Pre-Operations Report

Operation Name: South Gawley
County: Clackamas
Management Basin: Butte Creek Basin

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
	MC	131	115
Total		**131**	**115**

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 70 to 90 inches of rainfall per year. The operation is located within the *Tsuga heterophylla* Zone (Natural Vegetation of Oregon and Washington, Franklin & Dyrness, 1973).

The landform is gentle ridgeline along Gawley Ridge above the headwaters of Gawley Creek and slopes above Abiqua Creek and in the headwaters of Homestead Creek, Bridge Creek, and Silver Creek. The underlying rock units are igneous origin, Basalt and Andesite lava flows and breccias of the Western Cascades.

Soil within the operation consists of Goodlow soils. The Goodlow soil series consists of deep, well-drained, medium-textured colluvial soils. The elevation of the operation ranges from 3,220 feet to 3,600 feet. The slopes range from 0 to 40%.

II. CURRENT STAND CONDITION:

The stands within the operation are currently classified as Understory and are between the ages of 50 to 60 years. The overstory consists of a mixture of Douglas-fir, noble fir, western hemlock and red alder. The understory consists of huckleberry, rhododendron, vine maple, salmon berry and ferns. There are approximately 200 cubic feet per acre of sound down wood and approximately 6,000 total cubic feet per acre of down wood in all decay classes. There are very few snags within the operation area. (SLI 2003)

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Acres [2]
	MC	12266	DFWH	55	17	200	126	49	16
		12272	DFWH	51	18	168	91	40	74
		12267	DFWH	61	17	387	237	95	26

1 The source of stand inventory information is SLI from 2003 for trees greater than 8 inches in diameter.
2 The acres are based on GIS and includes 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:

According to the District's landscape design for the Butte Creek Basin, the desired future condition for the operation is in a General stand condition. *(Cascade District Implementation Plan, 2003)*

The objective of the operation is to rehabilitate an underproductive stand, establish an intensively managed new cohort, and maintain, or develop, the structural components important to habitat diversity.

The **Anticipated Pathway for the Operation (SLI types 12266, 12267, 12272)** begins with a modified clearcut.

- A regeneration harvest of the stand will occur at this entry.
- Intense site preparation will need to occur to remove the dense vegetation and plant a well stocked stand.
- In 10-15 years the stand will be a candidate for a pre-commercial thinning.
- Around age 40, the stand will be evaluated for a commercial thinning.
- Regeneration Harvest is planned to occur between age 80 to 90.

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest [1]	Desired Future	Acres
	12266	UDS	REG	General	16
	12272	UDS	REG	General	74
	12267	UDS	REG	General	26

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 is a modified clearcut.
- Approximately 5 green trees per acre will be retained within the unit. These trees may be concentrated in 3 Green Tree Retention Areas and Riparian Management Areas.
- Mechanical treatment will be used on brush species to prepare the site for planting. The logging slash will be piled and burned.
- The operation area may also receive an aerial chemical treatment to manage the growth of vegetation that would compete with newly planted seedlings.
- After the site preparation is completed, the area will be planted with a mixture of noble fir and some Douglas-fir seedlings.
- All existing down wood will be retained along with all existing snags that do not pose a safety hazard. Approximately 2 snags per acre will be located within the sale perimeter following the completion of the operation. At least 600 cubic feet per acre of down wood will be retained within the operation by utilizing cull material that results from logging, supplemented with felled trees as necessary.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%	□	x
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	2,336	25	2,361
Stumpage Value ($/MBF)	$250	$150	
Estimated Gross Value	$584,000	$3,750	$587,750
		Project Costs:	$78,000
		Estimated Net Value:	$509,750

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access to the operation is via the Butte Creek Mainline and the BC 700 road, a collector road. The existing roads have good quality crushed rock surfaces that will provide for all weather use. Two un-surfaced, out-sloped spur roads with 14 foot subgrades will be constructed to provide landing opportunities for ground yarding. Should a purchaser desire to use surfacing, there will be rock available from a nearby rock pit at purchaser expense. These roads will be approximately

3,500 feet in length and will be water-barred and blocked to traffic when the operation is completed.

The topography is relatively gentle within the operation, predominately less than 35%. This will allow the unit to be harvested with ground based equipment.

Required Project Work:

- Construct 3,500 feet of new spur road: 14 foot out sloped, un-surfaced
- Replace culvert on Butte Creek with a bridge to allow for juvenile and adult fish passage.

Table 5. Transportation Planning Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0	0	0	0.66
Improve	0	0	0	0
Maintain	4	1	0	0.66
Close/Block	0	0	0	0.66
Vacate	0	0	0	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:

There are no listed fish within this operation. There are 2 small seasonal streams and 1 small perennial stream located within the operation. These are all non-fish streams. The overstory along these streams consists of Douglas-fir and red alder. The understory consists of salmonberry, vine maple and ferns.

If any streams are found during sale layout, management activities within riparian areas of these 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 25 feet of any non-fish bearing streams found, 2. There will be seasonal restrictions as to when ground yarding will be allowed (i.e. during dry seasons), 3. Erosion control measures will be used

on areas of soils exposed during 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 one response from a single owl during the 2003 survey season. The operation was surveyed again in 2004 with two male night responses and one daytime observation on a follow-up survey. Site status was changed to Resident Single. The operation was surveyed in 2005 with no responses. The operation may be surveyed again in 2006.

The operation area was checked against District knowledge for any listed plant location. The operation area was also checked against the Oregon Natural Heritage Program's database of known listed plant locations. No listed plant records were identified within the operation area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial hazard and risk assessment from the geotechnical specialists is low. If high landslide hazard locations are identified during fieldwork the geotechnical specialist will be consulted.

X. RECREATION RESOURCES:

There are no recreational resources within close proximity to the operation. A portion of the haul route is also an access route for Rhody and Butte Lakes. Access to the lakes will be not be obstructed by this operation, but may be affected by increased log truck traffic.

XI. CULTURAL RESOURCES:

There are no known cultural resources within the operation. If discovery is made, the cultural resource will be protected and field staff will consult with the Cultural Resource Specialist in Salem.

XII. SCENIC RESOURCES:

There are no scenic considerations within the operation.

XIII. OTHER RESOURCE CONSIDERATIONS:

To protect air quality, the planned burn will comply with the Oregon Smoke Management Plan. The Smoke Management Plan is designed to reduce emissions from prescribed burning in western Oregon and to minimize smoke intrusions into designated population areas.

XIV. LMCS:

Area 1 contains Focused Stewardship, Aquatic and Riparian Habitat for one perennial Type N stream. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.