

Review Documentation for the Annie's Cabin T.S. Cascades Resource Area

To: FY 2006 Timber Sale Thinning Environmental Assessment Project File - EA OR-080-04-20

Date: 11/29/2011

Location: T.6 S., R. 3 E. sections 7, 18, 19, 30, 31; T. 7 S., R.3 E., section 6. Units 2, 3, 4, 5, 6, 7, 8, 9, 12, 15, 16 and 17.

Land Use Allocation: General Forest Management Area (GFMA) and Riparian Reserve

Description of Change and how it complies with the NEPA Documentation:

Annie's Cabin – Mechanized Falling, Processing and Pre-bunching for Helicopter Yarding:

The proposed change is to extend Fall operating season six weeks to allow mechanized harvester operations to proceed in inclement weather when hand falling is shut down, providing for a more predictable operating schedule.

Changes in project design features (PDF) only apply to those PDF associated with soil productivity. The project would follow all other project design features as documented in the Annie's Cabin Decision and timber sale contract. Appendix A shows how the changes in the proposal meet RMP soil protection standards.

Additional Project Design Features:

- Allow the Purchaser to use a harvester to fell/process and pre-bunch logs in units 2, 3, 4,5,6,7, 8, 9, 12, 15 16 and 17 of Annie's Cabin Timber Sale in preparation for helicopter yarding. Operations may commence upon receipt and approval of a logging plan that implements the conditions of the proposal and will be within the effects analyzed in the EA.
- The harvester would be a tracked carriage designed for harvester operations with a dangle head processor mounted on a boom. It would be capable of cutting trees up to approximately 20 feet either side of the travel path and processing the tree (limbing and bucking) into logs immediately in front of the carriage in the travel path to progressively build a slash mat 1-3 feet thick for the harvester to travel on.
- The harvester would be operated so that damage to residual trees is minimal (as per standard contract administration procedures).
- The harvester would be operated so that it is consistently operated on top of a slash mat and turning is done in a way that results in minimal soil disturbance.
- Bucked logs would be pre-bunched for helicopter yarding to reduce potential canopy impacts and improve operational efficiency for the helicopter operations.
- Standard contract provisions allow the BLM to halt operations if environmental damage is occurring.

Timing of Work: Weather dependent. Estimated dates are December 8, 2011 to February 14, 2012.

Changes in Effects or Additional Mitigation Measures:

Affected Resource	Changes to Effects or Additional Project Design Features	Name	Initial	Date
Botany	None	Terry Fennell	TGF	11/30/11
Cultural Resources	None	Heather Ulrich	HAU	12/6/11
Economic Efficiency	Harvester operations can proceed in inclement weather when hand falling is shut down, providing for a more predictable schedule. The harvester can pre-bunch logs so that choker setters can hook up consistent payloads and the helicopter requires less hover time to lift a bunch than to lift a daisy-chain.	Chris Papen	CP	11/30/11
Fire Hazard/Risk	None	Maria Caliva	MC	11/30/2011
Fisheries	None. Harvester operation will take place 60 feet from streams.	Bruce Zoellick	BWZ	12/2/2011
Hydrology/ Water Quality	None. The type of disturbance and compaction caused by this type of operation would not create opportunities for runoff to gain enough velocity to transport soil more than a few feet, correlating to the length of the disturbance spots described above. There is, therefore, no route for sediment to reach a stream.	Patrick Hawe	WPH	11/30/2011
Natural Resource Staff Supervisor	N/A	Chris Papen	CP	11/30/11

Affected Resource	Changes to Effects or Additional Project Design Features	Name	Initial	Date
Recreation/Visuals	<p>None. Harvester would be required to cross singletrack trails perpendicular to their course rather than using trail corridor, as described in EA. Trail crossings should be limited to the extent practical and trail connectivity will be restored after equipment entry. Use of harvester is expected to result in less invasive visual disturbance within treated stands based on previous experience.</p> <p>Public access to Molalla River Trail System, including roads, would be restricted during harvest activities. This action would be in addition to the singletrack trail closure typically in effect during the winter months. These effects have already been analyzed and documented in the EA.</p>	Adam Milnor	<i>AM</i>	12/5/11
Residual trees	<p>BLM experience with harvesters demonstrates that damage to residual trees is typically less than that caused by hand falling. Observations indicate that this is because the harvester operator can choose the exact falling direction for every tree, even holding the tree vertical while moving it to a favorable location for laying it down. During the Fall/Winter seasons, bark is tight and not easily damaged.</p> <p>Pre-bunching logs for helicopter yarding reduces crown and bole damage compared to “daisy-chaining” unbunched logs from hand falling operations. Pre-bunched logs can all be lifted vertically while logs choked sequentially in a “daisy chain” move laterally as well as vertically until they can be lifted vertically for the rest of the lift.</p>	Charley Thompson	<i>CRT</i>	11/30/11
Safety	<p>Harvester operations are safe for the operator because they are protected by an enclosed cab designed for operator protection. Hand fallers are exposed to direct hazards from falling trees and limbs as well as indirect hazards of exposure to the elements. Choker setters have less exposure for slips/trips/falls when hooking up bunched logs compared to scattered logs. Helicopter yarding is safer because there are fewer opportunities for suspended loads to hang up in leave trees with bunched logs compared to logs in a daisy chain.</p>	Chris Papen	<i>CP</i>	11/30/11

Affected Resource	Changes to Effects or Additional Project Design Features	Name	Initial	Date
Soils	Disturbed and compacted soil would be within the 10 percent areal compaction analyzed in the EIS and EA because the BLM estimates that total disturbed soil from turning and compacted soil from incidental operations off of the slash mat would be less than 1 percent of the harvested area in small (<2X15 feet) spots with a random, discontinuous distribution along harvester trails. The BLM anticipates, based on observations of similar projects, that compaction under the slash mat would be minimal to undetectable except for the incidental spots described above. Additional Project Design Features are described above.	Patrick Hawe	<i>WPH</i>	11/30/11
Wildlife	None	Jim England	<i>JE</i>	11/30/11

Other Comments: None

Reviewed by: *Carolyn Sands*
NEPA Coordinator

Date 12/7/11

Approved by: *Cindy Enstrom*
Cindy Enstrom, Field Manager

Date 12/7/2011

Appendix A: Proposed Falling / Pre-bunching Compliance with RMP Soil Protection Standards (SPS)

RMP p. 23-24: “In timber sales involving ground yarding systems...

- **Use existing skid trails as much as possible.** Will comply.
- **Limit new skid trails to slopes less than 35%.** No skidding is proposed. No new skid trails will be created on the project area.
- **Limit tractor operations to skid trails to periods of low soil moisture content.** Will not be using tractors since there is no skidding proposed. No tractor operations will take place.
- **Require operators to minimize the extent of soil displacement during logging.** Will comply.

RMP Appendix C-2: “Conservation practices...listed below and management guidelines identified in Chapter 2.

- **Management guidance from Chapter 2 addressed above.**
 1. **Use existing skid trails whenever possible.** Will comply.
 2. **Limit new skid trails to slopes less than 35%.** See above
 3. **Restrict tractor operations...low soil moisture...dry season.** No tractors will be used. See above.
 4. **Locate skid roads for use later.** No skid roads.
 5. **Till compacted roads.** No longer recommended in thinning's, no roads will be constructed.
 6. **Avoid tractor yarding on areas where soil damage cannot be mitigated.** No tractor will be used for yarding, helicopter only.
 7. **Avoid placement of skid roads.** No skid roads, units will be helicopter yarded.
 8. **Water bar skid roads.** No skid roads, units will be helicopter yarded.
 9. **Paragraph concerning skidding with wide tracked vehicles.** No skidding.
 10. **Till skid roads prior to falling.** See #6.

No restrictions were found in the RMP which limit the proposed activity. Therefore the project is within the effects analyzed and NEPA is sufficient for the project to proceed.