

# Pre-Operations Report

**Operation Name:** Abiqua Basin  
**County:** Marion  
**Management Basin:** Cedar Creek Basin

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

Area	Type of Operation	Gross Acres	Net Acres
	PC	255	206
<b>Total</b>		<b>255</b>	<b>206</b>

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

The operation is located within a temperate climate area. Typically the fall and winter seasons are wet. This area receives approximately 89 inches of rainfall per year. The operation is located within the *Tsuga heterophylla* Zone (Natural Vegetation of Oregon and Washington, Franklin & Dyrness, 1973).

The landforms are gentle to moderate slopes with a few bands of steep slope above Abiqua Creek near the confluence of Wildcat Creek. The underlying rock is igneous origin rock Lava flows and flow breccia of andesite, basaltic andesite, and basalt also includes interbedded volcanoclastics.

The slopes in the operation range from 10 to 80% with an average slope of 50%. The soils within the operation are a mix of Pechuck (63%), Akerson (12%), and Nasty (25%). Pechuck and Akerson are well-drained, fine textured colluvial soils. Nasty soils are moderately deep, well-drained, moderately fine textured skeletal soil. The 50 year site index for Douglas-fir is 116 feet. The elevation of the operation ranges from 1860 feet to 2900 feet.

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

The majority (82%) of the operation is located within a 34 year old stand. The rest of the stand is 49 years old. The operation is currently classified as Understory. The overstory consists of Douglas-fir, western hemlock, big leaf maple and red alder. The understory contains salal, vine maple, ferns and Oregon grape. There is 1 snag per acre within the operation; 40 cubic feet per acre of sound down wood and a total of 2700 cubic feet per acre of down wood in all decay classes within the operation (SLI 2002).

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age	DBH	BA	TPA	SDI	Acres <sup>2</sup>
	PC-M	Target <sup>3</sup>			12	111	132	30	
		12019	DFWH	34	12	146	179	41	209
		12020	DFWH	49	11	149	221	43	46

1 The source of stand inventory information is SLI from 2002 year.

2 The acres are based on GIS include roads, streams buffers, reserve areas, etc.

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

### III. DESIRED STAND CONDITION:

The desired future condition (dfc) for all the areas in this operation is Layered for 82% of the operation and General for the remaining 18% as shown on Map B.

The anticipated pathway for the dfc Layered stand is as follows:

- this area will receive a moderate partial cut as part of this operation which will improve the growing condition for the residual trees,
- in approximately 15 years, this area will be evaluated for another partial cut,
- at the next commercial entry, snags and down wood will be evaluated using Stand Level Inventory methods to determine if a development project is needed.

The anticipated pathway for the dfc General stand is as follows:

- this area will receive a moderate partial cut as part of this operation which will improve the growing condition of the residual trees,
- in approximately 15 years, this area may be evaluated as a candidate for final harvest.

**Table 3. Stand Structure Information**

Area	Stand ID	Current	Post Harvest <sup>1</sup>	Desired Future	Acres
	12019	UDS	UDS	LYR	209
	12020	UDS	UDS	GEN	46

1 The stand is expected to develop into this condition in the five to ten years after this operation is completed.

### IV. PROPOSED MANAGEMENT PRESCRIPTION:

This operation will receive a moderate partial cut resulting in a residual SDI of 30%. A 13 acre patch of larger trees located within the operation will be posted as no harvest.

Existing down wood will be retained. Snags will be retained that do not pose a safety hazard, but some snags will be felled during the operation. No new snags or down wood will be added during this entry due to the size of the trees.

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

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned Quarter:		3	

	Conifer	Hardwood	Total
Net Volume (MBF)	680	0	680
Stumpage Value (\$/MBF)	\$250	0	
Estimated Gross Value	\$170,000	0	\$170,000
		Project Costs:	\$14,850
		Estimated Net Value:	\$155,150

**VI. TRANSPORTATION PLANNING AND HARVESTING:**

Access to the operation is via the Crooked Finger county road, a mainline road. Other roads used for the operation are the CF mainline, A-900, A-930, A-950 and a private road on the east side of the operation. All of these roads fall into the “collector” category. Road brushing will be required on approximately 5 miles of road in the immediate area and in Section 2 to the north. These roads are surfaced with either crushed rock or pitrun rock as you get closer to the operation. Easements will need to be acquired on parts of the Crooked Finger road that are not already under an existing easement. A 550 foot spur road will be constructed from the end of the private road on the east side of ODF land to a mid-slope bench in the eastern portion of the operation to provide a cable logging setting

About 30% of the area will be ground logged and the remaining 70% will be cable logged.

Required Project work

- Construct 550 ft of spur road, surfaced (\$2750)
- Construct approximately 11 small landings (\$1400)
- Brush 5 miles of Collector road (\$4500)
- Grade approximately 5 miles of Collector road (\$1300)
- Move in (\$2000)
- Vacate 550 ft of low use road that was built (\$400)
- Spot rock as needed, 500 cubic yard pitrun (\$2,500)

**Table 5. Transportation Planning Summary (Miles).**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	0.1	0
Improve	0	0	0	0
Maintain	3.5	5	0	1
Close/Block	0	0	0	0
Vacate	0	0	0.1	0

- For determination of road class either use results of the Harvest and Habitat roads classifications, or if this information is not available then low use roads are spurs, medium use roads are collectors and high use roads are mainlines. Use these same criteria when comparing the total for all AOP sales to the IP plans.

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

This operation is not in proximity to any streams where listed fish are present.

Abiqua Creek, a large fish bearing stream is located at the south end of the operation. There are also approximately 12 streams of unknown beneficial use located within the operation. A fish presence survey may be performed on the streams with unknown beneficial use during the 2005 survey season. If fish presence surveys are not performed on the streams, the Oregon Forest Practices Revised Guidance on Interim Water Classifications (1995) will be used to make the determination. The overstory on these streams consists of red alder, Douglas-fir and western hemlock. The understory consists of salmonberry, vine maple, Oregon grape and ferns.

Management activities within riparian areas of streams will focus on achieving properly functioning aquatic and riparian habitat conditions over time. Riparian Management Areas (RMAs) will be established immediately adjacent to streams for the purpose of protecting aquatic and riparian resources and maintaining the functions and ecological processes of the streams. The Management Standards

for Aquatic and Riparian Areas found in the *NWO State Forests Management Plan* (pg. J-1 – J-16) will be followed within these RMAs.

The following measures will be used to minimize impacts to streams: 1. No ground based equipment will be allowed within 50 feet of the fish stream and 25 feet of the non-fish streams, 2. There will be seasonal restrictions as to when ground yarding and road construction will be allowed (i.e. during dry seasons), 3. Erosion control measures will be used on areas of soils exposed during road construction or improvement, 4. Road ditches will be disconnected from streams, 5. Road maintenance will be required during log hauling.

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

This operation was surveyed for Northern Spotted Owls with no response during the 2004 survey season. The operation will be surveyed again during the 2005 survey season. Approximately 24 acres of the operation are located within the outer edge of the Abiqua Northern Spotted Owl site. A biological assessment has been drafted by the Northwest Oregon Area biologist. This assessment will be reviewed by both the Oregon Department of Fish and Wildlife and the US Department of Fish and Wildlife. The biological assessment and comments from both agencies will be reviewed by the District Forester, Program Director and the Area Director who will then determine how to proceed with the planned operations. The draft biological assessment states that the Abiqua Basin sale will not impact "suitable" habitat.

The operation was checked against the Oregon Natural Heritage Program's database of known plant locations. The operation was also checked against district knowledge for any listed plant location. No records of threatened, endangered, rare or candidate plant species were found within the operation.

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

The initial assessment from the geotechnical specialist is moderate. There are a few bands of steep slopes running through the operation. The geotechnical specialist will be consulted during sale layout and the need for field review will be assessed.

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

There are no developed recreational resources within the operation area, but hunting and camping do occur in the area.

**XI. CULTURAL RESOURCES:**

There are no known cultural resources within the operation.

**XII. SCENIC RESOURCES:**

There are no scenic resources within the operation.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

There are no other resource considerations.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Management Classification Summary**

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
	Wildlife Habitat	24	0
	Aquatic & Riparian	23	16

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. For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian, Recreation, and Scenic resources.