

# Pre-Operations Report

**Operation Name: Clamson**  
**County: Tillamook**  
**Management Basin: Lower Nehalem**

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres <sup>1</sup>
1	RC	177	135
2	MC	180	164
Total		357	299

*1. The net acres are based on orthophotos and GIS and exclude roads, stream buffers (special stewardship), and other buffers.*

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

Slopes have a north aspect and range from 5% to 80%. Elevations range from 320 to 1680 feet. The major soil types are Killam and Rye.

The landform is the headwaters of several tributaries of Cook Creek at the lower end of a divide between Clammer Creek and Hanson Creek. The underlying rocks are igneous origin of the Tillamook Volcanics formation subaerial Basalt flows.

## **II. CURRENT STAND CONDITION:**

**Table 2. Stand Inventory Information<sup>4</sup>**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Net Acres <sup>2</sup>
1	RC	101	DF, WH, RA	45	14	192	179	51	135
		Target <sup>3</sup>	DF, WH	45	19.5	64	31	15	135
2	MC	116	RA, DF, WH	45	12.5	163	190	45	164

*1. The source of stand inventory information is from field reconnaissance cruise plots taken in 2004.*

*2. The net acres are based on orthophotos and GIS, and exclude roads, and stream buffers (special stewardship), and other buffers. Modified clearcut acres are not contiguous and do not exceed 120 acres.*

*3. The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.*

*4. These numbers are based on plot data taken to this point and final numbers may differ significantly from the actual conditions. The directive for minor and major modifications will be followed for further review.*

The sale areas burned in the 1933 Tillamook Fire and in the 1945 Wilson River Fire. A large portion of Area 1 was planted in 1958 and a smaller portion of this area was re-planted in 1968. In Area 2, a small portion was planted in 1958. The remaining portions of the sale areas were naturally regenerated. These areas have had no prior stand management. The majority of Area 1 has been commercially thinned.

Both of the sale areas have been inventoried using the Stand Level Inventory (SLI) procedure and the stands have been identified as UDS.

Area 1 is comprised of single story Douglas-fir that was thinned previously. It also has small pockets of alder and scattered other conifer. Area 2 is a single story stand of alder, with scattered conifer. In both of these areas there is a continuous understory of salmonberry.

See Table 2 for specific stand data.

The alder components of these stands were aerially sprayed to release planted conifer in the 1970's resulting in alder trees with short boles and many limbs. The Douglas-fir has Swiss needle cast (SNC) symptoms and poor live crown ratios resulting in slowed diameter and height growth. There is also scattered hemlock, spruce, and cedar throughout the sale.

Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some windthrow in decay classes 1 and 2 and slash from recent partial cut activity. SLI measurements show that the down wood level in decay classes 1 and 2 is 982 cubic feet per acre in Area 1 and 159 cubic feet per acre in Area 2. Total down wood levels in Area 1 is 2696 cubic feet per acre and in Area 2 is 1374 cubic feet per acre. There is no down wood, greater than 24 inches on the large end in decay classes 0, 1, and 2, recorded for either of these areas. The down wood requirements for OFS stands that are outlined in the FMP have not been met at this time. During sale preparation, different options such as down wood creation, additional green tree retention, and future stand management and monitoring will be considered in order to achieve FMP targets.

There are some large snags in various states of decay and some hard snags created from wind and snow damage. Area 1 has 9 snags per acre greater than 12 inches DBH, of which 2 are greater than 24 inches DBH. There were no snags recorded that were greater than 15 inches DBH and in decay classes 0, 1, and 2. In Area 2 there are 4 snags per acre greater than 12 inches DBH, of which 2 are greater than 24 inches DBH. There was 1 snag per acre recorded that is greater than 15 inches DBH and in decay classes 0, 1, and 2. Area 1 meets the FMP snag targets for OFS structure but it doesn't meet the FMP goal of retaining

2 snags per acre greater than 15 inches DBH. Area 2 does not meet the snag retention goals in the FMP. During sale preparation, different options such as snag creation, additional green tree retention, and future stand management and monitoring will be considered in order to achieve FMP targets.

**III. DESIRED STAND CONDITION:**

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	101	UDS	UDS	GEN	20
1	101	UDS	UDS	LYR	20
1	101	UDS	UDS	OFS	95
2	116	UDS	REG	GEN	69
2	116	UDS	REG	LYR	4
2	116	UDS	REG	OFS	91

*1. The stand is expected to develop into this condition in the five to ten years after this operation is completed except in REG stands, which occur after harvest.*

See Section IV: Proposed Management Prescription for more information on Green Tree, Down Wood, and Snag Strategies during operation. Also refer to Landscape Design in the Summary document for more information on strategies to move the district toward Desired Future Condition goals.

The prescription will remove alder and Douglas-fir and retain other species resulting in a varied stand that has large open areas, small gaps, and pockets of dense conifer. There will also be pockets of unmanaged timber in headwalls, stream buffers, and on other high landslide hazard locations. The sale areas will be planted with a mix of conifer species. As the future stand is established the residual trees from previous stands will add to complexity of sizes, species and densities.

The timber sale areas will combine with adjacent managed and unmanaged stands to create a mosaic of openings, gaps, variable densities and mixed species stands. As the future stand is established the residual trees from previous stands will add to complexity of sizes, species and densities. These trees will also add to snags and down wood over time and through the life of the stand.

Stand Level Inventory (SLI) will be scheduled for clearcut and retention cut harvest units five to seven years after stand establishment. This inventory will provide more data on down wood and snags in the harvest units. Snag and down wood creation opportunities will be evaluated at this time.

#### **IV. PROPOSED MANAGEMENT PRESCRIPTION:**

**See Table 2 for prescription targets**

##### **Retention Cut:**

In Area 1, Douglas-Fir and merchantable hardwood will be removed. Hemlock less than 16 inches DBH will also be removed. A diameter limit will be used to leave a component of Douglas-fir on the landscape. All other species will be reserved.

##### **Modified Clearcut:**

In Area 2, merchantable alder and Douglas-fir will be removed. All other species will be reserved.

##### **Green Tree, Down Wood and Snag Strategies**

See also Section III: Desired Future Condition for long term strategies

A variety of methods will be used to achieve green tree retention requirements. These residual green trees will supplement the future stand by promoting growth of dominant/co-dominant leave trees. Small non-merchantable hardwood and conifer will also be retained where possible. Unmanaged hardwood and conifer will also be left in headwalls and on high landslide hazard locations that are identified during fieldwork. Conifer other than Douglas-fir will be left throughout both sale areas. There are also areas adjacent to the sale areas that will be left unmanaged and outside of the timber sale boundary due to Salmon Anchor Habitat strategies. These leave trees function as future source of snags and down wood recruitment across the landscape.

Existing down wood will be left in the sale areas. Down wood recruitment is expected through mortality and windthrow of residual or leave trees, felled snags and tops left during harvest. Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term snags and down wood. Tops from harvesting operation will be left in the areas that are approved for ground yarding.

Existing snags not determined to be a safety hazard will be retained and any felled snags will be left for down wood. Creation of snags is expected during harvest activities (rub trees, lift trees, or tail trees) and over time by natural processes.

**V. ESTIMATED TIMBER AND REVENUE INFORMATION:**

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	x
Planned Quarter:		2nd	

	Conifer	Hardwood	Total
Net Volume (MBF)	1704	840	2470
Stumpage Value (\$/MBF)*	192	250	
Estimated Gross Value	\$327,168	\$210,000	\$537,168
		Project Costs:	\$127,750
		Estimated Net Value:	\$409,418

**\*Combined Douglas-fir and hemlock stumpage values**

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Cook Creek Road and Clammer Road. These are currently all weather, crushed rock roads. Approximately 2.5 miles of existing surfaced road will be improved. This work will bring all roads up to standards described in *the Forest Roads Manual*. See maps for specific road locations and conditions. Approximately 0.2 miles of road will be constructed to provide access to cable yarding areas. Following harvest, roads within the sale areas will be reviewed for closure. See summary document for more information on this topic. The operation will be 74% cable and 26% ground yarding.

**Table 5. Transportation Planning Summary (Miles)<sup>4</sup>**

Activity	Mainline	Collector	Rocked Spur <sup>1</sup>	Dirt Spur <sup>1</sup>
Construct			.2	
Improve		2	.5	
Maintain <sup>2</sup>	5.5			
Close/Block <sup>3</sup>				
Vacate <sup>3</sup>				

1. Additional roads may be built by the operator at the time of harvest and will be approved by the State through the Operations Plan. These will be short dead end spurs and closed or blocked after harvest
2. All roads accessing the sale area will be maintained during the life of the timber sale contract. Maintenance miles in the table are those roads not being constructed or improved.
3. Roads not closed/blocked or vacated at the end of the sale will be reviewed for closure after reforestation is established.

4. *The numbers in this table reflect planned Project Work associated with the sale.*

## **VII. AQUATIC RESOURCES AND WATER QUALITY:**

Cook Creek, Hansen Creek, and Clammer Creek are Type F streams that are adjacent to the sale areas and the haul route. There are no known Type F streams within the sale areas. There is an unnamed Type N stream within the sale areas. Riparian vegetation along these streams includes a mix of hardwood and conifer species. Additional streams may be identified during fieldwork.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys before sale layout begins. Streams of unknown status will be treated as Type F until surveys are completed to verify fish use.

Streams within harvest unit boundaries will be managed according to FMP Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and operational constraints for implementing FMP strategies.

Both of the sale areas are within the Cook Creek sub-basin. This sub-basin has been identified as a Salmon Anchor Habitat (SAH) Basin and the most current SAH Basin Strategies will be used at the time of contract development.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and monitoring logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and September 15. Operations outside of this period will be reviewed with ODFW.

## **VIII. T&E SPECIES CONSIDERATIONS:**

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist (Clint Smith).

Surveys for marbled murrelets are not required for Clamson, due to the absence of potentially suitable habitat.

It was determined that there is potential northern spotted owl habitat within or adjacent to the sale boundary. Surveys have been and will be conducted during the 2004 and 2005 survey season for northern spotted owl. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol. There were no northern spotted owl detections in the 2004 survey season.

T & E Plant species: The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known threatened or endangered listed plant locations as well as local records in the Land Management Classification System (LMCS). No listed plants were identified within or adjacent to the sale areas.

**IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

The initial assessment from the geotechnical specialists is high due to steep slopes located along most of the sale boundary. The geotechnical specialist will review the sale in the field. If the sale boundaries are changed prior to field review, the geotechnical specialist may be consulted and the need for field review may be reassessed.

The sale areas are located in the Cook Creek SAH Basin and the most current SAH Strategies will be used at the time of contract development. See the Summary Document for more information.

**X. RECREATION RESOURCES:**

The sale areas are designated as Non-Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). No OHV trails were identified within or adjacent to the sale areas. Recreational use common to this area includes hunting, hiking, and camping. The District Recreation Coordinator will be consulted during sale layout and sale contract preparation.

**XI. CULTURAL RESOURCES:**

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary.

**XII. SCENIC RESOURCES:**

The sale areas have a visual classification of Level 2, moderate sensitivity. Visual impact will be minimal due to stream buffers and the amount of residual trees being left in the sale areas.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

There is a SNC study plot inside of the sale unit and a control outside of the sale. The study plot that is located in the sale area will be protected.

#### **XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Management Classification Summary**

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian	124	4
1	Deeds	>1	
1	Recreation	>1	
1	Wildlife Habitat	327	
2	Aquatic and Riparian	14	
2	Wildlife Habitat	30	

This table summarizes the acres of Focused and Special Stewardship within the operations. The acres in each operational area in this table do not necessarily add up to its gross or net acres, because of overlapping classifications under the Land Management Classification System (Feb. 2003). For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian, Recreation, and Scenic resources.