

Request for Proposals
Sugar Pine Roadside Fuel Break Project
Tahoe National Forest, California

Background and Statement of Work: The National Forest Foundation (NFF) and the USDA Forest Service are working together to protect and restore the Tahoe National Forest. This year the NFF and Tahoe National Forest are collaborating on a number of projects, including the Sugar Pine Roadside Fuel Break Project. The Sugar Pine Roadside Fuel Break Project on the American River Ranger District (ARRD) will improve roadside safety by masticating up to 743.8 acres near the Sugar Pine Reservoir recreation area. The implementation contractor will collaborate with the NFF, Oversight Forester, and ARRD staff to implement forest health treatments specified in the Project.

Information Requested

If interested in submitting a bid for this project, please provide a proposal for the above statement of work by providing:

- technical approach
- work experience
- cost
- capacity for this project
- experience in similar projects

Specific requirements are detailed below.

I. PROJECT OVERVIEW AND REQUIREMENTS

General Specifications

- (a) Description of Work – This Request for Proposals is for restoration services related to mastication on the Sugar Pine Roadside Fuel Break Project, including the following:
- Mastication treatment of specific brush and conifers up to 10 inches DBH on up to 743.8 acres in accordance to specifications in Appendix E. Preference will be given to Type 1 feller bunchers that are self-leveling with a boom arm, however all technical approaches that will meet the treatment objectives will be considered.
 - Traffic control for public safety in accordance with Appendix E. Traffic control will be required at all times during operations.

The Contractor shall identify what they can supply in terms of materials, labor, equipment, supplies, supervision, quality control, and incidentals required to complete the work described. The Contractor shall perform all work in a safe and conscientious manner.

- (b) Project Location – The Sugar Pine Roadside Fuel Break Project is located on the American River Ranger District, roughly 10 miles north of Foresthill and 5 miles east of Iowa Hill. The project runs along Iowa Hill Rd. and adjacent roads surrounding the Sugar Pine Reservoir recreation area. All project work will be within Placer County.
- (c) Work Schedule – The project is expected to begin as soon as possible once a contract is in place with the successful bidder(s). All work must be completed by December 31, 2024. Anticipate delays in summer and fall 2024 for Project Activity Level (PAL) days where limited work is allowed. Wet ground may prevent equipment work during later fall into December.

Other Project Requirements and Specifications

- I. Utilities – In many locations there will be no or limited sanitation, water, electrical or housing services available. The Contractor shall make its own arrangements for temporary facilities if needed.

- (b) Specifications – Project work shall be accomplished in accordance with the following:

- Attachment 1: Sugar Pine Roadside Fuel Break RFP Project Site Tour Q&A
- Appendix C: Forest Service Map
- Appendix E: Service Work Specifications (including guidelines for operations)
- Appendix H: Fire Plan (Mechanical Thin)

Insurance Requirements

Upon selection of the winning bid, the Contractor agrees that it has and shall maintain the following insurance coverage indicated below. The effective date of all coverage shall precede the start of any work.

- a. State minimum workers' compensation insurance coverage for its employees, if any.
- b. Broad form general liability, property damage, and automotive liability insurance in the minimum amount of \$1,000,000 for bodily injury, death, or damage to property of any person and \$2,000,000 for bodily injury, death, or damage to property of more than one person. The Contractor shall name NFF an Additional Named Insured and provide NFF with a certificate of insurance evidencing such coverages, prior to the initiation of the Scope of Services.
- c. If the Scope of Services includes professional services as identified herein, Contractor shall also provide professional errors and omissions liability insurance. Professional services for purposes of this section include, but are not limited to performing architecture, engineering, landscape architecture, land surveying or planning, preparation and signing or stamping of drawings, maps, surveys or construction specifications, or design and development of computer software, programs or websites by the Contractor or by subcontractors on behalf of the Contractor, for which professional liability insurance would typically be required. The minimum coverage limits required are \$1,000,000 for each claim and \$1,000,000 annual aggregate.

Prohibited Telecommunications Services and Equipment

The Contractor is responsible for compliance with the prohibition on certain telecommunications and video surveillance services or equipment identified in 2 CFR 200.216.

Payment/Performance Security

Contractor shall post cash, a letter of credit, bond, or other financial security that is easily convertible into cash in a form acceptable to the NFF, in its sole determination, to assure completion of the work required under any subsequent agreement and payment of all amounts lawfully due to all persons supplying or furnishing to the Contractor or Contractor's subcontractors with labor, laborers, materials, rental machinery, tools or equipment used or to perform the work. Contractor may incorporate required associated costs into mobilization costs or other approved expenses.

- a. Work that is classified as construction in accordance with the Miller Act or Little Miller Act or if required per conditions of the funding source, payment and performance bonding will be required in the full amount of any Agreement. For the purposes of this Request for Proposal, construction is defined as "any contract greater than \$100,000 for the construction, alteration, or repair of any public building or public work where the federal government is the owner", or
- b. If Contractor is not self-performing at least 85% of the total contract value or if the cost of materials is in excess of the larger of \$100,000 or 50% of the contract total, payment and performance bonding will be required in the full amount of the agreement, or
- c. If the value of the agreement is in excess of \$250,000, Contractor will be required to post financial security in a form acceptable to the NFF in the amount of 5% of the total agreement value up to \$250,000 in total financial security.

American Made Products. The work associated with this RFP is subject to Build America, Buy America Act. P.L. 117-58, Secs 70911-70917, and as such, domestic content procurement preference requires all iron and steel, manufactured products and construction materials used within the scope of this Agreement, be produced in the United States.

Federal Exclusion Verification

The selected Contractor will be required to affirm that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

Federal Flowdown Provisions

Flowdown Requirements: Any Agreement associated with this RFP may be subject to flowdown requirements under associated federal or state funding agreements, which are included and made part of by this reference.

II. REQUIRED COMPONENTS

Technical Proposal

Please provide a detailed technical approach to the work.

Contractor Qualifications

- I. Past Experience – Please provide a brief explanation of previous work experience with land management agencies.
- II. References – Please provide three professional references that can speak to past performance.

Pricing Schedule

Contractor shall price work according to the schedule below. **Prevailing wages do not apply to the items/tasks in the schedule below.**

Item	Project Unit	Description	Unit of Measure	Quantity	Unit Price \$	Total \$
a	FB1	Mastication and Traffic Control	Acres	264.5		
b	FB2	Mastication and Traffic Control	Acres	101.0		
c	FB3	Mastication and Traffic Control	Acres	218.8		
d	FB4	Mastication and Traffic Control	Acres	76.5		
e	FB5	Mastication and Traffic Control	Acres	17.7		
f	FB6	Mastication and Traffic Control	Acres	22.4		
g	FB9	Mastication and Traffic Control	Acres	31.8		
h	FB10	Mastication and Traffic Control	Acres	11.1		
TOTAL				743.8		

III. SUBMISSION, EVALUATION, AND CONTACTS

Contractor Selection Process

This is a request for proposals only and bids furnished are not offers from the National Forest Foundation. This request does not commit the National Forest Foundation to pay any costs incurred in the preparation or submission of the proposal or to contract for supplies or services.

The NFF will use the Evaluation Factors below to review each submitted bid. Based on the outcomes of that selection process, the NFF will notify successful and unsuccessful bidders within 10 business days and will prepare a separate contract document.

Evaluation Factors and Relative Importance

The following criteria will be used in the evaluation of submitted proposals, ordered from highest weighting (level 3) to lowest weighting (level 1).

Level 3 Criteria

- Price / cost
- Equipment and contractor capability
- Timing of when contractor can begin and/or finish the project
- Past performance, references, and USFS feedback

Level 2 Criteria

- Technical proposal / proposed approach to project
- Overall strategic benefits to meeting NFF goals and grant needs, requirements, and timelines

Level 1 Criteria

- Benefits to the local community
- Relationship to local community

Point of Contact

Please submit any questions about the project in writing to the Point of Contact.

Anne Graham
National Forest Foundation, Sierra Nevada Program Coordinator – Tahoe Area
agraham@nationalforests.org | 530.201.8560

Responses will be shared with known interested parties by email or otherwise posted at <https://www.nationalforests.org/rfp>.

Bid Submission

Submit bids via email to Anne Graham (agraham@nationalforests.org) by **Friday, June 28 at 5pm**.

Equal Opportunity Provider

In accordance with Federal law and U.S. Department of Agriculture policy, the National Forest Foundation is prohibited from discriminating on the basis of race, color, national origin, sex, age, religion, political beliefs, or disability.

Attachment 1
Sugar Pine Roadside Fuel Break RFP Project Site Tour Q&A

Note: There is an updated project map breaking up the project area into units as well as an updated pricing schedule for prospective bidders to complete in the request for proposals document.

Q: How was this project identified?

A: This project area is being evaluated under the Shirttail Environmental Assessment (EA) which is anticipated to be signed in summer 2024. This roadside fuel break was identified within this as a very high priority area for treatment for evacuation egress from the recreation areas near the reservoir. A decision memo was signed to meet environmental compliance needs for the roadside fuel break allowing the Forest Service (FS) to partner with the National Forest Foundation (NFF) and implement this project in advance of the work to be done under the Shirttail EA. This project is a precursor for more project work to be implemented in this area in the coming years.

Q: Is there a potential to hire multiple contractors to accomplish the large project area in a limited time frame?

A: Yes, NFF is considering awarding multiple contractors given the large project area and short time to implement the project before the end of the calendar year.

Q: How would the project area be split up if multiple contractors are awarded for the project?

A: Following the bid tour, the NFF and the Forest Service have broken up the project area into units. A new map and break down of the acreage of each unit is included in the revised request for proposals. If multiple contractors are awarded on the project, each contractor would be awarded specific units to treat.

Q: Will there be any ability to negotiate working days and time of day when the project activity level (PAL) is Ev if a contractor has the equipment to do larger fire suppression?

A: A contractor is able to submit a variance request when the PAL is at a level of Ev; however, it is highly uncommon for any variance requests to be approved and the contractor should not account for this in their ability to complete the project work.

Q: What certification is required of the traffic control person(s)?

A: There is no certification required for traffic control persons. They should be competent and capable of using a radio to perform the necessary road safety management. The language "certified" has been removed from Appendix E Item 2.

Q: Will a pilot car be required for traffic control?

A: No, the need for a pilot car for traffic control has been removed from the Appendix E Item 2.1.

Q: Can any roads be closed during the project?

A: No, all roads will remain open during project implementation. Contractors conducting traffic control can hold cars for up to 15 minutes before being required to allow them to pass.

Q: Could you define equipment shut down required for cars to pass?

A: No mastication should be going on if a car is passing through the work zone. Contractors can simply lift the masticator head until all cars have passed through the working zone and the all clear is given. Contractors are not required to fully shut off equipment when a car needs to pass.

Q: Could NFF contract the traffic control separately?

A: No, the awarded contractor will also be responsible for providing traffic control in the project area and should include that within their bid.

Q: What makes someone a qualified fire patrol person in Appendix H?

A: The requirement for the fire patrol person is that they are competent and capable of performing the necessary fire patrol during the operating period each day and following the operating period for the required time. The language "qualified" has been removed from Appendix H when referring to the fire patrol person.

Q: What are the hours in which operators can work?

A: Operators are allowed to work any time of day as long as they are further than 1/8 mile from any developed campgrounds. Operations within 1/8 mile of developed campgrounds may only take place between 8am-4pm.

Q: Can the contractor work on Saturdays?

A: Yes, the contractor can work any days of the week.

Q: Are there any wildlife concerns or areas that have a limited operating period (LOP)?

A: There is one LOP in the project area; however, it is inactive and is not expected to limit operations. There is a newly identified pair of bald eagles on Sugar Pine Reservoir that may result in a new LOP that is not currently indicated on the project map. A biologist with the Forest Service is currently conducting surveys to determine if any protections are needed and potential project impacts.

Q: Are exclusion zones marked in the project area?

A: Yes, they are either already flagged or will be flagged prior to the start of the project.

Q: Can avoidance areas be operated in at all?

A: No, avoidance areas should not have any operations take place in them. Additionally, to go around avoidance areas, operators should plan to move equipment on the road following all necessary road protections. If the operator would prefer to go further from the road to go around the avoidance area, this will need to be pre-approved by NFF and FS.

Q: How close can an operator work near streams and creeks?

A: A riparian buffer exists at 100ft for perennial streams, 50 ft for intermittent streams, and 25 ft for ephemeral streams. No equipment may enter within 20 ft of the edge of the channel or aquatic feature regardless of the size of the riparian buffer. Equipment may be used within the riparian buffer so long as it 1) remains outside of the 20ft buffer from the edge of the channel and 2) the equipment limits ground disturbing activities accomplishing as much work as possible from one pivot point. Operators are able to masticate within the 20 ft buffer from the channel edge so long as their equipment does not track within the buffer.

Q: Will NFF or the FS do any communications related to the project?

A: The FS and NFF will support the contractor by putting signage at campgrounds around the project area in advance of the project. The contractor will be responsible for any signage on roads and trails while project work is occurring.

Q: Are there any additional communications required by the contractor during hunting season?

A: No.

Q: Are contractors responsible for masticating remnant piles in the project area?

A: No, contractors can masticate remnant piles for access or if it feels appropriate; however, it is not a requirement. The Forest Service intends to burn remnant piles at a later date.

Q: Is there an opportunity for the contractor to be paid for piling larger logs?

A: No, this is not within the project scope of work. Logs can be removed or rearranged for access, but piling should not be factored into the bid.

Q: Can trees larger than 10 inches DBH be removed for access?

A: Yes.

Q: Is dead timber to be felled in the project area?

A: It is not a requirement to fell dead timber in the project area. Operators may fell dead timber for safety.

Q: Do remnant piles count towards the down woody debris specification (Appendix E Item 1.9)?

A: No, remnant piles do not count towards this specification. There has been an addition to the specification clarifying that the spec refers to debris up to 10 inches DBH.

Q: Will any trails be closed during the project period?

A: No.

Q: What signage is required for trails?

A: The contractor is responsible for signage notifying trail users of operating machinery. Signs shall include phrases similar to "Caution, tree falling stay back 200 feet" and be no less than 3 feet X 3 feet in size. Lettering shall be at least 6 inches in height. NFF and the FS will post notices at staging areas both inside and outside of the project area to notify trail users who may enter the project area from further away.

Q: Do trails need to be cleared daily of mastication debris?

A: Yes, trails should be cleared daily of debris so that it is clear where the trail goes.

Q: Do ditches and culverts need to be cleared out every day?

A: Yes, ditches and culverts need to be cleared out each day following the end of work.

Q: Could we have access to the decision memo?

A: Yes, it is attached in the email update to the RFP.

Q: Does the project acreage include slopes greater than 40%?

A: The initial project map included slopes greater than 40%. Slopes 40% and greater have now been removed from the total project acreage and will be treated in future projects in this area under the Shirttail Environmental Assessment. The new total project acreage is 743.8 acres. The breakdown of acreage by project unit can be seen in the table below.


Unit	Acres	Fuels Treatment	Road
FB1	264.5	Mastication	250 ft buffer – Sugar Pine/10Road
FB2	101.0	Mastication	250 ft buffer – Iowa Hill/PLA-4140 Road
FB3	218.8	Mastication	250 ft buffer – Brimstone / 24 Road
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Total	743.8		

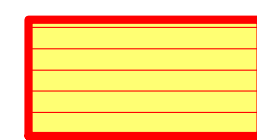
Sugar Pine Roadside Fuelbreaks

- 2024 -

Roadside Fuelbreak - Mastication

743.6 Acres

 100' Each Side of Road
60.5 Acres

 250' Each Side of Road
683.1 Acres

 Slope Greater Than 40%

 No Treatment - Avoidance

 Limited Operating Period

1:15,000 40 Foot Contour Interval

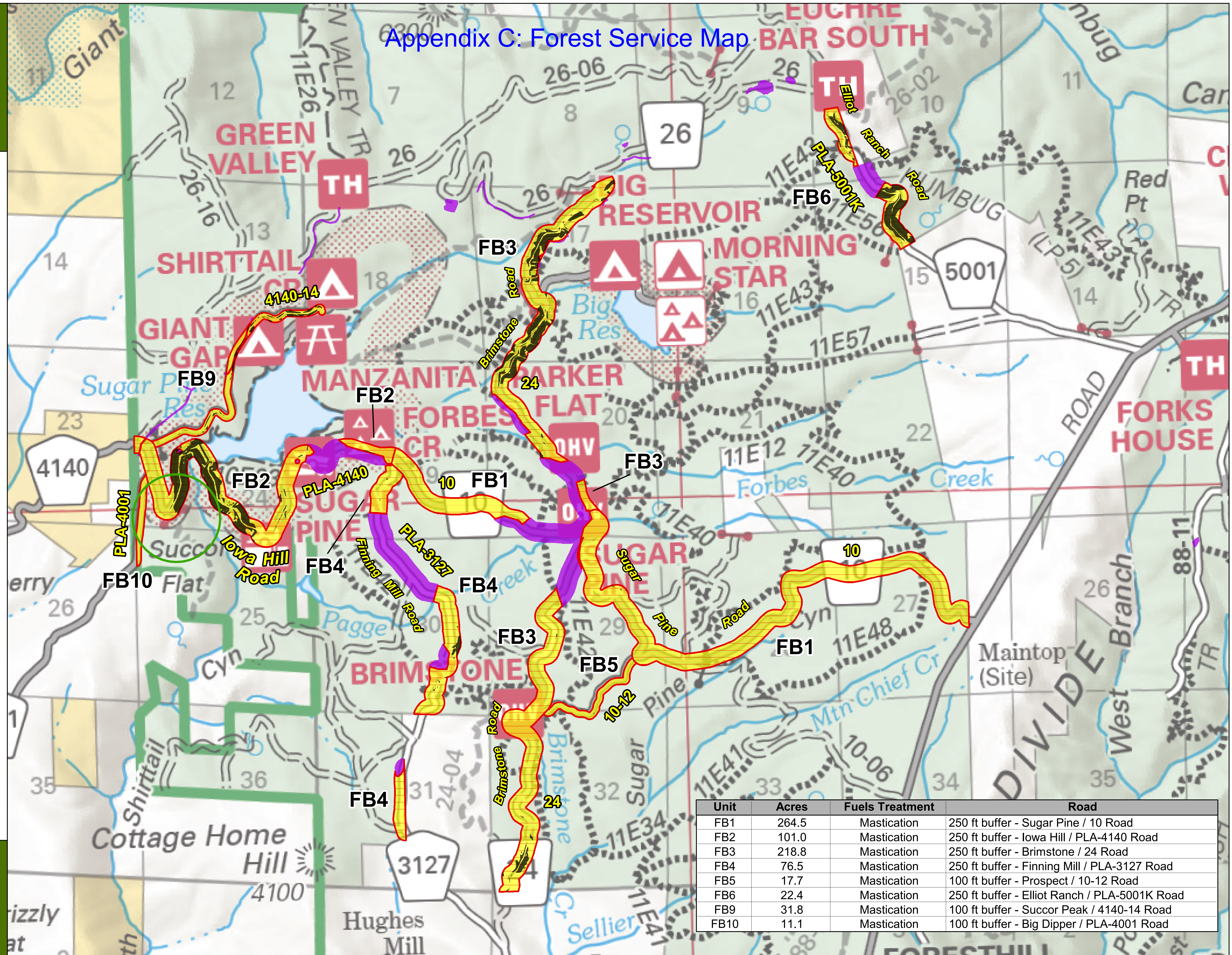
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 United States Department of Agriculture

 Forest Service
Tahoe National Forest
American River Ranger District

Appendix C: Forest Service Map



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**APPENDIX E
SCHEDULE OF ITEMS
AND
SPECIFICATIONS**

SCHEDULE OF ITEMS

Item	Project Unit	Description	Unit of Measure	Quantity	Unit Price \$	Total \$
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TOTAL				743.8		

Item 1: Mastication

Prior to the beginning and completion of any fuels reduction implementation, a District Fire/Fuels Management Specialist will be consulted with to ensure treatment activities will meet prescribed fire and fuels reduction objectives.

Mastication shall generally be limited to slopes less than 40%, unless consultation with FS soil scientist and/or hydrologist indicates that steeper areas are acceptable for equipment use. Movement across slopes shall generally be perpendicular to the slope. Turning shall be conducted such that soil berms and rutting are minimized, if berms or ruts are created that exceed 6 inches deep, they shall be smoothed out.

Specification:

1. Thin trees to a 25-35 foot crown spacing, masticating only trees less than 10.0 inches in diameter.
2. In areas that have trees larger than 10 inches DBH at the prescribed spacing, masticate all trees and brush less than 10 inches DBH and greater than 12 inches in height.
3. Stumps/staubes shall be no more than 6 inches high, or 6 inches above natural obstacles.
4. Unless not possible (and upon FS consultation), masticated/shredded material shall be less than 3 feet in length.
5. Species retention preference is (highest to lowest priority) sugar pine, ponderosa pine, Douglas-fir, incense cedar, white fir and grey pine. Oak greater than 10 inches DBH will count towards overall spacing in the treatment units – avoid cutting unless required for safety.

6. Remove all brush when trees are present. In areas without trees, leave small brush clumps approximately 8 foot in diameter with 40 foot spacing between clumps.
7. Retain riparian vegetation and hardwoods, such as oaks, alder, willow, dogwood, and elderberry. Some riparian and hardwood vegetation may be removed for operability or safety or as needed for restoration, approved skid trail or road crossings or agreed to by a riparian specialist.
8. Down woody debris: Retain 2-3 tons of surface fuels per acre of DWD less than 10 inches DBH. Retain 1-2 logs per acre greater than 20" in diameter for DWD. Remnant piles in the project area do not count towards the DWD tonnage.
9. Follow all public safety measures listed under Guidelines for Operations.

Item 2: Traffic Control

The contractor shall provide for public safety when operating equipment within 300 feet of open roadways and designated trails by posting cautionary signs warning of hazardous work ahead. Requirements also include:

1. Road guards should be used to prevent vehicles from passing by running equipment and to assist with safely passing equipment. Equipment should not be actively masticating when vehicles are passing the working area.
2. Warning signs (at least two, one for each direction) shall be posted on roads. These shall be located 200' from the intersection of the road and unit boundary at each edge of the unit. Signs shall be posted whenever working to alert oncoming traffic of the safety hazards associated with the operation. Any trails in the project area must also be signed. Signs shall include phrases similar to "Caution, tree falling stay back 200 feet" and be no less than 3 feet X 3 feet in size. Lettering shall be at least 6 inches in height.
3. Cleanup of the roads, culverts, and trails of any debris should take place daily following the completion of work to avoid hazards for public utilizing the project area during non-operation hours.

GUIDEINES FOR OPERATIONS

Contractor Responsibility:

The Contractor shall provide everything--including, but not limited to, all equipment, supplies, transportation, labor, and supervision--necessary to complete the project, except for that which the contract clearly states is to be furnished by NFF.

Accessibility:

Most sub-items are accessible with a 2-wheel drive vehicle after snowmelt. NFF assumes no liability to perform special road maintenance to keep roads open to the project area.

Contractor-Furnished Equipment:

Equipment shall be furnished on a fully operational basis, of modern design, and in good operating condition, with a competent, fully qualified operator. The Contractor shall furnish all fuel, lubricants, and personnel necessary for the operation of the equipment. All repairs, service and replacements are the responsibility of the Contractor and shall be at the Contractor's expense. If, during the contract period, the equipment requires repairs before operations can continue, it shall be the responsibility of the Contractor to complete such repairs. The Contractor shall provide plastic that is at a minimum 6 millimeter thick.

Public Safety

The contractor shall provide for public safety when operating equipment within 300 feet of open roadways and designated trails by posting cautionary signs warning of hazardous work ahead. Requirements also include:

1. Road guards should be used to prevent vehicles from passing by running equipment and to assist with safely passing equipment. Equipment should not be actively masticating when vehicles are passing the working area.
2. Warning signs (at least two, one for each direction) shall be posted on roads. These shall be located 200' from the intersection of the road and unit boundary at each edge of the unit. Signs shall be posted whenever working to alert oncoming traffic of the safety hazards associated with the operation. Any trails in the project area must also be signed. Signs shall include phrases similar to "Caution, tree falling stay back 200 feet" and be no less than 3 feet X 3 feet in size. Lettering shall be at least 6 inches in height.
3. Cleanup of the roads, culverts, and trails of any debris should take place daily following the completion of work to avoid hazards for public utilizing the project area during non-operation hours.

Project Boundary Description:

The perimeters of sub-items will be partially flagged with orange and black-striped flagging and other areas of the sub-items will be identified with a single piece of flagging. In some cases, roads may make up part of the boundary of the unit and therefore these parts of the unit boundary may or may not be marked or flagged. The project maps are intended to show the general shape and location of the work areas. The map is not intended to be accurate as to precise location and dimension. If the map and field boundaries conflict, the field boundaries shall govern. Positions of streams and topographic features, when shown, also may be approximate.

Protected Sites and Exclusions (non-work areas): The following shall be excluded or protected:

1. **No hand piling** will be permitted within 100 feet of the banks of **stream channels and waterbodies**.
2. **Cultural resource sites** within the project area will be flagged with blue and black stripe flagging and avoided.
3. **Sensitive plant avoidance areas** will be flagged in advance of treatment with orange and white-striped flagging. These areas will not be treated and are to be completely avoided during all activities, including staging of equipment, materials and crew as well as tree felling activities.
4. **Noxious weed infestations** will be marked with orange flagging with the words "Noxious Weed" in black prior to commencement of work. These areas will not be treated and are to be completely avoided during all activities, including staging of equipment, materials and crew as well as tree felling activities.

Applicable Management Requirements

1. Avoid damaging and retain elderberry, dogwood, California hazelnut, and Pacific yew.
2. Keep masticator 20' from edge of channels.
3. Minimize or avoid crossing of perennial streams by mechanical equipment. Crossings of intermittent and ephemeral channels would be designated by a qualified specialist prior to implementation.
4. All equipment and vehicles used for project implementation must be free of invasive plant material before moving into the project area. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material or other such debris. Cleaning shall occur at a vehicle washing station or steam-cleaning facility before the equipment and vehicles enter the project area. Equipment used during emergency work or used exclusively on paved surfaces is exempt from the cleaning requirement. When working in known invasive plant infestations, equipment shall be cleaned before moving to other National Forest Service system lands.
5. Avoid disturbance and do not stage equipment in known invasive plant infestations. Invasive plant infestations will be avoided during equipment traffic and soil-disturbing project activities. Avoidance areas will be identified on project maps.
6. **Survey monuments and bearing trees** shall be protected and not damaged in any way.
7. **All specified roads and recreational trails shown on contract maps** shall be left in the original condition existing prior to the commencement of work on this contract. Any water bars in skid trails disturbed by the Contractor's operations shall be restored to the condition prior to damage at the

Contractor's expense. Excessive slash and chips cannot be left in the roadways and recreational trails after end of each work day. **All cut vegetation shall be kept within unit boundaries. If slash is fell onto the roadways, it must be removed by the end of each workday.**

8. Servicing and refueling equipment areas shall be located at a minimum of 300 feet from streams and other wet areas. In case of a HAZMAT spill, the material shall be immediately contained and NFF shall be immediately notified.

9. Avoid piling within the drip line of large trees (conifers & hardwoods), snags, and large downed logs

10. Within the sub-item boundaries, NFF may exclude non-work areas such as: rocky areas, wildlife areas, and other special areas. The Contracting Officer's Representative will designate non-work areas. Such areas exceeding 1/2 acre in size per unit may be excluded from payment.

Restrictions on Work:

Work may be performed at any time during the period of the contract, except as outlined here. Restrictions are as follows:

1. In accordance with the fire plan, included in Appendix H.
2. When the Contracting Officer (or designated representative) determines that adverse weather has made access too dangerous or that continued vehicular travel would cause unacceptable road damage.
3. When the Contracting Officer (or designated representative) determines that continued operation may be injurious to leave trees.
4. If any Sierra Nevada yellow-legged frog is found at any time during implementation of this Project, cease operations in the vicinity of the frog, vacate the immediate area and leave the frog alone. If possible, take a photograph of the frog as follows: top looking down, and side view. No activity will occur in that area until such time as the frog has vacated the area on its own volition. With the exception of a U. S. Fish and Wildlife Service approved biologist, do not handle Sierra Nevada yellow-legged frogs. Report the occurrence as soon as possible to the COR or Designated Representative.
5. In units with an LOP for California spotted owl, no work shall occur from March 1 – August 15.
8. Within 300 feet of perennial and intermittent creeks, and 30 feet of ephemeral creeks, limit the operating period for **mechanical treatments** during the wet season, which is defined as the first frontal rain system depositing a minimum of 0.25 inches of rain after October 15 and ending April 15. The LOP may be lifted only if an aquatic biologist determines that the stream does not meet the definition of suitable Controlled Area red-legged frog habitat (described in guidelines provided by the US Fish & Wildlife Service, California Red Legged Frog Take Avoidance Scenarios March 25, 2008), or that activities will occur further than 300 feet from suitable habitat.

Flagging Identification:

- Boundary: Black & Orange Striped
- Cultural Sites: Blue & Black Striped
- LOP: Black & Orange Striped
- Botany (Sensitive Plants and Noxious Weeds): Orange & White Striped with Black "Special Treatment" Lettering

Required Training:

Environmental awareness training will be conducted to contract representatives, Contract Officers, project managers, and field personnel prior to the onset of project work. Training will include a briefing on the following: (a) How to recognize Sierra Nevada yellow-legged frogs, (b) The specific measures that are being implemented to conserve the species, (c) The penalties for non-compliance, (d) If a Sierra Nevada yellow-legged frog is encountered in the work area, work activities in that area shall cease until the species has moved from the area on its own volition, or a U. S. Fish and Wildlife Service-approved biologist moves the individual in accordance with Forest Service approved procedures. If any injured or killed Sierra Nevada yellow-legged frogs are found, work activities will immediately cease in the area, and the COR or approved biologist will be notified as soon as possible to take appropriate action, which includes notification within 24 hours to the U. S. Fish and Wildlife Service.

Definitions:

Aggregation – A pocket of densely packed trees distinct from adjacent areas within a project unit. It is characteristic for trees within aggregations to have a higher percent of *phenotypic defects* due to competition for resources in close proximity to others.

Brush – all woody shrub species such as manzanita, whitethorn, deerbrush, dwarf tanoak, silktassel and ribes. For the purposes of this contract bear clover, snowberry, prostrate manzanita and squaw carpet are not considered brush.

Conifer - A cone-bearing tree with needles or leaf scales (e.g. pine, fir, cedar).

Co-dominant Tree - A tree with the crown forming the general level of the crown cover and receiving full light from above, but comparatively little from the sides.

C.O.R. - Contracting Officer's Representative.

Crop Tree (Leave Tree) - Any crop tree without excessive damage, which has a live crown ratio of greater than 30%. The top will not be dead, broken, or forked.

Damaged tree – Any crop tree with one or more of the following injuries:

1. Any true fir that has any bark cut or removed to the cambium regardless of the amount.
2. Any other tree species that has bark cut or removed to the cambium from more than 25% of the circumference of the bole.
3. Any tree that has a broken, forked, or dead top.
4. Any tree that has had 25% or more of the live limbs or branches broken or removed by any operation.
5. Defects, which include sweeps in the bole and crooked boles.

DBH - Diameter at breast height; the diameter of a tree measured at a point 4-1/2 feet above the ground on the uphill side of the tree.

Diseased Trees – Any tree greater than two feet tall with a diameter less than ten inches at DBH with one or more of the following diseases:

1. **Mistletoe:** Trees with one or more visible infections on any part of the live crown or stem.
2. **Gall Rust:** Trees with one or more visible cankers on the bole or multiple cankers on the limbs in the green crown.
3. **Chlorosis:** Trees with off color foliage, weak root system and otherwise exhibiting a general unhealthy appearance.
4. **Damage:** Tree that exhibits insect infestation, severe mechanical, animal, or other damages (i.e. trees leaning severely).
5. **White Pine Blister Rust:** On sugar pine, stem / branch cankers, yellow to red flagging of branches and tops.

Dying Tree – 50% or more of the foliage-bearing crown is recently dead and/or 75% or more of the circumference of the lower bole is girdled by wildlife.

Excess Tree - A tree that is left but should have been cut to meet standards.

Foliage – Tree/plant leaves.

Forked Trees – Trees with one or more forks in the live crown or with old dead or broken-out tops within 13 feet of the ground.

Girdled – A cut through the tree bark or branch all the way around.

Hang-up Tree – A cut tree suspended above the ground by a leave tree.

Hardwood – A tree with broad leaves rather than needles (e.g., oak, madrone, big leaf maple, elderberry, dogwood, etc.)

Insect Infested Tree – A tree pitching sap from the bark in multiple spots on the bole, frass in cracks of bark or at base of tree, dead or fading top.

Limited Operating Period (LOP) – This indicates there is a limited period in which operations may NOT occur for a particular work unit. This period is variable based on the species being protected. See the Schedule of Treatments for the definition of each LOP.

Live Crown Ratio – The percentage of the live limbs in relation to the total tree height.

Invasive plants (Noxious Weeds) - For the purpose of this contract, the following list refers to species on the Tahoe National Forest Invasive Plant List, last updated 05/01/2017, namely:

Scientific Name	Common Name
<i>Acroptilon repens</i>	Russian knapweed
<i>Aegilops triuncialis</i>	barbed goatgrass
<i>Ailanthus altissima</i>	tree-of-heaven
<i>Arundo donax</i>	giant reed
<i>Bromus tectorum</i>	cheatgrass
<i>Berteroa incana</i>	hoary alyssum
<i>Carduus nutans</i>	musk thistle
<i>Carduus pyconocephalus</i>	Italian thistle
<i>Centaurea diffusa</i>	diffuse knapweed
<i>Centaurea melitensis</i>	Maltese starthistle
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Centaurea stoebe</i>	spotted knapweed
<i>Chondrilla juncea</i>	skeletonweed
<i>Cirsium arvense</i>	Canada thistle
<i>Cortaderia selloana</i>	pampasgrass
<i>Cytisus scoparius</i>	scotchbroom
<i>Ditrichia graveolens</i>	stinkwort
<i>Elymus caput-medusae</i>	medusahead
<i>Euphorbia oblongata</i>	oblong spurge
<i>Foeniculum vulgare</i>	fennel
<i>Genista monspessulana</i>	French broom
<i>Hydrilla verticillata</i>	hydrilla
<i>Isatis tinctoria</i>	dyer's woad
<i>Lepidium chalepensis</i>	lenspod whitetop
<i>Lepidium draba</i>	whitetop
<i>Lepidium latifolium</i>	tall whitetop
<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	Dalmatian toadflax
<i>Lythrum salicaria</i>	purple loosestrife

<i>Myriophyllum spicatum</i>	Eurasian water milfoil
<i>Onopordum acanthium</i>	Scotch thistle
<i>Phalaris arundinacea</i>	reed canary grass
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Spartium junceum</i>	Spanish broom
<i>Ulex europaeus</i>	gorse

Phenotypic Defects - Referring to inherited defects or deficiencies caused by local environmental conditions. Examples: Trees with flat top shapes having under 4 inches of leader growth (measure of previous year), forked or multiple tops, twisting in the limbs bole and trees with sweeping, leaning or drooping forms.

Riparian Conservation Area (RCA) – Areas adjacent to streams, ponds, and springs protected by limiting treatments in some situations. RCA’s are as follows:

- Perennial streams = 300 feet each side of channel
- Seasonal (Intermittent and Perennial) = 150 feet each side of channel
- Streams in Inner Gorge = Top of inner gorge
- Special Aquatic Features (meadows, lakes, and springs) = 300 feet from edge of feature or riparian vegetation, whichever is greatest.

Scour Zone – The zone where moving water runs-off and removing any surface cover down to bare mineral soil.

Slash - All debris resulting from operations including stems, limbs and tops of trees, and brush.

Suppressed Tree - Any tree with less than 30% of its total height in live green crown or with less than 4 inches of current leader growth.

Thinning - The cutting of trees to meet the short term desired condition.

True fir – This classification refers to the conifer species red fir & white fir.

PROJECT INSPECTION AND ACCEPTANCE

Items 1 Inspection

Inspection of Services—Mastication see above statement

1. Sampling

[X] *Plots*. At least one percent of each treatment area will be sampled by a random series of plots distributed over the entire area. Plot size will be:

[] 1/250 acre

[] 1/100 acre

[X] 1/50 acre

[] 1/10 acre

other (specify)

Transects.

Other (specify)

1/50 acre plot is a circular plot measured on a horizontal plane having a radius of 16.7 feet.

2. Specific Inspection Procedures

Each plot will be inspected to determine:

A. The number of trees left uncut per specification in APPENDIX E. If any trees are left uncut per specifications or with too high of stump, the plot fails.

B. The number of brush left uncut per specification in APPENDIX E. If more than 1 shrub is left uncut or left with too high stump the plot will fail.

C. Pruning will be inspected for adherence to specification in APPENDIX E. If more than 2 branches per this spec is left the plot will fail.

D. Tracked chipping will be inspected per specifications in APPENDIX E. If chipped material exceeds 6 inches in depth throughout the entire plot and/or chipped material is distributed within the riparian area, the plot will fail.

Work will be accepted for payment on the basis of final inspection and passage of specification. NFF or the Forest Service will inspect for compliance of specifications. Plots will be located throughout the sub-items so as to obtain a representative sample of the area. Sub-items will be inspected separately and not combined for the purpose of determining percent of satisfactory work.

A series of 1/50-acre plots (16.7 foot plot radius) distributed over the entire unit sufficient to yield at least a one-half on one percent sample (0.5%) will be taken. Plot centers will be marked.

On each plot the NFF or the Forest Service will record the plot number, whether the plot is satisfactory or unsatisfactory and the reason if unsatisfactory. Each plot will be examined to record findings on the items "1" through "10" listed below. To be considered satisfactory these items must meet the following criteria:

3. Acceptance

Work on this contract will be deemed acceptable when a score of 9 points or more is achieved. The unit may be reworked ONCE and then re-inspected. This re-inspection score will be the final result for payment on that unit, (see re-inspection after rework below). Some of the units in this contract are so large, plots will be installed as work progresses and the Contractor will be notified of inspection results that are not satisfactory as they are found.

4. NFF Inspections

NFF inspections are for the purpose of satisfying the NFF that the services are acceptable and do not relieve the Contractor of the responsibility for maintaining quality control.

NFF or the Forest Service will conduct all inspections. The Contractor (or designated representative) is encouraged to be present to observe inspections. Summary results will be made available on request.

Compliance Inspections.

Visual compliance inspections will be made on a periodic basis. Such inspections are not final and do not constitute acceptance by the NFF.

Final Inspections.

Final (formal) inspections for payment will be made on completed sub-items only. Contractor shall request final inspections in writing and give NFF at least two working days advanced notice. Inspections will be completed within four working days after the notice is received. If the work is not ready for inspection at the time specified by the Contractor, the cost associated with the inspection attempt may be charged to the Contractor.

Disputed Inspection.

The Contractor may request re-inspection without rework if the results are unacceptable. Re-inspection must be requested in writing within 48 hours after receiving written notice of the inspection results. Re-inspection will be accomplished within five working days after receipt of the contractor's written request.

The same sampling and inspection procedures will be used, but new samples will be taken. The inspection pattern will be shifted so that new samples will not overlap previously inspected samples. Results will be rounded to the nearest whole percent.

If re-inspection results are within five percentage points of the first inspection, the original inspection result will be used in determining acceptability and payment. If re-inspection results are greater than five percentage points above or below the first inspection, the re-inspection results will be used.

If the re-inspection results are within five percentage points of the first inspection, the Contractor shall pay the actual costs of the re-inspection.

Re-inspection after Rework.

Where rework after a failed inspection may improve the inspection results, the Contractor may rework the area and request (in writing) a second inspection. Re-inspection will be accomplished within five working days after the notice is received. The results of the second inspection will be final, and no further rework

will be permitted. Areas not ready for re-inspection at the time specified by the Contractor will not be re-inspected, and the results of the first inspection will be final.

1. Acceptance

Work on this contract will be deemed acceptable when 90 percent or more of the plot inspections meet specifications. The unit may be reworked ONCE and then re-inspected. This re-inspection will be the final result for payment for the work invoiced. Some of the units in this contract are so large, plots will be installed as work progresses and the Contractor will be notified of inspection results that are not satisfactory as they are found.

2. NFF Inspections

NFF inspections are for the purpose of satisfying the NFF that the services are acceptable and do not relieve the Contractor of the responsibility for maintaining quality control.

The NFF project coordinator or NFF designated inspector will conduct all inspections. The Contractor (or designated representative) is encouraged to be present to observe inspections.

Compliance Inspections. Visual compliance inspections will be made on a periodic basis. Such inspections are not final and do not constitute acceptance by the NFF.

Final Inspections. Final (formal) inspections for payment will be made on completed sub-items only. Contractor shall request final inspections in writing and give NFF at least two working days advanced notice. Inspections will be completed within four working days after the notice is received. If the work is not ready for inspection at the time specified by the Contractor, the cost associated with the inspection attempt may be charged to the Contractor.

Disputed Inspection.

The Contractor may request re-inspection without rework if the results are unacceptable. Re-inspection must be requested in writing within 48 hours after receiving written notice of the inspection results. Re-inspection will be accomplished within five working days after receipt of the contractor's written request.

The same sampling and inspection procedures will be used, but new samples will be taken. The inspection pattern will be shifted so that new samples will not overlap previously inspected samples.

Re-inspection after Rework. Where rework after a failed inspection may improve the inspection results, the Contractor may rework the area and request (in writing) a second inspection. NFF will charge to the Contractor the cost of this additional inspection. Re-inspection will be accomplished within five working days after the notice is received. The results of the second inspection will be final, and no further rework will be permitted. Areas not ready for re-inspection at the time specified by the Contractor will not be re-inspected, and the results of the first inspection will be final.

APPENDIX H
US FOREST SERVICE REGION 5
FIRE PLAN FOR MECHANICAL SERVICE CONTRACTS
Ver. 01/22/2020

1. **SCOPE:**

The provisions set forth below outline the responsibility for fire prevention and suppression activities and establish a suppression plan for fires within the contract area. The contract area is delineated by map in the contract. The provisions set forth below also specify conditions under which contract activities will be curtailed or shut down.

This fire plan is to be used for projects with no heavy machinery operating within the contract area. A wood chipper that remains on Forest Service roads may be covered under this fire plan at the discretion of the District Fire Management Officer.

2. **RESPONSIBILITIES:**

A. Contractor

- (1) Shall abide by the requirements of this Fire Plan.
- (2) Shall take all steps necessary to prevent his/her employees, subcontractors and their employees from setting fires not required in completion of the contract, shall be responsible for preventing the escape of fires set directly or indirectly as a result of contract operations, and shall extinguish all such fires which may escape.
- (3) Shall permit and assist in periodic testing and inspection of required fire equipment. Contractor shall certify compliance with specific fire precautionary measures in the fire plan, before beginning operations during Fire Precautionary Period and shall update such certification when operations change.
- (4) Shall designate in the Fire Plan and furnish on Contract Area, during operating hours, a qualified fire supervisor authorized to act on behalf of Contractor in fire prevention and suppression matters.

B. Forest Service

The Forest Service may conduct one or more inspections for compliance with the Fire Plan. The number, timing, and scope of such inspections will be at the discretion of agency employees responsible for contract administration. Such inspections do not relieve the Contractor of responsibility for correcting violations of the fire plan or for fire safety in general, as outlined in paragraph 2.A above.

3. **DEFINITIONS:**

The following definitions shall apply:

Active Landing: A location the contractor may be skidding logs into, or performing other operations such as delimiting, log manufacturing, and chipping logs. Except for EV and E days, loading logs or stockpiling chips only, on a cleared landing, does not constitute an Active Landing.

Fire Tools: Shovels, pulaskis McLeods, axes and chainsaws.

Hot Saw: A harvesting system that employs a high-speed (>1100 rpm) rotating felling head, i.e., full rotation lateral tilt head.

Mechanical Operations: The process of felling, skidding, chipping, shredding, masticating, piling, log processing and/or yarding which requires the use of motorized power which includes, **chainsaws**, chippers, motorized carriages, masticators, stroke delimiters, skidders, dozers etc.

4. **TOOLS AND EQUIPMENT:**

The Contractor shall comply with the following requirements during the fire precautionary period, as defined by unit administering contracts:

The Fire Precautionary Period is set by the State of California which is April 1 through December 1 of any year.

- This contract requires, does not require, a **Fire Box and associated Fire Tools according to CPRC Section 4428.**

A. Fire Tools and Equipment: Contractor shall meet minimum requirements of Section 4428 of the California Public Resources Code (C.P.R.C.) The contractor have sufficient fire tools to supply each contractor employee in the event of a fire. No more than one in four of these tools shall be a chainsaw. All tool heads shall be secure, all handles shall not be cracked or damaged operable and sufficient fuel for three hours of operation shall be on sight.

B. Power Saws: Each power saw shall be equipped with a spark arrester approved according to C.P.R.C. Section 4442 or 4443 and shall be maintained in effective working order.

- This contract requires, does not require, **Section 4C of the Fire Plan**

C. Backpack Pump: When Project Activity Level C or higher is in effect the following shall be required. Each power saw shall have a 5-gallon backpack pump or can with hand pump within 300 feet of the operating power saw when used off cleared landing areas. Each operating wood chipper shall also be equipped with a 5 gallon backpack pump or can with hand pump.

- This contract requires, does not require, **Section 4D of the Fire Plan**

D. Fire Extinguishers: When Project Activity Level C or higher is in effect the following shall be required. An Underwriters Laboratories (UL) approved fire extinguisher containing a minimum 14 ounces of fire retardant shall be kept with each operating power saw and a minimum 5-pound fire extinguisher shall be equipped on any operating wood chipper. In addition, a size 0 or larger shovel with an overall length of not less than 38 inches shall be kept with each gas can or wood chipper but not more than 300 feet from each power saw when used off cleared landing areas.

- This contract requires, does not require, **Section 4E of the Fire Plan**

E. Tank Truck or Trailer: Contractor shall provide a **water tank truck or trailer** on or in proximity to Contract Area during Contractor's Operations hereunder during Fire Precautionary Period. When Project Activity Level C or higher is in effect, a tank truck or trailer shall be on or immediately adjacent to each active landing, unless otherwise excepted when Hot Saws or Masticators are being used. See Section 6 for specific contract requirements.

The tank shall contain at least 300 gallons of water available for fire suppression. Ample power and hitch shall be readily available for promptly and safely moving tank over roads serving Contract Area. Tank truck or trailer shall be equipped with the following:

- (1) Pump, which at sea level, can deliver 23 gallons per minute at 175 pounds per square inch measured at the pump outlet. Pumps shall be tested on Contract Area using a 5/16 inch orifice in the Forester One Inch In-Line Gauge test kit. Pump shall meet or exceed the pressure value in the following table for nearest temperature and elevation:

Temp	Sea Level		1000 Feet		2000 Feet		3000 Feet		4000 Feet		5000 Feet		6000 Feet		7000 Feet		8000 Feet		9000 Feet		10000 Feet																								
	55	70	179	175	23	23	174	171	23	23	169	166	23	22	165	162	22	22	161	158	22	22	157	154	22	22	153	150	21	21	150	147	21	21	146	143	21	21	142	139	21	21	139	136	21

85	171	23	168	23	163	22	159	22	155	22	151	21	147	21	144	21	140	21	136	20	133	20
100	168	23	164	23	159	22	155	22	152	22	148	21	144	21	141	21	137	20	133	20	131	20
	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G
	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P
	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M

The pump outlet shall be equipped with 1-1/2 inch National Standard Fire Hose thread. A bypass or pressure relief valve shall be provided for other than centrifugal pumps.

- (2) 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose mounted on live reel attached to pump with no segments longer than approximately 50 feet, when measured to the extreme ends of the couplings. Hose shall have reusable compression wedge type 1-inch brass or lightweight couplings (aluminum or plastic). One end of hose shall be equipped with a coupling female section and the other end with a coupling male section. The hose shall, with the nozzle closed, be capable of withstanding 200 PSI pump pressure without leaking, distortions, slipping of couplings, or other failures.
- (3) A shut-off combination nozzle that meets the following minimum performance standards when measured at 100 P.S.I. at the nozzle:

	G.P.M.	Horizontal Range
Straight Stream	10	38 feet
Fog Spray	6 - 20	N/A

- (4) Sufficient fuel to run the pump at least 2 hours and necessary service accessories to facilitate efficient operation of the pump.

When Contractor is using Hot Saws or Masticators, an additional 250 feet of light weight hose, approved by the Forest Service, shall be immediately available for use and be capable of connecting to the 300 feet of hose and appurtenances in (2) and (3) above.

This equipment and accessories shall be deliverable to a fire in the area of operations and is subject to the requirements for each specific activity level identified in Section 6.

F. Compressed Air Foam System: A Compressed Air Foam System (CAFS) is a fire suppression system where compressed air is added to water and a foaming agent. By agreement, Contractor may substitute a CAFS or functional equivalent in lieu of the tank truck, trailer or fire extinguishers, provided it meets or exceeds the following specifications and requirements:

1. Variable foam expansion ratio – 10:1 to 20:1.
2. Units shall be kept fully charged with air; water and foam concentrate as recommended by the manufacturer and have the appropriate tools to service the system.
3. The unit shall contain enough energy to empty tank and clear hose prior to exhausting propellant.
4. The unit shall be capable of being completely recharged within 10 minutes.
5. When used on cable yarding landings, the unit shall be outfitted for immediate attachment to carriage and transported without damage to the unit.

Fire extinguishers required for Hot Saws, Masticators and similar equipment identified in Section 4 B. above may be substituted with a 3 gallon CAFS.

Tank truck, trailer or equivalent may be substituted with a 30 Gallon CAFS with at least 550 feet of one inch hose and an adjustable nozzle with enough water, air and foam concentrate for at least one recharge.

This equipment and accessories shall also be deliverable to a fire in the area of operations and subject to the requirements for each specific activity level identified in Section 6.

5. **GENERAL**

- A. **State Law:** In addition to the requirements in this Fire Plan, the Contractor shall comply with all applicable laws of the State of California. In particular, see California Public Resource Codes.
- B. **Permits Required:** The Contractor must secure a special written permit from the District Ranger or designated representative before burning, welding or cutting metal or starting any warming fires. If contract requires Blasting and Storing of Explosives and Detonators, an Explosives Permit may be required pursuant to the California Health and Safety Code, Section 12101.
- C. **Blasting:** Contractor shall use electric caps only unless otherwise agreed in writing. When blasting is necessary in slash areas, a Fire Patrolperson equipped with a size 0 or larger shovel with an overall length of not less than 46 inches and a filled backpack can (4 or 5 gallon) with hand pump shall remain in the immediate area for an hour after blasting has been completed.
- D. **Smoking:** Smoking shall not be permitted during fire season, except in a barren area or in an area cleared to mineral soil at least three feet in diameter. In areas closed to smoking, the CO may approve special areas to be used for smoking. The Contractor shall sign designated smoking areas. Contractor shall post signs regarding smoking and fire rules in conspicuous places for all employees to see. Contractor's supervisory personnel shall require compliance with these rules. Under no circumstances shall smoking be permitted during fire season while employees are operating light or heavy equipment, or walking or working in grass and woodlands.
- E. **Storage and Parking Areas.** Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material for a radius of at least 10 feet unless otherwise specified by local administrative unit. Small mobile or stationary internal combustion engine sites shall be cleared of flammable material for a slope distance of at least 10 feet from such engine. The COR shall approve such sites in writing.
- F. **Reporting Fires:** As soon as feasible but no later than 15 minutes after initial discovery, Contractor shall notify Forest Service of any fires on Contract Area or along roads used by Contractor. Contractor's employees shall report all fires as soon as possible to any of the following Forest Service facilities and/or personnel listed below. Please notify the Dispatch Center first, then notify other listed Forest Service contacts below:

	Name	Office Address	Office telephone
Dispatch Center	Grass Valley Emergency Command Center (GVECC)	13120 Loma Rica Dr. Grass Valley, CA 95945	911 or 530-477-7237
Nearest FS Station	American River Ranger District Office	22830 Foresthill Road Foresthill, CA 95631	(530) 367-2224
Inspector (s)			
District Ranger	Michelle Barry	22830 Foresthill Road Foresthill, CA 95631	(707) 980-1833

When reporting a fire, provide the following information:

- Your Name
- Call back telephone number
- Project Name
- Location: Legal description (Township, Range, Section); and Descriptive location (Reference point)
- Fire Information: Including Acres, Rate of Spread and Wind Conditions.

- This contract requires, does not require, Section 5G of the Fire Plan.

G. Communications: Contractor shall furnish a serviceable telephone, radio-telephone or radio system connecting each operating side with Contractor's headquarters. When such headquarters is at a location which makes communication to it clearly impractical, Forest Service may accept a reasonable alternative location. The communication system shall provide prompt and reliable communications between Contractor's headquarters (or agreed to alternative) and Forest Service via commercial or Forest Service telephone.

- This contract requires, does not require, Section 5H of the Fire Plan.

H. Fire Patrolperson: Contractor shall furnish a competent fire patrolperson each operating day when Project Activity Level C or higher is in effect. When on duty, sole responsibility of patrolperson shall be to patrol the operation for prevention and detection of fires, take suppression action where necessary and notify the Forest Service as required. This Fire patrol is required on foot, unless otherwise agreed. By agreement, one patrolperson may provide patrol on this and adjacent projects. No patrolperson shall be required on Specified Road construction jobs except during clearing operations unless otherwise specified.

The Contractor shall, prior to commencing work, furnish the following information relating to key personnel:

<u>Title</u>	<u>Name</u>	<u>Telephone Number</u>
Fire Supervisor		
Fire Patrolperson		

I. **Clearing of Fuels:** Contractor shall clear away, and keep clear, fuels and logging debris as follows:

Welding equipment and stationary log loaders, yarders and other equipment listed in California State Law:	10 feet slope radius
Tail or corner haulback blocks:	All running blocks shall be located in the center of an area cleared to mineral soil at least 15 feet in diameter.
Lines near, between or above blocks:	Sufficient clearing to prevent line from rubbing on snags, down logs and other dead woody material.

6. EMERGENCY PRECAUTIONS

Contractor's Operations shall conform to the limitations or requirements in the Project Activity Level (PAL) table below. Project Activity Levels applicable to this project shall be the predicted activity levels for the Fire Danger Rating Area(s), or fire weather station(s) stated in the Contract Area Map Legend on Integrated Resource Service Contracts (IRSC's), and other contracts where applicable.

Fire Danger Rating Area/Fire Weather Station for Project

Tahoe NF Westside PAL Group

The Forest Service, in its sole discretion, may change the predicted activity level if the current fire suppression situation, weather and vegetation conditions warrant an adjustment. If practicable, Forest Service will determine the following day's activity level by 6:00 PM. Contractor shall obtain the predicted Project Activity Level from the appropriate Ranger District Office before starting work each day.

Phone Number or Website to obtain Predicted Activity Levels:

530-478-6176

Forest Service may change the Project Activity Level Table to other values upon revision of the National Fire Danger Rating System. When Contractor is notified, the revised Project Activity Levels will supersede the levels in the Project Activity Level Table below.

PROJECT ACTIVITY LEVEL

Level	Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.
A	Minimum requirements noted above in Sections 4 and 5.
B	1. Tank truck, trailer, or approved CAFS substitute shall be on or adjacent to the Active Landing.
C	1. When Hot Saws or Masticators are operating, a tank truck, trailer, or approved CAFS substitute shall be within ¼ mile of these operations. Effective communications shall exist between the operator and the Active Landing. 2. Immediately after Mechanical Operations cease, Fire patrol is required for two hours.
D	1. Immediately after Hot Saw or Masticator operations cease, Fire patrol is required for three hours. 2. No Dead Tree felling after 1:00 PM, except recently dead. 3hr fire patrol regardless of shutdown time 3. No burning, blasting, welding or cutting of metal after 1:00 PM, except by special permit.
Ev	<p>1. The following activities may operate all day:</p> <ul style="list-style-type: none"> a) Loading and hauling logs decked at approved landings. b) Loading and hauling chips stockpiled at approved landings. c) Servicing equipment at approved sites. d) Dust abatement, road maintenance (Chainsaw use prohibited), culvert installation within cleared area, chip sealing, paving, earth moving or rock aggregate stock pile loading and installation (does not include pit or quarry development). e) Chainsaw and log processing operations associated with loading logs or other forest products at approved landings. <p>2. Hot Saws or Masticators may operate until 1:00 PM; provided that:</p> <ul style="list-style-type: none"> a) A tractor with a blade or other equipment capable of constructing fireline is on or adjacent to the active landing or within ¼ mile of the operating equipment. This piece of equipment shall have effective communication with the Hot Saw or Masticator. b) Any additional restrictions specified by the Forest. <p>3. All other conventional Mechanical Operations are permitted until 1:00 PM. 3hr fire patrol</p> <p>4. Some operations may be permitted after 1:00 PM, on a case-by-case basis, under the terms of a PAL Ev Variance Agreement. Activities for which a Variance may be issued are: terms of variance</p> <ul style="list-style-type: none"> • Rubber Tire Skidding • Chipping on Landings • Helicopter Yarding • Fire Salvage <p>When approved by a Line Officer, a Variance Agreement can be implemented when the criteria specified in the agreement are met and mitigation measures are in place. This approval is good for ten (10) days unless cancelled sooner or extended by the Contracting Officer for an additional ten (10) days. Variance approval can be withdrawn at the sole discretion of the Forest Service. Variance approval is contingent on the 7-day fire weather forecast, fuel conditions, site characteristics, current fire situation, state of Contractor's equipment for prevention and suppression readiness, type of operation and social and community considerations etc. (See attached Project Activity Level Variance Agreement).</p>

Level	Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.
E	<p>The following activities may operate all day:</p> <ol style="list-style-type: none"> 1. Loading and hauling logs decked at approved landings. 2. Loading and hauling chips stockpiled at approved landings. 3. Servicing Equipment at approved sites. 4. Dust abatement, road maintenance (chainsaw use prohibited) or loading stock piles and rock aggregate installation (does not include pit or quarry development). 5. Chainsaw operation associated with loading at approved landings. <p>All other activities are prohibited.</p>

This Project utilizes “The Project Activity Level” (PAL), an industrial operation’s fire precaution system. The following Climatology Chart indicates the Historic Activity Levels for the Project Fire Danger Rating Area or Fire Weather Station utilized on this Project. This is only a historical average of the Activity Levels for the identified Fire Danger Rating Area or Weather Station.

Project Activity Level Climatology								
Fire Danger Rating Area/Weather Station	TNF Westside Group				Years Analyzed		1996-2016	
	A	B	C	D	Ev	E	Days	
Month	Expected Days per Month at Each PAL Value						Days	Analyzed
May	12.7	7.4	10.6	0.3	0.0	0.0	333	31
June	3.6	7.4	16.3	2.2	0.4	0.0	403	30
July	0.1	2.0	18.5	7.8	2.7	0.0	430	31
August	0.3	1.8	7.8	11.4	9.1	0.6	431	31
September	1.2	2.6	8.2	8.7	5.7	3.6	419	30
October	4.4	4.7	10.9	8.0	2.9	0.0	406	31
November	11.5	9.0	8.4	1.0	0.0	0.0	292	31

Region 5 Project Activity Level (PAL) Ev Variance Application/Agreement

Project Name: _____
 Contract Number: _____
 Contractor Name: _____
 Request #__, for period: _____
 Units/Subdivisions Affected: _____

Location of operation:	
Slope	
Aspect	
Elevation	
Fuels on site	
Fuels in surrounding area	
7 Day PAL Outlook	
Short range predictions (Red Flags)	
Fuel Moistures	
Response time of suppression resources	
Potential for ignition	
RAWS location	
Current Fire Situation:	
Draw down information	
National Readiness Level	
Contractual considerations:	
Normal Operating Season	
Frequency of recent contract fires in area	
Type of operation	
Contractors past/current performance & equipment readiness	
Other site specific mitigation or precaution (i.e. Contractors proposals)	
Social & Community Considerations:	
Proximity of high value resources	
Sensitivity of location	

Proposed Actions:

Description of Mitigation Measures:

Remarks:

Fire Management Officer Concurrence

Date

Line Officer Approval

Date

I have considered the above request and determined the specified mitigation measures or actions must be implemented to continue operations in Project Activity Level Ev. Unless extended, the approval remains in effect for ten (10) calendar days unless cancelled sooner or extended by the Forest Service for an additional ten (10) days. At the sole discretion of the Forest Service, this variance can be modified and/or cancelled at no cost to the government.

Contracting Officer

Date

Contractor Representative

Date