

Plumas County Fire Safe Council



WHITEHAWK RANCH HAZARDOUS FUEL REDUCTION PROJECT

Project Prospectus

The Whitehawk Ranch Hazardous Fuel Reduction Project (WHRHFR) was developed as part of the Plumas County Fire Safe Council's (PFSC) strategy to reduce hazardous fuel conditions surrounding communities at risk. The project is located on Whitehawk Ranch Lands, T21N, R13E, Section 6, MDM in Plumas County. Access is gained from State Highway 89 and associated county and private roads. Approximately 121 acres have been identified for treatment using mechanical applications. This prospectus is intended to solicit potential contractors interested in performing hazardous fuel reduction tasks to the specifications provided below.

Project is funded has been provided by HR 2389, Title II funds.

Contract Term and Timing of Operations:

Operations shall begin by agreement upon contract execution with completion no later than December 31, 2007.

Operations shall be conducted during daylight hours, beginning no sooner than 7:00 am.

Operations may be limited by weather to prevent unacceptable impacts to the watershed, soils, leave trees, or roads. Wet season operations will be in consultation with the RPF.

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 surveyors' ribbon. Color codes and significance are as follows:

Solid Red: Property Boundary, do not cross.

Solid Blue: Internal Property Line, Crossing allowed, product accountability boundary.

Blue and White Candy Striped: Watercourse Protection, Equipment limitation.

Florescent Pink: Out Area, No Operations.

Orange & White, with black lettering: Cultural Resources, limited operations, equipment exclusions.

Four property owners are participating with this project. External boundaries have been established with red flagging. Operations shall not extend beyond the external boundary.

Treatments:

Two treatment methods have been developed within the WHRHFR. Each method was designed to meet the PFSC objective, minimize environmental impact and effectively treat hazardous fuel conditions (As described below). As a prospective contractor, you are encouraged to submit a bid to complete all or an individual project unit(s). Please provide details of how you will conduct your operations and timeline for

completion. Your bid will be reviewed by an RPF (Pete Thill, RPF #1715) who will then discuss potential operation(s) with the appropriate PFSC representatives to determine the successful bidder. The RPF and PFSC reserve the right to reject any or all bids.

Plumas County's Fire Safe Council's General Hazardous Fuel Reduction treatment desires are:

Desired Stand Condition:

Fuel conditions (surface, ladder & canopy) would not contribute to initiating or sustaining a crown fire and have projected flame lengths of less than 2-4 feet in the surface fuels and represented in photo series PNW-51 and 52: photo description codes **1-PP-4-PC**, 2-PP-4-PC, 4-PP-1-TH,, 1-DF-4-PC, 6-DF-PC and 2-LP-3-PC. (www.bof.fire.ca.gov/pdfs/photoseries%201-pp-4-pc.pdf and www.bof.fire.ca.gov/pdfs/fuelbreak.pdf) Stand resilience from fire would be high. The resulting stand would appear open and park like with the primary carrier of the fire being needles and/or grasses. When a fire passes, there may be occasional torching of bushes 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, with canopy cover of 40-50%, over light surface fuels.

Understory Layer:

Standard: Conifer stands would be thinned from below increasing the crown to base height (a fire modeling term for distance between surface fuels and the lower branches of the overstory) and tree spacing. The treated crown to base height would be targeted to at least 15, but preferably 20 feet. There should be less than 20% brush or small trees left on site that would contribute to elevating a surface fire into the crowns of the desired leave stand.

Treatment: Smaller trees would 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. Cutting, mastication or piling for burning to reduce the fuel height and volume would treat brush and small trees. Occasional patches of small trees and bushes could be retained, provided they will not contribute to fire laddering into the canopy of the leave stand.

Surface fuel layer:

Standard: Treated surface fuel conditions would not contribute to initiating or sustaining a crown fire and have projected flame lengths of less than 2-4 feet in the surface fuels and represented in photo series PNW-51 and 52: photo description codes 1-PP-4-PC, 2-PP-4-PC, 4-PP-1-TH,, 1-DF-4-PC, 6-DF-PC and 2-LP-3-PC. Stand resilience from fire would be high. The resulting stand would appear park like and the primary carrier of the fire would be needles and/or grasses. When a fire passes, there may be occasional torching of bushes 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: Any activity fuel or residual slash (with the exception of an occasional downed log for wildlife purposes) would be removed, masticated or piled for burning.

Overstory Vegetation:

Standard: Tree crowns for the remaining fire resistant trees would not be touching creating a canopy cover of 40-50%, allowing for heat dispersion. Canopy closure in the shade intolerant species & long needle conifer would usually be less than for shade tolerant and short needle conifers.

Treatment: Cut and remove trees that would contribute to initiation or sustaining of a crown fire. Use the charts below to guide average spacing over the treatment area.

Unit 1(A), Salvage and Green Timber Recovery, 110 acres.

Green timber sawlogs will be harvested in this unit prior to mastication treatment.

There is an estimated 15MBF of WF; 15MBF of DF; and 15MBF of IC green sawlog volume that will be removed by thinning from below in scattered pockets of the existing stand where stem spacing is too close. The majority of this volume is along the paved road. This volume will be removed tree length to various landings, logs processed, and tops and limbs chipped and removed. Green timber will be left to discretion of operator, spacing of green will be as detailed in following table:

A	<u>Tree Size, DBH</u>	<u>Minimum Spacing</u>	<u>Maximum Spacing</u>	“FOREST
FIRE	0”- 9”	25’	35’	
	10”-12”	18’	25’	
	13”-15”	21’	30’	
	15”-24”	23’	30’	

PREVENTION EXEMPTION”, 14 CCR 1038i shall govern all operations. This permit will be submitted following contractor selection so LTO information is included in Exemption and the full allotted term for operations of one year can be utilized for this project.

There is also a potential to recover salvage volume by agreement in Unit “1 A” , with conventional/tree length logging to capture dead and dying white fir (WF); and douglas fir (DF) salvage estimated to be: 25MBF WF; and 15MBF DF.

A “10% Dead, Dying or Diseased Products Exemption” RM-73(1038ab) will be the governing paperwork with the CDF for salvage removal for this unit.

Treatment in this unit shall remove only dead, diseased, dying or suppressed trees of any species.

All sawlogs in this unit will be removed tree length to various landings, logs processed and tops and limbs chipped and removed..

For Fire prevention measures, the LTO or designee will visually observe immediate area where most recent operations have been conducted, each hour. A designated watchman shall oversee the entire operating area, watching for fires, for at least two hours past shutdown, if the fire forecast is HIGH or EXTREME.

Fire suppression equipment, as required by California Forest Practice Act, shall be on site if in fire season.

Any Forest products generated from operations shall become the property of the Plumas Corporation. The contractor shall not remove or sell any products from this project to defer costs or generate income to him/her in any way.

Unit #1B, Mechanical Mastication, Approximately 110 acres.

There is a potential to recover salvage sawlogs in this unit prior to mastication treatment. If Unit “1A” is awarded & implemented,, those operations will precede mastication operations.

Mechanical Mastication, or chipping, of vegetation, or biomass, shall be required to reduce fuel load, and modify vegetative density and arrangement for fire hazard reduction. Conifers and other vegetative species are designated for treatment within this unit.

All brush species including, but not limited to, manzanita and ceanothus, shall be treated. Operations shall clear brush to create an effective fuel break. Isolated shrubs or clumps may be left for wildlife habit when

their presence does not contribute to horizontal or vertical continuity of the fuel which creates a potential for fire mortality to residual leave trees or stand and by designation or agreement of the RPF.

The shall select the highest quality conifer then remove all surrounding, competing conifers to create a canopy cover of 40-50% and to the designated spacing below. Residual timber (leave trees) shall consist of healthy, vigorous dominant and co-dominant trees with full crowns, greater than 40% live crown, free of defect and the best phenotypes of the pre-harvest stand. The LTO/operator shall generally maintain the preharvest species composition. Conifer retention priority shall generally be in the following order: Sugar Pine, Ponderosa Pine (PP), Douglas fir, Incense Cedar, and White fir.

Conifers within the treatment area shall be thinned as follows:

Tree	<u>Tree Size, DBH</u>	<u>Minimum Spacing</u>	<u>Maximum Spacing</u>
	0"- 4"	25'	35
	5"-12"	20'	25

foliage/canopy shall not overlap; trees will have a distinct gap between tree crowns.

Tree stumps and stems shall be no taller than 4" above ground, measured on uphill side.

Masticated material shall be spread out to depth of less than 4 inches, none may be piled against residual vegetation.

Mastication or chipping equipment shall not operate between the hours of 1:00 pm and 8:00pm on days designated as "Red Flag Warning" by the national weather service in Redding, California. This forecast shall be consulted each evening in the next days forecast.

For Fire prevention measures, the LTO/operator, will visually observe immediate area where most recent operations have been conducted, each hour. A designated watchman shall oversee the entire operating area, watching for fires, for at least two hours past shutdown, if the fire forecast is HIGH or EXTREME.

Fire suppression equipment, as required by California Forest Practice Act shall be on site if in fire season, during operations.

Contractors who are not LTO's will be required to provide proof of appropriate insurance coverage for workers comp, liability, and vehicles.

Unit #2 Pre-Commercial and Commercial Thinning Operations, Approximately 11 acres. .

A combination of pre-commercial and commercial thinning shall be required to reduce the fuel load and modify vegetative density for fire hazard reduction. Conifers and other vegetative species are designated for removal within this unit. Mechanical mastication and/or chipping of vegetation may also be required to achieve the surface fuel standard.

Unit 2 is a forest setting with commercial products that includes sawlogs and chips. It is estimated there are approximately 33MBF of conifers to be harvested in Unit 2 with this Exemption =The estimated volume distribution is 26MBF of (PP); 4MBF of WF; and 3MBF of IC; all greater than 10" dbh. It is estimated there are 130BDT of wood chips within this unit. Operations shall treat this area utilizing ground based skidding of tree length pieces, (bundles). All bundles shall be skidded out to landings and processed for delivery to SPI Mills in Quincy, Loyalton (chips only), or Oroville (cedar only).

All trees greater than 10"DBH, slated for harvest removal, have been marked with orange paint prior to operations. Most trees less than 10"DBH have been designated with orange paint for removal. The tables provided below shall direct the LTO in terms of the residual stand structure for unmarked trees. The LTO shall select the highest quality conifer then remove all surrounding, competing conifers to create a canopy

cover of 40-50% and to the designated spacing below. Residual timber (leave trees) shall consist of healthy, vigorous dominant and co-dominant trees with full crowns, greater than 40% live crown, free of defect and the best phenotypes of the pre-harvest stand. The LTO 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.

Unmarked conifers within the treatment area shall be thinned as follows:

<u>Tree Size, DBH</u>	<u>Minimum Spacing</u>	<u>Maximum Spacing</u>
0"- 10"	20'	35

Trees with tops and limbs attached shall be skidded to landings for log or chip production. Limbs that are large enough to be grappled gathered and bundled by hand in the Unit, shall be yarded to chipper for disposal. The residual stand(s) must be "clean" and limited to potential forest fire flame lengths of two to four feet.

Treatment shall remove any dead, diseased, dying or suppressed trees of any species unless they are designated by the RPF. Treatment shall remove any dead and down material that will "hold together" for skidding to the chipper.

Trees shall be severed no higher than 4" above ground as measured from the upper side of the tree. Once felled, each tree shall be bucked to manageable lengths, if necessary to minimize damage to the residual stand, and removed to designated treatment sites for manufacturing.

Stocking will be met by retaining 100 healthy, vigorous, dominate trees per acre > 8"DBH. Or stocking may be met with minimum of 75 sqft of basal area/acre as determined by RPF. All lands are Dunning's Site III for the Sierra Nevada, 1942.

A "FOREST FIRE PREVENTION EXEMPTION", 14 CCR 1038i shall govern all operations. This permit will be submitted following contractor selection so LTO information is included in Exemption and the full allotted term for operations of one year can be utilized for this project.

Operator/Bidder must be a current California Licensed Timber Operator with an "A" license.

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 detection reasons, the operator shall visually observe the area where operations have occurred constantly. Operator shall get off the feller-buncher machine hourly and walk areas they have been cutting, checking for smokes or fires. A designated watchman shall observe the entire area in which operations have occurred for a minimum of two hours after shutdown.

Fire suppression equipment, as required by California Forest Practice Act, shall be on site if in fire season, during operations.

All forest products generated from operations shall become the property of the Plumas Corporation. The contractor shall not remove or sell any products from this project to defer costs or generate income in any way

Pre-Work Meeting:

Prior to operations, the LTO shall meet with RPF Thill 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 confirmation of work completion and acceptance of work by the supervising RPF.

Bidding Requirements:

Pre-Bid Project Tour

All interested bidders are strongly encouraged to attend the one time Pre-Project bidders' tour. The purpose of this event is to provide project details, objectives and answer all questions regarding operations. The pre-bid tour date is December 13, 2006, at 9:00 AM, meet at the Main Entrance to Whitehawk Ranch Golf Course and Condos off SR# 89, approximately 2 miles east of Clio, on right side, heading east.

Bid Date

The contractor shall provide a lump sum bid, by Unit, for this project to Pete Thill, P.O. Box 25, Graeagle CA 96103, no later than January 12, 2007, at 5:00 PM.