

TWIN SKIN

TIMBER SALE REPORT

I. Location

The sale area is 1140 acres in size and is located in sections 19, 29, 30 T.63N., R.3E., section 24 T.63N., R.2E., and section 2 T.62N., R.2E. of the Boise Meridian, in Boundary County, Idaho. The timber stand atlas compartment numbers are 737, 742, and 744 on the Bonners Ferry Ranger District of the Idaho Panhandle National Forests. Harvest is planned on 610 acres. The sale lies in the Lower Moyie River drainage, including Skin Creek and Deer Creek. The sale area is located approximately 16 miles northeast of Bonners Ferry, accessed by US Hwy 2 and county road 72.

II. Relationship to the Environmental Document and Other Uses

This sale is prepared under the direction of the Twin Skin HFRA Project Environmental Assessment and Decision Notice, approved by the Forest Supervisor on May 30, 2008. The objectives of the project are to 1) reduce fuels to create a lower-intensity fire environment within the Boundary County defined wildland urban interface (WUI) area and; 2) trend towards vegetative conditions which are more fire-resilient into the future and that better resist insects and diseases. Alternative 2 was chosen to best meet management objectives.

- Units 5, 6, and 9 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 16, 17, and 18 lie in Forest Plan Management Area 2 (TGRIZ) – Manage identified grizzly bear habitat to support the IPNF’s share of a recovered grizzly bear population while providing for the production of commercially valuable wood products.
- Units 1, 3, 4, and 8 lie in Forest Plan Management Area 3 (TGRWR) – Provide sufficient winter forage areas to support existing and projected big game populations while providing for the production of commercially valuable wood products.
- Units 2, 7, 9a, 10, 12, 13, 14, and 15 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 3, 4, 5, 6, 7, 9, 10, 12, 14, 15, and 18. Private boundaries are clearly marked with blazed trees and signs. Fell trees away from private property boundaries. A Temporary Road Use Permit has been obtained from Carol Mesenbrink to use private road 2269UL in order to log unit 9. A gate will need to be installed and kept closed at the end of the work day and when not in use.

- B. Threatened, Endangered, (T&E) and Sensitive Species:** This project will have no effect on any T&E fish species, woodland caribou, or Canada lynx and that it may affect, but is not likely to adversely affect the gray wolf, grizzly bear and sensitive plant populations. Sensitive plant sites have been excluded from cutting units. Two are adjacent to unit 1 and another one is adjacent to unit 13. Fell trees away from these sites and no equipment permitted in the buffered areas. A portion of the sale area lies in Gray Wolf and Grizzly Bear habitats. In order to minimize disturbance to grizzly bears, all timber harvest and road reconstruction or reconditioning that will take place within the Keno BMU (Units 16, 17 and 18) will occur outside the spring bear season from April 1 to June 15. This period will overlap with activity restrictions for gray wolf as follows: no timber harvest will occur in Units 16, 17, and 18 from April 1 through August 15. However, road reconstruction and reconditioning can occur during this time period - outside of the spring bear season (after June 15th).
- C. Wetlands/Streamside Habitats:** All activities are designed to protect water quality and fisheries habitat. Standards and guidelines established by the Inland Native Fish Strategy (INFS) will be used: exclusion zones of no harvesting and no equipment within 300 feet for fish-bearing streams, 150 feet for perennial streams, and 50 feet for ephemeral draws. Wetlands, elk wallows and seeps or bogs (wet areas) < 1 acre in size will be protected with a no activity buffer of 50 ft radius. All buffers have been applied during unit layout and have boundaries excluding them from cutting units, however they are adjacent to units 1, 8, 13, and between 17 & 18. Fell trees away from these sites and no equipment permitted in the buffered areas.
- D. Special Uses, Mining Claims, Range Allotments:** There are no mining claims, special uses, or range allotments in the sale area.
- E. 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.
- F. Cultural Resources:** There are three archaeological sites in the Moyie Mine area requiring protection, adjacent to units 9, 9a, 10, 13, and 14. A hydraulic flume extending from the northern boundary of Unit 9, adjacent to Units 9, 9a, 13, and ending near Unit 10 has been excluded from cutting unit boundaries by a 50 feet buffer on either side. No mechanical activities, including yarding of trees/logs shall take place in all exclusion areas. Adjacent to units 13 and 14 identified features of the Moyie Mine resource have been avoided and excluded from treatment areas. Fell trees away from these sites and no equipment permitted in the buffered areas.

- G. Wildlife:** Large woody debris shall be retained in all units to meet wildlife objectives. Snags and replacement snags will be maintained by appropriate harvest prescriptions in all units, for wildlife purposes. Leave dead trees (snags) > 16" dbh standing. To maintain habitat diversity, hardwood trees shall not be harvested. If large diameter snags or hardwood trees are felled for safety reasons, they shall remain on the site, for large woody debris recruitment, and long-term site productivity. When grapple piling slash, leave some piles unburned for small animal habitat. There is an existing gate on road 2269 just past the junction with road 2269B. Purchaser's activities behind the gate during the closure period (October 7 - October 25) shall be permitted, however the gate must be closed at the end of the day. No firearms permitted behind the gate during the closure period.
- H. Soils:** Existing skid trails and slash mats will be used during logging and during grapple piling, where possible. Ground-based equipment shall stay on slopes less than 35%. To protect soils, tractor logging in units 12 and 13 shall only occur when one or more of the following conditions exist: 18 inches of settled snow, 4 inches of frozen ground, 24" snow layer, or 12 inches of snow in combination with an adequate slash mat. Any skid trails excavated shall be fully recontoured after use by the contractor. Mechanical felling shall only be allowed off skid trails if the machine travels on 18 inches of snow, frozen ground, or an adequate slash mat to avoid soil compaction. No whole tree yarding will be allowed, to facilitate nutrient recycling. Allow slash to remain on the ground for at least 6 months prior to piling or burning, to allow nutrients to leach into the soil, except where fuels concentration is an issue. In addition, leave 7-15 ton/acre of coarse woody debris on dry sites and 17-33 ton/acre on moist sites.
- I. Recreation:** Hauling will be restricted on weekends and holidays for safety reasons, due to residential and recreational use of the haul route. No recreation sites or trails will be impacted by this sale.

III. Timber Volumes

This sale was cruised in the fall of 2007, and finished in the spring of 2008 using sample tree and plot cruising methods. Units were variable plot cruised with a 20 BAF. Sample tree cruised units had sample groups with varying frequencies depending on population characteristics. All units require non-sawtimber removal. This non-sawtimber was cruised with 1/20th acre fixed plots. Cutting unit acres were determined using GPS.

This is a weight scale sale with a designed sale error of 20%. Refer to Twin Skin cruise number 70802, run on 06-26-2008. The INGY 2 point volume equations were used with a 5.6" top diameter for sawtimber. The sale-as-a-whole error was 12.59% 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 .5216 mbf/ccf. The average weight conversion factor is 3.30 ton/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	S	WP	Sawlog Total	Non-Saw	Sale Total	Sale Tons
1	48	97	51	113	180	26	17	3	4	0	491	103	594	1,958
2	34	30	85	165	29	21	0	0	0	16	346	90	436	1,418
3	63	128	67	148	237	34	23	4	6	0	647	135	782	2,570
4	9	11	10	57	24	24	4	0	4	0	134	28	162	521
5	13	15	14	85	33	33	5	0	5	0	190	40	230	739
6	56	114	59	132	210	30	20	4	5	0	574	120	694	2,284
7	20	17	50	97	17	12	0	0	0	9	202	53	255	834
8	20	41	21	47	75	11	7	1	2	0	205	43	248	816
9	20	0	309	0	0	4	3	0	0	0	316	19	335	1,126
9a	5	15	19	46	3	0	19	0	2	1	105	5	110	355
10	51	0	787	0	0	11	7	0	0	0	805	48	853	2,871
12	14	5	11	9	1	0	1	0	1	0	28	19	47	155
13	24	15	33	25	3	1	3	0	3	0	83	36	119	387
14	18	0	0	0	0	0	174	0	0	0	174	33	207	637
15	29	87	111	266	20	0	111	0	10	7	612	29	641	2,060
16	48	0	156	0	0	0	212	0	0	0	368	113	481	1,560
17	12	12	15	9	0	6	64	2	0	0	108	27	135	428
18	126	11	651	146	0	0	130	0	0	0	938	355	1,293	4,408
Total	610	598	2,449	1,345	832	213	800	14	42	33	6,326	1,296	7,622	
MBF		270	1,186	689	405	108	392	7	20	19	3,096	880	3,976	
Tons		1,393	8,254	4,631	2,923	725	2,461	52	118	128	20,685	4,442		25,127

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 4, 5, and 15 are Shelterwoods with Reserves. Units 1, 3, 6, and 8 will be harvested using the Free Selection silvicultural method of uneven-aged cutting. This is a relatively new method that is not in our database, so these units will be coded as Group Selections with Commercial Thinning, including approximately 1/3 of the acres of regeneration. Units 9 and 10 are Group Selections with Commercial Thinning. Units 2, 7, 9a, 14, 16, 17, and 18 are Commercial Thinnings with Sanitation Salvage. Units 12 and 13 are Improvement Cuts.

B. Designations:

C2.38# - Species Designation

Unit	Designated Species	Maximum Stump Diameter - (Inches)
1, 8	LP	NA
1, 8	GF, H	20
1, 8	DF, C, AF, S, PP	17
2	WP, GF, LP	NA
2	DF, L, C, H, AF, S, PP	12
3	LP	NA
3	C, GF, H	20
3	DF, AF, S, PP	14
4, 5	GF, H	NA
4, 5	DF, L, C, AF, S, LP, WP, PP	14
6	LP	NA
6	L	14
6	DF, C, GF, H, AF, S, WP, PP	18
7	C, GF, H, LP	NA
7	DF, L, AF, S, WP, PP	17
9, 10	GF, LP	NA
9, 10	DF	20
9, 10	L, C, H, AF, S, WP, PP	14
9a	GF, H, LP	NA
9a	DF, L, C, AF, S, WP, PP	14
12, 13	GF, H, LP, AF, S	NA
12, 13	DF, L, C, WP, PP	17
14	LP	NA
14	GF, DF, L, C, H, AF, S, WP, PP	12
15	GF, H, LP	NA
15	DF, C, AF, S, PP	20
16	LP	NA
16	GF, DF, C, H, AF, S,	12
17	GF, LP	NA
17	DF, L, C, H, AF, S, WP, PP	12
18	GF	NA
18	LP, DF, C, H, AF, S	13

Stump Diameter Inches	DBH Inches
12	10
13	11
14	12
17	14
18	15
20	16

In addition to species listed above, trees to be cut are marked with a horizontal stripe of blue paint at about dbh and a blue mark below stump height in units 9a, 14, and 17; and 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 units 1, 3, 6, 7, 8, and 13.

V. Logging Plan

A. General:

For tractor-yarded units 1, 3, 6, 7, 8, 12, 13, 14, 15, 16, 17 and incidental tractor (w/skyline swing) in Unit 18.

- 1) Ground-based yarding, processing, and harvester equipment will operate on slopes under 35% and will utilize existing skid trails, landings, and slash mats where possible.
- 2) Main skid trail spacing will average 100 feet or greater, except where the trails converge to landings and as terrain dictates otherwise.
- 3) Any one of the following winter logging conditions will be required for tractor-yarded Units 12 and 13:
 - A 24-inch snow layer or 18 inches of settled snow or;
 - A slash mat in combination with 12 inches of settled snow or;
 - Frozen ground to a depth of 4 inches.
- 4) In units 1, 8, 13, 17, and 18; where wet areas have already been identified on the landscape, they have been buffered out of treatment units.

For skyline-yarding Units 2, 4, 5, 9, 9A, 10, and 18: the leading end of logs will be suspended during skyline yarding.

The sale administrator will ensure, whenever practical, that the design of skid trails and skyline corridors avoid veteran and relic survivor trees and snags. To maintain forest species diversity and wildlife habitat, aspen and birch trees would not be harvested for pulp. Large diameter snags (greater than 16 inches diameter) and hardwoods that are felled for safety reasons will remain on site to provide for large woody debris recruitment and long-term site productivity.

All skid trails utilized will be covered with some residual slash, waterbarred, and seeded as needed upon completion of the sale.

Site sanitation requirements for operations in grizzly bear habitat, units 16, 17, and 18, will be required and included in the prework conference.

Protect sensitive plant sites, wet areas, surveys monuments, private property and any private improvements, archeological sites, plantations, private improvements, and streamcourses.

No hauling operations will occur on weekends or federal holidays.

B. Timber Characteristics: Unit 18 will be appraised as skyline since most of the unit is skyline and the swing portion is also skyline.

	Tractor	Skyline	Total/Ave.
Net Volume (CCF)	3,494	2,832	6
Net Cut Vol/Ac (CCF)	10	11	10
Total Acres	352	258	610
Total Trees	26,698	23,811	50,509
Percentage by Volume	55%	45%	100%
Ave. External Yard Distance	825'	675'	
Ave. DBH	10"	10"	10"

C. Skyline Analysis: Analysis using LoggerPC has shown that all skyline units are feasible. Profiles are available for review at the Bonners Ferry District office. Units 2, 4, 5, 9, 10, and 18 may need intermediate supports. To protect trees on private property, mobile tailholds will be needed to log unit 9. An allowance will be made for an excavator for 10 days.

VI. Transportation System

A. Average haul route to sale center:

Road Name	Road Number	Mileage
Southwick A	2215A	1.9
Southwick	2215	0.9
Pork	2533	0.2
Deer Creek Spread Creek *	435	3.1
Old Highway Two Loop	C72	3.1
US Highway 2	US2	1.5
Mill Road	Cty83	0.5
Total		11.2

* The county maintains the first 2.6 miles of road 435.

B. Road construction or reconstruction:

Road Number	Road Name	Type of Work	Road Mileage
2269	Tuin	Reconstruction	2.00
2404A	Solomon Lake	Reconstruction	0.22
2549	Solomon Mountain	Reconstruction	0.90
2584	Knife	Reconstruction	0.90
Total			4.02

C. Reconditioning:

Road Number	Road Name	Type of Work	Road Mileage
627	Skin Creek	Blade	1.8
2269UL	Private Mesenbrink TRUP	Brush & blade	0.9
2215	Southwick	Brush & blade	1.5
2215A	Southwick A	Blade & blade	1.9
2215B	Southwick B	Brush & blade	0.3
2584A	Knife A	Brush & blade	0.5
Total			6.9

Driveable dips (waterbars) will need to be constructed on roads 2269, 2269UL, 2549, 2584, and 2584A, after use (see Erosion Control). As part of the Temporary Road Use Permit, a farm-style gate will need to be placed on 2269UL at it's junction with county road 72.

D. Temporary roads: Temporary roads may be constructed to access timber in Units 2 and 10. New temporary roads will be obliterated by the purchaser following use. The obliteration will restore roads to their pre-road condition by revegetating (seeded and fertilized), berming, and by covering with slash to prevent off-road vehicle use. The location of the temporary roads will ensure, whenever practical, that veteran and relic survivor trees and snags would not be removed during construction.

Existing non-system roads (considered temporary roads under the contract) that are associated with Units 17 and 18 will require some removal of vegetation to make them drivable. They will also require closure with a mechanism (such as the placement of large woody debris or an earthen barrier) to prevent vehicle access after completion of project activities. A temporary farm-style gate will be placed on the temp road in unit 17, at the junction with road 2404A. It shall be replaced with an earth berm when no longer needed.

E. 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. 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 frequent cross drains created to prevent mass failures of roads.

1. Snowplowing: Estimate 3.1 miles of 1 plowing/ week & 1 winging/2 weeks on rds 2269 (2.0 mi), 2584(0.6 mi), and 2584A(0.5 mi), for 8 weeks/season for 1 season:

$$\begin{aligned}
 &8 \text{ plowings} \times \$ 80.32/\text{hr (grader \& operator)} \times 3.1 \text{ miles} / 3 \text{ miles/hr} &&= \$ 664 \\
 &4 \text{ wingings} \times \$ 90.01/\text{hr (dozer \& operator)} \times 3.1 \text{ miles} / 1 \text{ mile/hr} &&= \$1,116 \\
 &\text{Total Cost} = \$1,780 &&\text{Cost/CCF} = \$.28
 \end{aligned}$$

2. Dust Abatement - Estimate 2.4 miles of 94% CaCl pellets, watered and applied for roads 435(0.5 mi from rd 2533 south to county), 2404(0.1 mi), and 627(1.8 mi):

$$\begin{aligned}
 &7.71 \text{ tons/mile} \times \$440/\text{ton} = \$3392/\text{mile} \times 2.4 \text{ miles} = \$ 8,142 \\
 &\text{Cost/CCF} = \$ 1.29
 \end{aligned}$$

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. Roads 2269, 2269UL, 2549, 2584, and 2584A, shall be waterbarred with driveable dips, as designated by the sale administrator.

Area to Seed	Acres
Landings	7
Skid trail/corridors	11
Total	18

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 18 acres x \$2.87/lb = \$ 930
 Fertilizer: 200 lbs/ac x 18 acres = 3600 lbs x \$.39/lb = \$1,404
 Labor: 18 ac x 1/3 manday/ac x \$ 212/manday = \$1,272
 Transportation: 36 mi/trip x \$.50 /mile x 2 trips = \$ 36
 Waterbars: \$50/waterbar x 40 waterbars = \$2,000
 Total Erosion control needs = \$5,642
Cost/CCF = \$.89/CCF

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 4 stocking surveys each is planned for units 4, 5, 15, and portions of units 1, 3, 6, 8, 10 (128 acres).

Natural regeneration will be initiated in a portion of unit 9. Three stocking surveys are planned in the first, third, and fifth years (6 acres).

Underburning site prep for planting is planned for unit 10 (15 acres).

Mechanical site prep (Grapple pile) for planting in portions of units 4, 5, 8, and 15 (17 acres).

B. KV Other: Weed and Release is planned for units 11, 12, 13, and non-harvest unit 13a.

IX. Hazard Reduction and Site Preparation

A. General:

1. Slash will be left to recycle nutrients back into the soil until site-prep occurs. Grapple piling equipment should operate on slopes under 35 percent.
2. Downed woody retention levels will be maintained at the lowest recommended levels due to concern for fire hazard in the interface area. For the moist forest habitat types where treatment is proposed in Units 1, 3, 4, 5, 6, 8, 12, 13, 14, and 15, Graham et al (1994) recommend retaining 17-33 tons of downed woody material greater than three inches in diameter. For the drier habitat types associated with Units 2, 7, 9, 9A, 10, 16, 17, and 18 the recommended retention level is 7-13 tons/acre.
3. Where fire hazard is considered high, especially along shared boundaries with private property or heavily-used roads, flexibility will be given to treat slash prior to it being left for several months.
4. Prescribed underburning and pile burning would take place when the upper surface inch of mineral soil has a soil moisture content of 25 percent by weight. Prescribed underburning generally takes place in the spring while pile burning takes place in the fall.
5. Where grapple piling is prescribed for post-harvest fuel reduction, leave an occasional slash pile (i.e. 1 per 3 acres) where deemed appropriate by the District Fire Management Officer, to provide habitat for small forest animals (e.g. snowshoe hares), while still meeting fuels reduction objectives.

B. Purchaser requirements: Slash treatments shall occur within 30 days of skidding/yarding, unless otherwise agreed by the Sale Administrator.

Limb and lop tops of sawlogs in all cutting units. Buck slash into 12 ft pieces in units to be grapple piled.

Fell (slash) damaged residuals in all cutting units.

Construct firelines by hand in units 9, 9a, 10 (1.6 miles), and by machine (excavator) in unit 10 (0.3 miles), to facilitate underburning. 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.

Protect leave trees in units 9, 9a, and 10, by pulling slash back 10 feet from designated PP, DF, L leave trees, and in unit 9a also protect WP, C leave trees by pulling slash back 20 feet (76 acres).

Pile all landing slash (6.8 acres).

Site Prep slashing all non-merchantable conifer regeneration is planned for units 4, 5, and 15.

C. Forest Service requirements (BD):

Grapple pile trails and concentrations of slash that can be reached from skid trails/corridors in units 1, 2, 3, 6, 7, 12, 13, 14, 16, 17, and 18 (111 acres).

Burn all grapple piles (128 acres).

Underburn for fuels reduction and for site prep for natural regeneration in units 9, 9a, 10, and 14 (65 acres).

Burn all landing piles (6.8 acres).

X. Other Provisions

A. Period of contract:

1. Normal operating season:
 - June 16 thru October 31 for units 1, 2, 3, 4, 5, 6, 7, 8, 9, 9a, 10, 14, 15, 16, 17 and 18 road work.
 - December 15 thru March 15 for units 12 and 13.
2. Termination date: October 31, 2012.
3. Road Completion Date: October 31, 2009.

B. Purchaser fire liability:

Total number of personnel/crew	8
Number of hours/day	12
Total hours/crew day	96
Hourly rate AD-C firefighter	\$13.24
Average daily cost	1,271
Average fire length	5 days
Purchaser obligation for fire operation	6,355
Rounded up to the nearest \$100	6,400

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.
	Lake present.
X	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

VALID PURPOSE CODES:

- TC -- Timber Commodity Purpose
- FS -- Forest Stewardship Purpose
- PP -- Personal Use

VALID ACTIVITY CODES:

- TC 01 -- Timber Purpose
- FS 10 -- Forest and Ecosystem Health
- FS 20 -- Recreation/Visual/Cultural Resource Enhancements
- FS 30 -- Wildlife Habitat Management
- FS 40 -- Fisheries Habitat Management and Watershed Improvement