

# Pre-Operations Report

**Operation Name: Roger Fox**  
**County: Tillamook**  
**Management Basin: Wilson**

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

Area	Type of Operation	Gross Acres	Net Acres <sup>1</sup>
1	Modified clearcut	122	121
2	Retention cut	101	96
3	Modified clearcut	27	24
4	Modified clearcut	122	118
5	Retention cut	35	33
6	Retention cut	20	18
7	Modified clearcut	34	33
8	Modified clearcut	10	9
9	Modified clearcut	30	29
10	Retention cut	32	31
Total		533	512

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

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

Slopes have varied aspects and range from 10 to 90%. Elevations range from 400 to 2,200 feet. The major soil types are Enright and Rye.

The landforms are moderate to very steep side-slopes on the north side of Fox Creek below Fox Creek Ridge and the gentle spur ridges with moderate to very steep draws and side-slopes between Stanley Creek and the unnamed tributary to Jordan Creek. The underlying rocks of Area 1, 2 and 3 are mostly igneous intrusive origin rocks, diabase commonly tabular sills with columnar joints cut by dike swarms fed by Tillamook Volcanics with some sedimentary origin rocks of the Yamhill formation massive to thin-bedded dark gray siltstone commonly associated with tuff beds and thin sandstones. The underlying rocks of Area 4 through 10 are mostly igneous origin rocks of the Hembrie Ridge Formation, submarine pillow basalt sheet flows including submarine basalt breccia and sandstone and sedimentary origin rock of the Tyee Formation, thin bedded siltstone and sandstone turbidite sequence. There is also a small sequence of igneous diabase intrusive with sedimentary Yamhill Formation.

## 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	MC	220	DF/RA	50	12	65/60	160	36	121
2	RC	221	DF/RA	50	12	65/60	160	36	96
		Target <sup>3</sup>	DF		16	35	25	10	
3	MC	222	DF/RA	44	12	100/50	190	42	24
4	MC	223	DF/RA	46	12	120/80	160	36	118
5	RC	224	DF	43	12	140	175	39	33
		Target <sup>3</sup>			14	35	34	10	
6	RC	225	DF	43	12	140	175	39	18
		Target <sup>3</sup>			14	35	34	10	
7	MC	226	DF/RA	43	14	140/80	130	37	33
8	MC	227	DF	43	14	140	130	37	9
9	MC	228	DF/RA	43	14	140/80	130	37	29
10	RC	229	DF	43	14	140	130	37	31
		Target <sup>3</sup>			16	35	25	9	

1. The source of stand inventory information is from field reconnaissance in 2004, SLI in 2003 and expanded SLI.

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

The sale areas burned in the 1933 (Tillamook) and the 1939 (Saddle Mountain) fires. The west side of Roger Road within Areas 1 and 2 and small portions of the remaining areas were replanted in 1970. Portions of Area 2, 3, 4, 9, and 10 were fertilized in 1996/1997.

Approximately 111 acres have been inventoried using the Stand Level Inventory (SLI) procedure and the stand has been identified as UDS. The remaining acres of the sale were identified as CSC according to the district stand summary information (1999). The stands are primarily single story, two species stands of Douglas-fir and alder with a brush understory. Portions are single-species stands with the Douglas-fir more prevalent on the ridges.

**See Table 2 for specific stand data.**

The Douglas-fir has Swiss needle cast (SNC) symptoms resulting in slowed diameter and/or height growth. The stands have been mapped by aerial surveys in each of the last three years.

There are scattered hemlock, spruce, and cedar throughout the sale areas. 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.

No other significant insect or disease problems have been identified at this time.

The brush component in all the sale areas is comprised primarily of vine maple, huckleberry and fern. Salmonberry is located in the draws .

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. From SLI measurements within and adjacent to the sale areas there was under 50 cubic feet per acre of down wood in decay class 1 and 2. Total down wood ranged from 2,682 to 4,820 cubic feet per acre. No down wood greater than 24" on the large end in decay class 1 and 2 was recorded. Landscape down wood targets for hard snags have not been met. Older Forest Structure stand targets are met or nearly met for total down wood per acre.

There are some large snags in various states of decay and some hard snags created from wind and snow. No snags greater than 15" in decay class 1 and 2 were recorded on the SLI measurement plots. FMP landscape targets have not been met for hard snags.

**III. DESIRED STAND CONDITION:**

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Net Acres
1	220	CSC/UDS	REG	GEN/LYR/OFS	121
2	221	CSC/UDS	REG	GEN/LYR/OFS	96
3	222	CSC	REG	GEN	24
4	223	CSC/UDS	REG	GEN/LYR/OFS	118
5	224	CSC/UDS	REG	GEN/OFS	33
6	225	CSC	REG	GEN/OFS	18
7	226	CSC/UDS	REG	GEN/OFS	33
8	227	CSC	REG	GEN/OFS	9
9	228	CSC/UDS	REG	GEN/OFS	29
10	229	CSC/UDS	REG	GEN/OFS	31

*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 with Swiss needle cast symptoms and retain other species. These regeneration harvest areas will be planted with a mix of conifer species. Unmanaged hardwoods and conifer mixes will be left in headwalls, and in riparian buffers as well as scattered in the unit.

Additional acreage east of Area 3 has been commercially thinned but overall there has been limited management adjacent to the sale areas. The timber sale areas will combine with adjacent stands to create a mosaic of openings, gaps, variable densities and mixed species over the landscape.

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. SLI will measure the snags/acre and cubic feet of down wood by decay class. If the stands are 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, 3, 4, 7, 8, and 9, Douglas-fir and merchantable alder will be removed. A diameter limit will be used to select trees to be left. These residual trees will provide a future down wood and/or snags. All other species will be reserved.

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

In Areas 2, 5, 6, and 10, average residual basal area will be at least 33 square feet, primarily in Douglas-fir. Merchantable Douglas-fir in excess of 33 square feet basal area and alder will be removed. All other species will be reserved.

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 a 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 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. Tops resulting from ground yarding will be left in the units.

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:		1	

	Conifer	Hardwood	Total
Net Volume (MBF)	3606	1388	4994
Stumpage Value (\$/MBF) *	237	233	
Estimated Gross Value	\$854,622	\$323,404	\$1,178,026
		Project Costs:	\$273,500
		Estimated Net Value:	904,526

**VI. HARVESTING AND ACCESS CONSIDERATIONS:**

The sale areas are accessed via Fox Creek Ridge Road, an all-weather, crushed rock road. See maps for specific road locations and conditions

Approximately 1.8 miles of abandoned road will be improved which includes grading, rocking, widening, culvert replacement, spot rocking, sidecast pullback, and adding new culverts. An additional 2.3 miles of abandoned road will be improved but not rocked. This work will bring all roads up to standards described in *the Forest Roads Manual*.

Approximately 0.1 miles of spur road will be constructed to provide access to cable yarding areas.

Following harvest, roads within the sale areas will be reviewed for closure. All ground yarding roads will be closed and waterbarred. See summary document for more information on this topic.

No other project work is currently planned for this sale.

The operation will be 15% ground yarding and 85% cable yarding.

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

Activity	Mainline	Collector	Rocked Spur <sup>1</sup>	Dirt Spur <sup>1</sup>
Construct			0.1	
Improve			1.8	2.3
Maintain <sup>2</sup>		3.0		
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:**

There are no known Type F streams within the sale areas. Stanley Creek, a medium Type F stream, is adjacent to Area 1. Fox Creek, a large Type F, is adjacent to Areas 4 through 10. Two unnamed tributaries to Fox Creek are adjacent to Area 4, 9 and 10. These are currently identified as assumed small Type F streams based on topography but have not been surveyed. There are several 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) 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.

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.

ODFW fish biologist will work with ODF to identify possible stream enhancement project areas.

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 marbled murrelets and northern spotted owls are not required due to the absence of potentially suitable habitat.

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 found within the sale areas, however 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 is an understory species normally occurring in moist shady areas next to streams. All riparian areas are protected as part of the planned activity.

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

The initial assessment from the geotechnical specialists is high. There are high landslide hazard locations throughout the sale. 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.

#### **X. RECREATION RESOURCES:**

The sale areas are designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator.

Two designated OHV trails are within the sale, Mad Dogs Pumpkin Patch and Rogers Road. Both of these trails will be improved for use as haul roads. Rocking is not planned for Mad Dogs Pumpkin Patch to reduce future impact on the trail. Project work will include filters on both trails following harvest to limit the types of vehicles using the trails. Short term closure of these trails may occur to facilitate logging and public safety. Slash will be removed from the OHV trails upon completion of the operation. A plan will be developed to advise the public when trails are closed due to harvest activity. The District Recreation Coordinator will be consulted during sale layout.

Recreational use common to this area includes hunting and OHV use.

**XI. CULTURAL RESOURCES:**

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary. 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. A small portion of Area 2 that may be visible from Highway 6 has a visual classification of Level 1, high sensitivity. The sale was reviewed by the Public Use Coordinator.

Area 2 is a retention cut, which will reduce the visual impact due to the amount of residual trees being left. The stream buffers, sale area sizes, and residual trees within the units will minimize visual impact in the other sale areas.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

Permanent inventory plots are within the sale areas. Permanent plot markings will be protected according to guidelines.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

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**Table 6. Land Management Classification Summary**

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic and Riparian Habitat	45	
	Recreation	18	
	Visual	<1	
2	Aquatic and Riparian Habitat	19	
	Recreation	23	
	Visual	1	
3	Aquatic and Riparian Habitat	7	
	Recreation	4	
4	Aquatic and Riparian Habitat	45	
	Recreation	11	
5	Aquatic and Riparian Habitat	12	
	Recreation	5	
6	Aquatic and Riparian Habitat	10	<1
	Recreation	2	
7	Aquatic and Riparian Habitat	6	
	Recreation	3	
8	Aquatic and Riparian Habitat	5	
	Recreation	4	
9	Aquatic and Riparian Habitat	9	
	Recreation	4	
10	Aquatic and Riparian Habitat	10	
	Recreation	5	

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.