

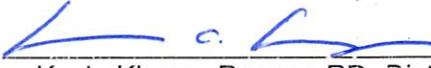
TIMBER SALE REPORT AND STANDARD RATE APPRAISAL

WOLFY SALVAGE TIMBER SALE – 2016

Prepared by: 
Matt Tuten, Supervisory Forester

Date: 8/5/16

I certify that this sale meets requirements of the Secretary of Agriculture's Regulation 36 CFR 223.30.

Approved by: 
Kevin Khung, Pagosa RD, District Ranger

Date: 8/5/2016

I. SUMMARY OF RECOMMENDATIONS

Advertised as Scaled Sale

INCLUDED VOLUME		
Engelmann Spruce-Dead	All conifer species	3535 CCF
	Total (included volume only)	3535 CCF
REQUIRED DEPOSITS		
	Road Maintenance	\$0.00/CCF
	Surface Rock Replacement	\$0.00/CCF
	Slash Deposit	\$0.00/CCF
(no gravel roads in the sale; all native surface)		
TOTAL SALE VALUE (standard rates)	\$3.65/CCF X 3535	\$ \$12,902.75
ADVERTISED VALUE	By Species and Product	
SAWTIMBER	ES (Dead nonsaw/houselog)	\$3.65/CCF
APPRAISAL BULLETIN NO	BU230416	
Support Information		
	Normal Operating Season	07/15 – 10/31
	Fire Liability	\$2,000.00
	Termination Date	09/30/2019
	Method of Bidding	Sealed Bid
	Escalated	No-Flat
	Bid Guarantee	\$1,300.00
	Minimum Performance Bond	\$2,000.00

This sale complies with Section 6(g), 3(e) - (f) of the National Forest Management Act of 1976, (36 CFR 233.3), the San Juan National Forest Plan (Revised 2013), and the Wolf Creek Spruce Salvage Categorical Exclusion, signed 4/18/2014

ii. DESCRIPTION OF SALE AREA

A. Location

The Wolfy Salvage Timber Sale is located T37N, R1E, Sections 1 & 12, and T37N, R2E, Sections 5, 6 & 7, NMPM, Mineral County, Colorado, approximately 22 miles northeast of Pagosa Springs, CO and 22 miles southwest of South Fork, CO, just south of US Highway 160 along Wolf Creek Road (NFSR 725).

B. Acreage, Volume Data, and General Sale Information

The Wolfy Sale consists of 131.6 acres of dead Engelmann spruce cut units within a broader sale area of approximately 811 acres.

Unit #	Acres	Spruce Volume (cf)
1	25.32	66427
2	27.03	70913
3	40.58	106461
4	9.14	23979
5	13.12	34420
6	4.62	12120
7	11.75	30826
<i>Totals</i>	<i>131.6</i>	<i>345146 cf</i>

The sale has a limited operating season due to the heavy snowpack typical of the Wolf Creek Pass area. Operations are not expected before July 15th in an average year. This short operating season is further compounded by heavy mid to late summer rains and early fall snows.

C. Land Status

National Forest land.

D. Basis for Selecting the Area

This area was covered by a 2012 CE and contains some of the most high volume per acre spruce on the San Juan NF, accessible by a short section of well-drained, native surfaced roads.

E. Relationship to Other Uses

The area is adjacent to Wolf Creek ski area which is expected to expand into areas to the north and east of the sale area in a minimum of 3 years. This potential expansion is not expected to impact sale operations.

F. Project Design Criteria

Hydrology

- Equipment will not be allowed to operate off of mapped roads when soils are saturated. Evidence of soil saturation will be when ruts four inches deep and at least 10 feet long are being created in other than rare isolated cases. If larger ruts are created, they will be rehabilitated by blading, draining, and seeding as necessary.

Provision B6.6 Erosion Prevention and Control indicates that equipment shall not be operated when ground conditions are such that excessive damage will result.

- Unless protected by at least 1 foot of packed snow or 2 inches of frozen soil, all mapped riparian zones and wetlands, as well as mapped ephemeral, intermittent, and perennial stream courses (both

within and outside of the unit boundaries) will be avoided by equipment, landings and skid trails, except at road or skid trail crossings designated by the Forest Service.

Layout was designed to avoid seasonally wet areas and streamcourses. Orange marked trees were used to designate Streamside management Zones. Wheeled or tracked equipment shall not be allowed to operate within 25 feet mapped streamcourses, flowing streams or orange marked tree areas.

- Directional falling shall be used to fall trees away from mapped riparian and wetland areas, as well as mapped ephemeral, intermittent, and perennial stream courses.

This language was included in the Felling and Bucking (C6.411#) provision

- To the extent possible log decks shall be located on pre-existing harvest roads or landing locations. When it is not feasible to do so, alternate locations shall be approved, in advance, by the Forest Service.

This was done to the extent possible with sale layout and design. Only two short sections (0.2 mile total) sections of temporary roads were needed, one of which was primarily an existing temp road.

- Limit soil disturbance to less than 15% of treatment units. Soil disturbance includes bare soil exposed at the completion of the treatment and soil that is disturbed and then covered with mulch, chips, or slash.

Forest service will designate skid trails which is expected to limit soil disturbance to less than 15% of cut units. Provision B6.6 Erosion Prevention and Control indicates that equipment shall not be operated when ground conditions are such that excessive damage will result.

- Equipment will not be allowed to operate on sustained slopes greater than 35 percent.

No sustained slopes >35% are located within the sale subdivisions.

- At least 10% of treatment generated slash will be left on site, distributed throughout the treatment units.

No trees less than 10" will be harvested with this sale and cull logs will be required to be left within cut units as part of sale operations via C6.411#

- All temporary roads will be closed following completion of salvage operations. Road closing could include installation of signs and/or barriers. Prior to closing, erosion control measures will be implemented as needed. These measures may include one or more of the following: outsloping, installation of cross drains (waterbars), covering with slash, scarification, and seeding.

Only two small sections of temporary road will be required to haul from this sale. They will be closed as described above via the C5.34# Obliteration of Temporary Roads, Skid Trails and Landings provision.

- Locate vehicle service and fuel areas, chemical storage and use areas, and waste dumps and areas on gentle upland sites. Dispose of chemicals and containers in State-certified disposal areas.

B6.34 Sanitation and Servicing provision requires that this be completed as part of sale operations.

- A temporary bridge or other temporary device will be installed at the stream crossing from FSR 725 into Unit 1 before heavy off road logging equipment or log trucks can cross the stream. Occasional use by a pickup may be allowed prior to installation of the temporary bridge. All crossing devices will be removed after harvest and barriers will be placed to prevent subsequent usage of the stream crossing.

This stream crossing will be installed by the Forest Service by 8/15/2017 and removed after acceptance of this unit following harvest. This method was decided through agreement between the forest engineering and timber programs as the most efficient way to complete this stream crossing.

- Slash shall not be left in ephemeral, intermittent, or perennial stream courses, or ditches.

This requirement is covered by the B6.5 & C5.31# provisions.

- All off road equipment will be cleaned of soil, seeds, vegetative matter, or other debris that could contain or hold noxious weed seeds before entering the Project Area, or before moving equipment from weed infested units to non-weed infested units.

Provision B6.35, equipment cleaning will be included in the timber contract requiring cleaning as described above.

Cultural Resources

Should unidentified archaeological resources be discovered in the course of the project, a San Juan National Forest Archaeologist shall be notified immediately. Work must be interrupted until the resources have been evaluated in terms of National Register of Historic Places eligibility criteria (36 CFR 60.4).

A San Juan National Forest Archaeologist shall be notified immediately if cultural resources are discovered during implementation.

Wildlife

- Treatment activities should avoid regeneration of spruce and fir to the extent possible to minimize impacts to snowshoe hare habitat.

Treatment units were designed to avoid spruce-fir regeneration. Felling and Bucking (C6.411#) and Skidding and yarding (C6.42#) provisions will be included in the contract with criteria designed to help avoid logging damage to residual trees.

- If an active raptor nest is discovered during layout or implementation, the District wildlife biologist will confirm activity in the nest area and recommend what follow-up steps are needed to protect the nest and/or affected raptors before activity occurs, or continues, in unit where the nest has been identified.

No raptors were discovered during layout. If a raptor is discovered, the District wildlife biologist will be notified.

III. CONDITION OF SALE

A. Planned Cutting Methods

The harvest system for this sale is ground-based – tractor/mechanical harvester on included timber.

B. Regeneration and Sale Area Betterment

Planting in high mortality areas is expected. Areas will be surveyed after harvest to determine regeneration needs. The KV plan includes regeneration surveys to ensure that this occurs.

C. Slash Treatment

C6.7#, states how slash will be treated in this sale. Tops and cull logs that remain at landings shall be returned to the unit or decked at landings.

D. Erosion Control

Provisions C6.601# and C6.602# are included in the contract.

E. Specified New Road Construction & Road Reconstruction

No specified road construction is associated with this sale. The Forest Service will complete a construction of a stream crossing by 8/15/2017 for use in harvesting and hauling from unit 1. This maintenance will also improve current erosion of this road due failure of two waterbars. This method was decided through agreement between the forest engineering and timber programs as the most efficient way to complete this stream crossing.

F. Check Cruise Information

A check cruise was not needed and was not done on this sale.

IV. APPRAISAL PREMISE

Sale will be sold as Dead Saw/Houselog at standard rates (*FSM 2400, 2430 Commercial Sales, Supplement 2430-02-1.*)

http://www.fs.fed.us/im/directives/field/sanjuan/fsm/2400/rq_2430_02_01.htm#_ftn1

Standard rate appraisal is 1/3 current adjusted base period price, minus competition factor

Adj BPP	1/3 AdjBPP	Comp Factor	Minus Comp Factor
15.66	\$5.22	1.57	\$3.65

The decision to sell this sale as dead saw/houselog at standard rates is founded in several factors:

- Time since mortality. The spruce beetle outbreak that occurred in Southwest Colorado originated in the area of the sale. Many of the trees that are part of this sale have been dead since circa 2008 (the start of the outbreak) and many marginally merchantable trees appear to predate the start of the widespread beetle outbreak. The sale contains very few currently beetle-infested trees without signs of deterioration; it is estimated >95% of the included volume was dead for at least 5 years at the time of cruising.

- Feedback from a current purchaser of nearby salvage sale. This purchaser has reported minimal recovery of 2"x and 4"x sawn material due to the heavy checking of spruce logs. This claim has been substantiated by field visits of the logging operation
- Feedback from regional measurement specialist during spring 2016
- Verification of deep checking observed through felling of trees as part of the timber cruising effort.

A waiver from the regional measurements specialist was granted for the standard rate appraisal for this sale on 8/1/2016 since it is being sold as dead sawtimber/houselog product, a product not appraised via standard Transaction Evidence Appraisal methods.

A. Volume Compilation

A summary of the volume determination is attached. Volumes are gross scale minus and estimated 28% hidden internal defect (2409.12 Ch10, ex12)

B. Plan of Operation

Due to the short operating season, a minimum of three operating seasons is assumed necessary to complete this sale.

A prehaul, during haul and post haul blading, cleaning of leadout ditches and roadside ditches was appraised for this sale. All roads but NFSR 725 (NFSR 725 is in good condition) are currently in good hauling condition and prehaul maintenance may or may not be required at the time of harvest. If not required as prehaul, this maintenance effort can be considered supplemental during haul maintenance.

C. Appraisal Point

Regional direction recently stated that all sawlog sales will be appraised to Montrose Forest Products in Montrose, Colorado given the current sawlog market condition. They also manufacture the end product.

D. Load Count Factor Derivation

The load count factor for this contract is 11.9 ccf/load from Kurt Stagner, R2 Certified Scaler.

V. VOLUME & COST CALCULATIONS

WolfyAppraisalSpreadsheet_standardrates.xlsx

- Sale Volume Calculation
- Sale Unit Volume Summary & Live and Dead Volume Calculation
- Haul Cost
- Road Maintenance Cost
- Performance Bond Calculation & Bid Guarantee
- Fire Liability (AT15)

Logging Plan and Map

Weight Calculation

Silvicultural Prescription with included Marking Guides

Cruise Design & Addendum

Cruise Printout

Slash Plan & Costs
K-V Plan & Costs