Contractor shall exhibit sufficient manpower to ignite and manage the burning of piles.

Contacts: An "Air Pollution Permit" shall be obtained from the local Northern Sierra Air Quality Management District – Quincy Field Office (530-283-4654) prior to burning. Other required contacts:

- a. Contact – check Air Quality Mgmt. Dist. "burn day" status (284-6520) prior to ignition.
- b. Contact – Danielle Banchio, RPF, 24 hour notice prior to planned ignition- (530) 284-1800
- c. Contact – U.S. Forest Service, 24 hour notice to Mt Hough RD, Ron Heinbockel (283-0555).  
Note: Widespread burn restrictions may often be re-imposed without notice. Advisable to check in with Mt Hough office as well as Cal Fire Quincy office (283-1792).
- d. Piles shall be managed to burn clean and level to the ground. Chunking in at least one time will be necessary after the piles have had time to burn down and more may be required for satisfactory consumption. Chunking will include not only unburned pile material, but *any burning fuel* which is creeping from a pile to prevent further creep.
- e. Piles shall cease to be lit if excessive scorching of the remaining leave trees occurs. A deduction will be made from payment to contractor in the amount of 10% for every increment of 10% of the remaining leave stand destroyed by careless burning.
- f. Burn Patrol. Contractor shall provide adequate patrol on site until burn piles are consumed and pose no threat for additional creep.

*Burning of Piles, con't:*

g. Fire Suppression Equipment & Fire Cache. Contractor shall furnish fire fighting tools on project site at all times during burn. Type and number of tools will meet Cal Fire requirements (PRC 4428).

Contractor is responsible for any patrols to prevent escape until the unit/project is accepted by the RPF.

Units will be considered complete and available for full payment upon RPF inspection that no heat and/or smokes are present from burned piles.

### **General Precautions**

1. **Roads and landings shall be maintained for dust control. Contractor shall be required to select the best water source for the operation.**
2. **Driveways and roads shall be returned to their pre-treatment condition upon conclusion of their use. If operations cause rock displacement, wallowing out, or other road damage, contractor is responsible for returning all roads to the original condition.**
3. Driveways and roads utilized during operations shall be swept prior to the conclusion of each day to remain passable.
4. Contractor shall provide signage to warn motorists of timber operations. Signs shall be posted at visible locations approaching the area of operations.
5. Operations shall be conducted during daylight hours beginning no earlier than 7:00 a.m. each working day unless otherwise indicated by the RPF.

### **Contract Term and Timing of Operations:**

Your bid will be reviewed by Registered Professional Forester (RPF) Danielle Banchio, RPF #2808, who will then discuss potential operators with the appropriate PFSC representatives to determine the successful bidder. The RPF and the PFSC reserve the right to reject any or all bids. **Operations shall begin by agreement upon contract execution with completion no later than May 15, 2009.** At that time, Plumas Corporation reserves the right to either extend the contract or to reevaluate the contract and pursue other contractors. The winning bidder shall provide details of how they shall conduct operations along with a timeline for operations, to be strictly adhered to.

Operator must:

- A) Be a California Licensed Timber Operator (LTO) to provide services as described in Section #3 of the permit if commercial timber operations are employed.

or,

**B) Meet the following Insurance Requirements**

Prior to rendering services, CONTRACTOR and his/her subcontractors shall acquire, and maintain during the term of this Agreement, at Contractor's sole expense: (1) Workers' Compensation Insurance conforming to the statutory requirements of the state in which operations under this agreement are performed; (2) comprehensive general and automobile bodily injury liability insurance written on an "occurrence" basis subject to minimum limits of \$1,000,000.00 each person and \$1,000,000.00 each occurrence; and (3) general property damage insurance subject to a minimum of \$1,000,000.00 with not more than a \$10,000.00 deductible each loss; and (4) loggers' broad form property damage insurance of \$1,000,000.00 per occurrence. All liability insurance coverage shall provide that subcontractors working for CONTRACTOR are covered under the terms of CONTRACTOR'S policies. For Contractor performing the burning of piles, such liability insurance shall expressly include coverage for damages incurred for fire escape. All insurance shall meet the approval of Plumas Corporation (PC) and Banchio and all policies evidencing said insurance shall provide for thirty days' prior written notice to PC and Banchio before cancellation or material change in the policy. A certificate of Insurance showing evidence of insurance coverage as specified herein shall be furnished to PC and/or Banchio prior to commencement of Contractor's operations.

Fire suppression equipment as required by California Forest Practice Act or Cal Fire rules (PRC 4428) - shall be on site during operations within fire season.

### **Bidding Requirements:**

#### **Highly Recommended Pre-Bid Project Tour:**

A one-time pre-bidder's tour will be offered for interested bidders. The purpose of this event is to provide project details, objectives, and to answer all questions regarding operations. The tour will also address parcel access, power lines, and other details.

The pre-bid tour date is *Wednesday October 8, 2008 at 9am*. The meeting site will be at the intersection of Pongside Drive and LaPorte Road (Pongside Drive is located along LaPorte Rd, approximately one mile south of the intersection of LaPorte Rd and Highway 70).

**If Unable To Attend Tour:** **Please do not disturb the occupants of each project unit. All project units are residential.** If you are unable to attend the pre-bid tour, please contact the RPF for alternate arrangements to view project parcels. Project parcels will be identified with letters corresponding to the attached map.

For questions regarding this project, please contact Danielle Banchio at (530) 284-1800.

#### **Bidding Criteria:**

1. Mechanical: Lump Sum Bid. To cover for an over-run of chips, it is advised that bidder indicate a price in terms of BDT for chips delivered to the destination point. What constitutes an over-run is a yield of chips over and above the stated volumes by 10%.
2. Hand Thin/Pile/Burn: Separate your bid into two parts: Hand Thin&Pile, and Burning. This will allow for payment of hand thin/pile prior to burning of piles.
3. Start date and completion date. CDF permits are valid for a limited period (one year); therefore, completion dates are critical.
4. Experience in Community HFR (Hazard Fuel Reduction) Projects and other related projects not part of a Fire Safe Council sponsored project.
5. Equipment to perform this project.

### **Bid Date**

The contractor shall provide a bid for individual bid items. Bids shall be sent to North Valley Resource Management, PO Box 53, Taylorsville, CA. 95983 no later than **October 15, 2008 at 5:00 p.m.** Bids may also be faxed to the North Valley Resource Management office at (530) 284-1801.

### **Pre-Work Meeting:**

Prior to operations, the contractor shall meet with a North Valley Resource Management Representative to discuss operations.

### **Method of Payment:**

The contractor may submit an invoice to the Plumas Corporation twice monthly for work completed. Payment shall be made following conformation of work completion and acceptance of work by the supervising RPF.

