

**TIMBER SALE REPORT AND APPRAISAL**  
**SULLY'S TIMBER SALE**  
Sale Number - 16801

**REGION TWO**  
**SAN JUAN NATIONAL FOREST (13)**  
**COLUMBINE RANGER DISTRICT (08)**

Prepared by: Beth Vance  
Beth Vance - Forester

Date: 7/28/16

This sale complies with section 6 (g) (3) (E)-(F) of the National Forest Management Act of 1976, 36 CFR 223.1, the San Juan National Forest Land and Resource Management Plan approved 09/29/83, amended 05/12/92, and the Decision Notice for the Fosset Gulch/Northern HD's Ecosystem Restoration Project dated 1/5/2015.

Approved by: Matt Janowiak  
fd Matt Janowiak - District Ranger

Date: 7-28-2016

## SUMMARY OF RECOMMENDATIONS

Contract Type: 2400-6T

Specified Road Cost: N/A

Sale Volume: 938 CCF

Road Completion Date: N/A

Method Of Sale: Sealed Bid, 30-day ad

Sale Termination Date: 09/30/2019

Normal Operating Season: May 20 to November 30

Method of Measurement: Premeasured

Deficit Sale: YES

Bid Guarantee: \$ 300

Minimum Performance Bond: \$ 300

Operations Fire Liability: \$2,600

Rate Adjustment: 100% up/down

Advertised Minimum Bid Rates:

SPECIES – PRODUCT	ADVERTISED RATE
Live Ponderosa Pine Sawtimber	\$ 3.00
Live Ponderosa Pine Non-Saw	\$ 1.00
<b>Total Appraised Advertised Value</b>	<b>\$2,754.00</b>

### Summary and Location

This Sully's Timber Sale Contract is part of the larger Fosset Gulch/Northern HD's Ecosystem Restoration Project area. This project was developed under the Healthy Forest Restoration Act of 2003 to reduce the risk of high severity wildland fire and restore or maintain healthy, diverse, fire adapted ecosystems on several thousand acres of ponderosa pine/Gambel oak forests. As part of this project, commercial timber sale and/or stewardship contracts were planned to treat approximately 2,691 acres. Poor market conditions for ponderosa pine have hindered efforts to implement this aspect of the project, but this contract is designed to harvest and regenerate four units of about 175 acres in an economically viable way. The unit will be treated using an uneven-aged individual tree selection prescription with conventional ground-based mechanized logging systems.

The Sully's Timber Sale is located on the Columbine Ranger District, San Juan National Forest. The sale is approximately 16 miles east of Bayfield, CO. The primary access route to the Sale is south from Highway 160 and Forest Service road 613. The gross sale area is an estimated 310 acres, total treatment area is an estimated 172 acres.

Legal Description: Portions of Sections 4, 9 & 10, Township 34 North, Range 5 West, New Mexico Principal Meridian, Archuleta County, CO.

## **Decision Notice Summary**

The District Ranger approved the Decision Notice and Finding of No Significant Impact for the Fosset Gulch/Northern HD's Ecosystem Restoration Project on January 5th, 2015.

*The decision as stated in the Decision Notice is:*

*Based upon my review of the EA, the project record, and the comments received during the 30-day public comment period, I have decided to implement Alternative 2, the Proposed Action.*

*In summary, the Selected Alternative authorizes the following management actions:*

- *Mechanical treatment on approximately 2,691 acres, including slash treatment and overland access with motorized equipment. This overland access will include driving of equipment across the native ground surface without construction of permanent or temporary road prisms, including such equipment as forwarders, hydro-mowers, ATVs, and service pick-up trucks.*
- *Hand thinning on approximately 614 acres in a 500-foot buffer around all private and state lands, including slash treatment and pile burning.*
- *Prescribed fire treatment across the entire proposed project area of approximately 13,646 acres, including control lines.*

*Further details about the Selected Alternative can be found in the description of Alternative 2 in the EA.*

Design Criteria were developed to ease some of the potential impacts. These are part of my decision and will be implemented, unless a waiver is granted in writing by the District Ranger. Waivers may be granted due to changing or unanticipated conditions, such as unusual weather conditions, provided that environmental consequences would be within the range of impacts analyzed in the EA.

## **Required Mitigation Measures & Design Criteria for Sully's Timber Sale**

### **Design Criteria**

#### **Soils**

1. When soils are saturated, equipment operations will cease until the ground dries out or freezes. Soils are considered saturated when ruts created by equipment are 4 inches deep (beyond the lug tread of the tire) for 10 feet or longer. This condition should be widespread in the treatment units and not in isolated depressions.
  - *Equipment shall not be operated when ground conditions are such that excessive damage will result. (BT6.6 - Erosion Prevention & Control)*
2. Limit equipment operations to sustained slopes less than 35%.

- Implemented during cutting unit layout, the majority of the cutting units are on slopes ranging from 0-10% with some short pitches (< 100ft) up to 35%.
3. Limit soil disturbance to less than 15% of the treated area.
- As per CT6.601 Erosion Control Seeding, it is estimated that three acres of disturbed areas will require re-habilitation. Three acres is 1.7 percent of the total treatment area of 175 acres.

### Watershed

4. Do not masticate or cut vegetation that is growing within or on the banks of defined stream channels, gullies or ditches. Do not masticate or cut more than 50% of the vegetation within 25 feet of defined drainages, gullies, ditches, wetlands, or ponds.
5. Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription.
6. Equipment shall not be operated in stream channels except to cross at crossings designated by the FS. Cross perpendicular to the direction of flow and do not cross where banks exceed 30% slope.
- Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep, BT6.5 Streamcourse Protection
7. Drainage must be provided on system roads that will be used for hauling logs; log trucks will be limited to system roads. Minimize connected disturbed areas.
- BT5.1 Authorization, BT5.3 Road Maintenance, CT5.31# Road Maintenance Requirements (T-802 Ditch Cleaning, T-803 Surface Blading, T-805 Drainage Structures)
8. Locate skid trails and other overland access routes primarily along the contour. Routes shall be rehabilitated upon completion of use by returning them to the original grade, water barring, spreading slash, and/or seeding as necessary.
- BT6.422 Landings and Skid Trails, BT6.65 Skid Trails and Fire Lines, CT5.34# - Obliteration of Temporary Roads, Skid Trails and Landings, CT6.6# Erosion Prevention and Control, CT6.601# Erosion Control Seeding.
9. Landings shall not be placed within 100ft of perennial or intermittent streams. Landings shall be rehabilitated upon completion of use by ditching and/or sloping to permit water to drain and spread. Cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion. Landings will be ripped or scarified and seeded.
- BT6.422 Landings and Skid Trails, BT6.64 Landings, CT5.34# Obliteration of Temporary Roads, Skid Trails and Landings CT6.6# Erosion Prevention and Control.
10. Operations shall be conducted to prevent debris from entering perennial or intermittent stream courses. In the event that debris enters stream courses in amounts that may adversely affect the natural flow of the stream or water quality, such debris will be removed as soon as practicable, but not to exceed 2 days during periods of actual or expected flow, and in an agreed manner that will cause the least disturbance to the stream course.

- BT6.5 Streamcourse Protection

### Vegetation

11. Pre-settlement trees will be protected except those that have been identified as a safety risk. Pre-settlement trees are those established prior to 1880 and can be identified by the relatively smooth orange bark with large plates and irregular flat topped crowns.
  - These parameters were incorporated into the stand specific silvicultural prescription and marking guides and were implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription. Reference the *Review and Certification of Marking* of the Silvicultural Prescription.
12. Where possible, avoid treatment of Gambel oak greater than 6" DRC (diameter at root collar). Gambel oak retained should be left in mosaic pattern consisting of clumps ranging in size from 1/10<sup>th</sup> acre to 10 acres.
  - Not Applicable, Gambel oak will not be treated during this contract implementation.
13. Slash generated by the project should be scattered over the ground surface and not exceed 2ft in depth.
  - The contract will required slash to be piled to meet specifications as described in CT6.7# Slash Treatment.
14. Chips generated by the project should be randomly scattered over the ground surface so as not to exceed 4" in depth to allow for the emergence of plant growth.
  - Not Applicable, no chipping is required for this contract implementation.
15. Stumps from cut trees should not exceed 12" height above ground as measured from the uphill side.
  - AT6 High Stumps, BT6.412 Stump Heights
16. Do not masticate or cut riparian or wetland species such as willows or cottonwoods.
  - Not Applicable, the Timber Sale Contract does not require mastication.
17. Pre-treatment of noxious weeds will occur before project implementation. All equipment brought into the project area will be cleaned and inspected prior to operating. Post treatment of noxious weeds will occur once the project is completed. Infestations of noxious weeds will be inventoried, monitored, and treated as necessary within the project area for a minimum of five years after the project is complete.
  - The Area was surveyed on 7/6/2016 to determine the need for noxious weed control/treatment prior to Timber Sale Operations, identified treatment needs are isolated along the FSR 613 and are scheduled to be accomplished in late July 2016 prior to award of the Timber Sale Contract. The Sale Area Improvement (KV) plan includes post timber sale treatment of noxious weeds for 5 years. As per BT6.35, the Purchaser shall comply with requirements of cleaning "Off-Road" Equipment.

18. The district ecologist will train operators/crew leaders in the identification of Missouri milkvetch (*Astragalus missouriensis* var. *humistratus*) and maps of the likely occurrences of this species will be provided to operators/crews so they may avoid intentionally trampling and/or uprooting the species. If additional populations of *A. missouriensis* var. *humistratus* are identified, operations in the area will cease until the district ecologist can inventory and monitor the occurrence(s).
  - The Area was surveyed on 7/6/2016, no sensitive plants were found.
19. Seed mixes will emphasize native species and will include a sagebrush component, where appropriate.
  - CT6.601# Erosion Control, Seeding
20. To the extent possible, individual sagebrush plants will be left untreated.
  - Not Applicable – the vegetation layer within the Timber Sale Area does not include a sagebrush component.

### **Cultural Resources**

21. Avoid known cultural sites as indicated in the cultural clearance.
  - Not Applicable – there are no identified cultural resource sites identified with in the timber sale area.
22. Should any cultural site be encountered during project implementation, they are to be avoided and reported to the district archeologist.
  - Contracting Officer may interrupt the Purchasers operations. BT6.24 – Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources.

### **Wildlife**

23. Except for purposes of safety, no snags 16” dbh or greater will be cut.
  - Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription. Reference the *Review and Certification of Marking* of the Silvicultural Prescription
24. Prior to prescribed fire, protect Class I and Class II snags of ponderosa pine or Douglas-fir that are 16” dbh or greater.
  - Not Applicable during Timber Sale implementation.
25. Where possible, retain green trees with spiked tops, cavities, lightning scars, etc. Regardless of size, trees with apparent multiple cavities should be retained if possible during mechanical or burning operations.
  - Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription.
26. Where possible, retain snags in groups along ridge tops, upper portions of canyons, stream bottoms and on edges of forest openings.

- Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription.
27. If an active raptor nest is discovered during layout or implementation, the district biologist will be consulted for mitigation actions.
- BT6.24 – Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources. No nests were identified during sale prep implementation.
28. Mechanical treatments in goshawk habitat will not occur during the March 1<sup>st</sup> to August 31<sup>st</sup> nesting season unless protocol surveys do not detect occupancy. If an active goshawk nest is discovered, treatments will be modified to be consistent with forest plan requirements.
- BT6.24 – Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources. No nests were identified during sale prep implementation.
29. In mapped Critical Winter Range, Severe Winter Range, and Winter Concentration Areas: between Dec 1<sup>st</sup> and April 30<sup>th</sup>, mechanical and Rx burning operations will generally be limited to no more than two active work locations at one time. If treatment occurs during the restriction period, operating hours will be between 0900 and 1500.
- No portion of the Sully's Timber Sale Area lies within mapped Critical Winter Range, Severe Winter Range or Winter Concentration Areas.
30. In mapped General Winter Range: between Dec 1<sup>st</sup> and April 30<sup>th</sup>, mechanical operations will generally be limited to no more than four active work locations at one time. If treatment occurs during the restriction period, operating hours will be between 0900 and 1500. Mechanical operations include chain saw work in hand thinning units, mastication, timber sale operations, and biomass removal. Rx burning, pile burning, and hand-line construction are not restricted at any time.
- As per District Ranger Decision on 7/8/2016, The Sully's Timber Sale Operations - hauling is permitted to begin at 0700 during the restricted period of December 1<sup>st</sup> through April 30.  
CT6.312# Sale Operation Restrictions
31. No treatment will occur within 300 feet of potential southwestern willow flycatcher habitat.
- Not Applicable
32. At known peregrine falcon eyries, no treatments will occur within ½ mile from 15 March through 31 July except as may be modified by the district ranger, in consultation with the district biologist.
- BT6.24 – Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources. No nests were identified during sale prep implementation.
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33. If any migratory bird nests are found during wildlife surveys, by the marking crew, or during project implementation, the wildlife biologist will be notified and the nest will be protected.
- BT6.24 – Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources. No nests were identified during sale prep implementation

### **Visual Quality**

34. Leave visual screening dispersed along roads and trails where there are sight line or travel management concerns.
  - Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription. Reference the *Review and Certification of Marking* of the Silvicultural Prescription
35. Leave visual screening between existing and proposed gas well pads and nearby houses and roads.
  - Defined in Silvicultural Prescription and Marking Guidelines, implemented during sale prep. The marking has been reviewed on the ground and meets the intent of the prescription. Reference the *Review and Certification of Marking* of the Silvicultural Prescription
36. Coordinate access route alignments to utilize the same alignments as proposed gas well roads.
37. Cross-country and overland vehicular travel and fire control lines will be rehabilitated as necessary to discourage public use by OHVs.
  - BT6.422 Landings and Skid Trails, BT6.65 Skid Trails and Fire Lines, CT5.34# -Obliteration of Temporary Roads, Skid Trails and Landings, CT6.6# Erosion Control Seeding

### **Miscellaneous**

38. Section corners and survey monuments will be protected.
  - BT1.1 Sale Area Map, BT6.23
39. No temporary road construction will occur in Colorado Roadless Areas; temporary overland motorized use is allowed, but minimized to the extent possible. Contractors and crews implementing the project will be informed of the importance of minimizing ground impacts, especially in roadless areas.
  - Not Applicable, the Sully's Timber Sale is not within the Colorado Roadless Area.
40. Notify gas industry operators, adjacent landowners, and grazing permittees in advance of prescribed burning. Notification should also include press releases including whether there will be area closures for public safety during any operations.
  - Not Applicable
41. No intentional lighting of prescribed fire will occur where coal deposits are visible at the surface. Supplementary monitoring will occur in these areas to find potential coal fire starts quickly.
  - Not Applicable

### **Public Health/Safety**

During contract operations, all appropriate OSHA and other safety precautions would be taken to minimize risks to the public. Adherence to these precautions is a standard requirement in the contract for the successful bidder. In addition, the contractor would post warning signs on the road to alert the public.

- *The Purchaser has responsibility for compliance with safety requirements for Purchaser's employees. Purchaser is also required to furnish and maintain temporary traffic controls sufficient to warn of potentially hazardous conditions. (reference BT6.33 – Safety)*

## **CONDITIONS OF SALE**

### **Silvicultural Prescriptions:**

The silvicultural prescription and marking guide for this sale was prepared by Travis Bruch, a certified Forest Service silviculturist. The selected management method for this stand is an uneven-aged individual tree selection system. The prescription was developed to meet objectives related to density management, fire behavior mitigation and to enhance ecosystem health and wildlife habitat.

### **Marking and Volume Determination Summary:**

This sale implements one planned timber sale, consisting of 4 harvest units under the Fosset Gulch/Northern HD's Ecosystem Restoration Project consisting of ±172 acres. The cutting units were GPS'd to determine the area.

The unit boundaries are flagged with orange flagging and marked with Orange tracer paint using procedures specified in the marking guide and R2 FSH 2409.12 Timber Cruising Handbook. Paint used for this marking was **Orange Lot # F0314**.

The included timber was designated with a "**Cut Tree**" (CTM) system. Cut trees within the unit were designated by using **Blue** tracer paint (**Blue Type-A Lot # F0239**) marks at or above eye level on the uphill and downhill side of the tree, with one additional mark below stump height on the downhill side of the tree. All marking was completed during the month of June, 2016. Merchantable volume was sample tree cruised at the time of marking with a total tree count.

### **Method of Measurement:**

The Sully's Timber Sale Cruise Plan contains detailed information about the cruise design and implementation. Matthew Tuten, a certified cruise designer, prepared the plan. Beth Vance, a qualified cruiser was the Responsible Cruiser for the sale. The sale was estimated to have a value less than \$5,000-6,500. Sampling error standards do not apply to sales of this value, however, the volume must still be determined in an economical and defensible manner (R2 Supp. FSH 2409.12, Section 41.1). To meet the requirements to produce a "defensible" cruise, the inventory for this sale was designed to meet a target Sale-as-a-Whole sampling error standard of less than 25% at the 95% confidence interval. The sampling error of the final cruise is 28.54%. Since sampling error standards do not apply, this cruise will be considered defensible and used as-is, without additional sampling. A detailed cruise printout is included in the pre-sale folder.

## **Harvest Operations:**

All the sale units can be harvested with ground mechanized equipment. The area is well roaded so no new permanent roads will be built as part of the sale. The volume can be efficiently removed by using NFSR 613 as well as several existing native surface roadbeds that traverse the area. The existing roadbeds and any new skid trails that are utilized will be closed by the Purchaser after use. A detailed logging plan and map are included in the presale folder.

## **Regeneration:**

All the units will be prescribed burned after harvest to reduce the natural and created fuels, as well as to create conditions more favorable for the establishment of grass and pine seedling regeneration. The regeneration in the pine restoration units may be monitored after harvest and burning is completed, in order to determine if the objectives of the treatments were met. However, the harvest prescriptions for this sale do not create a reforestation need and any surveys would not be considered essential KV projects.

## **Associated Plans:**

Brush Disposal Treatment Plan (FS-2400-62) – No BD plan will be issued with this sale.

Sale Area Improvement (K-V Collection) Plan (FS-2400-50) – describes improvement projects within the Sale Area that may be funded through timber sale receipts. In this sale, the projects to be completed with K-V funds are described in the Sale Area Improvement Plan Narrative Statement. Adequate K-V funding for all non-essential K-V work is unlikely due to the low value of ponderosa pine timber and these tasks may be supplemented with other funding if available.

Salvage Sale Fund Plan (FS-2400-51) – This sale was designed to harvest only live products, so no SSF Plan will be prepared and no stumpage receipts will be collected into the Forest Fund.

## **TIMBER APPRAISAL**

### **Current Appraisal Base Data**

<b>BULLETIN NO. BU230416 (effective May 2, 2016)</b>
BASE DATA PERIOD: 2 <sup>nd</sup> QTR CY15 – 1 <sup>st</sup> QTR CY16
APPRAISAL BASE PERIOD: 6-16
BASE INDEX (per MBF) White Woods: 345.37
BASE INDEX Adjusted to CCF: 141.78

<b>BASE PRICE/COSTS</b>			
SPECIES:		PP Saw	PP Non-Saw
<b>Adjusted Base Period Price (“Standard Rate”):</b>		<b>3.00</b>	<b>1.00</b>
Base Skid-Yard Cost		104.71	n/a
Base Haul		84.06	n/a
Base Road Maintenance		4.30	4.30
Base Slash		1.36	1.36
Base Temp Roads		2.39	2.39

### **Cruised Timber Volume Summary (CCF)**

	Units	Sale Total or Avg.	PP (Sawlog)	PP (Non-Saw)
Gross Volume	CCF	<b>4590</b>	984	30
Average Total Defect/Breakage	%	<b>7%</b>	7%	0%
Contract Volume(Net)	CCF	<b>938</b>	908	30
% Net Volume By Species/Group	%	<b>100%</b>	97%	3%
Avg. Net Volume/Tree	CF	<b>20.4</b>	23.0	4.6
Avg. Net Volume/Acre	CCF	<b>5.45</b>	5.28	.17
Net BF/CF Ratio	n/a		5.201	5.109
Quad Mean DBH/Species	Inch	<b>13.6</b>	14.3	8.6
Total Number of Trees	Trees	<b>4590</b>	3944	646

### **APPRAISAL ADJUSTMENTS**

#### **Road Maintenance**

The basic unit cost rates used to calculate road maintenance are from the San Juan National Forest Road Maintenance and Temporary Road Cost Guide prepared by the forest engineering staff. These rates include applicable contractor overhead on both labor and equipment.

**During Haul Maintenance** will be performed as needed by the contractor on the following roads per contract provision CT5.31# specifications. The Forest Service maintains FSR 613 annually, thus for appraisal purposes, it is anticipated that these annual maintenance items will not be required and thus are not include in the appraisal.

**Post Haul Maintenance** will be performed by the contractor on the following roads per contract provision CT5.31# specifications. It is assumed these maintenance items will be performed once, after hauling is completed.

NFSR 613 (Fosset Gulch Road)	Ditch Cleaning(T802), Surface Blading(T803), Drainage Structures(T805)	\$ 490/mile	2.5 miles	\$ 1225
Total Post-Haul Maintenance:			2.5 miles	\$ 1225

**Total Contractor Maintenance Cost: \$1225/938 = \$1.31 CCF**

**Surface Rock Replacement Deposits**

*FOREST PRIMARY TIMBER SALE HAUL ROADS WITH AGGREGATE SURFACE*

Miles of gravel road	2.5
Base Rate/CCF/mile	0.3
Rate/CCF/mile+FS OH @26%	0.378
Deposit Rate/CCF	0.945
CCF	938
Total Deposit	\$886.41
Cost/CCF	\$0.95/CCF

**Maintenance Summary:**

	<b>Total Cost</b>	<b>Volume</b>	<b>\$/CCF</b>
Surface Rock Replacement Deposits	\$886.41	938 ccf	\$ 0.95
Post Haul Maintenance	\$1,225	938 ccf	\$1.31
<b>TOTAL ROAD MAINTENANCE COST</b>	<b>\$ 2,110</b>	<b>938 ccf</b>	<b>\$ 2.26</b>

**Temporary Roads Construction & Decommissioning**

No temporary road construction will be needed for this sale.

**Haul Costs**

Sawtimber Haul Table to Montrose, CO

HAUL ROAD	CLASS	GRADE	MILES	MIN./ MI.	ADJ. FACTOR	% VOLUME	ROUND TRIP MIN.
<b>FSR 631 to CO HWY 160</b> at intersection w/Forest Boundary	5C3	-4%	2.8	6.5	--	100%	18
<b>CO HWY 160</b> to Bayfield CO	2B1	+2%	15.8	3.7	--	100%	58
<b>CO HWY 160 to CO HWY 550</b> in Durango CO	2B1	+2%	18.7	3.7	--	100%	69
<b>CO HWY 550</b> Molas Pass	2C1	+7%	38.1	7.1	--	100%	270
<b>CO HWY 550</b> to Silverton CO	2C1	-7%	10.1	4.5	--	100%	45
<b>CO HWY 550</b> to Red Mnt Pass	2C1	+7%	10.5	7.1	--	100%	74
<b>CO HWY 550</b> to Ouray CO	2C1	-7%	13.0	4.5	--	100%	58
<b>CO HWY 550</b> to Ridgeway CO	2C1	-2%	10.6	4.2	--	100%	45
<b>CO HWY 550</b> to Montrose, CO	2B1	-1%	26	3.6	--	100%	93
<b>SUB-TOTAL</b>							<b>730 min.</b>
<b>Delay Time Added:</b>							<b>60 min.</b>

<b>TOTAL</b>			<b>146.5 mi.</b>				<b>790 min.</b>
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The nearest operating sawmill to this timber sale that is capable of processing this volume and species of logs into finished lumber is Montrose Forest Products, located in Montrose, CO. Their annual capacity is several million board feet. The Montrose mill primarily processes Engelmann spruce, lodgepole pine, Douglas fir and true fir species into 2x4 lumber and landscape timber products. Therefore, this sale will be appraised to Montrose Forest Products in Montrose, CO.

Sawtimber Sale Haul Cost = (Total Round Trip Haul Minutes) x (\$0.1130/CCF/Min.) (per FSH 2409.22, Chap. 44.1)

$$= 790 \text{ Min.} \times \$0.1130/\text{CCF}/\text{Min.} = \mathbf{\$ 89.27/\text{CCF}}$$

**Non-Saw (Ponderosa Pine) Haul Cost Adjustment**

This sale contains a relatively small amount of Pine Non-Saw material (30CCF). The Purchaser will have the option of leaving this material at the sale area under the terms of *CT2.21# - Optional Removal* and *CT6.7# - Slash Treatment* which will be included in this contract. It is believed that the most likely scenario is that the purchaser will opt to leave all the Non-Saw material at the sale area. For this reason, the purchaser’s Non-Saw haul cost adjustment will be considered **zero** for appraisal purposes.

**Slash Disposal**

According to the provision, *CT6.7# - Slash Treatment*, the Purchaser will be required to pile slash within the unit or what is left at landings following whole-tree yarding. These piles will be burned by Forest Service force account crews when conditions allow.

**Purchaser Performance Items**

**Unusual Adjustments**

Unusual adjustments are sale adjustments made necessary for cost or value items that are not reflected in the appraisal database. (FSH 2409.22, 51.6)

**A. Sorting and Handling Adjustment:**

Non-saw size material (8.0”-9.9”) represents approximately 3% of the volume in the sale and is distributed evenly throughout the cutting unit. FSH 2409.22, sec. 51.6 provides guidance regarding development of a sorting and handling adjustment. An adjustment factor of 3% will be applied to the average Load Cost.

The average loading cost from 2409.22, sec. 42 of \$5.43/CCF  
 This loading cost is considered to be increased by a 3% adjustment factor: which = \$ 0.16/CCF

**B. Hauling Fuel Cost Adjustment:**

Per Region 2 Appraisal Bulletin effective May 2, 2016 (Bulletin #BU230416), no special appraisal adjustment representing the increased cost of fuel required for log hauling will be developed.

**C. Logging Fuel Cost Adjustment:**

Per Region 2 Appraisal Bulletin effective May 2, 2016 (Bulletin #BU230416), no special appraisal adjustment representing the increased cost of fuel used in ground based logging systems will be developed.

**Summary of Unusual/Other Adjustments (per CCF)**

	\$/CCF
Sorting & Handling	\$ 0.16
Hauling Fuel Cost	\$ 0.00
Logging Fuel Cost	\$ 0.00
<b>TOTAL:</b>	<b>\$ 0.16</b>

**Purchaser Liability Limit per Operations Fire (reference AT14 & BT7.41)**

Firefighter Type 2 (crewmember)  
 AD-C Wage rate (FSH id5109.34-2016) = \$18.00/hr.

Estimated number of persons needed to operate the sale = 4  
 \$18.00/hr. x 12 hr. day x 4 persons x 3 days = \$ 2,592  
 Rounded up to **\$2,600**

**Performance Bond**

The minimum Performance Bond for this sale shall be the greater of either the estimated performance bond amount based on the appraised value or the calculated cost of the estimated work required assuming the Purchaser quit operations before completing the entire sale.

The estimated Performance Bond Amount Is:

Appraised Value = \$2754 x 0.1 = \$ 275.40 (rounded up to \$ 300.00)

The minimum Performance Bond amount for this sale will be **\$300.00**

**Bid Guarantee**

The minimum bid guarantee shall not be less \$300 or 10% of the advertised value of the timber required to be removed (FSH 2409.18, Sec. 56.31).

**.10 x 2754.00 = 275.40 rounded up to next 100 = \$ 300 Bid Guarantee**