



Forest Officer's Report

Cook Creek Logging Unit

Siletz Indian Reservation
Lincoln County, Oregon



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Table of Contents

Part A - NARRATIVE OF FACTUAL INFORMATION	3
Introduction.....	3
Description of the Area	3
Consent of Owners	4
Timber Sale Access.....	4
Other Land Use Resources and Values	4
Silvicultural Prescription.....	5
Cruise Summary.....	6
Appraisal Summary	6
Form of Contract.....	7
Prospectus and Advertisement	9

For examples of the below FOR elements, contact your regional office.

EXHIBITS

- Exhibit A - Logging Unit Map
- Exhibit B – Purchaser Road Maintenance Map
- Exhibit C - Vicinity Map
- Exhibit D - Soil Type and Topography Map
- Exhibit E - Timber Type and Ownership Map
- Exhibit F - Cruise Plot Location Map

APPENDICES

- Timber Cruise Report
- Stumpage Appraisal
- Tribal Resolution – Stumpage Rates
- Form of Contract
- Prospectus, Bid Form, Advertisement

Part B. APPRAISAL

Forest Officer's Report

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Part A - NARRATIVE OF FACTUAL INFORMATION

Introduction

The harvest of this unit meets several of the objectives outlined in the Forest Resource Management Plan (Forest Plan). The implementation of this action will follow the guidelines in the Forest Plan, Chapter 4 – Implementation.

This harvest also meets the objectives and guidelines of the Tribal Forest Management Ordinance (adopted December 16, 2000, Tribal Resolution No. 2000-434) regarding use and management of commercial forestlands.

The 1999-2010 Forest Resource Management Plan (Forest Plan) for the Siletz Indian Reservation was approved by the Tribal Council via Resolution Number 99-382 on December 17, 1999. The Siletz Agency Superintendent approved the plan on December 22, 1999. Tribal Council changed the rotation age to 60 years via a Forest Plan Maintenance Action on July 22, 2005 (Resolution Number 2005-273). The Siletz Agency Superintendent approved the Finding of No Significant Impact for the change in the rotation age on July 27, 2005. On June 28, 2010 the 1999-2010 Forest Resource Management Plan was amended to become a “non-expiring” plan in accordance with BIA rules and regulations, which included approval by Tribal Council (via Resolution No. 2009-120) and the BIA Northwest Regional Office Director for the Secretary of the Interior. The harvest of 1.999 MMBF of conifer timber satisfies the 77% of the 2.58 MMBF AAC 2018 target.

The sale is a one season sale and local markets exist for all forest products.

Description of the Area

The Cook Creek Logging Unit lies in portions of two watersheds. The northwest corner of the parcel (about 5.91 acres) is in the Long Tom Creek watershed of the Sam Creek – Lower Siletz River 6th Field Watershed. The remaining 34.6 acres is in the Cook Creek watershed of the Simpson Creek – Upper Yaquina River 6th Field Watershed. The 40.51 acre Cook Creek Logging Unit is a stand- alone parcel of the Siletz Indian Reservation located about 3.0 air miles southeast of the City of Siletz, Oregon and is fully Tribal Trust land.

Legal Description for Cook Creek Logging Unit Tract 1032:

Lot 8 of Section 24, Township 10 South Range 10 West, Willamette Meridian in Lincoln County, Oregon.

Unit Description (timber type, stream protection/leave tree areas, etc):

Cook Creek Logging Unit (Reservation Forestland) – 40.51 acres (cutting unit including C100 right-of-way is 31.89 acres, 8.12 acres of stream protection areas, and 0.5 acres in a leave tree area): Mature (130 to 160+ year old) conifers and hardwoods occupy the unit. This medium stocked stand was established in 1860. The understory consists of medium to dense brush ranging from 20 to 100% cover. Major understory species include sword fern, salal, salmonberry, vine maple, and huckleberry.

C200 Right-of-Way (Weyerhaeuser) – 0.9 acres. A twenty to twenty five year old

Douglas- fir plantation that has been pre-commercially thinned.

Elevations range from 320 to 800 feet above sea level. Aspect ranges from northwest to southwest.

The Natural Resource Conservation Service (NRCS) general soil map delineated four soil types in the Cook Creek Logging Unit: 2E Astoria silt loam (5 to 30% slopes), 7H Bohannon-Preacher Complex (60-90% slopes), 49E Preacher-Bohannon Complex, and 50G Preacher-Bohannon-Slickrock Complex (35-60% slope) (see Exhibit D – Soil Type and Topography Map).

The soil types are located on slopes ranging from 5 to 80%. Surface horizons are weathered gravelly loams. The bedrock layer for all the soil types is partially weathered sandstone and siltstone.

All soil types are well-suited for the production of Douglas-fir. These soils range in depth from 20 to 60 inches and are generally considered to be very productive with a Douglas-fir site class of 2 on a scale of 1 to 5, with the most productive being Site 1 to least productive being Site 5.

The main concerns in producing and harvesting timber are slope, the hazard of erosion, plant competition, and the limited rooting depth of the Bohannon soils. These soils are limited to the use of highlead and other cable logging systems due to slope. These systems fully or partially suspend logs and are less damaging to the soil.

Consent of Owners

Consent for the sale of tribal timber from the Cook Creek Logging Unit was obtained in the form of Tribal Resolution No. 2020-123 on March 25, 2020. This sale area is fully Tribal Trust lands.

Timber Sale Access

For all species, there are 4.8 miles of private gravel road that access the unit behind a locked gate (keys will be issued for CTSI lock). Use of such road is subject to the terms and provisions of the Reciprocal Right of Way and Road Use Agreements between Weyerhaeuser, Hancock Forest Management, and the Confederated Tribes of Siletz Indians.

Douglas-fir and Other Conifer sawlogs were appraised to Dawson, Oregon, a total distance of 60 miles via Cook Creek C100 and C200 Roads, Mainline C, Mainline D, Hollywood Hills Road, Hamer Road, Sams Creek Road, U.S. Highway 20, 19th Street (Philomath), Chapel Drive, Bellfountain Road, and Dawson Road.

Red Alder and Other Hardwoods were appraised to Eugene, Oregon, a total distance of 79.8 miles via Cook Creek C100 and C200 Roads, Mainline C, Mainline D, Hollywood Hills Road, Hamer Road, Sams Creek Road, U.S. Highway 20, 19th Street (Philomath), Chapel Drive, Bellfountain Road, Greenberry Road, Highway 99W, Enid Road (Eugene) and Prairie Road (Eugene).

Other Land Use Resources and Values

An Environmental Assessment (EA) developed for this logging unit, the Cook Creek Logging Unit EA, gives a detailed analysis of the possible effects of harvesting this unit on the environment including water, soils, essential fish habitat, threatened and endangered species (Northern Spotted Owl and Marbled Murrelet, Oregon Coast Coho Salmon), timber production, vegetation, and timber revenue. The EA evaluates two alternatives (Alternative A - No Action and Alternative B – Regeneration Harvest) with respect to their impacts on the environment. The approved Best Management Practices, Silvicultural Systems and Harvest Methods, and Fire Management Plan in the Forest Plan would be followed along with site-specific requirements for this unit incorporated into the Special Provisions and Road Construction and Maintenance Specifications sections of the Timber Sale Contract.

Silvicultural Prescription

The objective is to clearcut harvest from the logging unit mature conifer (1,998.71 MBF) and hardwood (0.11 MBF) and establish a plantation of mixed conifer species to be managed for saw timber with a commercial thinning at age 40 and a rotation age of 60.

The plantation goal for such a management strategy is 300 well-distributed seedlings per acre in a free-to-grow position at age 10. The units will be planted on 9 x 9 foot spacing with 500 seedlings per acre of mixed species (Douglas-fir, western hemlock, and western redcedar). This will be accomplished by following the Silvicultural Prescription for the Cook Creek Logging Unit, which incorporates the Best Management Practices and Silvicultural Systems and Harvest Methods outlined in the Forest Plan.

The unit will be surveyed for stocking levels after the first, second, third and fourth growing seasons following planting. The surveys will determine survival, stocking, degree of animal damage, insect and disease problems, amount of vegetative competition, and identity of principle competitors. A method of survey will be used that not only identifies surviving trees per acre, but also emphasizes tree distribution.

If stocking is found to be less than an acceptable level, such as 60 to 70 percent of the plantation goal, then the unit will be interplanted or replanted to bring stocking up to the original planting density.

Release treatments will be prescribed if competing vegetation is deemed a problem. Release may be mechanical, such as slashing; a combination of mechanical and chemical, such as cut stump treatment; or chemical such as aerial, thin line or backpack herbicide applications.

If animal damage is found on a significant portion of surveyed seedlings, then control measures will be prescribed. This could include trapping of mountain beavers or installation of bud caps or vexar tubing to prevent deer or elk browse.

For a stand to be commercially thinned, 300 trees per acre at age 10 are needed. Thinning at age 40 will harvest the trees expected to die due to competition. This also allows for maximum growth up to a rotation age of 60 years.

Logging Method

There two landings for this 32.79 acre cutting unit (includes C100 and C200 right-of-way acres). A minimum 70-foot or 100-foot tall yarder is recommended for harvesting this unit.

Required Special Logging Methods:

- Directional felling and one end suspension are required to protect the soils resource.
- Directional felling required adjacent to stream protection buffers and designated reserve trees.
- No cut buffers of 50 feet on the non-fish bearing tributaries to Cook Creek. Stream protection areas are flagged and tagged on the ground. Trees felled for yarding corridors within stream protection areas shall be felled toward the stream and remain on site.
- Trees that fall or slide into stream protection areas shall not be removed without prior approval from the Officer-in-Charge.
- When it is absolutely necessary to yard through stream protection buffers, yarding corridors will be restricted to the minimum number feasible, will not exceed 30 feet in width nor reduce crown cover on the stream segment to less than 80 percent of pre-disturbance conditions. Logs will be fully suspended over water and adjacent banks. In addition, lateral yarding at least 100 feet on either side of the skyline during lateral inhaul operations is required.

Cruise Summary

A variable plot cruise was implemented for the logging unit. The sale volume was calculated using Atterbury Consultants' FLIPS/SuperACE 08 Cruise Program. Gross volumes of cruise trees and total gross volume of the unit was calculated by using the Scribner Log Rule, based on variable log lengths. Final unit volume was obtained by subtracting an additional 6% defect from the net volume of both conifers and hardwoods for hidden defect and cull in breakage from the felling of trees. A copy of the cruise report can be found in the Appendix.

Variable Plot – Cook Creek Logging Unit (31.89 acres): A GPS traverse determined the unit acres. Plot locations are shown in Exhibit F, Cruise Plot Location map. Josh Urbach cruised this timber during October 2018 through December 2018. A total of 35 plots were measured with data obtained from 145 Douglas-fir and Other Conifers and 16 Red Alder and Other Hardwoods (average of 5.2 trees per plot).

A Basal Area Factor (BAF) of 40 was used for the Douglas-fir and Other Conifers (live and dead) and a 20 BAF for Red Alder and Other Hardwoods. The goal was to obtain a sample error of 10% or less at a 95% confidence interval. The standard error for net board feet per acre is 10.1% and for basal area per acre is 8.4%

Variable plots of both 20 and 40 BAF used a sight point of 16 feet above stump height. All trees were cruised for volume and grade. Merchantable heights were measured in variable log lengths, which maximize value according to merchantability specifications. Log lengths depended upon maximizing the grade of the tree. Minimum and maximum log lengths are 12 and 40 feet respectively.

Measurements were made with a Relaskop to a 5-inch top or 40% of D4H (diameter at 4 feet above stump height) whichever is greater. D4H was measured with a diameter tape. Form factor at 16 feet was calculated for each cruise tree from measurements made with a Relaskop. Trees were graded using the "Official Rules for Log Scaling and Grading Bureaus, Columbia River, Northern California, Pacific Rim, Southern Oregon, Yamhill, dated January 1, 2011 Edition."

C100 Right-of-Way (0.5 acres) – RoadEng road design software determined the right-of-way acres. The trees within the C100 right-of-way on tribal land were felled and bucked in March of 2018. Josh Urbach ground scaled 52 logs (48 DF logs, 4 WH logs) with gross and net volume calculated. Logs were graded using the "Official Rules for Log Scaling and Grading Bureaus, Columbia River, Northern California, Pacific Rim, Southern Oregon, Yamhill, dated January 1, 2011 Edition."

C200 Right-of-Way (0.9 acres) – The 0.9 acre right-of-way on Weyerhaeuser land was strip cruised (33.3% sample) by Josh Urbach. All trees were measured within a 33-foot wide strip, perpendicular to the centerline at 100-foot intervals. The acreage is based on the RoadEng design for the road. A total of 19 merchantable Douglas-fir and 2 merchantable red alder were measured using the "Official Rules for Log Scaling and Grading Bureaus" as listed above.

Appraisal Summary

The appraisal was developed using the residual value method for determining stumpage values. Residual value appraisals begin with estimated delivered log prices and subtract logging and hauling costs, road maintenance, post-sale activities costs and profit and risk to end up with an estimated net stumpage value for advertisement. An estimated 1,998.82 MBF of sawlogs consisting of Douglas-fir, western hemlock are the dominant species within the sale area. Sitka spruce, red alder and big leaf maple are minor species and represent less than 1%.

Form of Contract

The proposed Form of Contract – Part A is included as an appendix to this report. The following provisions apply to the Cook Creek Logging Unit.

A14. Scaling – Arrangement for scaling will be made with a Third Party Scaling Organization acceptable to the Approving Officer. Check scaling by a contract Westside check scaler will be utilized.

A15. Slash and Cull Tree Disposal – The Purchaser must pull-up and pile firewood on the unit landing after yarding and loading is completed. Concurrent with yarding operations, non-merchantable material that is brought to the landing that is suitable for use as firewood, but that the Purchaser does not intend to remove from the unit as Wood Logs, shall be decked by the Purchaser in a location accessible to the loader. Upon completion of all yarding and loading activities and prior to removal of loading equipment from the logging unit, firewood material shall be piled in the center of the landing, separated into individual piles accessible for firewood cutting. Minimum piece size required to be separated for firewood shall be 4 feet in length 20 board feet (gross). Additionally, all other slash and debris within reach of the landings by the log loader shall be pulled up and piled on the edge of the landings, away from the firewood piles, so as to facilitate pile burning, as directed by the Officer-in-Charge. Purchaser shall be required to pull up only the slash that can be reasonably reached with a loader with its boom fully extended.

A16. Road Construction and Maintenance – An Operating Plan is required before a notice to proceed will be issued. The Purchaser shall be subject to the terms and provisions of the license agreements for the use of existing roads between the Siletz Tribe and Weyerhaeuser, and Hancock Forest Management. The Purchaser's responsibility for normal road maintenance commences with the Purchaser's first use of a road for any activity under the contract and continues through any active periods until final acceptance of the maintenance is made by the Officer-in-Charge. The provisions specific to road maintenance include grading, slough removal, spot rock application, brushing, drainage, sediment control and final road maintenance specifications.

A17. Special Provisions – The inclusion of special contract provisions is requested to tailor the contract for local needs. The Siletz Tribe will benefit from these additional clauses, which are summarized below:

- a) The State of Oregon will represent the Bureau of Indian Affairs in matters regarding fire protection on the logging unit through the approved Master Cooperative Wildland Fire Management and Stafford Act Response Agreement. The Purchaser must notify the State when operations begin and must abide by all State fire regulations.
- b) The Purchaser shall immediately report all fires on the sale area to the Officer-in-Charge and the appropriate authority identified in the Fire Plan under B11.1.
- c) The Purchaser must prepare a logging plan in accordance with Standard Provision B8.2.
- d) Seasonal restrictions are required for felling, yarding, and hauling in accordance with the U.S. Fish and Wildlife Service incidental take permit.
- e) Logging operations may be suspended or restricted by the Officer-in-Charge as necessary due to fire hazard conditions, severe weather occurrence or in order to survey for, identify, manage or protect threatened or endangered species.
- f) The Purchaser must suspend all operations if any threatened or endangered species of plant or animal are discovered on the logging unit.
- g) The Purchaser must suspend all operations if any cultural sites are found within the logging unit.

- h) This provision details the payment procedures that the Purchaser is required to follow regarding payment for scaled timber.
- i) This provision details how interest follows principal. The Purchaser will not receive interest on funds paid to or deposited with either the Bureau of Indian Affairs or the Tribe except on the principal amount of funds returned or refunded to the Purchaser. Interest accrued on the principal amount retained for default will be treated as a penalty and distributed to the Tribe.
- j) The Purchaser shall make diligent effort to remove all timber and/or logs under this contract from the logging unit to an approved scaling point within a reasonable period of time. In no event shall such material remain unscaled for more than sixty (60) days after said timber has been severed from the stump, unless otherwise approved by the timber sale Approving Officer.
- k) All trees shall be felled quarter to the slope. Directional falling, jacking, sniping or beveling of stumps, and if needed, line pulling of trees to avoid drainages and leave trees and/or minimize breakage is required. Directional falling is required in areas designated on Exhibit A – Logging Unit Map.
- l) Purchaser is required to protect survey markings, steel fence posts, and monuments. The Purchaser shall not remove, alter, damage, or destroy any signs, posters, markings, land survey markers and corners, witness trees, or corner reference tags pertaining to the timber sale or land survey. Bearing trees shall not be cut without prior approval from the Officer-in-Charge. Any damage to the above items shall be restored at the Purchasers cost.
- m) The Purchaser shall use all means possible to protect from disturbance the areas designated as “Stream Protection Area”. Special felling and yarding requirements adjacent to and/or crossing stream protection areas.
- n) The Purchaser is required to leave certain trees, snags and logs within the unit, including: all green non-merchantable conifer trees; all non-merchantable standing snags; two snags or green trees per acre in the clearcut unit; two downed logs or trees per acre in the clearcut unit. All trees marked with a “W” and a band of orange paint at breast height, and/or a sign reading “Reserve Tree – Do Not Cut” are to be left. Additional reserve trees include: boundary trees posted with yellow “Boundary Clearcut” tags or with blue ribbon tied on them; and trees within stream protection areas including trees with white “Stream Protection Area” tags or blue and white stripe ribbon tied on them.
- o) All hardwood sawlogs meeting minimum product specifications will be removed from the unit. Bigleaf maple stumps will be cut as low to the ground as possible to minimize re-sprouting.
- p) One end suspension is required in all areas not designated as full suspension zones. Soil gouging shall be limited to a depth not to exceed one foot. The carriage shall have lateral yarding capabilities of at least 100 feet and shall be able to maintain a fixed position on the skyline during lateral yarding when yarding near designated leave trees. When absolutely necessary to yard through stream protection areas, yarding corridors shall be at least 100 feet apart and pre-approved and cables shall be pulled out of reserved timber prior to rigging the next yarding road. Logs shall not be landed on the main haul road. Tail blocks, corner blocks, or guylines attached to live trees shall be equipped with nylon straps or similar protective devices.
- q) The Purchaser shall secure written approval from adjacent landowners before using their lands for anchoring or other logging operations.
- r) Contract closure of specific areas of the logging unit will be allowed after satisfactory completion of all contract requirements on those specific areas.
- s) This provision details the responsibilities of the Purchaser for reporting, containing, and clean up of the spill or release of hazardous materials.

Prospectus and Advertisement

The Siletz Tribal Council has decided to advertise this sale. A period of 30 days is recommended for sale advertisement. Advertisement will be by direct mailing of the Prospectus package to prospective purchasers. The purchaser mailing list has been developed over the past 30 years to obtain widespread notification of this sale. Sale by sealed bid only.

Biddable Species to be sold on a scaled basis: Douglas-fir and Other Conifers - Peeler and Sawmill Grade Logs with a minimum appraised stumpage rate of \$359.25/net MBF.

Non-Biddable Species to be sold at the appraised rate on a scaled basis:

Red Alder and Other Hardwoods - Peeler and Sawmill Grade Logs at the appraised rate of \$98.90/net MBF.

All Conifer and Hardwood Species Wood Logs would be sold on a gross volume basis at the price of \$75.00/gross MBF.

A prospectus, bid form, and advertisement follow this report.