

Gold Crown Timber Sale Report

I. Location

The sale area is 1,630 acres in size and is located in sections 30, 31, 32, T57N, R1W, and sections 5, 6, T56N, R1W Boise Meridian, in Bonner County, Idaho. The timber stand atlas compartment number is 654, Sandpoint Ranger District, Idaho Panhandle National Forests. Harvest is planned on 470 cutting unit acres and 7.5 road ROW acres. The sale lies in the Gold Hill area, in the Gold Gulch and Hays Gulch drainages. The sale area is located approximately 2.5 miles southeast of Sandpoint

II. Relationship to the Environmental Document and Other Uses

This sale is prepared under the direction of the Gold Crown Fuels Reduction Project (HFRA) Environmental Assessment and Decision Notice approved by the Forest Supervisor on August 11, 2008. The purpose is to reduce wildland fuels on NFS lands within the Bonner County defined wildland urban interface (WUI) area and lessen the risks associated with a landscape fire event in the area between Bottle Bay and Sagle Slough, and to improve the overall health and resilience of the residual forest stands. Alternative 2 was chosen to best meet management objectives.

- Units 1, 2, 2a, 3, 4, 4a, 5, 6, 6a, 9, 10, 30, 34 and a portion of units 7, 8a, 17 lie in Forest Plan Management Area 1 (TIMBR) – Provide for the long-term growth and production of commercially valuable wood products on those lands that are suitable for timber production.

- Units 8b, 8c, 8d, 11, 12a, 12b, 14, 16, 18, 19, 20, 21, 22, 29, 29a, 31, 33, and a portion of units 7, 8a, 17 lie in Forest Plan Management Area 4 (TMEKW) – Provide winter forage to support existing and projected big game populations through scheduled timber harvest and permanent forage areas.

A. Private Land/Right-of-Way: Private land lies adjacent to units 1, 2, 8A 12a, 12b, 14, 29, 29a, 31 and 34. Private boundaries are clearly marked with blazed trees and signs, except along the BLM boundary (along units 8a, 31). Fell trees away from private property boundaries. A Temporary Road Use Permit has been obtained from Stimson Lumber Co. to use private portion of road 2642F in order to log units 29 and 29a. The existing gate will need to be moved to the private property boundary. A Right-of-way & Encroachment Permit has been obtained from Bonner County to construct a temporary road to access unit 34.

B. Threatened, Endangered, (T&E) and Sensitive Species: A sensitive plant site has been found adjacent to unit 11. The unit boundary has been modified to provide an adequate buffer around the site. A no activity area of 40-acres has been placed around goshawk nests north of unit 2. Project activities (harvest and fuels treatment) in units 1, 2, 2a, 3, 34, and road work on roads 2642B, 2642G shall be suspended from March 15 to

August 15, to promote nesting success and provide forage opportunities for adults and fledgling goshawks during the fledgling dependency period. Activity restrictions would be removed after June 30 if the District Wildlife Biologist determines the nest site is inactive or unsuccessful.

- C. Wetlands/Streamside Habitats:** Timber harvest will be prohibited in any RHCA. The minimum RHCA widths are 300 ft for fish-bearing streams, 150 ft for perennial non-fish bearing streams, and 60 ft (one-half the site potential tree height) for seasonal streams for this project. All known or discovered seeps, bogs, elk wallows and springs less than one acre in size have been protected with a “no activity” buffer of approximately 100 feet. All buffers have been applied during unit layout and have boundaries excluding them from cutting units, however, they are adjacent to units 1, 2a, 4a, 7, 8a, 8d, 10, 12a, and 31. Fell trees away from these sites and no equipment permitted in the buffered areas.
- D. Fisheries:** Road work activities in live water which generate the potential for instream sedimentation are prohibited from April 1 to July 15th on sites upstream of trout populations and/or spawning areas in Gold Gulch and its tributaries, along road 2642.
- E. Mining Claims, Range Allotments:** There are no mining claims or range allotments in the sale area.
- F. Noxious Weeds:** In order to prevent the spread of noxious weeds into the sale area, the purchaser shall be required to clean off-road logging and construction equipment prior to entry on to the sale area. Weed pretreatment (spraying) on existing haul roads 2642, 2642A, 2642C, and 2642E on National Forest lands would occur prior to ground disturbing activities where feasible.
- G. Cultural Resources:** There are no cultural resource sites in or near cutting units.
- H. Recreation:** There are several recreation trails in the sale area, Gold Hill Trails # 1, 2, and 3. Hauling will be restricted on weekends and holidays for safety reasons, due to residential and recreational use of the haul route. Trail impacted units are 11, 20, and adjacent to unit 21. Crossing would be limited and rehabilitated immediately adjacent to the trail (scattered with slash, berms eliminated), and trail tread would be restored (30” wide for Trail #3 and 48” wide for Trail #2). Trees shall be directionally-felled away from the trail to minimize negative effects to the trail tread. The trail would be closed to the public during active logging operations adjacent to or affecting the trail, with closure warning signs posted at the road 2642 entrances and trailheads. Stumps within the 75-foot buffer adjacent to the trail would be flush cut no higher than 6” from the ground, and no logging or harvester equipment allowed within the buffer (pull line). No landings shall be permitted at any trailheads, or turnouts. For safety reasons, no grapple piling in units 11, 20, and 21 and no logging operations in all cutting units during the peak summer season, from Fourth-of-July through Labor Day.
- I. Wildlife:** Snags and live tree replacements would be retained where opportunities exist in treatment units. To maintain forest species diversity and wildlife habitat, aspen and

birch trees would not be harvested. Large diameter snags not designated for removal (greater than 15 inches dbh), aspen and birch trees that are felled for safety reasons would remain on site to provide for large woody debris recruitment and long-term site productivity. Intermittent vegetation buffers would be left along the open roads in Units 4, 7, 8c, 10, 12a, 18, 19 and 22 to provide security screening for wildlife and minimize unauthorized access into these stands. This was accomplished through appropriate timber designations. To prevent establishment of motorized public use patterns on the temporary road, currently closed roads, and new permanent roads, gates will be installed to block access at the end of the day and during closures or periods of inactivity. After use these system roads will be put into storage by the Forest Service and the temp roads will be obliterated by the purchaser.

J. Soils: Protection measures to protect soils and site productivity are discussed under Logging Plan and Forest Service Slash Requirements in this report.

K. Visuals: Unit shapes and sizes should be blended into past treatment areas, as well as natural vegetation and geologic features. Following sale activities, residual unit boundary signs, marking, and flagging should be removed adjacent to trails, travel corridors, private land boundaries and public facilities. Any marking paint visible from the travel corridors or designated trails should be covered over with paint blending in with the bark of the tree. This will be done by the Forest Service. Stump heights in units that can be seen from open travel corridors, recreation trails, and some private residence boundaries should be no higher than 6 inches within 75 feet.

III. Timber Volumes

This sale was cruised in the summer of 2008, using sample tree for sawlogs and fixed plot cruising for non-sawlogs. Fixed plots were cruised with a 1/20th acre plots. Sample tree cruised units had sample groups with varying frequencies depending on population characteristics. All units require non-sawtimber removal (small trees and tops). Cutting unit acres were determined using GPS.

This is a weight scale sale with a designed sale error of 20%. Refer to Gold Crown cruise number 60801, run on 07-23 -2008. The INGY 2 point volume equations were used with a 5.6" top diameter for sawtimber and 4.0" top for non-sawtimber. The sale-as-a-whole error was 6.05% at the 95% confidence level, based on net volume, and can be found in Table DS1. Strata errors < 50% were attained for all strata. Table UC5 was used for sawtimber volume. Table R101 was used for appraisal group statistics. Table UC11 was used to determine the number of trees. Non-sawtimber (topwood and small trees) are mandatory products in all cutting units. The sale conversion factor is .5239 mbf/ccf. The average weight conversion factor is 3.21 tons/ccf. The following table summarizes sale acreage and estimated timber volumes by species, product, and unit:

Volumes (CCF)

Unit	Acre	C	DF	GF	H	L	LP	PP	Sawlog Total	Non- Saw	Sale Total
1	21	20	104	16	1	10	2	0	153	40	193
2	27	15	202	7	1	14	0	0	239	56	295
2a	13	8	161	1	1	8	0	0	179	31	210
3	21	11	119	2	1	11	0	0	144	43	187
4	12	13	52	6	1	6	0	0	78	23	101
4a	10	5	30	4	0	5	2	0	46	18	64
5	5	4	49	1	0	3	0	0	57	11	68
6	11	23	83	5	2	13	2	0	128	34	162
6a	6	9	23	5	1	6	0	0	44	15	59
7	13	10	76	8	3	7	0	0	104	26	130
8a	25	22	142	23	14	9	1	0	211	45	256
8b	6	3	34	1	1	3	0	0	42	12	54
8c	14	15	77	12	1	5	2	0	112	26	138
8d	3	2	13	1	2	2	0	0	20	6	26
9	6	3	22	0	0	2	0	0	27	10	37
10	40	32	352	24	2	27	2	0	439	91	530
11	39	22	356	51	2	19	5	0	455	84	539
12a	23	14	190	10	1	8	1	0	224	41	265
12b	4	3	45	0	0	2	1	0	51	9	60
14	13	17	93	5	1	4	1	0	121	24	145
16	6	7	69	24	3	5	0	0	108	16	124
17	30	44	188	6	4	13	6	0	261	59	320
18	15	12	96	25	2	8	4	0	147	29	176
19	20	15	99	30	4	13	13	0	174	37	211
20	9	7	51	1	0	9	2	1	71	18	89
21	2	1	19	0	0	2	0	0	22	4	26
22	22	31	101	41	1	20	0	0	194	39	233
29	15	55	91	30	8	7	0	0	191	31	222
29a	3	5	9	3	2	2	0	0	21	6	27
30	6	26	36	1	0	4	0	0	67	15	82
31	18	10	81	57	5	9	1	0	163	32	195
33	5	13	31	7	1	4	0	0	56	12	68
34	7	6	65	0	1	7	0	0	79	13	92
Total Units	470	483	3,159	407	66	267	45	1	4,428	956	5,384
Rd 2642D	3	11	62	12	5	13	0	2	105	5	110
Rd 2642B	3	10	57	11	5	12	0	2	97	5	102
Temp Rd 29	.5	3	17	3	1	3	0	1	28	1	29
Rd 2642E	.8	3	16	3	1	3	0	1	27	1	28
Temp Rd 34	.2	1	4	1	0	1	0	0	7	0	7
Total ROW	7.5	28	156	30	12	32	0	6	264	12	276
Total CCF	477.5	511	3,315	437	78	299	45	7	4,692	968	5,660
Total MBF		230	1,645	231	37	155	22	4	2,324	641	2,965
Total Tons									14,964	3,224	18,188

IV. Marking Plan

A. General:

All cutting unit boundaries have been marked on three sides of cutting unit boundary trees with streaks of orange paint extending from near ground level to a height of 6 feet or more, and orange stump marks. The middle streak faces the cutting unit. Where a cutting unit is adjacent to a road, the road is the boundary and no paint was used. Fell trees away from cutting unit boundaries.

Units 2, 2a, 8c, 10, 14, 20, 29, 30, and 34 are Irregular Shelterwoods with Reserves. Units 4, 4a, 7, 8a, 11, 12a, 12b, 17, 18, 19, and 22 are Group Selections with Commercial Thinning. Units 1, 3, 6, 6a, 8b, 8d, 9, 16, 21, 29a, and 31 are Commercial Thinnings. Units 5 and 33 are Improvement Cuts.

B. Designations:

C2.38# - Species Designation

Unit	Designated Species	Maximum Stump Diameter - (Inches)	DBH limit (Inches)
1	LP	NA	
1	L,H,C	13	10
1	DF,GF	16	12
2,2a	LP	NA	
2,2a	L,H,C	13	10
2,2a	DF,GF	18	14
3,8b,8d,9	LP	NA	
3,8b,8d,9	L,C	13	10
3,8b,8d,9	DF,GF,H	16	12
4,4a	LP,GF	NA	
4,4a	L,DF	13	10
4,4a	H,C	16	12
5,8c,17	LP,GF,H,C	NA	
5,8c,17	L	13	10
5,8c,17	DF	16	12
6,6a	LP	NA	
6,6a	L,DF	13	10
6,6a	GF,H,C	16	12
7,10	LP,GF	NA	
7,10	L,H,C	13	10
7,10	DF	16	12
8a	LP,GF,H	NA	
8a	L	13	10
8a	DF,C	16	12
11	LP	NA	
11	L,GF,H,C	12	9
11	DF	14	12
12a	LP,H	NA	
12a	L	13	10
12a	DF,GF,C	18	14
12b	LP,GF,H,C	NA	
12b	L	13	10
12b	DF	18	14
14	LP,GF,H,C	NA	

14	L,PP,WP	11	9
14	DF	18	14

Unit	Designated Species	Maximum Stump Diameter - (Inches)	DBH limit (Inches)
16	LP,H	NA	
16	DF,GF	14	12
16	C	12	10
18	LP,GF,H	NA	
18	L	11	9
18	DF,C	14	12
19	LP	NA	
19	L,C	11	9
19	DF,H	13	11
19	GF	22	18
20	LP,GF,H	NA	
20	L,C,PP,WP	11	9
20	DF	18	14
21	LP	NA	
21	L,DF,GF,H,C,PP,WP	13	10
22	LP	NA	
22	L	13	10
22	DF,H,C	14	12
22	GF	22	18
29	LP,GF,H	NA	
29	L	13	10
29	DF,C	22	18
29a	LP	NA	
29a	GF,H,C	11	9
30	LP,GF,H,C	NA	
30	L,PP,WP	11	9
30	DF	14	12
31	LP,GF,H	NA	
31	L,C	11	9
31	DF	14	12
33	LP,GF,H	NA	
33	L	12	10
33	DF,C	18	14
34	LP,GF,H	NA	
34	DF	20	16
34	C	14	12

Trees to be left standing are marked with a horizontal stripe of orange paint at about dbh and an orange mark below stump height. In addition to species listed above, trees to be cut in units 1, 5, 7, 8a, 8b, 8c, 8d, 9, 10, 11, 12a, 12b, 14, 16, 17, 18, 20, 21, 29, 29a, 30, 31, 33, and 34 are marked with a horizontal stripe of blue paint at about dbh and a blue mark below stump height. In units 2, 2a, 3, 4, 4a, 6, 6a, 19, and 22 trees to be cut are marked with a horizontal stripe of yellow paint at about dbh and a yellow mark below stump height.

V. Logging Plan

A. General:

Tractor logging is suitable for units 1, 3, 4, 4a, 6, 6a, 7, 10, 11, 12b, 16, 18, 19, 21, 22, 29a, 31, and 34. In portions of units 4, 6, 12b, and 21 a swing system with a skyline will be needed to get logs to landings. Do not use the trailhead adjacent to unit 18 as a landing site.

Winter harvest on Snow or Frozen Soil will be required in units 11 and 22 under one of the following conditions:

- 0 inches of frozen soil Need 10 inches of machine-packed snow.
- 2 inches of frozen soil Need 6 inches of machine-packed snow.
- 4 inches of frozen soil No snow cover necessary.

Limit ground-based equipment to 40% slopes or less. Short pitches within harvest units 7, 10, 16, 18, and 19 that are above 40% slope should be line-pulled and/or trees should be directionally-felled. Use existing skid trails and maintain narrow trails, where practical.

Conventional tractor/ skid trails should be no closer than 75 feet apart in the summer on dry soils. In the winter on snow or frozen ground, skid trails should be spaced no closer than 50 feet apart.

Skyline yarding is required in units 2, 2a, 5, 8a, 8b, 8c, 8d, 9, 12a, 14, 17, 20, 29, 30, and 33.

Harvester trails should be spaced no closer than 50 feet apart, summer or winter. Where feasible, timber harvesters should place slash in front of the harvest equipment and work on a slash mat.

To maintain habitat for snag-dependent species the location of proposed new roads, skid trails and cable corridors shall be placed where veteran and relic fire survivor trees would not be removed, wherever practical.

Closure/warning signs would be posted both at the 2642 road entrance, as well as at trailheads for Trails #2 and #3, to deter public use during active logging/hauling operations.

Protect sensitive plant sites, wet areas, surveys monuments, gates, stream courses, private property, recreation trails, and any private improvements, including private barb-wire fence.

Units that require a maximum 6 inches stump height within 75 feet:

- From roads 2642, 2642C, 2642G, or Bottle Bay C122 include: 1, 2, 3, 4, 4a, 5, 6, 6a, 7, 8b, 8c, 8d, 10, 11, 12a, 16, 18, 19, 20, 22, 33, and 34.
- From Gold Hill Trails 1, 2 or 3 include: 11, 18, 20, and 21.
- From private property include: Unit 34 and southern half of eastern boundary of unit 1.

B. Timber Characteristics:

	Tractor	Skyline	Tractor Swing	Total/Ave.
Net Volume (CCF)	2,531	1,876	279	4686
Net Cut Vol/Ac (CCF)	10.2	9.4	9.6	10
Total Acres	248.5	200	29	477.5
Total Trees	17,918	13,751	2,529	34,198
Percentage by Volume	54%	40%	6%	

Ave. External Yard Distance	640'	460'	960'	
Ave. DBH	10"	10"	10"	10"

C. Skyline Analysis: Analysis using LoggerPC has shown that all skyline units are feasible. Profiles are available for review at the Sandpoint District office. Units 8a, 8b, 8c, 17, 29, and 30 may need intermediate supports.

VI. Transportation System

A. Average haul route to sale center:

Road Name	Road Number	Mileage
Contest Mountain D	2642D	0.7
Contest Mountain	2642	4.4
Sagle County Road	C247	6.4
US Highway 95	US95	5.5
US Highway 2	US2	13.8
Total		30.8

B. Road construction or reconstruction:

Road Number	Road Name	Type of Work	Road Mileage
2642B	Contest Mountain B	Construction	0.70
2642D	Contest Mountain D	Construction	0.72
2642E	Contest Mountain E	Reconstruction	0.30
2642E	Contest Mountain E	Construction	0.17
Total			1.89

C. Reconditioning under C5.312#:

Road Number	Road Name	Type of Work	Road Mileage
2642	Contest Mountain	Construct ditch and drain dips, remove slump & cattleguards, as described.	4.4
2642A	Contest Mountain A	Brush & blade	0.2
2642C	Contest Mountain C	Brush & blade	0.3
2642F	Contest Mountain F	Brush & blade	0.9
Total			5.8

D. Temporary roads:

Road	Type of Work	Road Mileage
Unit 29 Temp Road	Construction	.20
Unit 34 Temp Road	Construction	.15
Total		.35

A Right-of-way & Encroachment Permit has been obtained from the county for the new temporary road to unit 34. See the permit for details and specific requirements. Temporary roads will be obliterated by the purchaser following use. The obliteration will restore roads to their pre-roaded condition by revegetating (seeded and fertilized), berming, and by covering with

slash to prevent off-road vehicle use. Unit 34 Temp Rd is marked on the ground with pink flagging and Unit 29 Temp Rd is marked on the ground with orange flagging.

E. Road Closures Under C5.41#: The private gate on road 2642F is on Forest Service property and needs to be moved to the private property line. Stockyard (farm-style) gates will need to be installed on roads 2642A, 2642B, 2642D, and 2642E.

F. Road maintenance: A deposit will be collected for surface replacement and vegetative brushing, for all Forest Service roads in the haul route. Purchaser shall be responsible for recurrent maintenance, including dust abatement and snowplowing. An allowance will be made for snowplowing on Forest Service maintained roads, for units requiring winter logging. All access roads must be carefully plowed and cross drains created to prevent mass failures of roads.

Snowplowing: Estimate 6.7 miles of 1 plowing/ week & 1 winging/2 weeks on rd 2642 for 12 weeks/season for 1 season:

12 plowings	x \$ 80.32/hr (grader & operator) x 6.7 miles / 3 miles/hr	= \$ 2,153
6 wingings	x \$ 90.01/hr (dozer & operator) x 6.7 miles / 1 mile/hr	= \$ 3,618
Total Cost = \$ 5,771		Cost/CCF = \$ 1.23

F. General:

1. When roads are first constructed or reopened prior to use for the project, they would be closed to public motorized use with a gate or other effective closure device, at the end of each day's use, during periods of inactivity, on weekends and on holidays.
2. After completion of project activities, the roads would remain closed to public motorized use with a gate or other effective closure device until the road is decommissioned or put into storage by the Forest Service. Temp roads will be obliterated by the purchaser.
3. Decommissioning or storage activities would occur as soon as possible after completion of project activities including planting and fuels treatment.
4. All existing and created skid trails that might provide motorized access from open roads would be closed with large mounds made up of a combination of slash and dirt to help reduce the attraction to use of these trails.

G. Noxious Weed Pretreatment: Field reviews have found the occurrence of noxious weeds within the timber sale area. Logging equipment used in the area along with road reconstruction would further disturb the area creating a high risk of further invasion and establishment by the weed species. In order to help control the weeds, the purchaser will be required to spray herbicides along the following system roads used in conjunction with this timber sale as described under C6.27#.

<u>Road Number</u>	<u>M.P. to M.P.</u>	<u>Miles</u>
2642	From m.p. 6.7 to the jct with county road 247.	6.7
2642A	From m.p. 0.2 to the jct. with road 2642.	0.2
2642C	From m.p. 0.3 to the jct. with road 2642.	0.3
2642E	From m.p. 0.3 to the jct. with road 2642.	0.3

Total

7.5

VII. Erosion Control

A. General: Application shall be during the period from May 1 to June 15, and/or September 1 to September 30. Seed shall be applied evenly at the rate of 18 pounds per acre (moist site mix) and 200 pounds per acre of fertilizer type: 16N – 16P – 16K or 10N – 16P – 10K. Erosion control measures should be done by the end of the normal operating season to prepare for overwintering.

Landings, skid trails/corridors, and temporary roads shall be seeded, fertilized, covered with slash, and waterbarred, as needed. Temporary road seeding and fertilizing cost is included in the road obliteration cost.

Area to Seed	Acres
Landings	12.3
Skid trail/corridors	11.7
Total	24.0

B. IPNF Standard Moist Site Seed Mix - appropriate for roadside application on low to middle elevation sites that have moderate moisture.

SPECIES	PLS LBS/AC
Slender wheatgrass "Pryor" or "Revenue" (<i>Elymus trachycaulus</i> ssp. <i>trachycaulus</i>)	3.0
Sheep fescue "Durar" (<i>Festuca ovina</i>)	5.0
Mountain brome "Bromar" (<i>Bromus marginatus</i>)	5.0
Annual rye (<i>Lolium multiflorum</i>)	4.0
Streambank wheatgrass "Sodar"	1.0
TOTAL	18.0

Acceptable substitutes:

Blue wildrye "Arlington" or "Elkton" (*Elymus glaucus*) @ 3 PLS LBS/AC for slender wheatgrass
Use of Alsike clover has been removed since it would conflict with other resource values (e.g. grizzly bear habitat).

C. Costs:

Seed: 18 lbs/ac x 24 acres x \$2.87/lb = \$ 1,240
Fertilizer: 200 lbs/ac x 24 acres = 4,800 lbs x \$.39/lb = \$ 1,872
Labor: 24 ac x 1/3 manday/ac x \$ 212/manday = \$ 1,696
Transportation: 36 mi/trip x \$.50 /mile x 2 trips = \$ 36
Total Erosion control needs = \$ 4,844
Cost/CCF = \$ 1.03

VIII. Sale Area Improvement

A. KV Reforestation: The sequence of activities and activity costs are attached. Costs are generated through the FACTS program.

A preplant exam, planting, and 3 stocking surveys each is planned for units 2a, 14, 29, 30, 34 and portions of units 2, 3, 4, 4a, 7, 8a, 8c, 10, 11, 12a, 12b, 17, 18, 19, 20, 22. (123 acres base rates, 70 acres KV Other).

Underburning site prep for planting is planned for all or portions of units 2, 2a, 8c, 10, 14, 20, 29, and 30 (96 acres).

IX. Hazard Reduction and Site Preparation

A. General:

Grapple-piling shall be accomplished from skid trails, or slashed-over harvester routes (slash mats). In areas where grapple piling is prescribed for fuels reduction, leave one to three slash piles per acre unburned to provide habitat for small forest mammals (snowshoe hare) and forest land birds, except in areas designated as fuelbreaks.

Detrimental soil disturbance caused by the fuel reduction and slash treatment activities (soil compaction and displacement) shall not exceed 15% of the treatment area.

Generally leave 7 to 14 tons per acre on dry forest types and 16-33 tons per acre of coarse woody debris on moist forest types.

Where underburning, wait an interval (at least 6 months) between the thinning and the underburn, for nutrient recycling and soil productivity, when possible. Underburn when the topmost mineral horizon has moisture content of 25% or greater.

B. Purchaser requirements:

Limb and lop tops of sawlogs in all cutting units.(470 acres) Buck slash into 10-12 ft pieces in units to be grapple piled .

Fell damaged residual in units 1, 3, 4, 4a, 5, 6, 6a, 7, 8a, 8b, 8d, 9, 10, 11, 12a, 12b, 16, 17, 18, 19, 20, 21, 22, 29a, 31, 33, and 34 (343 acres).

Construct firelines by hand in units 2, 2a, 5, 7, 11, 14, 17, 20, 30, 33 (2.5 miles), and by machine (excavator) in units 2, 2a, 7, 8a, 8c, 10, 12a, 17, 20, 29, 30, 33 (3.6 miles), to facilitate underburning for site prep. Unit perimeters requiring fireline construction are identified on the Sale Area, Hazard Reduction & Site Prep Map. Waterbar fireline (approximately every 50 ft or as needed) to minimize the potential for erosion.

Site prep slashing, to facilitate the underburning, of all non-merchantable conifer regeneration and maple trees in units 2, 2a, 8c, 10, 14, 20, 29, and 30, as described in C6.7 (124 acres).

Grapple pile trails and concentrations of slash that can be reached from skid trails/corridors to reduce fuels in units 1, 3, 4, 4a, 6, 6a, 8d, 9, 16, 18, 19, 21, 22, 34, and portions of units 12a, 20 (67 acres).

Pile all landing slash (12.3 acres).

C. Forest Service requirements (BD):

Grapple pile trails and concentrations of slash that can be reached from skid trails/corridors in units 2, 5, 7, 8a, 8b, 10, 11, 12b, 17, 29a, 31, and 33 (24 acres).

Burn all grapple piles (91 acres).

Underburn for fuels reduction and/or for site prep for planting in units 2, 5, 7, 8a, 10, 11, 12a, 14, 17, and 33 (128 acres).

Burn all landing piles (12.3 acres).

X. Other Provisions

A. Period of contract:

1. **Normal operating season: September 8 (or current Labor Day) to October 31 in Units: 1,2,2a,3,4,4a,5,6,6a,7,8a,8b,8c,8d,9,10,12a,12b,14,16,17,18,19,20,21,29,29a,30,31,33 and 34 and December 15 to February 28 in Units 11 and 22.**
2. **Termination date: October 31, 2013.**
3. **Road Completion Date: October 15, 2009.**

B. Purchaser fire liability:

Total number of personnel/crew	6
Number of hours/day	12
Total hours/crew day	72
Hourly rate AD-C firefighter	\$13.24
Average daily cost	953
Average fire length	5 days
Purchaser obligation for fire operation	4,766
Rounded up to the nearest \$100	4,800

XI. Notification of Forest Practices

X	Harvest of forest tree species.
X	Road construction associated with harvesting trees.
X	Reforestation.
	Use of chemicals or fertilizers for the purpose of growing or managing trees.
X	Slashing or use of prescribed fire resulting from harvest or other management activities.
X	Site specific BMP's.
X	Lake present.
	Class 1 stream present.
	Steep slopes.
	Unstable or erodible soils present.
	Stream crossings anticipated.

XI. Sale Objective Code

Purpose	Activity	Percentage
TC -- Timber Commodity Purpose	01 -- Timber Purpose	10
FS -- Forest Stewardship Purpose	10 -- Forest and Ecosystem Health	90