

Introduction: The objective of this project is to manage stocking and species composition to reduce the risk of high severity wildfire by reducing surface, ladder and crown fuels; protect and enhance late-successional species habitat; improve sustainability of forest vegetation consistent with fire adapted landscapes; increase tree growth and vigor; diversify species age and composition; lessen susceptibility to insect and disease outbreaks; and decrease point source sedimentation impacts from existing roads.

Mandatory Stewardship Project Number 001 - Tree Marking Designation by Prescription (DxPre) Specifications

The end result is to retain the *best available trees* to the specified stocking level and/or other *desired condition* as summarized within the Low Pole DxPre Specifications (see **Attachment B**). The Contract Area Map (CAM) specifies the locations for marking.

The contractor shall use non-tracer orange paint to mark designated leave trees.

End results specific requirements:

1. Special features to buffer will be tracked by latitude and longitude using a GPS - NAD83 map datum. Government will provide known locations.
2. Contractor will provide any additions or changes made in same format.

Payment will be based on acres marked.

Mandatory Stewardship Project Number 002 - Road Decommissioning

The end result is to decommission the following road.

6300141: 0.5 mile (from the junction of Rd 6300000).

End results specific requirements:

1. The roadbed is cleared of trees and slash.
2. All drainage devices, including culverts, are removed and properly disposed of off-site.
3. De-compact to a depth of at least 18 inches or as otherwise agreed to by the contracting administrator and contractor, and reshape road surface to provide drainage for erosion control with minimal subsoil material brought to the surface.
4. Restore natural contour and drainage features.
5. Seed all disturbed areas as directed by the contract administrator.
6. The roadbed is effectively closed as appropriate to site conditions to discourage motor vehicle use.
7. The entrance is effectively closed by berm, large boulders, or obliteration.

Optional Stewardship Project Number 003 - Tree Marking Designation by Prescription (DxPre) Specifications

The end result is to retain the *best available trees* to the specified stocking level and/or other *desired condition* as summarized within the Low Pole DxPre Specifications (see *Attachment B*).

The contractor shall use non-tracer orange paint to mark designated leave trees.

End results specific requirements:

1. Special features to buffer will be tracked by latitude and longitude using a GPS - NAD83 map datum. Government will provide know locations.
2. Contractor will provide any additional or changes made in same format.

Payment will be based on entire unit 23 marked, 248 acres

Optional Stewardship Project Number 004 - Road Closure/Decommissioning

The end result is to decommission up to 4 mile of designated roads. Locations are to be determined post-harvest.

End results specific requirements:

1. The roadbed is cleared of trees and slash.
2. All drainage devices, including culverts, are removed and properly disposed of off-site.
3. De-compact to a depth of at least 18 inches or as otherwise agreed to by the contracting administrator and contractor, and reshape road surface to provide drainage for erosion control with minimal subsoil material brought to the surface.
4. Restore natural contour and drainage features.
5. Seed all disturbed areas as directed by the contract administrator.
6. The roadbed is effectively closed as appropriate to site conditions to discourage motor vehicle use.
7. The entrance is effectively closed by berm, large boulders, or obliteration.

Payment will be based on actual number of miles of roads decommissioned and closed.

GENERAL SPECIFICATIONS FOR ALL PROJECTS

The Contractor may use yarding equipment, mechanical treatments, hand treatments, or other methods to reduce slash.

DEFINITIONS

Basal Area (BA): The cross-sectional (sq. ft) area of trees measured at DBH. Basal Area is typically determined by a wedge prism, angle gauge or relaskope.

Best Available Trees: See 'Desirable Trees' below.

Contract Administrator: The delegated on-site inspector. The duties and responsibilities of the CA are defined in the letter of designation issued by the Contracting Officer.

Clumps: 2-8 leave trees with crowns within 5' of one another.

Crown ratio or live crown ratio (LCR): is the portion of the tree bole supporting live, healthy foliage and is expressed as a percent of the actual tree height.

Crown class: is the description of the relative position of the tree crown with respect to competing vegetation surrounding the tree. The Crown Class for each tree is determined in the context of its immediate environment, trees or shrubs that are competing for sunlight or moisture with the subject tree.

Damage: Defect or deformity of a tree resulting from agents such as wind, snow, animals, insects, disease, and equipment, and evidenced by such things as dead or broken tops or boles, crooks, and deep scars or damage to the bark on more than ¼ of the circumference of the tree.

DBH (Diameter at Breast Height): A point on the bole of a tree 4.5 feet above the ground measured on the uphill side.

Desired Condition: Includes any applicable direction within the marking plan.

DWD or CWD: Down Woody Debris/Course woody debris consisting chiefly of dead and down material prior to operations.

Hawksworth Mistletoe Rating: Divide the crown of the tree into 6 sections. Rate each section for presence of mistletoe. The sum of the sections equals the Hawksworth Mistletoe Rating.

Height to Diameter Ratio: The relationship between dbh and height. Trees that are overly tall for their diameter size generally have a poor height to diameter ratio. These trees usually bend over once nearby trees have been removed. A 50' height and 6" dbh is 100:1 ratio.

IRTC: Integrated Resource Timber Sale Contract

Ladder Fuel Reduction: Cutting and/or removal of small diameter (<5.0 DBH) trees growing under other more desirable trees to reduce risk of fire moving from the ground to the tree crowns.

Leave Trees: Trees not designated for removal or other prescribed treatment.

Overstory Removal (HOR): Removal of the overstory trees with the intent of managing the understory.

Period of Performance: (also Performance Period or Contract Time). The number of calendar days allowed in the contract for completion of contract work.

Piling: Use of mechanized equipment to concentrate slash for fall/winter burning.

Quality Assurance: The actions taken by the Government to assess the results to determine that they meet contract requirements. The methods for quality assurance are described in the Quality Assurance Surveillance Plan (QASP).

Quality Control: Those actions taken by a Contractor to control the production of outputs to ensure that they conform to the contract requirements.

Shelterwood Harvest (HSH): Silvicultural method designed to retain 16-20+ overstory trees/acre, sufficient to produce a new age class of desirable trees.

Slash (created): Boles, branches and limbs produced by the Contractor's operations.

Selection Harvest (HSL): Selection of individual trees or small groups of trees designed to retain a stand with high forest cover while simultaneously providing for an orderly development of trees with a range of ages and/or size classes.

Severe insect or disease problems: Trees with **mistletoe** in more than half the crown. Brooms, cankers, and swellings on stems and branches are indicators of mistletoe. Mistletoe is common in western larch.

Trees showing symptoms of **root disease** should be removed. Frequently these trees are Douglas fir near a root disease centers (an area of dead broken off trees). Indicators of root disease include a white fungus growing between the bark and the wood, resin flow at the base of the tree and or a lighter color crown with fewer needles, when compared to other Douglas fir in the area. Fading crowns and/or sap flow from the bole of Douglas-fir and grand fir. **Blister Rust** is common in western white pine. Symptoms of blister rust include heavy resin flow on the stem from a diamond shaped wound, dead branches and/or a dead top. Grand fir with **scolytus** scars on both sides of the tree. Numerous pitch tubes where **beetles** have bored into tree (usually lodgepole). Symptoms of mountain pine beetles are small red to yellowish pitch tubes (less than one-fourth inch) and boring dust in bark crevices and round the base of the tree. Symptoms of Ips beetles are dead tops and group killings without pitch tubes.

Severe mechanical defects: heavy leans, v-shaped forks, sharp crooks, bear damage or bird peck girdling the tree, broken trees with few live branches remaining.

Stream course: The area along a stream with riparian vegetation and other riparian characteristics. Stream courses are noted on the Contract Area Map. Protection of streamcourses is outlined in the IRTC.

Thinning (HTH): Selection of individual trees designed to retain a stand with high forest cover. Leave-trees are generally those with 'desirable' characteristics and meet the prescribed spacing and/or BA retention requirements.

Trees not expected to live for 10 years: Trees with red needles, few live branches or other indicators of recent or expected tree mortality.

Trees per acre (TPA): A method of determining stocking level. The number of live trees >4" dbh per acre.

Vegetative Screen: Available vegetation such as shrubs, seedlings, saplings, full crown and/or wolfy trees. When designated, available vegetation is to be retained at a level sufficient to screen at least 90% of a large animal at 200 feet.

Vigor/Growth: Relative health and growth of forest trees. Leave-tree preference shall favor trees possessing relatively high vigor/growth, free of disease and defect over trees with relatively poor vigor and growth, regardless of specie preference. For example, a PP with a relatively healthy crown will be favored over and a similarly-sized DF with a faded crown. If the two trees possessed similar vigor/growth characteristics, the PP shall be the preferred leave-tree.

Wildlife tree and snags: Live or dead trees retained for wildlife.

CONTRACTOR WORK REQUIREMENTS AND STANDARDS

Locked gates: In cases where units are behind locked gates, the Contractor shall close and lock gates after entering or exiting each gate and will be subject to all other restrictions of administrative use. The Contractor shall be permitted to drive from the locked gate to the unit with only the minimum number of vehicles necessary for efficient transport of the crew and equipment as well as product removal.

Leave trees: 1) all snags and wildlife trees that do not pose a hazard to operations as defined by the Washington State Labor and Industry standards, or are not identified for removal in the fireline construction end products specifications shall be considered leave trees and left uncut. 2) All designated leave trees both in the treatment units and in the Optional Units shall be left uncut and undamaged. Operations shall be conducted in such a manner so as to minimize damage to any leave trees during operations. See the IRTC for details related to damage and/or cutting of commercial timber within the project area.

Unless otherwise approved by the Contracting Officer, green biomass trees removed under the Mandatory and Optional work items shall be completely severed below the lowest live limb and within six (6) inches of the ground at an angle parallel to the slope, except when prevented by natural obstacles. A live limb is a limb of any size that has green needles attached. Cut trees shall be secured so they do not roll down hill and shall not be hung up on other trees or vegetation.

Slash Treatment: Treatments of slash is to include slashing, bucking, dispersion, commercial off-site removal, chipping, or piling. Slash created and/or trees dropped by the Contractor's operations outside the unit boundaries will be pulled back onto Forest Service property unless agreed to in writing by the Forest Service.

Resource Protection: The Contractor shall exercise extreme care to prevent damage to existing facilities, developments, and resources in all aspects of the contract work.

CONTRACTUAL ARRANGEMENT

(a) This is a contract for the Mandatory and Optional services specified and effective for the period stated in the Contractor's Proposal and made a part of this contract. The quantities of services specified in the Schedule are estimates only and are not purchased by this contract, except as orders are placed in accordance with the ordering clauses. Minimum and maximum quantity requirements, if any, are as stated in A4.3 STEWARDSHIP CREDITS.

(b) Performance shall be made only as authorized by the Contracting Officer in writing in the form of a Cutting Unit Release. Timber Removal activities within the Optional Units shall be scheduled and carried out in accordance with the Contractor's proposal, as approved by the Contracting Officer and in accordance with all relevant provisions of the 2400-13 Contract provisions.

(c) Subject to any limitations in this contract, the Contractor agrees to furnish to the Government the services specified in the Schedule and called for by Task Orders/Cutting Unit releases, issued by the Contracting Officer. The Contractor shall furnish to the Government the services specified in A4.3 STEWARDSHIP CREDITS, up to and including the quantity as shown in A4.3.

(d) The Government will obtain performance of all services in the Schedule exclusively from the Contractor, until such time as the Government requires performance and the contractor is unable to provide.

ORDERING OF STEWARDSHIP CREDIT MANDATORY AND OPTION WORK ACTIVITIES.

(a) Authorized Ordering Officials: The following individuals are designated as Ordering Officials under this contract and are authorized to place orders within their respective levels of authority: Susan Rinke, Contracting Officer.

(b) Ordering Procedure. The Government will determine which Stewardship Credit Work Activity Items are required and place orders with the Contractor to provide the item as specified. Reasonable time will be negotiated at time of order to allow for mobilization. Performance period will be agreed to at the time the contract is signed, or as otherwise mutually agreed at time of order.

(c) Contractor Obligation. Upon issuance of a Work Order/Cutting Unit Release order, the order becomes a binding contract under all terms and conditions of this contract and the Contractor is obligated to meet the requirements of the order as accepted. Return of the signed order and/or delivery and operation of ordered equipment constitutes acceptance. Failure to accept a work order for Work Activities Items in the Schedule may constitute partial default of the contract.

(d) Documentation. Facsimile documentation of order and acceptance is acceptable insofar as the documentation thus received is clearly legible. Return of the signed task order to the Ordering Official, by hard copy or FAX, documents acceptance of the order.

INSPECTION AND ACCEPTANCE

A. UNSATISFACTORY PERFORMANCE

If the work is determined to have major defects, the Government will immediately notify the Contractor in writing and order improvement of the quality of future work. If the defects requiring action are not corrected within two consecutive workdays after receipt of notice in writing of unsatisfactory work, the Contractor's right to proceed may be suspended and the contract considered in breach. Repeated failure to perform work at an acceptable quality level shall also be considered breach of contract.

B. REWORK AND REINSPECTION AFTER REWORK

When inspection results show a defect and the deficiency is correctable, payment will not be made until the deficiency has been corrected. Re-inspection after rework will be made in the same manner as the first inspection.

C. INSPECTION

CONTRACTOR QUALITY CONTROL PLAN

A. Quality Control Plan

The Contractor shall provide a Quality Control Plan (QCP) as part of the technical proposal. The Plan must demonstrate how the Contractor shall assure that quality of performance meets the objectives and requirements of the contract. The QCP shall specify:

- How quality will be monitored to ensure performance standards are met.
- How the work will be supervised.
- How results of the monitoring will result in quality performance.
- Identify the personnel responsible for performing quality control.

B. Contractor Quality Control Inspection

The Contractor shall assure that performance meets contract specification prior to requesting the Government to inspect for payment or acceptance. Upon completion of a unit, the Contractor shall contact the Contract Administrator to set a mutually agreed upon date for inspection of completed work. The Contract Administrator may observe the Contractor's inspection at any time and shall otherwise have unlimited access to the inspection data.

GOVERNMENT-QUALITY ASSURANCE SURVEILLANCE PLAN

The Government will conduct inspections of each unit to determine work quality. Initial inspections will normally consist of a 100 percent visual inspection preferably in conjunction with the contractor or the contractor's field representative and will be based on adherence to contract technical specifications. If visual inspection shows that the work is inadequate, final inspections and payment will not be made until the deficiency has been corrected by the Contractor. It is clearly defined here to be the complete responsibility of the contractor to monitor all work and to request final inspections based upon their knowledge that the work has been complete to the contract defined specifications.

The Government will install a series of circular plots to determine final payment results. Plots will be randomly located throughout each sub-item to obtain a representative sample of the work. Plots may be established within units that are being worked on at option of the Government if needed to determine if work is actually within the contract defined limits. If these plots are found to be acceptable they, may be added to plots taken after the remaining portion of the unit is completed and used to determine the compliance rating/percentage for the unit.

Re-inspection of Work Activities upon Contractor Request

If original inspection results are unacceptable to Contractor and a second inspection is requested without rework, the same inspection procedure will be used following a different plotline. If the second inspection shows less than 5 percent variance from the first inspection, the Contractor shall pay the cost of the second inspection, and results of the second inspection will be used in determining payment. Re-inspection requests shall be in writing and submitted within three (3) calendar days of the original inspection notification.

MEASUREMENT AND PAYMENT**MEASUREMENT**

All linear and area measurements under this contract are measured on a horizontal plane within the established boundaries. Boundaries are marked with paint, flagging and tags in the commercial units.

Re-measurement. The Contractor may at any time after award request re-measurement of any sub-item. The request must be in writing within 10 days after completion of a unit or pay item. The Government's re-measurement of the unit/sub item will be made within established boundaries.

If re-measurement indicates a variance of 5 percent or less in the acreage stated in the list of services, there will be no adjustment in acres and the Contractor shall pay for the actual cost of re-measurement.

If re-measurement results in a variance greater than 5 percent in the acreage stated in the list of services, payment shall be based on the re-measured acreage and the Government shall pay for the re-measurement.

The Government reserves the right to charge for cutting of designated reserve trees under the thinning tree selection criteria at the Damage tree rates as outlined in K-G.3.2 - Protection of Reserve Trees.

Acceptable Quality Level

Description	Defect		Allowable Defects		Required Action	
	Major	Minor	Major	Minor	Major	Minor
Quality Control Plan	Non-compliance with the approved plan.	Non-compliance with the approved plan.	0	0	Suspend work until in compliance	Suspend work until in compliance
	Non-compliance with pre-approved stream crossing sites.	N/A	0	N/A	Repair and stabilize	N/A
Use of Ground based equipment	Mechanical felling treatments do not occur under dry soil conditions and using a single-pass scenario.	N/A	0	N/A	Detrimental soil conditions will be repaired	N/A
	Non-compliance with pre-approved excavated skid trails.	N/A	0	N/A	Repair, reshape and stabilize	N/A
	Mechanical yarding equipment not confined to trails.	N/A	0	N/A	Detrimental soil conditions will be repaired	N/A
	Mechanical equipment located on trails averaging less than 40 feet.	N/A	0	N/A	Detrimental soil conditions will be repaired	N/A
	Equipment operating in riparian habitat conservation area (RHCA)	N/A	0	N/A	Repair and stabilize	N/A
Detrimental soil conditions exceeding forest plan standards occur.	N/A	0	N/A	Detrimental soil conditions will be repaired	N/A	

Description	Defect		Allowable Defects		Required Action	
	Major	Minor	Major	Minor	Major	Minor
	Non-compliance with pre-approved mechanical operations on slopes >35% (except for short pitches of 200 feet up to 45% slope).	Non-compliance with pre-approved mechanical operations on slopes >35% (except for short pitches of 200 feet up to 45% slope).	0	1	Detrimental soil conditions will be repaired	Repair and stabilize if there is more than 1 occurrences
	Heights exceeding 12 inches except next to obstructions.	Heights exceeding 6 inches except next to obstructions.	0	<10% stumps/acre	Stump heights will be reduced to 6 inches	N/A
Stump Heights	Stumps contain lower live limbs.	N/A	0	N/A	Live limbs will be removed	N/A
	Ladder fuels or slash exceeds 12 inches in height.	N/A	0	N/A	Reduce slash height	N/A
Lopping and/or Scattering	Slash less than 10 inches large end diameter not scattered outside RHCA.	N/A	0	N/A	Disperse slash outside RHCA or 50 feet from stream channel	N/A
	Piles containing material exceeding 12 inches diameter on the small end and exceeding 16 feet in length.	N/A	0	N/A	Remove material and scatter away from a pile to be burned.	N/A

Description	Defect		Allowable Defects		Required Action	
	Major	Minor	Major	Minor	Major	Minor
	Piles are placed closer than 10 feet from the bole of a tree, snag, or ditch	N/A	0	N/A	Move pile	N/A
Mechanical Piling	Piles are placed on any improvement such as road, fence, sign, etc.	N/A	0	N/A	Move pile	N/A
	Pile is placed outside unit e.g. Riparian Habitat Conservation Areas	N/A	0	N/A	Move pile	N/A
	Except as noted to close skid trails and roads, piles contain soil and /or foreign material that would retard burning.	N/A	0	N/A	Remove soil and re-pile.	N/A
	Piles are not tightly compacted.	N/A	>5%	<=5%	Compact or re-pile	N/A

Performance Work Statements					
End Result	Tasks and Critical Subtasks	Quality Standard	Acceptable Quality Level	Method of Monitoring	Incentives/ Disincentives
Project 003					
<p>Unless otherwise stated within the comments (col 5 of the DxPre table), the criteria within the DxPre Table shall be met by retaining the trees described to be leave tree marked.</p> <p>The contractor shall furnish all labor, equipment, supervision, transportation, supplies, and incidentals to perform the work described in this contract.</p>	<p>•Old trees are retained.</p> <p>•Retained trees are in a random pattern using combinations of small openings (or gaps of variable sizes), clumps (variable number of trees), individual trees, and complex patches to meeting average BA/Acre.</p> <p>•Retain Coarse woody debris already on the ground that is within the desired fuel loadings. Especially important to retain are large diameter tree structures that cannot be recreated in the managed stand.</p>	<p>•Leave tree mark meets standard in DxPre specifications.</p> <p>•Gaps do not exceed 2 acre in size on an individual basis.</p> <p>•Conifer encroachment <20.0" DBH is cut 50-100 feet from aspen tree or stand.</p> <p>•Existing large diameter coarse wood debris and wildlife trees are retained at prescribed levels.</p> <p>•Wildlife trees: All snags that do not pose a safety hazard shall be retained unless otherwise agreed to in writing. Trees with bird holes or large nests (that can be safely operated around) should be retained regardless of other direction.</p>	<p>90% acceptable level of performance.</p>	<p>Review contractor's Quality Control Plan and perform periodic on-site ocular estimates.</p>	<p>Re-work when below standard.</p> <p>No payment will be made for less than 90% acceptable quality level.</p>

Performance Work Statements					
End Result	Tasks and Critical Subtasks	Quality Standard	Acceptable Quality Level	Method of Monitoring	Incentives/ Disincentives
Project 004 Road Decommissioning	<ul style="list-style-type: none"> •The roadbed is cleared of trees and slash. •All drainage devices, including culverts, are removed and disposed of off-site. •De-compact to a depth of at least 18 inches or as otherwise agreed to by the contracting administrator and contractor, and reshape road surface to provide drainage for erosion control with minimal subsoil material brought to the surface. •Restore natural contour and drainage features. •Seed area with grass mixture (KT-GT.6.0#) •The roadbed is effectively closed as appropriate to site conditions to discourage motor vehicle use. •The entrance is effectively closed by berm, large boulders, or obliteration. 	<ul style="list-style-type: none"> •All culverts/drainage devices removed. •Road entrance is effectively closed to discourage motorized travel. •All material discourages motorized travel. •Scarification done to prepare site for seeding. •Site adequately drained. •Application of grass seed meets KT-GT.6.0#. 	90% acceptable level of performance.	Review contractor's Quality Control Plan and perform periodic on-site ocular estimates.	<p>Re-work when below standard.</p> <p>No payment will be made for less than 90% acceptable quality level.</p>