

Pre-Operations Report

Operation Name: Hole in the Wall
County: Tillamook
Management Basin: Wilson/Lower Nehalem

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	Modified clearcut	53	43
2	Modified clearcut	69	57
3	Retention cut	35	28
4	Modified clearcut	122	117
5	Retention cut	118	100
Total		397	345

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

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have varied aspects and range from 5% to 80%. Elevations range from 1,100 feet to 3,300 feet. The major soil type is Osweg and Rye. The sale areas occupy the ridges and upper slopes.

The landform is moderate to steep slopes in the headwaters of the West Fork of the North Fork of the Wilson River. The underlying rock units are Igneous origin, Tillamook Volcanics (basalt and breccia).

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	201	DF/WH/NF	41	12	179	218	51	43
2	MC	202	DF/WH/NF	43	14	158	160	46	57
3	RC	203	DF/WH	43	13	136	163	38	28
		Target ³	WH/DF		14	40	37	11	28
4	MC	204	DF/WH	43	12/14	210/120	254/106	59/32	39/78 ⁵
5	RC	205	DF/WH	43	13	104	114	29	100
		Target ³	WH/DF		16	48	35	12	100

1. The source of stand inventory information is from SLI cruise plots taken in 5/04.

2. The net acres are based on orthophotos and GIS and exclude roads, stream buffers (special stewardship), and reserve areas. Modified clear cut 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.

5. The portion below West Fork Road has been commercially thinned. Table shows the current stand with unthinned/thinned characteristics.

The sale areas burned in the 1933 (Tillamook) and the 1945 (Wilson River) fires and were planted in 1962. Areas 1, 2, and portions of Areas 3, 4, and 5 were pre-commercially thinned in approximately 1988. Portions of Areas 4 and 5 were commercially thinned in 2002/2003.

The sale areas were inventoried using the Stand Level Inventory (SLI) procedure in May 2004. 29% of the net acres (Areas 1 and 2) were identified as UDS and 71% (Areas 3, 4 and 5) were identified as CSC. Areas 1 and 2 have more variety in both tree and brush species and in vertical diversity. In Areas 3, 4, and 5, the percent coverage of shrubs, herbs, and grasses less than 15' in height is just under the amount required for UDS structure.

See Table 2 for specific stand data.

The Douglas-fir has Swiss needle cast (SNC) symptoms resulting in slowed diameter and/or height growth. Portions of the stands have been mapped by aerial surveys in two of the last three years. Isolated pockets of *Phellinus weirii* were noted during recon and previous management activities. No other insect or disease problems were observed.

There are pockets and scattered hemlock, noble fir, cedar and alder throughout the sale areas with more of these non-Douglas-fir conifer species in Areas 1 and 2. Portions of the alder components of these stands were aeriially sprayed to

release planted conifer in the 1970's resulting in alder trees with short boles and many limbs.

The brush component in all the sale areas is comprised primarily of sword fern, vine maple, salmonberry and salal. This occurs in patches at the higher elevations. Some beargrass was also observed in openings.

Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some windthrow and slash from recent partial cut activity in decay classes 1 and 2. From SLI measurements, down wood in decay classes 1 and 2 ranged from 0 to 441 cubic feet per acre. Both Areas 1 and 2 showed no down wood in these decay classes. Total down wood ranges from 2,469 to 4,799 cubic feet per acre with the lower amounts again showing up in Areas 1 and 2. No down wood greater than 24" on the large end in decay class 1 and 2 was recorded. FMP landscape down wood targets for hard conifer logs were not met. Older Forest Structure targets for total down wood are close to being reached in all sale areas.

There are some larger snags in various states of decay and a few hard snags created from wind and/or snow damage. The complex structure requirement of two snags per acre greater than or equal to 24" in diameter was met or close to being met on all measured SLI stands within the sale with the exception of those in Areas 1 and 2. No snags greater than 15" DBH in decay class 1 and 2 were recorded on the SLI measurement in any of the sale areas. Residual snags were felled as part of the fire prevention measures in the late 1950's. FMP landscape targets are anticipated to be met as tree diameters increase.

III. DESIRED STAND CONDITION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	201	UDS	REG	GEN/LYR	43
2	202	UDS	REG	GEN/LYR/OFS	57
3	203	CSC	REG	GEN/LYR/OFS	28
4	204	CSC	REG	LYR/OFS	117
5	205	CSC	REG	LYR/OFS	100

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 prescriptions will remove Douglas-fir susceptible to Swiss needle cast and retain other native species. The mix of prescriptions and the retention of the other conifer will create a mosaic of openings and variable densities across the landscape. These regeneration harvest areas will be planted with a mix of conifer species. Unmanaged hardwood and conifer mixes will be left in headwalls, riparian areas, and adjacent green tree retention areas as well as scattered throughout the units. Additional acreage adjacent to the sale areas has been commercially thinned. There are also areas of open rocky slopes especially in the higher elevations.

As the future stand is established the residual trees from this entry will add to the 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 harvest units five to seven years after stand establishment to determine snags/acre and cubic feet of downed wood by decay class. If the stand is deficient in either of these characteristics, the need for creating additional amounts will be evaluated.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

See table 2 for prescription targets

Modified Clearcut:

In Areas 1, 2 and 4 merchantable Douglas-fir will be removed. All other species will be reserved. In both Area 1 and Area 2, there is approximately 25 square feet of basal area in these other conifer species. In Areas 1 and 2, the prescription may be modified slightly to enhance habitat for a listed plant species. In Area 4, a diameter limit will retain the larger Douglas-fir as green tree retention for future down wood and/or snags. Other conifer species are a minor component of Area 4.

Retention Cut:

In Areas 3 and 5, the average residual basal area will be at least 33 square feet, primarily in Douglas-fir. The remaining merchantable Douglas-fir will be removed. All other species will be reserved. There is a minor amount of hemlock and alder in these two areas. Understory vegetation will be enhanced by the additional growing space available.

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. These leave trees function as future

source of snags and down wood recruitment across the landscape. Green trees will be left on precipitous slopes and headwalls and those areas not reached by conventional logging methods. Stream buffers adjacent to small perennials and the outer RMA (Riparian Management Area) along the West Fork Wilson River will also contribute additional green trees. Many of these areas will be posted so they are outside of the timber sale boundary.

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.

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:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	3268		3268
Stumpage Value (\$/MBF)*	\$236		
Estimated Gross Value	\$771,248		\$771,248
		Project Costs:	\$95,500
		Estimated Net Value:	\$675,748

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via the North Fork Wilson, West Fork Wilson, Firebreak 8W, and Diamond Mill roads. These are currently all weather, crushed rock roads. See maps for specific road locations and conditions.

Approximately 0.7 miles of existing surfaced road and 0.8 miles of abandoned road will be improved. Improving the abandoned road will allow hauling from FB8W to the West Fork Road, currently restricted by tight switchbacks. Improvement work includes grading, rocking, widening, culvert replacement, spot rocking, sidecast pullback, and adding new culverts. This work will bring all roads up to standards described in the *Forest Roads Manual*. pullback, and adding new culverts.

Approximately 0.6 miles of road will be constructed in order to access cable yarding areas.

Road improvement will be restricted on portions of Triangulation Point ridge road within and between Areas 1 and 2, to protect listed plant habitat.

Project work for the sale will include vacation of 0.7 miles of road in Area 5 following harvest. The remaining roads will be reviewed for closure at sale completion. See summary document for more information on this topic.

No other project work is currently planned for the sale.

The operation will be 100% cable yarding. Listed plant habitat in Areas 1 and 2 may restrict landing and cable corridor locations.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct			0.6	
Improve		0.7		0.8
Maintain ²		12.7	0.2	
Close/Block ³				
Vacate ³			0.7	

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:

There are no known Type F streams within the sale areas. The West Fork Wilson River is a large Type F stream adjacent to the sale areas. A medium Type F tributary of the West Fork Wilson River is adjacent to Area 5.

There are additional unnamed small perennial and seasonal Type N streams within the sale areas. These streams will be reviewed and protected appropriately during sale layout based on flow, topography, and terrain.

Oregon Department of Fish and Wildlife (ODFW) has completed stream surveys for the sale. If any additional streams needing surveys are found during layout

they will be treated as Type F until surveys are completed to verify fish use. Stream buffers within or adjacent to harvest unit boundaries will be managed according to *Forest Management Plan* Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

Approximately 6 net acres of the sale 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.

Surveys for northern spotted owls are not required due to the absence of potentially suitable habitat.

It was determined that in Areas 1 and 2 there is potential marbled murrelet habitat adjacent to the sale boundary. Surveys will be conducted during the 2005 and 2006 survey season for marbled murrelets. All surveys for marbled murrelet will be conducted in accordance with Pacific Seabird Group (PSG) protocol.

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).

A listed plant was identified within and adjacent to the sale areas. The Oregon Department of Agriculture (ODA) will be consulted during sale layout to determine appropriate level of protection. Road improvement and cable corridor and landing locations may be restricted adjacent to plant locations.

A plant on the state candidate list was identified as being in the general location of the sale. As such, this plant is not given special legal protection but ODF is documenting its occurrence and managing around it where possible. This plant

normally is found in open grassy areas so impact on the plant from the operation should be minimal.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial hazard risk assessment is high. Where high landslide hazard locations are identified during fieldwork the geotechnical specialist will be consulted.

Area 3 has been identified as having 6 net acres within a SAH Basin. 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 Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). The District Recreation Coordinator has reviewed this sale. No OHV trails were identified within or adjacent to the sale areas.

Recreation use common to this area includes hunting and sight- seeing.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary. Triangulation Point Lookout location is within Area 1. The cultural resource classification for this site is Class-II-ODF Identified for Protection. The district will consult the Public Use Coordinator for appropriate protection measures when necessary.

XII. SCENIC RESOURCES:

The sale areas have a visual classification of Level 2, moderate sensitivity. The sale will be reviewed by the Public Use Coordinator to determine methods to minimize visual impact. There will be some visual impact until green up occurs

XIII. OTHER RESOURCE CONSIDERATIONS:

The Tillamook County Sheriff's Department has a radio repeater/relay site on T-Point, within Area 1. The district will consult with The Tillamook County Sheriff's Department during sale preparation and operation.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Table 6. Land Management Classification Summary

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian Habitat	23	<1
	Wildlife Habitat	<1	
	Operationally Limited		6
	Plants		5
2	Aquatic and Riparian Habitat	12	
	Wildlife	8	
	Operationally Limited		1
	Plants		3
3	Aquatic and Riparian Habitat	2	
	Wildlife Habitat	2	
4	Aquatic and Riparian Habitat	38	
5	Aquatic and Riparian Habitat	29	

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.