

Management activities table:

S/S – Sanitation/Salvage

SW - Shelterwood (3-step)

CT - Commercial thinning

PCT- Pre-commercial thinning

USR- Understory removal

BT – Boundary Treatment Zone (50’ to 100’ wide fuelbreak length shown)

SBT – Spruce Beetle Treatment

Unit #	Est. Acres	Prescription	Slash Treatment	Est. CCF	Remarks
1	11	CT, BT(700’)	Skid/Pile/Burn or Chip Piles	50	
2	20	CT, USR, BT (2100’)	Skid/Pile/Burn or Chip Piles	100	700’ temp. road
3	36	SW, USR, <i>SBT</i> , BT(900’)	Lop & scatter, or Masticate	350	1200’ temp. road
4	59	CT	Lop & scatter, or Masticate	150	
5	42	SW, <i>SBT</i> , BT(900’)	Lop & scatter, or Masticate	200	1000’ temp. road
5A	26	CT, BT(900’)	Skid/Pile/Burn or Chip Piles	100	700’ temp. road
6	45	SW, USR, <i>SBT</i> , BT(100’)	Skid/Pile/Burn or Chip Piles	250	1700’ temp. road
7	65	PCT	Skid/Pile/Burn or Chip Piles	0	
8	18	CT, <i>SBT</i>	Lop & scatter, or Masticate	200	
8A	37	S/S, BT (800’)	Skid/Pile/Burn or Chip Piles	200	700’ temp. road
9	80	S/S, USR, <i>SBT</i> , BT(5000’)	Skid/Pile/Burn or Chip Piles	300	700’ temp. road.
9A	92	S/S, USR, <i>SBT</i>	Lop & scatter, or Masticate	300	PI-fence in unit.
10	34	S/S, USR, <i>SBT</i> , BT(1800’)	Skid/Pile/Burn or Chip Piles	150	700’ temp. road
12	10	S/S, USR, <i>SBT</i> , BT(1700’)	Lop & scatter, or Masticate	50	
12A	14	CT, USR, BT(1700’)	Skid/Pile/Burn or Chip Piles	50	
13	37	USR only, BT(1400’)	Skid/Pile/Burn or Chip Piles	0	

Unit #	Est. Acres	Prescription	Slash Treatment	Est. CCF	Remarks
14	44	PCT	Lop & scatter, or Masticate	0	
15	43	CT, USR, BT(1500')	Skid/Pile/Burn or Chip Piles	250	
16	12	PCT	Skid/Pile/Burn or Chip Piles	0	
17	11	PCT	Lop & scatter, or Masticate	0	
18	12	PCT	Skid/Pile/Burn or Chip Piles	0	
19	5	PCT	Skid/Pile/Burn or Chip Piles	0	
PIT B	-	Slash disposal pit	Burn Pile Yearly	0	Access thru Unit 13
TOTALS	<u>ACRES</u> 191 253 123 149 <u>37</u> 753 Acres 3.5 Miles (approx. 40 acres within acres above)	<u>TREATMENT</u> CT (includes USR) S/S (includes USR) SW (includes USR) PCT USR only BT (Located within units-shown as linear feet of 50 to 100' wide fuelbreak adjacent to private land boundary)	<u>SLASH DISPOSAL</u> 753 Acres (includes all methods)	<u>TOTAL CCF</u> 2,700 CCF	<u>TEMP. ROADS</u> 1.4 miles (Total feet converted to miles) Temporary roads, and associated culverts, are not planned as permanent transportation infrastructure.

Description of Prescriptions and Slash Treatments:

Sanitation/Salvage – Under this prescription approximately 15 to 25% of the existing overstory and understory would be removed to create gaps between tree crowns and break up the continuity of fuels; *and secondarily to improve the health and resiliency of the treated stand to future bark beetle attack.* This treatment is generally applied to sawtimber sized stands that have less than original basal area due previous silvicultural treatments, which has resulted in a more open crown condition of the dominant trees. An emphasis will be placed on removing trees that are overtopped, exhibit heavy mistletoe infection, and/or dead and dying. Cut trees would be whole tree skidded to landings and slash piled to be later burned and/or chipped. In cases of mechanized processing within the stands, slash may be disposed of by jackpot burning (burning concentrations without further piling). *In units with bark beetle activity, an emphasis is made on harvesting merchantable Engelmann spruce (>7" DBH) that is beetle infested, and/or diseased trees that are susceptible to beetle attack, along with lodgepole pine (>7" DBH), and subalpine fir (>10" DBH). In some cases these stands were treated with group selection treatment in the 1980's or earlier. Depending on beetle spread, it is anticipated that a significant portion of the acreage would not need to be treated within units identified for this treatment.*

Shelterwood – Under this prescription approximately 25 to 35% of the existing overstory, and understory where stands are not generally single-storied, would be removed in saw-timber sized stands to create gaps between tree crowns and break up the continuity of fuels; *and secondarily to improve the health and resiliency of the treated stand to future bark beetle attack.* This treatment will generally apply the first cut of a three-step shelterwood, in previously untreated sawtimber sized stands with closed crown conditions. Dominate or co-dominate live trees in the crown will be thinned noticeably. An emphasis will be placed on removing trees that are overtopped, exhibit heavy mistletoe infection, and/or dead and dying. In stands an emphasis is made on harvesting merchantable Engelmann spruce and lodgepole pine (>7" DBH) that will be most susceptible to future beetle attack and infestation along with subalpine fir (>10" DBH), leaving the healthiest, more resistant trees. Stands would retain sufficient basal area that provides shading, avoids opening the stand to the degree that promotes natural regeneration after this entry, and avoids wind-throw potential. Cut trees would be whole tree skidded to landings and slash piled to be later burned and/or chipped. In cases of mechanized processing within the stands, slash may be disposed of by jackpot burning (burning concentrations without further piling). In units with bark beetle activity, an emphasis is made on harvesting merchantable. *In units with bark beetle activity, an emphasis is made on harvesting merchantable Engelmann spruce (>7" DBH) that is beetle infested, and/or diseased trees that are susceptible to beetle attack, along with lodgepole pine (>7" DBH), and subalpine fir (>10" DBH). In some cases these stands were treated with group selection treatment in the 1980's or earlier. Depending on beetle spread, it is anticipated that a significant portion of the acreage would not need to be treated within units identified for this treatment.*

Commercial Thinning – Under this prescription identified lodgepole poletimber and small sawtimber stands would be thinned to approximately 12'x 12' spacing to create gaps between tree crowns, break up the continuity of fuels, and to improve stand health and resiliency. Areas of denser residual may occur. Treating these stands by thinning, thereby reducing the crown closure, will greatly reduce the stand's ability to support an independent or dependent canopy fire and developing future stands with larger trees exhibiting higher crown heights. Cut trees would be whole tree skidded to landings and slash piled to be later burned and/or chipped. In cases of mechanized processing within the stands, slash may be disposed of by jackpot burning (burning concentrations without further piling).

Pre-commercial Thinning – Under this prescription identified lodgepole seedling/sapling and smaller pole sized stands would be thinned to approximately 10' x 10' spacing to create gaps between tree crowns, break up the continuity of fuels, and to improve stand health and resiliency. Areas of denser residual may occur. Treating this stand by thinning, thereby reducing the crown closure, will greatly reduce the stand's ability to support an independent or dependent canopy fire. Slash within 100' of open roads or boundary would either be hand piled for chipping or burning. Units away from roads or private boundaries may receive lop (12" height) and scatter of thinning slash, hand piled for chipping and/or burning, or masticated within the unit.

Understory Removal – Under this prescription conifer regeneration would be cut from the understories of existing poletimber and sawtimber stands to reduce ladder fuels, break up the continuity of fuels, and to improve stand health and resiliency. This treatment may be used in conjunction with stands selected for commercial thinning, shelterwood or sanitation/salvage treatments. Areas void of overstory within these stands may receive a low thinning, leaving regeneration or pole sized timber on a spacing resembling a precommercial thinning treatment. Slash would either be piled for chipping and/or burning, or masticated on site.

Boundary Treatment – Under this prescription dead standing and down trees and slash within 50 to 100 feet (depending upon terrain and stand condition determined at time of project layout) of the National Forest and private land boundary would be cleared. YUM yarding (skidding of un-utilizable product sized material) and piling of downed material in the zone would be done. Understory ladder fuels would be removed, and lower branches on retained trees pruned to create a fuel break that would both increase the controllability of a potential wildfire from burning onto private land and/or from private land onto the Forest. The end result of this treatment will be a park like area, forested with scattered live trees with little or no slash, dead trees, or downed material present. Slash would either be hand piled for chipping and/or burning. This treatment is located within and in addition to prescribed silvicultural treatments selected for stands adjacent to the boundary of the private inholding.

Slash Disposal Area - Under this prescription one non-forested area(s) will be identified in the project area to serve as a slash disposal area for both the FS (for use in this project) and private landowners in the vicinity. The slash would be piled and burned (yearly) each fall when there is adequate snow.

Spruce Beetle Treatments – *Under this prescription, live sawtimber size Engelmann spruce would be felled to serve as “trap trees” within spruce dominated or mixed conifer stands where increasing beetle populations, and related mortality, have been found. Not intended as a treatment over an entire stand, these “trap tree” areas will constitute small groups or decks of spruce within individual units, generally with access. Much like a natural blowdown, the felled trees are intended attract adult beetles that subsequently lay eggs. One year later the trees would be either be debarked to kill the beetles that have hatched, piled and burned, and/ or removed.*