# Alberni Valley Community Forest

## Engineering Report

CP004

Block W15 ~ Weiner Creek

Sproat FDU

April 23, 2013

Prepared by:
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and
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**Introduction**

Meridian Forest Services Ltd. was contracted to provide multiphase development for the Weiner Creek Area of the Alberni Valley Community Forest (AVCF) tenure. Reconnaissance and cutblock development for W15 was conducted in December 2012 to summarize all resource features and determine development opportunities. The following Engineering Report summarizes the engineering specifics related to developing Block W15, it includes: a general description of the area, safety highlights, block description, engineering rationale and cruising summary. Related documents such as the Harvest Instructions Map can be seen in the Appendices. Table 1 and 2 below give a general breakdown of the cutblock specifics.

**Table 1: Block W15 Overview**

| Attributes | Description |
|---|---|
| **Tenure** | K2D, Alberni Valley Community Forest Corporation |
| **General location and Access** | 16 km west of Port Alberni on Highway 4 |
| **Mapsheet** | 92F025 |
| **Forest Region/District** | Coast/South Island |
| **Timber Supply Area/Block** | Strathcona / B Kyuquot |

**Table 2: Block W15 Area Breakdown**

| | W15 Gross | CP Net | Clear Cut | P. Cut | WTRA | TLA | RP R/W |
|---|---|---|---|---|---|---|---|
| **TimberMark** | K2D/004 | K2D/004 | K2D/004 | K2D/004 | K2D/004 | K2D/004 | *K2D/0R1 |
| **Area** | 41.7 | 28.7 | 23.2 | 5.5 | 3.8 | 4.2 | 5.7 |
| **Volume** | 10889 | 9628 | | | | | 1112 |

* Note: The Road Permit R/W is inclusive of both those R/W inside and outside of Block W15 Harvest area.

## Safety Highlights

### Falling: Block Specific Details

Block W15 can be mechanically felled, for the most part, but hand-falling will be required for areas identified as steep hoe-chuck. The areas exceed the safe working slope guidelines for ground based mechanical harvesters and soils are not conducive to track machinery (shallow soil profile over surface bedrock).

There are several other falling hazards associated with Block W15 which include:

- Partial Cut Retention Areas will target 50% basal area remove based with a defined inter-tree spacing. Trees will need to be directionally felled which may brush standing timber or cause canopy disturbance (broken branches) which creates overhead hazards.
- Root Rot areas have been identified near FC#45 to FC#45 and from FC#16 to FC#17. Timber in these areas exhibit a thinning canopy with a snag component and fallen timber with intact root-balls laying on the forest floor, in no defined direction. Unstable root systems, leaning trees and hung up branches all create an overhead hazard for crews working near these root rot centers.

### Falling: Snags and Danger Trees

Due to the heavy infestation of root rot in the area, there are snags and danger trees in Block W15.
In accordance with the Cutting Permit Authority and Work Safe BC Regulations, all snags and danger trees that endanger workers within a distance of 50 m outside the block boundaries; or within one and a half tree lengths (whichever is greater) are approved for falling. All danger trees and snags outside the block boundaries, that are required to be felled, must be recorded on a map and provided to AVCF once falling has been completed. AVCF will be notified immediately if danger trees and/or snags are identified in groups and removal will result in the block boundary being substantially impacted. Felled snags and danger trees up to 50m outside of the falling boundary meeting utilization specifications will be recovered.
One falling exception applies to Wildlife Tree Retention Areas (WTRA). Snags and danger trees can be felled within a WTRA for safety reasons although only the portion of the felled snag or danger tree that falls outside the WTRA can be recovered.

**Rainfall Shutdown**

Block W15 is within Rainfall Shutdown Area "5".

- Shutdown Criteria: Activities must shut down if: The total rainfall reaches 36 mm in 24 hours. Onsite rain gauges should be used and monitored daily.
- Start- Up Criteria: Activities may start up when the total rainfall is equal to or less than 30 mm in 24 hours. Adequate recovery time should be given before harvesting operations commence after a shutdown.

**Recreational Use**

The Sproat Lookout Hiking Trail Network lies within the proposed harvest area (see Appendix 2-Harvest Instruction Map). The hiking trails are active and appear well maintained. An effort was made during the layout phase to protect the recreational trails while at the same time improving trail access for the general public. Evidence of all-terrain vehicles (ATV) use was noted along numerous old road grades in and adjacent to the block. Adequate signs are to be posted to inform the public user groups of active blasting, logging and hauling during operations. All harvesting and road operations are to maintain the integrity of the trail network where operationally feasible and ensure no danger trees, snags or debris are left on or surrounding the trails.

The AVCF Sproat Lake FDU is located in provincial hunting region 1-7. Local hunters frequent the area in the fall (Sept 10$^{th}$ – Dec 10$^{th}$) and spring (April 1$^{st}$ – June 15$^{th}$) during the hunting season is search for upland game birds, deer, wolf, cougar and bear. During the engineering of Block W15 numerous hunters were observed to be using Branch AS12 to access prime hunting areas. Ensure signs are posted at key locations prior to Block W15 development to notify hunters of forest activities in the area.

In the fall, mushroom pickers were also observed utilizing adjacent road systems on AVCF 's tenure to access suitable timber for mushroom harvesting.

**Rock Fall Hazard**

A rock fall hazard has been identified in Block W15. The hazard is located west of Weiner Connector at road station 1+178m, near FC#D1. Fractured rock stacked on a slope of 40% is located within the Timber Leave Area (TLA). The Operations Supervisor should assess the area prior to block development to ensure a plan is in place to mitigate this hazard and ensure worker safety. See Appendix 2 Harvest Instructions Map for hazard location.

**Steep Road Grades**

There are no new road grades with gradients > 18% within Block W15. However, grades greater than 18% exist en route to the harvest area on the Weiner Connector. Prior to commencing log hauling operations, the Contractor must perform a risk assessment of the current site and road conditions and adjust hauling activities to fit the traction conditions. Hauling for Block W15 will not be permitted when ice and or snow is on the logging roads leading to or in Block W15 (very low traction level). Traction levels have been determined using FERRIC steep grade decent guidelines. The Ministry of Transportation guidelines are to be followed when hauling on public highways.

**Steep Slopes in Block**

The setting is to be both mechanically and hand felled. Hand falling is required for steeper slope areas that cannot be safely reached with the processor. Once felled the proposed harvest areas are to be hoe chucked. Some areas of hoe chuck contain slopes that may exceed ground-based machine capability. These areas have been addressed on the harvest instructions map with a safety hazard alert (areas over 35% -steep hoe chuck). All ground based operations must be conducted in compliance with the Occupational Health and Safety Regulations pertaining to slope limitations.

**Tenure Holders**

Branch AS12 is currently under permit to Western Forest Products ~ Port Alberni Forest Operation (WFP-PAFO). This road is utilized by WFP-PAFO to access their tenure on the south side to Great Central Lake. Industrial road activity on Branch A12 is infrequent but all tenure holders should be proactive in notifying adjacent neighbours of intended activity to ensure the safety of crews, Contractors and members of the general public.

**Cutting Permit 004 Overview -Weiner Creek**

Cutting Permit 004 (Block W15) is located in the Weiner Creek drainage approximately 2 km to the east of Sproat Lake and approximately 3 km to the west of Great Central Lake. Access from Highway 4 is via the existing the Weiner Connector Road for approximately 2 km. New construction will be required along the Weiner Connector for approximately 1.7 km including five spurs (W15-S1, W15-S2, W15-S3, W15-S4 & W15-S5) for a total of approximately 1 km. Alternate access is via the Island Timberlands High Level Road system (AS 12) from the Ash Mainline, refer to Appendix 1 for Overview Map.

The new road construction will improve public access to several established hiking trails within the Sproat Lake Trail Network that will be affected by harvesting**.**

Final block selection and layout targeted stands with merchantable volume and size and was based on utilizing ground based harvest systems and existing roads and trails as much as possible. Block boundaries were designed to meet visual quality objectives from Highway 4 and Sproat Lake while not restricting harvest opportunities as well as maintain water quality, biodiversity and recreation opportunities.

**Table 3: Cutting Permit Area Attributes**

| Attribute | Description |
|---|---|
| **Block** | W15 |
| **Stand Composition** | Second Growth |
| **General Species Composition** | Fd95, Hw2, Cw2, Dr1 |
| **General Biogeoclimatic Information** | CWH xm 2 (01,06 07) |
| **General terrain (Position, Slope)** | Mid slope /southwest aspect |
| **Forest Health** | Phellinus root rot. See site plans for details. |
| **Wind-throw** | Low to Moderate risk. |

**Block Description and Engineering Rationale**

Block W15 is situated mid-slope with an elevation range of 250m – 380m and a southwest aspect. The topography is broken with rock bluffs, bench/bluff features throughout and slopes ranging between 10-53%. There are no creek gullies located within the harvest area. However, there are a total of nine streams including a Fisheries Sensitive Feature (FSF), located in the vicinity of the harvest area. Four stream reaches have been classified as fish bearing. All streams located in the Sproat Lake Community Watershed are defaulted to an S4 classification or greater and the only stream that falling and/or yarding is permitted across is Stream 4R2. All other stream prescriptions require falling away and yarding away.

Two Wildlife Tree Retention Areas (WRTA) and four Timbered Leave Areas (TLA) have been established. One WTRA is located adjacent to the western polygon and Road AS12 and the other is located in the eastern polygon adjacent to Weiner Creek (S2). Both contribute to the retention targets and also serve as the Riparian Reserve Zones for fish bearing streams. All TLAs have been established due to the poor timber quality and the limited harvest accessibility.

The block includes a Clearcut with Retention Treatment Unit (TU) (24.5 ha) and a Commercial Thinning (partial cutting) TU (6.1 ha). The objective of the commercial thinning treatment is to improve the windfirmness of Weiner Creek and Stream 3 and to help provide a visual screen for the hiking trails. The level of retention prescribed is 50% - 272 stems/ha or 155 m3/ha of merchantable timber. The trees to be targeted are the larger dominant trees, suppressed trees and trees with defects including sweeps, forks and crooks. A second pass is planned to remove the remaining 50% in approximately 20-30 years

This block will be harvested with a ground based system since there are no slopes greater than 60%. All ground-based areas of this block will be machine felled with small areas that may require hand falling due to obstacles such as steep terrain, rock outcrops, and the need to directionally fall timber in narrow corridor.

The proposed harvesting area is comprised of three separate harvest unit polygons.

**Eastern Polygon (FC#1 to FC#37)**

The northern edge of this polygon parallels Weiner Creek (S2), where a 30m riparian reserve zone (RRZ) has been maintained from FC#1 to FC#3. The eastern edge of this polygon, from FC#4 to FC#9, utilizes a hoe-chuck/grapple split and immature timber situated on surface bedrock. FC#10 borders a grand-parented old growth management area (OGMA). A harvest

system spilt (hoe-chuck/grapple) was used to determine the boundary from FC#11 to FC#14. A 30m vertical rock bluff runs from FC#15 to FC#23. There is broken hoe-chuck ground with narrow corridors between rock outcrops from FC#24 to FC#28. Another 30m rock bluff forms the boundary from FC#29 to FC#32. Stream #2 (20m RRZ) forms the boundary from FC#34 to FC#37.

**Northern Polygon (FC#40 to FC#47)**

This polygon has root rot and the stand is quickly shutting down. Stumping will mitigate the spread of the disease post-harvest. Stream #3 (S3) forms the southern boundary from FC#40 to FC#42 and then the boundary follows a rock bluff along the western edge from FC#43 to FC#44 where there is a harvest system split (hoe-chuck/grapple) heading towards FC#45. The northern edge of this polygon parallels Weiner Creek (S2), where a 30m riparian reserve zone (RRZ) has been maintained from FC#45 to FC#46. The eastern edge of this polygon up to FC#47 borders Stream#2 (S3).

**Western Polygon (FC#48 to FC#64)**

The western polygon is located adjacent to the AS12 Road. A large rock outcrop forms the boundary from FC#48 to FC#59. A wildlife tree retention area (WTRA) situated on 50% ground and anchored to Stream #4 (S3) forms the boundary from FC360 to FC#61. A 20m RRZ on Stream #2 (S3) forms the block boundary from FC#62 to FC#64.

**Table 4: Block W15 Harvest Details**

| Attributes | Description |
|---|---|
| **Proposed Silviculture System** | Clearcut with Retention & Commercial Thinning |
| **Proposed Harvest Method** | Ground based |

**Cruising**

Block W15 was cruised to Ministry of Forests Standards with full measure and count plots established on a 100m x 100m cruise grid. This methodology resulted in a total of 38 plots for an average of 1.0 plot per hectare and an average of 4.4 cruised trees per plot. Block W15 was compiled as six separate timber types. The following table summarizes the results of the Cruise Plan:

**Table 5: Cruise Summary**

| Attributes | Description |
|---|---|
| Gross Harvest Area | *33.7 ha |
| Species Composition | Fd95, Hw2, Cw2, Dr1 |
| Avg. M3/Ha | 371 |
| Cruised Harvest Volume | **10,889 $m^3$ (including R/W) |

*Note: The gross harvest area for the cruise is 33.7ha due to the r/w being included.

**Note: The gross volume is inclusive of r/w and partial cut areas. The final volume nets out the 50% removeal for the partial cut and areas and the r/w volume associated with the Road Permit.

Refer to Appendix 4 for the full Cruise Report. Cruise plan maps and cards are not required for appraisal purposes but are retained on file and are available upon request.

The Leave Tree Report has also been included in Appendix 4.

## Appendices

**Appendix 1: Block W15 Overview Map**

ALBERNI VALLEY COMMUNITY FOREST

## OVERVIEW MAP

# Cutblock: W15

Forest Region: Coast
Forest District: South Island
Land District: Barclay
Cascades: West C
Tenure: K2D
Geographic Coordinates:
Lat: 49° 17' 51"
Long: 125° 00' 44"
Author: B. Bayley
Map Date: 16-Jan-2013

Scale: 1:20,000

N

Datum: NAD83
Mapsheet: 92F.025
Map Revision: 1a
Revised Date: 04-Apr-2013

## MAP LEGEND

**Boundary Features:**
- Falling Boundary
- Machine Free Zone
- Adjacent Block-Planned
- Harvested
- Legal Boundary
- Pruning
- Feathering

**Road Features:**
- Built Road
- Deactivated Road
- Proposed Road
- Backspar Trail
- Access Trail
- Bridge
- Road Station (0+000)
- Existing Culvert
- New Culvert
- Culvert to be replaced

**Natural Features:**
- Windthrow
- Snag
- Swamp
- Slide
- Rock Bluff
- Karst Feature (K1)

**Resource Features:**
- Hazard
- Single Tree Retention
- Monumental Cedar
- Archaeological Feature/CMT
- Quarry/Gravel Pit
- Bear Den/Bird Nest
- Helipad/Service Landing
- Index Contour (200)
- Intermediate Contour

**Riparian Features:**
- Fish Streams (S1-S4) (S1)
- Non Fish streams (S5, S6) (S5)
- Unclassified Creek
- Non Classified Drainage
- Gully
- FSZ Stream
- Reach Break/Fish Barrier
- Stream ID

**Lakes/Wetlands:**
- Lakes Class 1, 2, 3, 4 (L1)
- Wetlands Class 1, 2, 3, 4, 5 (W1)

**Sensitive and Designated Areas:**
- Wildlife Tree Retention Area
- Timber Leave Area
- Special Management Zone


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Coombs, BC V0R 1M0
www.meridianforest.ca


**SAFETY COORDINATES:**
**Lat: 49° 17' 51"**
**Long: 125° 00' 44"**

## Due Diligence

Two falling corners and/or road stations must be referenced in the field with the release map on a continual basis before, and during the felling of any timber within this setting. If you are unsure of your location, Stop Work and call a supervisor.

## Forest and Range Practices Act

*How to follow plan:*
1) Always read and understand your plans and maps.
2) Always match your plan and map to what you find on the ground and then check that you can do the work.
3) Stop and ask if you cannot follow the plan and map.
4) Know your responsibilities. Ask if you are unsure.
*Due Dilligence means following these steps.*

**Timbermarking requirements:**
**All decked timber must be sufficiently marked (at least 10%) when the setting is inactive.**

**Field Marking Standards:**

| Activity | Ribbon | Paint |
|---|---|---|
| Falling Boundary | FALLING BOUNDARY | ● |
| Internal Boundaries | FALLING BOUNDARY | ● |
| Reconnaissance Lines | | |
| Traverse Stations (All) | | |
| Cruise Strips / Plots | | |
| Road Location | ROAD LOCATION | ● |
| Culturally Modified Tree | CMT | |
| Landings / Tower Settings | | |
| Deflection Lines | | |
| Streams | | |
| Reserve Zones (All) | FALLING BOUNDARY | ● |
| Management Zones (All) | | |
| Reserve Trees (Painted) | L | ● |

| Riparian Class | RMZ | RRZ |
|---|---|---|
| S1 | 20 | 50 |
| S2 | 20 | 30 |
| S3 | 20 | 20 |
| S4 | 30 | 0 |
| S5 | 30 | 0 |
| S6 | 20 | 0 |
| W1 | 40 | 10 |
| W2 | 20 | 10 |
| W3 | 30 | 0 |
| W4 | 30 | 0 |
| W5 | 40 | 10 |
| L1 | 0 | 10 |
| L2 | 20 | 10 |
| L3 | 30 | 0 |
| L4 | 30 | 0 |

**Appendix 2: Block W15 Harvest Instruction Map**

ALBERNI VALLEY COMMUNITY FOREST

**HARVEST INSTRUCTIONS MAP**

# Cutblock: W15

Forest Region: Coast
Forest District: South Island
Land District: Barclay
Cascades: West C
Tenure: K2D
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Lat: 49° 17' 51"
Long: 125° 00' 44"
Author: B. Bayley
Map Date: 16-Jan-2013

Scale: 1:5,000

N

Datum: NAD83
Mapsheet: 92F.025
Map Revision: 1a
Revised Date: 17-Apr-2013

See Instructions on reverse

## MAP LEGEND

**Boundary Features:**
Falling Boundary
Machine Free Zone
Adjacent Block-Planned
Harvested
Legal Boundary
Pruning
Feathering

**Road Features:**
Built Road
Deactivated Road
Proposed Road
Backspar Trail
Access Trail
Bridge
Road Station
Existing Culvert
New Culvert
Culvert to be replaced

**Natural Features:**
Windthrow
Snag
Swamp
Slide
Rock Bluff
Karst Feature

**Resource Features:**
Hazard
Single Tree Retention
Monumental Cedar
Archaeological Feature/CMT
Quarry/Gravel Pit
Bear Den/Bird Nest
Helipad/Service Landing
Index Contour
Intermediate Contour

**Riparian Features:**
Fish Streams (S1-S4)
Non Fish streams (S5, S6)
Unclassified Creek
Non Classified Drainage
Gully
FSZ Stream
Reach Break/Fish Barrier
Stream ID

**Lakes/Wetlands:**
Lakes Class 1, 2, 3, 4
Wetlands Class 1, 2, 3, 4, 5

**Sensitive and Designated Areas:**
Wildlife Tree Retention Area
Timber Leave Area
Special Management Zone

**SAFETY COORDINATES:**
**Lat: 49° 17' 51"**
**Long: 125° 00' 44"**

## Due Diligence

Two falling corners and/or road stations must be referenced in the field with the release map on a continual basis before, and during the felling of any timber within this setting. If you are unsure of your location, Stop Work and call a supervisor.

## Forest and Range Practices Act

*How to follow plan:*
1) Always read and understand your plans and maps.
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4) Know your responsibilities. Ask if you are unsure.
*Due Dilligence means following these steps.*

**Timbermarking requirements:**
**All decked timber must be sufficiently marked (at least 10%) when the setting is inactive.**

**Field Marking Standards:**

| Activity | Ribbon | Paint |
|---|---|---|
| Falling Boundary | FALLING BOUNDARY | |
| Internal Boundaries | FALLING BOUNDARY | |
| Reconnaissance Lines | | |
| Traverse Stations (All) | | |
| Cruise Strips / Plots | | |
| Road Location | ROAD LOCATION | |
| Culturally Modified Tree | CMT | |
| Landings / Tower Settings | | |
| Deflection Lines | | |
| Streams | | |
| Reserve Zones (All) | FALLING BOUNDARY | |
| Management Zones (All) | | |
| Reserve Trees (Painted) | L | |

| Riparian Class | RMZ | RRZ |
|---|---|---|
| S1 | 20 | 50 |
| S2 | 20 | 30 |
| S3 | 20 | 20 |
| S4 | 30 | 0 |
| S5 | 30 | 0 |
| S6 | 20 | 0 |
| W1 | 40 | 10 |
| W2 | 20 | 10 |
| W3 | 30 | 0 |
| W4 | 30 | 0 |
| W5 | 40 | 10 |
| L1 | 0 | 10 |
| L2 | 20 | 10 |
| L3 | 30 | 0 |
| L4 | 30 | 0 |

K2D 0R1

K2D

K2D 004

K2D

**Hammermark for outside R/W only**

**HAZARD ALERT**

1) A rock fall hazard has been identified and workers must be made aware of this.

| Falling Type | Ha | Volume |
|---|---|---|
| Handfalling | 4.0 | |
| Mechanical | 28.1 | |
| TOTAL | 32.1 | 10889 |
| CRUISE VOL/HA (m3) | | 371 |
| ENG VOL/HA (m3) | | |
| HAUL DISTANCE | | |
| SPROAT DRY LAND | | 20.2km |
| Distance to Post Office Port Alberni | | 22.0km |
| Travel Time from Port Alberni | | 25min |

| HARVEST METHODS | | |
|---|---|---|
| System | Ha | Volume |
| R/W | 3.4 | 1261.0 |
| W R/W | | |
| Hoe Chuck | 23.2 | 8608 |
| Hoechuck Partial Cut | 5.5 | 1020.0 |
| Helicopter | | |
| Skidder | | |
| Harvest Area | 32.1 | 10889 |
| R/W Removed | 1.6 | |
| WTRA | 3.8 | |
| TLA | 4.2 | |
| Gross Area | 41.7 | 10889 |

| VOLUME BY TIMBERMARK | | | |
|---|---|---|---|
| Timbermark | Type | Ha | Vol |
| K2D/004 | CROWN | 28.7 | 9628 |
| K2D/0R1 | R/W | 3.4 | 1261 |
| | | | |
| | | | |
| TOTAL | | 32.1 | 10889 |
| Field Work: | MFS | | Dec-12 |
| Checked By: | AVCF | | |
| AVCF CORP: | | | Date: |
| CONTRACTOR: | | | Date: |

| Species | % |
|---|---|
| Fd | 95% |
| Hw | 2% |
| Hm | 0% |
| Cw | 2% |
| Yc | 0% |
| Pw | 0% |
| Dr | 1% |
| | |
| Total | 100% |
| OG | 0% |
| SG | 100% |

**PROFESSIONAL SEAL AND SIGNATURE**

REGISTERED PROFESSIONAL FORESTER — PROVINCE OF BRITISH COLUMBIA — ANDREW KENYON — NO. 4739

Andrew Kenyon
2013.04.29
09:35:34
-07'00'

I certify that I have reviewed this document, and while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of British Columbia Forest Professionals.

AVCF CORP: DATE:

**Harvest Methods:**
Grapple
Hoe Forward
Hoechuck
Helicopter
Steep Hoechuck
Right-of-Way
Partial Cut Areas

**Yarding Features:**
Backspar Tree
Sensitive Soils
Heli Drop Zone
Steep Grade
Yarding Direction
Ridge/Yarding Break


Prepared By:
MERIDIAN Forest Services Ltd.
PO Box 275
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Coombs, BC V0R 1M0
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**MAP 1 of 1** | **Cutting Permit: 004** | **Road Permit:** | **W15 - WEINER CONNECTOR**

**Appendix 3: Block W15 Harvest Instructions**

# HARVESTING INSTUCTIONS – OPENING#W15

**ACCESS ROAD: AS12 CUTTING PERMIT: N0. 4 TIMBERMARK: K2D 004**

## EMPLOYEE REQUIREMENTS

**1)** All employees, supervisors and contractors associated with this Logging Plan approval shall be fully advised of its contents and requirements.
**2)** All litter including cable, oil buckets, grease tubes, newspapers and lunch garbage is to be removed from the site and disposed of appropriately.

## WATER QUALITY

**1)** The overall objective of this cutblock is timber harvesting without impacting the water quality.
**2)** All ditches and culverts **must** remain as free flowing as possible through all phases of harvesting.
**3)** Cutblock W15 is within Rainfall Shutdown Area "5"
**Shutdown Criteria:** Activities must shut down if: The total rainfall reaches 36 mm in 24 hours. Onsite rain gages should be used and monitored daily.
**Start-Up Criteria:** Activities may start-up when: The total rainfall is equal to or less than 30 mm in 24 hours. Refer to the Return to work guide in the tender document for more information.

## Foresty

**1)** Invasive Plants: Broom occurs along sections of the highway on route to the block. Follow FSP measures for invasive plants. Cut and remove plants in association with road reactivation, clean machinery as required. Monitor and treat broom and other invasive species during early establishment. Grass seed exposed soil on or adjacent to roads, trails, and landing sites as soon as possible following harvest.

## FIRST NATIONS

**1)** If an unidentified cultural heritage resource is encountered within the cutblock during any harvesting phase, operations will cease in the immediate vicinity of the feature and AVCF shall be notified immediately.

## FALLING of SNAGS and DANGER TREES

**1)** In accordance with the WCB Regulations, snags and danger trees within the cutblock and outside the cutblock boundaries for a distance of not more than 50 meters that endanger workers are approved for falling under the logging plan for this cutblock. Danger trees and snags outside this 50 meter hazard area that are required to be felled should be recorded on a map for future reference. Sanitation falling will proceed if the occasional stem is required to be removed along the cutblock boundary. The Ministry of Forests will be notified if danger trees and/or snags are identified in groups and removal will result in the cutblock boundary being substantially impacted. Snags and danger trees meeting utilization specifications will be recovered.
**2)** If a bear den or raptor nest is encountered during falling operations, the tree will be reserved from falling along with a protection patch of timber surrounding it. AVCF is to be notified immediately. If the bear den tree is partially cut operations will proceed in conformance with WCB regulations.
**3)** Wildlife tree patches have been established, and are marked on the 1:5000 map. Any danger trees felled within the WTP will be left as Coarse Woody Debris.

## CUTBLOCK BOUNDARY TREATMENTS

**1)** All marked boundary trees except snags and danger trees must remain standing during and after the completion of harvesting. Trees adjacent to edges that cannot be felled into the setting will require approval from AVCF prior to falling. AVCF is to be notified immediately.
**2)** Leave trees may be substituted if, for safety reasons, a faller feels it is necessary to do so, but alternate leave trees must be retained and should be well rooted and of the same species and diameter

## YARDING and LOADING PRESCRIPTIONS

**1)** No roadside landing of logs within 3 meters of any streambank along all roadsides. All drainage structures will be maintained and remain functional.
**2)** Avoid excessive ground lead gouging due to surface erosion potential. If soil disturbance occurs, then grass seeding will be required.
**3)** During the bark peeling stage of growth, the tree bole is highly susceptible to damage. Contact with retention trees during harvesting operation should be avoided between April 1 st and June 15 th.
**4)** Leave trees may be substituted if, for safety reasons, a faller feels it is necessary to do so, but alternative trees must be retained and should be well rooted and of the same species, diameter and vigor.
**5)** No more than 10% of the retention trees in the aggregate or dispersed retention areas or single retention trees in this cutblock may have significant damage.
Significant damage to Hw, Fd, and Cw is defined as a tree with:
One or more wounds (i.e. exposed cambium) that girdle more than 1/3 the circumference of the stem.
Any wounds on a supporting root within one metre of the stem. A gouge – a wound that penetrates (splintered) into the sapwood or deeper.
Additionally, for Hw and Cw only: A wound >400cm$^2$ on the stem.

## SAFETY

Road and in-block safety hazards associated with block W15 have been identified on the harvest and road instruction maps. In the event additional in-block safety hazards (temporary or permanent) are encountered or develop during road construction or harvesting phases, a plan must be developed to address the hazard. Any identified permanent hazards must be reported back to AVCF (using Hazard/Issue Report Form).

## STEEP GRADES

Road segments with gradients > 18% will be identified on the Harvest and Road instruction Plan Map. Prior to commencing log hauling operations the contractor must perform a risk assessment of the current conditions and adjust hauling activities to suit the traction conditions. Hauling for W15 will not be permitted when ice and or snow is on the logging roads leading to or in the given setting (very low traction level). This has been determined using FERRIC step grade decent guidelines. The Ministry of Transportation guidelines are to be followed when hauling on the highway.

## SPECIFIC BLOCK COMMENTS

MACHINE OPERATORS WILL MONITOR SOILS FOR COMPACTION DURING RAIN EVENTS, AND MOVE TO DRIER AREAS WITHIN THE CUTBLOCK SHOULD COMPACTION AND/OR RUTTING OCCUR. .

## HARVESTING ISSUES

MACHINE OPERATORS SHOULD BE AWARE OF STEEP HOE CHUCK AREAS, SMALL ROCK OUTCROPS, ROCK FALL HAZARDS, SLOPE INSTABILITY AND SENSITIVE AREAS ALONG THE FALLING BOUNDARY. ALL THESE AREAS ARE IDENTIFIED ON THE HARVESTING MAP.

## E.1 RIPARIAN MANAGEMENT STRATEGIES

| Creek I.D. | CLASS | MANAGEMENT STRATEGIES FOR RIPARIAN MANAGEMENT ZONES (RMZ) INCLUDING PROTECTING STREAM |
|---|---|---|
| | NCD | - NCD(s) within the harvest area will be FX and YX. No RMZ is required.<br>- Note all streams lie within the Sproat Lake Community Watershed, minimize sedimentation at all costs. |
| | | **STREAM REACH AND RMA IS OUTSIDE OF THE HARVEST AREA** |
| | | |
| | | |
| | | **STREAM REACH OUTSIDE HARVEST AREA, PORTIONS OF THE RMA WITHIN THE HARVEST AREA** |
| 1 Weiner Creek | S2 | FA YA, NC |
| 2 R1 | S3 | FA YA, NC |
| 2 R2 | S4 | FA YA, NC |
| 3 | S3 | FA YA, NC |
| 4 R1 | S3 | FA YA, NC |
| 5 | S4 | FA YA, NC |
| 6 | S4 | FA YA, NC |
| 7 | S4 | FA YA, NC |
| | | **PORTIONS OF STREAM REACH AND RMA ARE WITHIN THE HARVEST AREA** |
| 4 R2 | S4 | FA BL, NC |
| FSF 1 | NCD | FA YA, NC |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | AC | Cleaning to be assessed post-yarding prior to block completion. |
| | FA/BL | Fall Away. Timber is to be felled away. Leaners and hazard trees that cannot be safely felled away shall be felled and left bridging the stream. |
| | FA | Fall Away. Timber is to be felled away. |
| | YA | Yard Away. Timber is to be yarded away. In order to improve deflection, cables are allowed to be suspended above the stream. **Non-fish streams**: merchantable leaners and danger trees that have been felled across the stream will, by necessity, be yarded across the stream. **Fish streams**: Leaners and danger trees which have been felled across the stream will be left unless detrimental to the stream. |
| | HH | 100% harvested (no retention of saplings) |
| | RS | Retain saplings on the streambanks (non-merchantible) |
| | FE | Feathered edge. |
| | BPT | Blue painted trees (selected for removal). Faller's choice of alternate tree if unable to fall painted tree safely. |
| | NHZ | No harvest zone. Trees are to be felled away from the zone. Safe trees that cannot be felled away are to be left as part of the NHZ. Danger trees **must** be felled and will be left for future LWD or be removed if detrimental to the stream. |
| | FX | Fall Across. |
| | YX | Yard Across. Maximize deflection to minimize stream bank disturbance. |
| | YV | Yard vertically. |
| | MFZ | Machine free zone. |
| | MC | Machine Clean transportable introduced large woody debris (LWD) and accumulations concurrent with yarding. |
| | HC | Hand Clean introduced transportable debris. |
| | | |

**Appendix 4: Cruise Reports**

# ALBERNI VALLEY COMMUNITY FORES

K2D - CP# 004

Weiner Creek
Block #: CB W15

**SUMMARY OF VOLUMES (CGNF)**
FULL VOLUMES APPLIED

21-Feb-2013 04:26:46PM

Cruised by: CONTOUR FOREST CONS.INC
Compiled by: Contour Forest Consultants INC.

**Block Summary**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

Net Area: Block : (I) - 001:CB W15, Plots in Block: 38, TUs: [ A : 33.6  ]
Gross Area: [ EX R/W  : 1.6  ][ WTR  : 2.8  ][ TLA  : 4.2  ][ Grand Total : 42.2  ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 12912 | 12802 | 12165 | 297 | 66 | 275 | 65 | 45 |
| Net Merchantable | m3 | 12471 | 12374 | 11824 | 249 | 51 | 251 | 62 | 34 |
| Net Merch - All | m3/ha | 371 | 368 | 352 | 7 | 2 | 7 | 2 | 1 |
| Distribution | % | 100 | 99 | 95 | 2 | 0 | 2 | 0 | 0 |
| Decay | % | 1 | 1 | 1 | 8 | 15 | 0 | | |
| Waste | % | 1 | 0 | 0 | 4 | | 7 | | 20 |
| Waste(billing) | % | 1 | 1 | 0 | 5 | | 7 | | 26 |
| Breakage | % | 2 | 2 | 2 | 4 | 7 | 2 | 4 | 4 |
| Total Cull (DWB) | % | 3 | 3 | 3 | 16 | 22 | 9 | 4 | 24 |
| Stems/Ha (Live & DP) | | 668.5 | 655.4 | 603.3 | 15.9 | 1.7 | 34.5 | 8.3 | 4.8 |
| Avg DBH (Live & DP) | cm | 28.8 | 28.9 | 29.1 | 31.2 | 42.4 | 21.9 | 20.1 | 23.5 |
| Snags/Ha | | 78.8 | 78.8 | 40.7 | | | 38.2 | | |
| Avg Snag DBH | cm | 12.1 | 12.1 | 12.1 | | | 12.0 | | |
| Gross Merch Vol/Tree | m3 | 0.57 | 0.58 | 0.60 | 0.55 | 1.16 | 0.24 | 0.23 | 0.28 |
| Net Merch Vol/Tree | m3 | 0.56 | 0.56 | 0.58 | 0.46 | 0.90 | 0.22 | 0.22 | 0.22 |
| Avg Weight Total Ht | m | 28.4 | 28.5 | 28.9 | 24.0 | 25.0 | 17.1 | 19.5 | 20.3 |
| Avg Weight Merch Ht | m | 23.3 | 23.4 | 23.8 | 19.6 | 20.2 | 11.5 | 12.9 | 14.0 |
| Avg 13.0 m Log Net | m3 | 0.35 | 0.35 | 0.35 | 0.40 | 0.49 | 0.22 | 0.23 | 0.18 |
| Avg 13.0 m Log Gross | m3 | 0.35 | 0.36 | 0.36 | 0.46 | 0.58 | 0.24 | 0.23 | 0.23 |
| Avg # of 13.0 m Logs/Tree | | 1.62 | 1.63 | 1.68 | 1.21 | 2.00 | 1.00 | 1.00 | 1.25 |
| Net Immature | % | 99.0 | 99.0 | 100.0 | 68.7 | | 100.0 | 100.0 | 100.0 |
| Net 2nd Growth | % | | 99.0 | | | | | | |
| Average Slope | % | 30 | | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #2 Sawlog | H | 2 | 2 | 2 | 26 | | | | |
| #3 Sawlog | I | | | | | | | | |
| #4 Sawlog | J | 76 | 77 | 80 | | | 25 | | |
| #5 Utility | U | 21 | 21 | 18 | 66 | 89 | 74 | 45 | 18 |
| #6 Utility | X | | | | 5 | | | | |
| #7 Chipper | Y | 1 | | | 3 | 11 | 1 | 55 | 82 |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 47.8 | 48.5 | 50.4 | 320.2 | 616.4 | 345.3 | 434.4 | 399.9 |
| Two Standard Error | % | 15.5 | 15.7 | 16.4 | 103.9 | 200.0 | 112.0 | 140.9 | 129.7 |
| Number and Type of Plots | | MP = 33 | F = 5 | | | | | | |
| Number of Potential Trees | | 169 | | | | | | | |
| Plots/Ha | | 1.1 | | | | | | | |
| Cruised Trees/Plot | | 4.5 | | | | | | | |

**Slope % Statistics**

Min= 3,  Max= 56,  CV=45.1,  Std Error of Mean=1.9,  2SE%=13.1

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Block Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Block : (I) - 001:CB W15, Plots in Block: 38, TUs: [ A : 33.6 ]
Gross Area: [ EX R/W : 1.6 ][ WTR : 2.8 ][ TLA : 4.2 ][ Grand Total : 42.2 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| H #2 Sawlog | | | | | | | | | | | | | |
| | Total | 216 | 1.8 | 64 | 25.9 | | | | | | | | |
| I #3 Sawlog | | | | | | | | | | | | | |
| | Total | 36 | 0.3 | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 9383 | 79.4 | | | | | 64 | 25.5 | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 2161 | 18.3 | 164 | 66.0 | 45 | 89.1 | 185 | 73.6 | 28 | 45.5 | 6 | 18.3 |
| X #6 Utility | | | | | | | | | | | | | |
| | Total | 6 | 0.0 | 12 | 4.9 | | | | | | | | |
| Y #7 Chipper | | | | | | | | | | | | | |
| | Total | 23 | 0.2 | 8 | 3.2 | 6 | 10.9 | 2 | 0.9 | 34 | 54.5 | 28 | 81.7 |
| TOTAL | | 11824 | 100.0 | 249 | 100.0 | 51 | 100.0 | 251 | 100.0 | 62 | 100.0 | 34 | 100.0 |
| Z #8 Cull | | | | | | | | | | | | | |
| | Total | 32 | | 13 | | | | 18 | | | | 9 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Block Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Block : (I) - 001:CB W15, Plots in Block: 38, TUs: [ A : 33.6 ]
Gross Area: [ EX R/W : 1.6 ][ WTR : 2.8 ][ TLA : 4.2 ][ Grand Total : 42.2 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| H #2 Sawlog | | | | | |
| | Total | 280 | 2.2 | 280 | 2.3 |
| I #3 Sawlog | | | | | |
| | Total | 36 | 0.3 | 36 | 0.3 |
| J #4 Sawlog | | | | | |
| | Total | 9447 | 75.7 | 9447 | 76.3 |
| U #5 Utility | | | | | |
| | Total | 2590 | 20.8 | 2555 | 20.6 |
| X #6 Utility | | | | | |
| | Total | 18 | 0.1 | 18 | 0.1 |
| Y #7 Chipper | | | | | |
| | Total | 101 | 0.8 | 39 | 0.3 |
| TOTAL | | 12471 | 100.0 | 12374 | 100.0 |
| Z #8 Cull | | | | | |
| | Total | 72 | | 63 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

Net Area: Type 1  (I):Fd, Plots in Type: 18, TUs: [ A : 17.7  ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 7714 | 7714 | 7421 | 92 | | 201 | | |
| Net Merchantable | m3 | 7516 | 7516 | 7251 | 85 | | 180 | | |
| Net Merch - All | m3/ha | 425 | 425 | 410 | 5 | | 10 | | |
| Distribution | % | 100 | 100 | 96 | 1 | | 2 | | |
| Decay | % | 0 | 0 | 0 | 2 | | 0 | | |
| Waste | % | 0 | 0 | 0 | 4 | | 8 | | |
| Waste(billing) | % | 0 | 0 | 0 | 4 | | 9 | | |
| Breakage | % | 2 | 2 | 2 | 2 | | 2 | | |
| Total Cull (DWB) | % | 3 | 3 | 2 | 8 | | 10 | | |
| Stems/Ha (Live & DP) | | 772.0 | 772.0 | 736.3 | 0.8 | | 34.9 | | |
| Avg DBH (Live & DP) | cm | 28.1 | 28.1 | 28.1 | 94.2 | | 24.7 | | |
| Snags/Ha | | 49.1 | 49.1 | 49.1 | | | | | |
| Avg Snag DBH | cm | 12.0 | 12.0 | 12.0 | | | | | |
| Gross Merch Vol/Tree | m3 | 0.56 | 0.56 | 0.57 | 6.54 | | 0.33 | | |
| Net Merch Vol/Tree | m3 | 0.55 | 0.55 | 0.56 | 6.03 | | 0.29 | | |
| Avg Weight Total Ht | m | 29.1 | 29.1 | 29.4 | 35.6 | | 17.9 | | |
| Avg Weight Merch Ht | m | 23.9 | 23.9 | 24.1 | 31.3 | | 12.4 | | |
| Avg 13.0 m Log Net | m3 | 0.35 | 0.35 | 0.34 | 2.05 | | 0.30 | | |
| Avg 13.0 m Log Gross | m3 | 0.35 | 0.35 | 0.34 | 2.18 | | 0.33 | | |
| Avg # of 13.0 m Logs/Tree | | 1.62 | 1.62 | 1.65 | 3.00 | | 1.00 | | |
| Net Immature | % | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | | |
| Net 2nd Growth | % | | 100.0 | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #2 Sawlog | H | 2 | 2 | 1 | 76 | | | | |
| #4 Sawlog | J | 77 | 77 | 79 | | | 30 | | |
| #5 Utility | U | 21 | 21 | 20 | 10 | | 70 | | |
| #6 Utility | X | | | | 14 | | | | |
| #7 Chipper | Y | | | | | | | | |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 45.2 | 45.2 | 44.1 | 424.3 | | 304.4 | | |
| Two Standard Error | % | 22.5 | 22.5 | 21.9 | 211.0 | | 151.4 | | |
| Number and Type of Plots | | MP = 18 | | | | | | | |
| Number of Potential Trees | | 86 | | | | | | | |
| Plots/Ha | | 1.0 | | | | | | | |
| Cruised Trees/Plot | | 4.8 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

Net Area: Type 2 (I):Fd, Plots in Type: 4, TUs: [ A : 4.6 ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 1624 | 1624 | 1570 | | | 54 | | |
| Net Merchantable | m3 | 1567 | 1567 | 1514 | | | 53 | | |
| Net Merch - All | m3/ha | 341 | 341 | 329 | | | 12 | | |
| Distribution | % | 100 | 100 | 97 | | | 3 | | |
| Decay | % | 2 | 2 | 2 | | | 0 | | |
| Waste | % | | | | | | | | |
| Waste(billing) | % | | | | | | | | |
| Breakage | % | 2 | 2 | 2 | | | 2 | | |
| Total Cull (DWB) | % | 4 | 4 | 4 | | | 2 | | |
| Stems/Ha (Live & DP) | | 679.4 | 679.4 | 578.9 | | | 100.5 | | |
| Avg DBH (Live & DP) | cm | 28.2 | 28.2 | 29.7 | | | 17.8 | | |
| Snags/Ha | | | | | | | | | |
| Avg Snag DBH | cm | | | | | | | | |
| Gross Merch Vol/Tree | m3 | 0.52 | 0.52 | 0.59 | | | 0.12 | | |
| Net Merch Vol/Tree | m3 | 0.50 | 0.50 | 0.57 | | | 0.11 | | |
| Avg Weight Total Ht | m | 26.4 | 26.4 | 26.9 | | | 13.5 | | |
| Avg Weight Merch Ht | m | 21.1 | 21.1 | 21.6 | | | 7.6 | | |
| Avg 13.0 m Log Net | m3 | 0.30 | 0.30 | 0.32 | | | 0.12 | | |
| Avg 13.0 m Log Gross | m3 | 0.31 | 0.31 | 0.33 | | | 0.12 | | |
| Avg # of 13.0 m Logs/Tree | | 1.69 | 1.69 | 1.81 | | | 1.00 | | |
| Net Immature | % | 100.0 | 100.0 | 100.0 | | | 100.0 | | |
| Net 2nd Growth | % | | 100.0 | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #4 Sawlog | J | 80 | 80 | 83 | | | | | |
| #5 Utility | U | 20 | 20 | 17 | | | 100 | | |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 33.2 | 33.2 | 39.4 | | | 200.0 | | |
| Two Standard Error | % | 52.9 | 52.9 | 62.6 | | | 318.2 | | |
| Number and Type of Plots | | MP = | 4 | | | | | | |
| Number of Potential Trees | | 17 | | | | | | | |
| Plots/Ha | | 0.9 | | | | | | | |
| Cruised Trees/Plot | | 4.3 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

Net Area: Type 3 (I):Fd, Plots in Type: 2, TUs: [ A : 2.9 ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 738 | 738 | 651 | 87 | | | | |
| Net Merchantable | m3 | 695 | 695 | 612 | 84 | | | | |
| Net Merch - All | m3/ha | 240 | 240 | 211 | 29 | | | | |
| Distribution | % | 100 | 100 | 88 | 12 | | | | |
| Decay | % | 4 | 4 | 4 | 2 | | | | |
| Waste | % | | | | | | | | |
| Waste(billing) | % | | | | | | | | |
| Breakage | % | 2 | 2 | 2 | 2 | | | | |
| Total Cull (DWB) | % | 6 | 6 | 6 | 4 | | | | |
| Stems/Ha (Live & DP) | | 590.7 | 590.7 | 482.9 | 107.8 | | | | |
| Avg DBH (Live & DP) | cm | 27.5 | 27.5 | 28.1 | 24.3 | | | | |
| Snags/Ha | | 442.1 | 442.1 | | | | 442.1 | | |
| Avg Snag DBH | cm | 12.0 | 12.0 | | | | 12.0 | | |
| Gross Merch Vol/Tree | m3 | 0.43 | 0.43 | 0.47 | 0.28 | | | | |
| Net Merch Vol/Tree | m3 | 0.41 | 0.41 | 0.44 | 0.27 | | | | |
| Avg Weight Total Ht | m | 24.0 | 24.0 | 25.0 | 16.5 | | | | |
| Avg Weight Merch Ht | m | 19.6 | 19.6 | 20.8 | 11.4 | | | | |
| Avg 13.0 m Log Net | m3 | 0.30 | 0.30 | 0.31 | 0.27 | | | | |
| Avg 13.0 m Log Gross | m3 | 0.31 | 0.31 | 0.32 | 0.28 | | | | |
| Avg # of 13.0 m Logs/Tree | | 1.37 | 1.37 | 1.45 | 1.00 | | | | |
| Net Immature | % | 100.0 | 100.0 | 100.0 | 100.0 | | | | |
| Net 2nd Growth | % | | 100.0 | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #4 Sawlog | J | 68 | 68 | 78 | | | | | |
| #5 Utility | U | 32 | 32 | 22 | 100 | | | | |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 7.7 | 7.7 | 28.0 | 141.4 | | | | |
| Two Standard Error | % | 68.7 | 68.7 | 251.8 | 1270.6 | | | | |
| Number and Type of Plots | | MP = | 2 | | | | | | |
| Number of Potential Trees | | 7 | | | | | | | |
| Plots/Ha | | 0.7 | | | | | | | |
| Cruised Trees/Plot | | 3.5 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

Net Area: Type 4  (I):Fd, Plots in Type: 2, TUs: [ A : 1.2  ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 323 | 323 | 323 | | | | | |
| Net Merchantable | m3 | 316 | 316 | 316 | | | | | |
| Net Merch - All | m3/ha | 263 | 263 | 263 | | | | | |
| Distribution | % | 100 | 100 | 100 | | | | | |
| Decay | % | | | | | | | | |
| Waste | % | | | | | | | | |
| Waste(billing) | % | | | | | | | | |
| Breakage | % | 2 | 2 | 2 | | | | | |
| Total Cull (DWB) | % | 2 | 2 | 2 | | | | | |
| Stems/Ha (Live & DP) | | 300.3 | 300.3 | 300.3 | | | | | |
| Avg DBH (Live & DP) | cm | 35.7 | 35.7 | 35.7 | | | | | |
| Snags/Ha | | 414.0 | 414.0 | 414.0 | | | | | |
| Avg Snag DBH | cm | 12.4 | 12.4 | 12.4 | | | | | |
| Gross Merch Vol/Tree | m3 | 0.90 | 0.90 | 0.90 | | | | | |
| Net Merch Vol/Tree | m3 | 0.88 | 0.88 | 0.88 | | | | | |
| Avg Weight Total Ht | m | 29.2 | 29.2 | 29.2 | | | | | |
| Avg Weight Merch Ht | m | 24.8 | 24.8 | 24.8 | | | | | |
| Avg 13.0 m Log Net | m3 | 0.54 | 0.54 | 0.54 | | | | | |
| Avg 13.0 m Log Gross | m3 | 0.54 | 0.54 | 0.54 | | | | | |
| Avg # of 13.0 m Logs/Tree | | 1.64 | 1.64 | 1.64 | | | | | |
| Net Immature | % | 100.0 | 100.0 | 100.0 | | | | | |
| Net 2nd Growth | % | | 100.0 | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #4 Sawlog | J | 86 | 86 | 86 | | | | | |
| #5 Utility | U | 14 | 14 | 14 | | | | | |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 17.6 | 17.6 | 17.6 | | | | | |
| Two Standard Error | % | 157.8 | 157.8 | 157.8 | | | | | |
| Number and Type of Plots | | MP = | 2 | | | | | | |
| Number of Potential Trees | | 6 | | | | | | | |
| Plots/Ha | | 1.7 | | | | | | | |
| Cruised Trees/Plot | | 3.5 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

Net Area: Type 5 (I):Fd, Plots in Type: 6, TUs: [ A : 4.8 ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 1657 | 1657 | 1477 | 115 | 66 | | | |
| Net Merchantable | m3 | 1576 | 1576 | 1447 | 78 | 51 | | | |
| Net Merch - All | m3/ha | 328 | 328 | 302 | 16 | 11 | | | |
| Distribution | % | 100 | 100 | 92 | 5 | 3 | | | |
| Decay | % | 2 | 2 | 0 | 17 | 15 | | | |
| Waste | % | 1 | 1 | | 8 | | | | |
| Waste(billing) | % | 1 | 1 | | 12 | | | | |
| Breakage | % | 3 | 3 | 2 | 7 | 7 | | | |
| Total Cull (DWB) | % | 5 | 5 | 2 | 32 | 22 | | | |
| Stems/Ha (Live & DP) | | 503.1 | 503.1 | 456.2 | 35.2 | 11.8 | | | |
| Avg DBH (Live & DP) | cm | 31.8 | 31.8 | 31.3 | 34.7 | 42.4 | | | |
| Snags/Ha | | | | | | | | | |
| Avg Snag DBH | cm | | | | | | | | |
| Gross Merch Vol/Tree | m3 | 0.69 | 0.69 | 0.67 | 0.68 | 1.16 | | | |
| Net Merch Vol/Tree | m3 | 0.65 | 0.65 | 0.66 | 0.46 | 0.90 | | | |
| Avg Weight Total Ht | m | 27.6 | 27.6 | 28.2 | 21.2 | 25.0 | | | |
| Avg Weight Merch Ht | m | 22.8 | 22.8 | 23.3 | 16.2 | 20.2 | | | |
| Avg 13.0 m Log Net | m3 | 0.38 | 0.38 | 0.38 | 0.34 | 0.49 | | | |
| Avg 13.0 m Log Gross | m3 | 0.39 | 0.39 | 0.38 | 0.46 | 0.58 | | | |
| Avg # of 13.0 m Logs/Tree | | 1.77 | 1.77 | 1.78 | 1.49 | 2.00 | | | |
| Net Immature | % | 91.8 | 91.8 | 100.0 | | | | | |
| Net 2nd Growth | % | | 91.8 | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #4 Sawlog | J | 78 | 78 | 86 | | | | | |
| #5 Utility | U | 21 | 21 | 14 | 93 | 89 | | | |
| #7 Chipper | Y | 1 | 1 | | 7 | 11 | | | |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 66.7 | 66.7 | 78.2 | 156.8 | 244.9 | | | |
| Two Standard Error | % | 70.0 | 70.0 | 82.0 | 164.6 | 257.1 | | | |
| Number and Type of Plots | | MP = | 6 | | | | | | |
| Number of Potential Trees | | 24 | | | | | | | |
| Plots/Ha | | 1.3 | | | | | | | |
| Cruised Trees/Plot | | 4.0 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

Net Area: Type 6  (I):Fd, Plots in Type: 1, TUs: [ A : 0.8  ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH  cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht  cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia  cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len  m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 158 | 158 | 158 | | | | | |
| Net Merchantable | m3 | 138 | 138 | 138 | | | | | |
| Net Merch - All | m3/ha | 173 | 173 | 173 | | | | | |
| Distribution | % | 100 | 100 | 100 | | | | | |
| Decay | % | | | | | | | | |
| Waste | % | 10 | 10 | 10 | | | | | |
| Waste(billing) | % | 12 | 12 | 12 | | | | | |
| Breakage | % | 2 | 2 | 2 | | | | | |
| Total Cull (DWB) | % | 12 | 12 | 12 | | | | | |
| Stems/Ha (Live & DP) | | 129.5 | 129.5 | 129.5 | | | | | |
| Avg  DBH (Live & DP) | cm | 44.3 | 44.3 | 44.3 | | | | | |
| Snags/Ha | | | | | | | | | |
| Avg Snag DBH | cm | | | | | | | | |
| Gross Merch Vol/Tree | m3 | 1.52 | 1.52 | 1.52 | | | | | |
| Net Merch Vol/Tree | m3 | 1.33 | 1.33 | 1.33 | | | | | |
| Avg Weight Total Ht | m | 31.2 | 31.2 | 31.2 | | | | | |
| Avg Weight Merch Ht | m | 26.7 | 26.7 | 26.7 | | | | | |
| Avg 13.0 m Log Net | m3 | 0.68 | 0.68 | 0.68 | | | | | |
| Avg 13.0 m Log Gross | m3 | 0.76 | 0.76 | 0.76 | | | | | |
| Avg # of 13.0 m Logs/Tree | | 2.00 | 2.00 | 2.00 | | | | | |
| Net Immature | % | 100.0 | 100.0 | 100.0 | | | | | |
| Net 2nd Growth | % | | 100.0 | | | | | | |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
| #3 Sawlog | I | 26 | 26 | 26 | | | | | |
| #4 Sawlog | J | 70 | 70 | 70 | | | | | |
| #5 Utility | U | 4 | 4 | 4 | | | | | |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | | | | | | | | |
| Two Standard Error | % | | | | | | | | |
| Number and Type of Plots | | MP = | 1 | | | | | | |
| Number of Potential Trees | | 2 | | | | | | | |
| Plots/Ha | | 1.3 | | | | | | | |
| Cruised Trees/Plot | | 2.0 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Summary**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

Net Area: Type 7 (I):R/W, Plots in Type: 5, TUs: [ A : 1.6 ]

| | | Total | Conifer | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | | | |
| Min DBH cm (I) | | | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | | | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | | | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | | | | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |
| **Volume and Size Data** | | | | | | | | | |
| Gross Merchantable | m3 | 698 | 588 | 565 | 3 | | 20 | 65 | 45 |
| Net Merchantable | m3 | 663 | 566 | 546 | 2 | | 18 | 62 | 34 |
| Net Merch - All | m3/ha | 414 | 354 | 341 | 2 | | 11 | 39 | 22 |
| Distribution | % | 100 | 85 | 82 | 0 | | 3 | 9 | 5 |
| Decay | % | 0 | 0 | 0 | 2 | | 0 | | |
| Waste | % | 2 | 1 | 1 | | | 9 | | 20 |
| Waste(billing) | % | 3 | 1 | 1 | | | 10 | | 26 |
| Breakage | % | 2 | 2 | 2 | 2 | | 2 | 4 | 4 |
| Total Cull (DWB) | % | 5 | 4 | 3 | 4 | | 11 | 4 | 24 |
| Stems/Ha (Live & DP) | | 675.0 | 400.0 | 325.0 | 25.0 | | 50.0 | 175.0 | 100.0 |
| Avg DBH (Live & DP) | cm | 29.7 | 34.2 | 36.8 | 14.4 | | 21.3 | 20.1 | 23.5 |
| Snags/Ha | | | | | | | | | |
| Avg Snag DBH | cm | | | | | | | | |
| Gross Merch Vol/Tree | m3 | 0.65 | 0.92 | 1.09 | 0.06 | | 0.26 | 0.23 | 0.28 |
| Net Merch Vol/Tree | m3 | 0.61 | 0.88 | 1.05 | 0.06 | | 0.23 | 0.22 | 0.22 |
| Avg Weight Total Ht | m | 31.0 | 33.3 | 34.0 | 11.7 | | 19.1 | 19.5 | 20.3 |
| Avg Weight Merch Ht | m | 26.3 | 28.8 | 29.5 | 5.2 | | 12.9 | 12.9 | 14.0 |
| Avg 13.0 m Log Net | m3 | 0.44 | 0.54 | 0.58 | 0.06 | | 0.23 | 0.23 | 0.18 |
| Avg 13.0 m Log Gross | m3 | 0.45 | 0.54 | 0.59 | 0.06 | | 0.26 | 0.23 | 0.23 |
| Avg # of 13.0 m Logs/Tree | | 1.44 | 1.69 | 1.85 | 1.00 | | 1.00 | 1.00 | 1.25 |
| Net Immature | % | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 |
| Net 2nd Growth | % | | 100.0 | | | | | | |

| **Cruiser Call Variable Length Grades %** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| #2 Sawlog | H | 19 | 22 | 23 | | | | | |
| #4 Sawlog | J | 57 | 67 | 68 | | | 57 | | |
| #5 Utility | U | 13 | 9 | 8 | | | 30 | 45 | 18 |
| #6 Utility | X | 1 | 1 | 1 | | | | | |
| #7 Chipper | Y | 10 | 1 | | 100 | | 13 | 55 | 82 |
| **Statistical Summary** | | | | | | | | | |
| Coeff. of Variation | % | 68.4 | 91.9 | 91.7 | 223.6 | | 223.6 | 157.6 | 145.1 |
| Two Standard Error | % | 85.0 | 114.1 | 113.9 | 277.6 | | 277.6 | 195.6 | 180.1 |
| Number and Type of Plots | | F = 5 | | | | | | | |
| Number of Potential Trees | | 27 | | | | | | | |
| Plots/Ha | | 3.1 | | | | | | | |
| Cruised Trees/Plot | | 5.4 | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 1 (I):Fd, Plots in Type: 18, TUs: [ A : 17.7 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| H #2 Sawlog | | | | | | | | | | | | | |
| | Total | 89 | 1.2 | 64 | 75.7 | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 5676 | 78.3 | | | | | 54 | 29.9 | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 1464 | 20.2 | 8 | 9.9 | | | 126 | 70.1 | | | | |
| X #6 Utility | | | | | | | | | | | | | |
| | Total | | | 12 | 14.4 | | | | | | | | |
| Y #7 Chipper | | | | | | | | | | | | | |
| | Total | 21 | 0.3 | | | | | | | | | | |
| TOTAL | | 7251 | 100.0 | 85 | 100.0 | | 100.0 | 180 | 100.0 | | 100.0 | | 100.0 |
| Z #8 Cull | | | | | | | | | | | | | |
| | Total | 9 | | 4 | | | | 16 | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 1 (I):Fd, Plots in Type: 18, TUs: [ A : 17.7 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| H #2 Sawlog | | | | | |
| | Total | 154 | 2.0 | 154 | 2.0 |
| J #4 Sawlog | | | | | |
| | Total | 5730 | 76.2 | 5730 | 76.2 |
| U #5 Utility | | | | | |
| | Total | 1599 | 21.3 | 1599 | 21.3 |
| X #6 Utility | | | | | |
| | Total | 12 | 0.2 | 12 | 0.2 |
| Y #7 Chipper | | | | | |
| | Total | 21 | 0.3 | 21 | 0.3 |
| TOTAL | | 7516 | 100.0 | 7516 | 100.0 |
| Z #8 Cull | | | | | |
| | Total | 29 | | 29 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 2 (I):Fd, Plots in Type: 4, TUs: [ A : 4.6 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 1254 | 82.9 | | | | | | | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 259 | 17.1 | | | | | 53 | 100.0 | | | | |
| TOTAL | | 1514 | 100.0 | | 100.0 | | 100.0 | 53 | 100.0 | | 100.0 | | 100.0 |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 2 (I):Fd, Plots in Type: 4, TUs: [ A : 4.6 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| J #4 Sawlog | | | | | |
| | Total | 1254 | 80.1 | 1254 | 80.1 |
| U #5 Utility | | | | | |
| | Total | 312 | 19.9 | 312 | 19.9 |
| TOTAL | | 1567 | 100.0 | 1567 | 100.0 |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,
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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 3 (I):Fd, Plots in Type: 2, TUs: [ A : 2.9 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 476 | 77.9 | | | | | | | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 135 | 22.1 | 84 | 100.0 | | | | | | | | |
| TOTAL | | 612 | 100.0 | 84 | 100.0 | | 100.0 | | 100.0 | | 100.0 | | 100.0 |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 3 (I):Fd, Plots in Type: 2, TUs: [ A : 2.9 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| J #4 Sawlog | | | | | |
| | Total | 476 | 68.5 | 476 | 68.5 |
| U #5 Utility | | | | | |
| | Total | 219 | 31.5 | 219 | 31.5 |
| TOTAL | | 695 | 100.0 | 695 | 100.0 |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,
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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 4 (I):Fd, Plots in Type: 2, TUs: [ A : 1.2 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 272 | 86.1 | | | | | | | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 44 | 13.9 | | | | | | | | | | |
| TOTAL | | 316 | 100.0 | 100.0 | | 100.0 | | 100.0 | | 100.0 | | 100.0 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 4 (I):Fd, Plots in Type: 2, TUs: [ A : 1.2 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| J #4 Sawlog | | | | | |
| | Total | 272 | 86.1 | 272 | 86.1 |
| U #5 Utility | | | | | |
| | Total | 44 | 13.9 | 44 | 13.9 |
| TOTAL | | 316 | 100.0 | 316 | 100.0 |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 5 (I):Fd, Plots in Type: 6, TUs: [ A : 4.8 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 1240 | 85.7 | | | | | | | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 207 | 14.3 | 72 | 92.9 | 45 | 89.1 | | | | | | |
| Y #7 Chipper | | | | | | | | | | | | | |
| | Total | | | 6 | 7.1 | 6 | 10.9 | | | | | | |
| TOTAL | | 1447 | 100.0 | 78 | 100.0 | 51 | 100.0 | | 100.0 | | 100.0 | | 100.0 |
| Z #8 Cull | | | | | | | | | | | | | |
| | Total | | | 10 | | | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 5 (I):Fd, Plots in Type: 6, TUs: [ A : 4.8 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| J #4 Sawlog | | | | | |
| | Total | 1240 | 78.7 | 1240 | 78.7 |
| U #5 Utility | | | | | |
| | Total | 325 | 20.6 | 325 | 20.6 |
| Y #7 Chipper | | | | | |
| | Total | 11 | 0.7 | 11 | 0.7 |
| TOTAL | | 1576 | 100.0 | 1576 | 100.0 |
| Z #8 Cull | | | | | |
| | Total | 10 | | 10 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 6 (I):Fd, Plots in Type: 1, TUs: [ A : 0.8 ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| I #3 Sawlog | | | | | | | | | | | | | |
| | Total | 36 | 25.8 | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 97 | 70.0 | | | | | | | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 6 | 4.3 | | | | | | | | | | |
| TOTAL | | 138 | 100.0 | 100.0 | | 100.0 | | 100.0 | | 100.0 | | 100.0 | |
| Z #8 Cull | | | | | | | | | | | | | |
| | Total | 16 | | | | | | | | | | | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 6 (I):Fd, Plots in Type: 1, TUs: [ A : 0.8 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| I #3 Sawlog | | | | | |
| | Total | 36 | 25.8 | 36 | 25.8 |
| J #4 Sawlog | | | | | |
| | Total | 97 | 70.0 | 97 | 70.0 |
| U #5 Utility | | | | | |
| | Total | 6 | 4.3 | 6 | 4.3 |
| TOTAL | | 138 | 100.0 | 138 | 100.0 |
| Z #8 Cull | | | | | |
| | Total | 16 | | 16 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,
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**Type Detailed Log Grade Table**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks:  (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |
| Standard Log Length:(m) | 13.00 | | |

Net Area: Type 7  (I):R/W, Plots in Type: 5, TUs: [ A : 1.6  ]

| | | Doug-Fir | | W.R. Cedar | | C Vet | | Hemlock | | Alder | | Maple | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | | | | | | | | | |
| H #2 Sawlog | | | | | | | | | | | | | |
| | Total | 126 | 23.2 | | | | | | | | | | |
| J #4 Sawlog | | | | | | | | | | | | | |
| | Total | 367 | 67.3 | | | | | 10 | 56.5 | | | | |
| U #5 Utility | | | | | | | | | | | | | |
| | Total | 45 | 8.2 | | | | | 6 | 30.4 | 28 | 45.5 | 6 | 18.3 |
| X #6 Utility | | | | | | | | | | | | | |
| | Total | 6 | 1.1 | | | | | | | | | | |
| Y #7 Chipper | | | | | | | | | | | | | |
| | Total | 2 | 0.3 | 2 | 100.0 | | | 2 | 13.0 | 34 | 54.5 | 28 | 81.7 |
| TOTAL | | 546 | 100.0 | 2 | 100.0 | | 100.0 | 18 | 100.0 | 62 | 100.0 | 34 | 100.0 |
| Z #8 Cull | | | | | | | | | | | | | |
| | Total | 6 | | | | | | 2 | | | | 9 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Detailed Log Grade Table**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

Net Area: Type 7 (I):R/W, Plots in Type: 5, TUs: [ A : 1.6 ]

| | | Total | | Conifer | |
|---|---|---|---|---|---|
| | | m3 | % | m3 | % |
| **Cruiser Call Variable Length Grades %** | | | | | |
| H #2 Sawlog | | | | | |
| | Total | 126 | 19.1 | 126 | 22.3 |
| J #4 Sawlog | | | | | |
| | Total | 377 | 56.9 | 377 | 66.6 |
| U #5 Utility | | | | | |
| | Total | 85 | 12.8 | 50 | 8.9 |
| X #6 Utility | | | | | |
| | Total | 6 | 0.9 | 6 | 1.0 |
| Y #7 Chipper | | | | | |
| | Total | 69 | 10.3 | 7 | 1.2 |
| TOTAL | | 663 | 100.0 | 566 | 100.0 |
| Z #8 Cull | | | | | |
| | Total | 17 | | 8 | |

*** 1 tree(s) changed to tree class 4:2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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*** FOR MPS PURPOSES ***

ALBERNI VALLEY COMMUNITY FORES

**Cruise Compilation Project Report**

| **Project Identification** | | **Compilation Specifications** | |
|---|---|---|---|
| Location of Cruise | : Weiner Creek | Volume and Taper Equations | : A. Kozak 1989 |
| Licence | : K2D | Decay Waste and Breakage Factors | : BCFS Zonal and PSYU |
| Project Number | : CB W15 | Compiled By | : Contour Forest Consultants INC. |
| Cutting Permit | : 004 | Cruised By | : CONTOUR FOREST CONS.INC |
| Forest Inventory Zone | : B | Under Licence From | : Industrial Forestry Service Ltd. |
| Forest District | : 4 | Program Version | : 2012.00 |
| Sustained Yield Unit | : PSYU : Quadra | Date of Compilation | : 21-Feb-2013 : 04:26:46PM |
| | | Method | : Average Line Method |

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

British Columbia Close Utilization
Net Volume ( Gross Volume less DWB )

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |

Standard Log Length:(m) 13.00

**Block Areas**

| | | Treatment Units |
|---|---|---|
| Blocks | Total | A |
| Block 001 | | |
| Type 1 | 17.70 | 17.70 |
| Type 2 | 4.60 | 4.60 |
| Type 3 | 2.90 | 2.90 |
| Type 4 | 1.20 | 1.20 |
| Type 5 | 4.80 | 4.80 |
| Type 6 | 0.80 | 0.80 |
| Type 7 | 1.60 | 1.60 |
| Total | 33.60 | 33.60 |

**Harvest Method Areas**

| | | Treatment Units |
|---|---|---|
| Harvest Methods | Total | A |
| Method CC | | |
| Type 1 | 17.70 | 17.70 |
| Type 2 | 4.60 | 4.60 |
| Type 3 | 2.90 | 2.90 |
| Type 4 | 1.20 | 1.20 |
| Type 5 | 4.80 | 4.80 |
| Type 6 | 0.80 | 0.80 |
| Type 7 | 1.60 | 1.60 |
| Total | 33.60 | 33.60 |

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**Appraisal Summary Report**

21-Feb-2013 04:26:46PM

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D CP: 004
Project: CB W15
Location : Weiner Creek

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table
No Of Blocks : 1

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

| Utilization Levels: | Minimum DBH | Top Diameter | Stump Height |
|---|---|---|---|
| Mature Blocks: (cm) | 17.5 | 15.0 | 30 |
| Immature Blocks:(cm) | 12.0 | 10.0 | 30 |
| Standard Log Length:(m) | 13.00 | | |

Net Area: [All Treatment Units : 33.6 ]

**All Method Summary**

Cruiser Call Variable Length Grades %

| Species Code | Description | H | I | J | U | X | Y | Net Volume (m3) All | Net Volume (m3) Live | Net Volume (m3) DP | Net Volume / ha All | Net Volume / ha Live | Net Volume / ha DP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CE | Cedar | 26 | | | 66 | 5 | 3 | 249 | 171 | 78 | 7.407 | 5.092 | 2.315 |
| CE | Cedar | | | | 89 | | 11 | 51 | 0 | 51 | 1.518 | 0.000 | 1.518 |
| FI | Doug-Fir | 2 | | 80 | 18 | | | 11824 | 11482 | 341 | 351.892 | 341.740 | 10.152 |
| HE | Hemlock | | | 25 | 74 | | 1 | 251 | 251 | 0 | 7.471 | 7.471 | 0.000 |
| AL | Alder | | | | 45 | | 55 | 62 | 62 | 0 | 1.849 | 1.849 | 0.000 |
| MA | Maple | | | | 18 | | 82 | 34 | 34 | 0 | 1.025 | 1.025 | 0.000 |
| | Total | | | | | | | 12471 | 12001 | 470 | 371.162 | 357.178 | 13.984 |

**Harvesting Method Summaries**

| Harvest Method | Net Volume | Net Vol /10m Log | Net Vol /Hectare | Hem+ Bal% | Partial Cut% | Slope% | Down Tree% | Heavy Fire% |
|---|---|---|---|---|---|---|---|---|
| CC | 12471 | 0.35 | 371.162 | 2 | | 30 | 1 | 0 |
| Conventional Methods | 12471 | 0.35 | 371.162 | 2 | | 30 | 1 | 0 |
| All Methods | 12471 | 0.35 | 371.162 | 2 | | | 1 | 0 |

**Cutting Authority**

| | |
|---|---|
| 95% Confidence Interval | 15.5 |
| Plots/Ha | 1.1 |
| Cruised Trees/Plot | 4.5 |
| Net 2nd Growth-Conifer % | 99.0 |
| Net 2nd Growth-Conifer (m3) | 12246 |
| Net Immature by Block % | 001: 99% |
| Non Heli Select Conifer (m3/ha) | 368.29 |
| Heli Select Total (decimal) | 0.00 |
| Heli+Skyline Total (decimal) | 0.00 |
| Piece Size - Conifer (m3/10m log) | 0.35 |

# Plots: 38 # <= 5yrs: 38 # > 5yrs: 0 # > 10yrs: 0 # no date: 0

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

*CruiseComp Copyright© 1996-2012, Industrial Forestry Service Ltd.*

**Map Area Statement Report**

| | | | |
|---|---|---|---|
| Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM |
| ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp |
| Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I |
| Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC |
| | | | Version: 2012.00a IFS build 5798 |

**Card A Cruise Identity**

| | | | |
|---|---|---|---|
| Licence # | : K2D | Cutting Permit # | : 004 |
| Number of Blocks | : 1 | Forest Region | : Coastal |
| Forest District | : South Island | Type | : PSYU |
| Unit No | : Quadra | Tenure | : Woodlot Licences (COAST) |
| Quota | : Prop./Mngd.PSYU,TFL,or SSA | Sale Type | : None |
| Elevation | : 0 | Co-ordinates Zone | : Unknown |
| East | : 0 | North | : 0 |
| Total Merch Area | : 33.60 | Report Type | : *** FOR MPS PURPOSES *** |
| Locality | : Weiner Creek | | |

**Card B Compilation Standard**

| | | | |
|---|---|---|---|
| Damage | : Damage | Selective | : Compile All Trees |
| Double Sampling | : Measure Plots Only | Special Compilation | : No Special Compilation |
| Species Compilation | : Exceptions Not Used | Type of Compilation | : Coastal |

| Compilation Standard | Mature | Immature |
|---|---|---|
| DBH Limit | 17.50 | 12.00 |
| Stump Height | 30 | 30 |
| Top Diameter | 15.00 | 10.00 |

**Card C Type Description**

| | | Silvicultural Treatment Units |
|---|---|---|
| Type | Description | A |
| 1 | Fd | 17.7 |
| 2 | Fd | 4.6 |
| 3 | Fd | 2.9 |
| 4 | Fd | 1.2 |
| 5 | Fd | 4.8 |
| 6 | Fd | 0.8 |
| 7 | R/W | 1.6 |

**Card D Block Description**

| | | | | Silvicultural Treatment Units |
|---|---|---|---|---|
| Block | Description | Maturity | Type | A |
| 001 | CB W15 | I | 1 | 17.7 |
| | | | 2 | 4.6 |
| | | | 3 | 2.9 |
| | | | 4 | 1.2 |
| | | | 5 | 4.8 |
| | | | 6 | 0.8 |
| | | | 7 | 1.6 |

**Card F Harvesting Description**

| Harvest | Harvest | | Silvicultural Treatment Units |
|---|---|---|---|
| Method | Description | Type | A |
| CC | Cable - Clearcut | 1 | 17.7 |
| | | 2 | 4.6 |

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

*CruiseComp Copyright© 1996-2012, Industrial Forestry Service Ltd.*

**Map Area Statement Report**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

| Harvest Method | Harvest Description | Silvicultural Treatment Units Type | A |
|---|---|---|---|
| CC | Cable - Clearcut | 3 | 2.9 |
| | | 4 | 1.2 |
| | | 5 | 4.8 |
| | | 6 | 0.8 |
| | | 7 | 1.6 |

**Card G Treatment Unit Description**

| Treatment Unit | Description |
|---|---|
| A | A |

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Double Sampling Factors**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

| | F | C | CV | H | D | MB |
|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 |

**Type Factors**

Forest Types:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 3 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 4 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 5 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 7 :R/W | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

**Block Factors**

Block 001:
Forest Types:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 3 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 4 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 5 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 7 :R/W | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

**Harvest Method Factors**

Method:  CC: Cable - Clearcut
Forest Types:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 3 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 4 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 5 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6 :Fd | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 7 :R/W | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Field Data & Slope Averages**

Average Line Method
ALBERNI VALLEY COMMUNITY FORES
Licence Number: K2D  CP: 004
Project: CB W15

Grades: Cruiser Called Alpha
Cruiser Est Decay
Cruiser Est Waste
CGNF Breakage Table

FIZ: B
PSYU: Quadra
Region: 1 - Coastal
District: 4 - South Island

21-Feb-2013  04:26:46PM
Filename: cbw15_2013opc_20130221.ccp
Compiled by: Contour Forest Consultants I
Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a   IFS build 5798

| Block | Strp | Plot | Type | Meth | Slp% | Strp | Plot | Type | Meth | Slp% | Strp | Plot | Type | Meth | Slp% | Strp | Plot | Type | Meth | Slp% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001: CB W15 | 1 | 6 | 4 | CC | 28 | 1 | 5 | 4 | CC | 34 | 1 | 13 | 5 | CC | 42 | 1 | 12 | 5 | CC | 35 |
| | 1 | 2 | 3 | CC | 36 | 1 | 8 | 2 | CC | 16 | 1 | 4 | 2 | CC | 17 | 1 | 1 | 3 | CC | 47 |
| | 1 | 9 | 2 | CC | 14 | 1 | 14 | 5 | CC | 37 | 1 | 38 | 7 | CC | 18 | 1 | 37 | 7 | CC | 9 |
| | 1 | 40 | 7 | CC | 40 | 1 | 39 | 7 | CC | 43 | 1 | 36 | 7 | CC | 23 | 1 | 22 | 5 | CC | 27 |
| | 1 | 15 | 5 | CC | 3 | 1 | 16 | 6 | CC | 12 | 1 | 28 | 5 | CC | 34 | 1 | 20 | 1 | CC | 41 |
| | 1 | 19 | 1 | CC | 44 | 1 | 23 | 1 | CC | 19 | 1 | 21 | 1 | CC | 17 | 1 | 18 | 1 | CC | 56 |
| | 1 | 10 | 1 | CC | 45 | 1 | 7 | 1 | CC | 40 | 1 | 17 | 1 | CC | 37 | 1 | 11 | 1 | CC | 11 |
| | 1 | 24 | 1 | CC | 13 | 1 | 34 | 1 | CC | 43 | 1 | 33 | 1 | CC | 32 | 1 | 3 | 2 | CC | 25 |
| | 1 | 35 | 1 | CC | 12 | 1 | 32 | 1 | CC | 20 | 1 | 26 | 1 | CC | 47 | 1 | 25 | 1 | CC | 31 |
| | 1 | 31 | 1 | CC | 32 | 1 | 30 | 1 | CC | 44 | | | | | | | | | | |

Summary:  Total % Slope: 1124  No. of Plots: 38  Weighted Average % Slope: 30.0  Arithmetic Average % Slope: 29.6

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Field Data & Slope Averages**

Average Line Method | Grades: Cruiser Called Alpha | FIZ: B | 21-Feb-2013 04:26:46PM
ALBERNI VALLEY COMMUNITY FORES | Cruiser Est Decay | PSYU: Quadra | Filename: cbw15_2013opc_20130221.ccp
Licence Number: K2D CP: 004 | Cruiser Est Waste | Region: 1 - Coastal | Compiled by: Contour Forest Consultants I
Project: CB W15 | CGNF Breakage Table | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5798

**Harvest Method Summary**

| Harvest Method | Total % Slope | No of Plots | Avg % Weighted Slope | Avg % Arithmetic Slope |
|---|---|---|---|---|
| CC | 1124 | 38 | 30.0 | |
| Total | 1124 | 38 | 30.0 | 29.6 |

FLAGS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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# ALBERNI VALLEY COMMUNITY FORES

K2D - CP# 004

Weiner Creek
Block #: W15

**SUMMARY OF VOLUMES (loss factors)**
L E A V E  T R E E  R E P O R T

10-Mar-2013 05:30:21PM

Cruised by: CONTOUR FOREST CONS.INC
Compiled by: F. Warren and Associates Ltd

**Block Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Block : (I) - 001:W15, Plots in Block: 33, TUs: [All Treatment Units : 32.0 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | 9.2 | | | 9.2 | | | |
| 20 | 2.4 | | 7.2 | 9.6 | | | |
| 25 | 7.4 | | | 7.4 | | | |
| 30 | 10.6 | | | 10.6 | 2.9 | | |
| 35 | 3.8 | | | 3.8 | 1.7 | | |
| 40 | 8.9 | | | 8.9 | | | |
| 45 | | | | | | | |
| 50 | 1.0 | | | 1.0 | | | |
| 55 | 0.9 | | | 0.9 | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | 44.3 | | 7.2 | 51.5 | | | |
| Dead P | 4.6 | | | | 4.6 | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |
| | | | Average DBH(cm) at 5 Levels | | | | |
| 12.5 + | 30.9 | | 17.8 | 29.4 | 31.7 | | |
| 17.5 + | 33.8 | | 17.8 | 31.6 | 31.7 | | |
| 22.5 + | 34.5 | | | 34.5 | 31.7 | | |
| 27.5 + | 36.8 | | | 36.8 | 31.7 | | |
| 32.5 + | 40.4 | | | 40.4 | 36.9 | | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Block Stand Table (stems/ha)**

10-Mar-2013 05:30:21PM

Average Line Method | Grades: MOF Computerized | FIZ: B | Filename: W15.ccp
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Compiled by: F. Warren and Associates Ltd
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Cruised by: CONTOUR FOREST CONS.INC
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Version: 2012.00a IFS build 5799

Block : (I) - 001:W15, Plots in Block: 33, TUs: [ A 100% Cut : 25.4 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | | | | | | | |
| 20 | | | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | | | | | | | |
| Dead P | | | | | | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |

Average DBH(cm) at 5 Levels

| | |
|---|---|
| 12.5 + | |
| 17.5 + | |
| 22.5 + | |
| 27.5 + | |
| 32.5 + | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Block Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Block : (I) - 001:W15, Plots in Block: 33, TUs: [ B 50% Cut : 6.6 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | 44.4 | | | 44.4 | | | |
| 20 | 11.6 | | 35.0 | 46.6 | | | |
| 25 | 36.1 | | | 36.1 | | | |
| 30 | 51.4 | | | 51.4 | 13.9 | | |
| 35 | 18.6 | | | 18.6 | 8.1 | | |
| 40 | 43.4 | | | 43.4 | | | |
| 45 | | | | | | | |
| 50 | 4.9 | | | 4.9 | | | |
| 55 | 4.4 | | | 4.4 | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | 214.8 | | 35.0 | 249.8 | | | |
| Dead P | 22.1 | | | | 22.1 | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |
| | | | Average DBH(cm) at 5 Levels | | | | |
| 12.5 + | 30.9 | | 17.8 | 29.4 | 31.7 | | |
| 17.5 + | 33.8 | | 17.8 | 31.6 | 31.7 | | |
| 22.5 + | 34.5 | | | 34.5 | 31.7 | | |
| 27.5 + | 36.8 | | | 36.8 | 31.7 | | |
| 32.5 + | 40.4 | | | 40.4 | 36.9 | | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Type 1 (I):Fd, Plots in Type: 18, TUs: [ A 100% Cut : 17.7 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | | | | | | | |
| 20 | | | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | | | | | | | |
| Dead P | | | | | | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |

Average DBH(cm) at 5 Levels

| | |
|---|---|
| 12.5 + | |
| 17.5 + | |
| 22.5 + | |
| 27.5 + | |
| 32.5 + | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Type 2 (I):Fd, Plots in Type: 4, TUs: [ B 50% Cut : 4.6 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | 63.8 | | | 63.8 | | | |
| 20 | | | 50.2 | 50.2 | | | |
| 25 | 51.8 | | | 51.8 | | | |
| 30 | 65.8 | | | 65.8 | 20.0 | | |
| 35 | 26.6 | | | 26.6 | 11.7 | | |
| 40 | 49.8 | | | 49.8 | | | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | 257.8 | | 50.2 | 308.0 | | | |
| Dead P | 31.7 | | | | 31.7 | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |
| | | | Average DBH(cm) at 5 Levels | | | | |
| 12.5 + | 29.4 | | 17.8 | 27.8 | 31.7 | | |
| 17.5 + | 32.7 | | 17.8 | 30.2 | 31.7 | | |
| 22.5 + | 32.7 | | | 32.7 | 31.7 | | |
| 27.5 + | 35.1 | | | 35.1 | 31.7 | | |
| 32.5 + | 38.2 | | | 38.2 | 36.9 | | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Type 3 (I):Fd, Plots in Type: 2, TUs: [ A 100% Cut : 2.9 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | | | | | | | |
| 20 | | | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | | | | | | | |
| Dead P | | | | | | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |

Average DBH(cm) at 5 Levels

| | |
|---|---|
| 12.5 + | |
| 17.5 + | |
| 22.5 + | |
| 27.5 + | |
| 32.5 + | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Type 4 (I):Fd, Plots in Type: 2, TUs: [ B 50% Cut : 1.2 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | | | | | | | |
| 20 | 64.0 | | | 64.0 | | | |
| 25 | | | | | | | |
| 30 | 30.7 | | | 30.7 | | | |
| 35 | | | | | | | |
| 40 | 18.1 | | | 18.1 | | | |
| 45 | | | | | | | |
| 50 | 27.0 | | | 27.0 | | | |
| 55 | 10.4 | | | 10.4 | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | 150.2 | | | 150.2 | | | |
| Dead P | | | | | | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |
| | Average DBH(cm) at 5 Levels | | | | | | |
| 12.5 + | 35.7 | | | 35.7 | | | |
| 17.5 + | 35.7 | | | 35.7 | | | |
| 22.5 + | 43.0 | | | 43.0 | | | |
| 27.5 + | 43.0 | | | 43.0 | | | |
| 32.5 + | 47.9 | | | 47.9 | | | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Type 5 (I):Fd, Plots in Type: 6, TUs: [ A 100% Cut : 4.8 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | | | | | | | |
| 20 | | | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | | | | | | | |
| Dead P | | | | | | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |

Average DBH(cm) at 5 Levels

| | |
|---|---|
| 12.5 + | |
| 17.5 + | |
| 22.5 + | |
| 27.5 + | |
| 32.5 + | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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**Type Stand Table (stems/ha)**

Average Line Method | Grades: MOF Computerized | FIZ: B | 10-Mar-2013 05:30:21PM
ALBERNI VALLEY COMMUNITY FORES | Computerized Decay | PSYU: Nootka | Filename: W15.ccp
Licence Number: K2D CP: 004 | Computerized Waste | Region: 1 - Coastal | Compiled by: F. Warren and Associates Ltd
Project: CB W15 | Computerized Breakage | District: 4 - South Island | Cruised by: CONTOUR FOREST CONS.INC
Version: 2012.00a IFS build 5799

Type 6 (I):Fd, Plots in Type: 1, TUs: [ B 50% Cut : 0.8 ]

| | F | C | H | Total | DP | DU | LU |
|---|---|---|---|---|---|---|---|
| **Utilization Limits** | | | | | | | |
| Min DBH cm (I) | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Stump Ht cm (I) | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Top Dia cm (I) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Log Len m | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| DBH Class | | | | | | | |
| 5 | | | | | | | |
| 10 | | | | | | | |
| 15 | | | | | | | |
| 20 | | | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | 44.3 | | | 44.3 | | | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | 20.4 | | | 20.4 | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |
| 80 | | | | | | | |
| 85 | | | | | | | |
| 90 | | | | | | | |
| 95 | | | | | | | |
| 100 | | | | | | | |
| 105 | | | | | | | |
| 110 | | | | | | | |
| 115 | | | | | | | |
| 120 | | | | | | | |
| 125 | | | | | | | |
| 130 | | | | | | | |
| 135 | | | | | | | |
| 140 | | | | | | | |
| 145 | | | | | | | |
| 150 | | | | | | | |
| 175 | | | | | | | |
| 200 | | | | | | | |
| 225 | | | | | | | |
| 250 | | | | | | | |
| 275 | | | | | | | |
| Total | 64.8 | | | 64.8 | | | |
| Dead P | | | | | | | |
| Dead U | | | | | | | |
| Live U | | | | | | | |

Average DBH(cm) at 5 Levels

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12.5 + | 44.3 | | | 44.3 | | | |
| 17.5 + | 44.3 | | | 44.3 | | | |
| 22.5 + | 44.3 | | | 44.3 | | | |
| 27.5 + | 44.3 | | | 44.3 | | | |
| 32.5 + | 44.3 | | | 44.3 | | | |

*** 2 tree(s) changed to tree class 6:because only log was less then 3.00 m ***
FLAGS: Leave Tree Report, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage,

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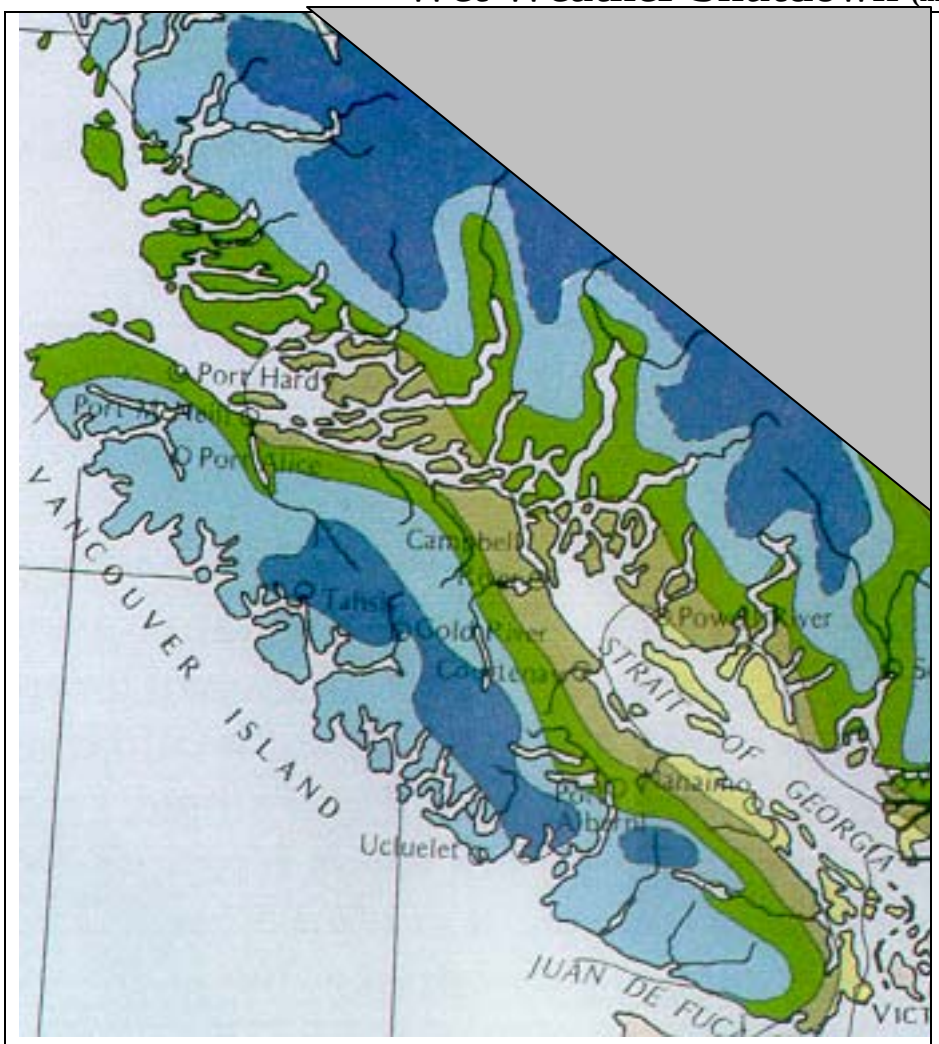
**Appendix 5: Wet Weather Shutdown Guidelines**

# Wet Weather Shutdown (modified Nov 7, 2006)

BCTS
BC Timber Sales
Strait of Georgia




| Zone | Mean Annual Precip (mm) | Shutdown Threshold (mm/24 hours) |
|---|---|---|
| 1 | 750 | 20 |
| 2 | 1500 | 40 |
| 3 | 2500 | 60 |
| 4 | 3000 | 75 |
| 5 | 3500 | 90 |

| TABLE B Local Soil Type | Multiplier Factor |
|---|---|
| Very Erodible (e.g. lacustrine) | 0.4 |
| Erodible (e.g. organics, sands) | 0.6 |
| Least Erodible (e.g. colluvium, till) | 0.8 |
| Bedrock | 1.0 |

| TABLE C Slope Modifier | Multiplier Factor |
|---|---|
| 0% - 57 | 1.0 |
| 57% - 70% | 0.9 |
| 71% - 88% | 0.8 |
| 89% + | 0.7 |

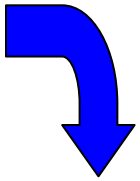
**Instructions**:

1) Use base shutdown threshold from Table A
2) Multiply by Soil Type Modifier from Table B
3) Multiply result by Slope Modifier from Table C

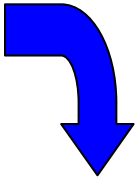
Result is rainfall shutdown threshold in millimeters in a 24 hour period

**Example**

| Zone¤ | Table·A:·Mean·Annual·¤ | Shutdown· Threshold¤ |
|---|---|---|
| °¤ | Precipitation·(mm)¤ | (mm/24·hours)¤ |
| 1¤ | 750¤ | 20¤ |
| 2¤ | 1500¤ | 40¤ |
| 3¤ | 2500¤ | 60¤ |
| 4¤ | 3000¤ | 75¤ |
| 5¤ | 3500¤ | 90¤ |



| TABLE·B·Local·Soil·Type¤ | Multiplier¤ |
|---|---|
| °¤ | Factor¤ |
| Very·Erodible·(e.g.· lacustrine)¤ | 0.4¤ |
| Erodible·(e.g.·organics,· sands)¤ | 0.6¤ |
| Least·Erodible·(e.g.· colluvium,·till)¤ | 0.8¤ |
| Bedrock¤ | 1.0¤ |



| TABLE·C·Slope·Modifier¤ | Multiplier¤ |
|---|---|
| °※ | Factor¤ |
| 0%·-·57¤ | 1.0¤ |
| ·57%·-·70%¤ | 0.9¤ |
| 71%·-·88%¤ | 0.8¤ |
| 89%·+¤ | 0.7¤ |

For Dark Blue Zone 5; 24 Hr Shutdown Criteria = 90 x 0.8 x 0.8 = 58 mm

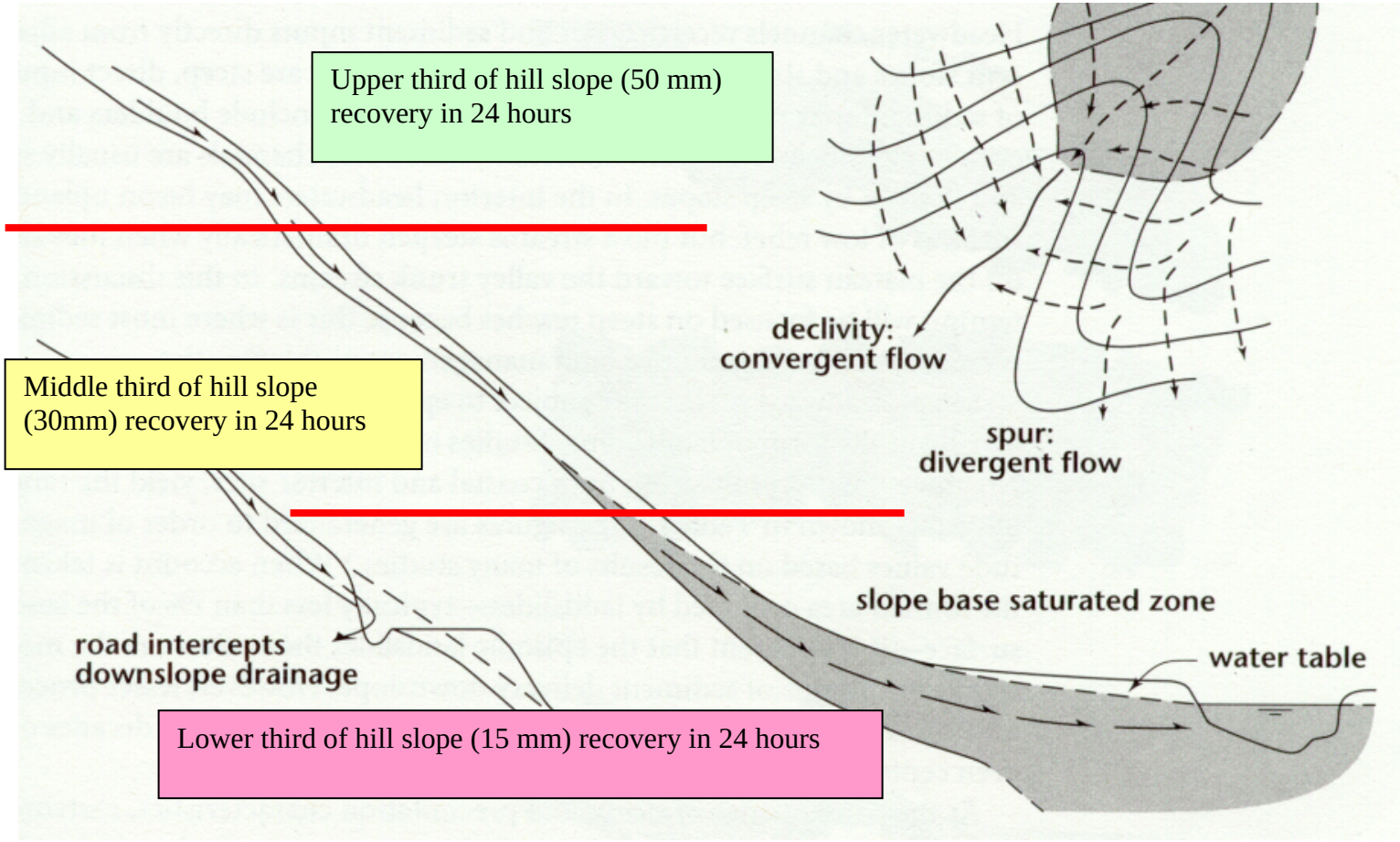
# Return to Work Estimation Guide

Water balance returns to normal after a heavy rainfall period subject to a number of variables

- -slope position
- -slope gradient
- -soil type and depth (or proximity to bedrock)

Where a road is located above the worksite, interception by ditch lines may have the effect of increasing the recovery rate for lower slope positions

Using the following sketch as a guide, identify the slope position of the planned activity (upper, middle and lower thirds)
In an **average** situation precipitation input is reduced in a 24 hour period by the indicated values based on slope position



**Appendix 6: Best Management Practices for a Community Watershed**

(Practices Derived from Econ Forest Consulting Roads Report June 2011 and Sproat Lake CWAP Report 2008)

# Best Management Practices for Community Watersheds

Refer also to Section 5.2.4 of the AVCF FSP.

Ditch Cleaning: where needed, ditches are to be cleaned when conditions are dry. Ditch spoil is not to be windrowed along the road shoulder. On moderate slopes, the ditch spoil could be thinly spread on the slope below the road, but not heaped or piled against trees. Where the road is on steep slopes, the ditch spoil should be end hauled to a suitable spoil site.

Culvert replacement: Where required culvert replacements are to be done during dry weather (except for emergency repairs or replacements). The inlet and outlet areas on new culverts, and the adjacent fill slopes, are to be armoured to prevent erosion or sloughing into the creek.

Rock Ballasting of road surface: For new road construction, where the road is close to a stream channel, the road surface is to be ballasted with clean rock. The road surface is also to be rock ballasted for 30 meters either side of stream culverts.

Road grading practices: grading is to be avoided during heavy rain.

Shutdown or harvest completion: In preparation for a shutdown for a period longer than 30 days or at a harvest completion, the following measures will be taken:

> No excavated or end hauled material will be left piled in such a way as to become unstable during the shutdown period. Spoil sites, piles and fills will be sloped uniformly to prevent instability.
>
> Ditches and culverts will be left clear and functional, with adequate inlet basins to minimize the potential for plugging.
>
> On sections of steep grades, cross ditches and back-up swales will be constructed where needed to minimize ditch erosion.
>
> If road construction has reached a drainage course but a drainage structure has not been installed prior to shutdown, the drainage course will be left open and unimpeded.
>
> Where exposed silty soils could erode and enter surface streams or ditches connected to streams, silt fences, hay bales or erosion blankets will be applied as needed for temporary protection.

**Appendix 7: Block W15 Site Plan**

# CUTBLOCK AND ROAD SITE PLAN

| CUTBLOCK IDENTIFICATION | | | | |
|---|---|---|---|---|
| Licence: K2D/AVCF | Cutting Permit: 4 | Block: W15 | Timber Mark K2D 004 | FDU: A (Sproat) |
| Silviculture System: SUA Retention SUB Commercial Thinning | Opening Number: 92F.025 | Location: Sproat Lake | Lattitude: 49° 17' 51'' | Longitude: 125°00' 44'' |
| TAUP(ha): 41.7 | NAR (ha): 30.6 | NP NAT (ha): 0 | NP UNN (ha /%): 3.1ha/7.4% | P.A.S. Limit (%): 7% |

| Road Name | Section | Length | Location |
|---|---|---|---|
| Weiner Connector | 0+000 to 1+764 New Construction | 1764m | 125°0'2''W // 49°17'13.87''N |
| W15–S1 | 0+000 to 0+218 New Construction | 218m | 125°0'21.97''W // 49°17'50.13''N |
| W15-S2 | 0+000 to 0+064 New Construction | 64m | 125°0'36.82''W // 49°17'56.68''N |
| W15-S3 | 0+000 to 0+213 New Construction | 213m | 125°0'44.31''W // 49°17'50.42'N |
| W15-S4 | 0+000 to 0+440 New Construction | 440m | 125°0'46.57''W // 49°17'48.05''N |
| W15-S5 | 0+000 to 0+145 New Construction | 145m | 125°0'46.8''W // 49°17'44.42''N |

| SOIL DISTURBANCE | | | | |
|---|---|---|---|---|
| SU | Compaction | Displacement | Surface Erosion | Soil Disturbance Limit (%) |
| A | Moderate | Very High | High | 5 |
| B | Moderate | Very High | High | 5 |
| COMMENTS | Use puncheon or rubber matting in sensitive areas and **stop work if the following soil disturbances cannot be avoided**:<br>>Wheel/Track Ruts, Compacted Areas, Gouges, Scalps<<br>Rehabilitate compacted areas and roadsides by de-compacting with hoe (preferably grapple attachment) while avoiding scalps larger than 1.5 x 1.5 m. Grass seed exposed mineral soil within 1 year of completion of harvest. Wide gouge and wide scalp are not countable soil disturbance categories in de-stumping areas.<br>Maximum Roadside Disturbance Limit: 25%.<br>De-stumping may exceed the soil disturbance limit as per FPPRs 35(4)(a). | | | |

| RESULTS & STRATEGIES | |
|---|---|
| RESULT OR STRATEGY | HOW THE STRATEGY OR RESULT APPLIES TO THE SITE |
| 5.1.1a Order Establishing Sproat Lake Landscape Unit and Objective – | • The proposed harvest area is within the Sproat Lake Landscape Unit.<br>• OGMAs have been established for the Sproat Lake Landscape Unit on July 18, 2005. |

# CUTBLOCK AND ROAD SITE PLAN

| | |
|---|---|
| Objective 1: Old Growth Management Areas (OGMAs) | • OGMA NAN_splk_4is located adjacent to the proposed harvest area but does not encroach onto it. The OGMA has been given a buffer of 50m. This is a small OGMA to the east of the proposed harvest area. No other OGMAs are located in the vicinity of the proposed harvest area.<br>Permissible activities that may occur for this OGMA include:<br>○ removal of danger trees, or brushing and clearing within the right-of-way on existing roads for safety purposes,<br>○ felling of trees for guyline clearance, tailhold anchor trees, (except high value wildlife trees) or danger trees along cutblock boundaries or within the right-of-way on new road/bridge alignments to meet safety requirements,<br>○ The AVCFC may carry out boundary pruning of trees within the OGMA.<br>• No replacement OGMA is needed since there are no known OGMA infringements. |
| 5.1.1b Order Establishing Sproat Lake Landscape Unit and Objective – Objective 2: Wildlife Tree Retention (WTR) | • The proposed harvest area is within the Sproat Lake Landscape Unit.<br>• A 3.8 ha WTRA has been retained adjacent to the block, meeting the minimum requirements set out in the approved landscape unit plan for areas within the CWH xm BEC subzone. This WTRA contains second growth Fd (Cw Hw) representative of the pre-harvest stand.<br>• AVCF will ensure that the 5 year average of WTR will met the minimum requirements set out in the approved landscape unit plan for areas within the CWH xm BEC subzone by ensuring that each individual block meets this target.<br>• AVCF will ensure that the WTR are distributed across the landscape by ensure that each WTR is directly adjacent to their corresponding cutblock, which is planned to be distributed across the license area. Permissible activities that may occur for this WTRA include:<br>○ Removal of danger trees,<br>○ WTPs with a high likelihood of windthrow may be pruned or topped to maintain the integrity of the WTP. |
| 5.1.1b Order Establishing Sproat Lake Landscape Unit and Objective – Objective 3: Special Management Zone 17 (SMZ 17) | • The proposed harvest area does not lie within a SMZ, results and strategies do not apply. |
| 5.1.2a Vancouver Island Land Use Plan Higher Level Plan Order – Objective 1a: Sustain forest ecosystem structure and function in SMZs | • The proposed harvest area does not lie within a SMZ, results and strategies do not apply. |
| 5.1.2b Vancouver Island Land Use Plan Higher Level Plan Order – Objective 1b: Sustain forest ecosystem structure and function in SMZs. | • The proposed harvest area does not lie within a SMZ, results and strategies do not apply. |

# CUTBLOCK AND ROAD SITE PLAN

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|---|---|
| 5.1.2c Vancouver Island Land Use Plan Higher Level Plan Order – Objective 1c: Sustain forest ecosystem structure and function in SMZs. | • The proposed harvest area does not lie within a SMZ, results and strategies do not apply. |
| 5.1.2d Vancouver Island Land Use Plan Higher Level Plan Order – Objective 2: Recovering damaged timber within SMZs. | • The proposed harvest area does not lie within a SMZ, results and strategies do not apply. |
| 5.2.1 Soils (FPPR s.35-36) | • Soil disturbance limits comply with Section 35 of the FPPR. Limits are listed in SOIL DISTURBANCE section of the Site Plan.<br>• Permanent access structures comply with Section 36 of the FPPR. Permanent access structures for the development are 7.4%. The area occupied by permanent access structures exceeds 7% due to the size, topography and engineering constraints of the cutblock and safety of road users. The permanent access structure limit is exceeded by as little as practicable. |
| 5.2.2 Wildlife – MAMU (FPPR s.7) | • The Notice specifies the amount, distribution and attributes of wildlife habitat required for Marbled Murrelet and consequently a result or strategy is required. The harvest area is a second growth Douglas fir stand; poor Murrelet habitat. |
| 5.2.3 Water, Fish, Wildlife and Biodiversity within Riparian Areas (FPPR s.47-52) | • For each riparian class of stream found in and adjacent to the harvest area, the minimum riparian management area (RMA) width, riparian reserve zone (RRZ) width and riparian management zone (RMZ) width, on each side of the stream, are as per the table in FPPR 47(4).<br>• For each riparian class of wetland found in and adjacent to the harvest area, the minimum riparian management area (RMA) width, riparian reserve zone (RRZ) width and riparian management zone (RMZ) width, on each side of the stream, are as per the table in FPPR 48(3).<br>• A fish sensitive wetland is located 300m outside of the harvest area and outflows into stream 2. It has been classified as a W4 wetland as per FPPRs. 48.<br>• There are no lakes in or adjacent the harvest area, FPPRs. 49.<br>• Trees in the RRZ of streams 1 (S2), 2R1 (S2), 3 (S3), and 4R1 (S3) are planned to be cut, modified or removed for the following purpose(s):<br>o felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard;<br>o topping or pruning a tree that is not wind firm<br>o creating guyline tiebacks.<br>• Retention is not required along stream 4R2. Operators are to maintain stream bank or channel stability during harvest operations. All other streams are outside of the harvest area and have been given the required buffers. |

# CUTBLOCK AND ROAD SITE PLAN

| | |
|---|---|
| | • Riparian Management Area (RMA) road infringements:<br>- Weiner Connector RMA infringement of stream 5;<br>- W15-S2 RMA infringement of stream 1;<br>- W15-S4 and W15-S5 RMA infringement of stream 2R1;<br>- W15-S3 RMA infringement of stream 3.<br>All RMA infringements cannot be avoided as there are no other practical options for locating the road and or the road is required as a stream crossing FPPR 50(1)(a), FPPR 50(1)(b), FPPR 51(1)(c). |
| 5.2.4 Community Watersheds (FPPR s.8.2) | • The proposed harvest area is within the Sproat Lake Community Watershed.<br>• CWAP recommendations have been followed and assessments completed to ensure low to moderate material adverse hydrological effects will occur as a result of forest practices. |
| 5.2.5 Wildlife and Biodiversity – Landscape Level (FPPR s.64-65) | • The net area to be reforested is in accordance with the FPPR Sections 64 (less than 40ha) and 65 (it is not adjacent an existing cutblock). |
| 5.2.6 Wildlife and Biodiversity – Stand Level (FPPR s.66-67) | • Wildlife tree retention targets are in accordance with the results or strategy for the approved Sproat Lake Landscape Unit Plan Objective 2. (FSP s. 5.1.1b)<br>• No signs of bear dens or raptors nests were observed during field work. |
| 5.2.7 Cultural Heritage Resources (FPPR s.10) | • On December 20th 2012 Warren Lauder of the Hupacasath First Nations was emailed to begin the 30 day review process. On January 15th 2013 a second confirmation email was sent. It will be the responsibility of the licensee to ensure all First Nations parties involved are accommodated for and requirements are met.<br>• If, during harvesting, any evidence of traditional use or cultural heritage values is found within or surrounding the area crews are to cease work, notify the AVCF Manager and the Ministry of Forests Aboriginal Liaison Officer. |
| 5.3.1 Visual Quality Objectives (FPPR s.7 – GAR Order) | • A visual impact assessment was completed by Darren Hiller on April 12th 2013. The assessment shows that the VQO of partial retention is met. |

# CUTBLOCK AND ROAD SITE PLAN

## STOCKING STANDARDS

| SU | Standards ID | NAR (ha) | Biogeoclimatic Ecosystem Classification | | | | Regeneration Method | Preferred Species | Acceptable Species |
|---|---|---|---|---|---|---|---|---|---|
| | | | Zone | Subzone | Variant | Site Series | | | |
| A | 1028571 | 24.5 | CWH | xm | 2 | $01_{90}06_{5}07_{5}$ | Plant | Fd | Hw Cw Pw[22] |
| B | 1028571 | 6.1 | CWH | xm | 2 | $01_{90}06_{5}07_{5}$ | NA | Fd | Hw Cw Pw[22] |

([22]) Risk of white pine blister rust.

A post-harvest survey is required following harvest completion to satisfy annual reporting requirements.

Openings greater than 0.1 ha created during the harvest operation are to be mapped and regenerated following harvest completion.

| SU | Regen. Date (yrs) | FG Date Late (yrs) | MITD (m) | TSS (sph) | MSSp (sph) | MSSp (sph) | Min. FG Ht. by Species | | Crop Tree to Brush Ratio %) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Species | Ht (m) | |
| A | 3 | 11 | 2.0 | 900 | 500 | 400 | Fd<br>Hw<br>Cw<br>Pw | 3.0<br>2.0<br>1.5<br>2.5 | 150 |

| SU | Regen. Date (yrs) | FG Date Late (yrs) | MITD (m) | TSS (sph) | Tree Layer | Target (sph) | Minimum Preferred and Acceptable (sph) | Minimum Preferred (sph) |
|---|---|---|---|---|---|---|---|---|
| B | NA | NA | NA | 900 | 1 Mat.<br>2 Pole.<br>3 Sap.<br>4 Reg. | 250<br>500<br>700<br>900 | 150<br>300<br>400<br>500 | 150<br>200<br>300<br>400 |

## CRITICAL FACTORS AND REGENERATION COMMENTS

# CUTBLOCK AND ROAD SITE PLAN

**Harvesting**:

Block boundaries are established with orange flagging, orange tags, and falling corners. Boundary trees may be harvested when they are adjacent to an existing road or block. All other boundary trees should not be felled or damaged.

**Commercial Thinning**

A commercial thinning has been prescribed for three separate polygons within SUB, net area 6.1ha. The level of retention will be 272 st/ha or 155 m3/ha of merchantable timber, therefore removing half of the standing trees within SUB. The thinning will help improve the growth rate of the remaining stand by increasing growing space. It will also help to provide a visual screen for portions of the lookout trail network as well as act as an additional windthrow buffer for Weiner Creek and Creek 3. A field survey to insure these targets are met is required post thinning. No reforestation is required. A second pass involving the removal of the residual stand and reforestation is expected within 20-30 years.

**Remove:** 50% of all stems, 155 m3/ha or 272 st/ha. Trees to be targeted are the larger dominant trees, suppressed trees and trees with defect such as sweep, fork or crooks.

**Retain:** 50% all stems, 155 m3/ha or 272 st/ha. This equals an average distance between retained trees of 6.8m. Target co- dominate and intermediate trees with good form, vigor and sufficient live crown greater than or equal to 30%.

The prescription is to be implemented as dispersed removal/retention within SUB. The specific harvest method will be a ground based system. Harvesting details are to be determined in consultation with the logging contractor and the AVCF manager. All areas have gentle slopes and easy access from the Weiner Connector and AS12.

**Windthrow:** A windthrow assessment was completed by Meridian Forest Services on October 26, 2012. Block W15 has been assessed as having a moderate to low windthrow risk. The potential windthrow risk along Winner Creek has been mitigated by prescribing a commercial thinning treatment. The remaining edges are parallel or lee of the wind with a minimal risk. Due to the location of the trail network and the prescribed commercial thinning, it is recommended that a post-harvest windthrow/danger tree assessment is completed. See windthrow plan for further details.

**Recreation:** The Sproat Lookout Trail Network lies within the proposed harvest area, see map for locations. The trails appear to be active and well maintained. An effort was made during the layout phase to protect the recreational trails well improving access to the area for the public. Evidence of motorized vehicular use was also noticed along old road grades. Adequate signs are to be posted to inform the public user groups of active blasting, logging and hauling during operations. All harvesting and road operations are to maintain the integrity of the trail network where operationally feasible and insure no danger trees snags or debris is left on or surrounding the trails.

**Root Rot:** Significant root rot infection centers were identified in this block during fieldwork, see map for locations. Recommend de-stumping the northern root rot infected areas after the residue and waste survey has been completed. Other areas of root rot may exist, for these areas plant Cw and Pw.

**Coarse Woody Debris:** Retain a minimum of 4 logs/ha each being at least 5m in length and 30 cm in diameter at one end as per FPPR s.68

**Wildlife Tree Retention Areas:** WTRA totaling 3.8 ha have been designated for W15. This is equivalent to 12% of the total area to be harvested. There is additional area in the riparian reserve of Weiner Creek adjacent to the northern boundary that contains tree retention not designated as WTRA and not included in this calculation.

**Invasive Plants**: Broom occurs along sections of the highway and hauling roads on route to W15. Monitor and treat broom and other invasive species during early establishment. Grass seed exposed soil on or adjacent to roads, trails, and landing sites as soon as possible following harvest.

**Natural Range Barriers:** Natural range barriers do not apply to the proposed harvest area.

# CUTBLOCK AND ROAD SITE PLAN

**Regeneration:** Plant promptly following harvesting to minimize the potential need for future brushing treatments. Focus Cw on water receiving sites, in areas where Mb brush competition is noted and in areas of root rot infection; as indicated on the map. All Cw is to be coned as deer browse has historically been an issue. Plant Pw in identified areas of root rot. Areas within the commercial thinning polygons are not to be replanted. These areas must be surveyed within a year of harvest to meet the required stocking standards.

**Terrain Stability:** It was determined that a terrain stability assessment was not required, this was based on the following rationale:

- Slopes are less than 60% and average15% within the block;
- No gullies in the area;
- No current or previous signs of instability;

**Recommended Planting Prescription:**

| SU | NAR (ha) | Species | Percent (%) | Stock Type | Stems/ha | Total Stems |
|---|---|---|---|---|---|---|
| A | 24.5 | Fd<br>Cw<br>Pw | 70<br>20<br>10 | 415B or other<br>512A or other<br>415B or other | 840<br>240<br>120 | 14406<br>1176<br>294 |
| B | 6.1 | - | - | - | - | - |
| A more detailed planting prescription is to be completed during the Post-Harvest Assessment.<br>SUB is the prescribed commercial thinning area. | | | | | | |

| RIPARIAN MANAGEMENT | | | | | |
|---|---|---|---|---|---|
| Riparian Class of Feature | S2<br>S3<br>S4<br>S3<br>S3<br>S4<br>S4<br>S4<br>S4<br>FSF | Designation on Map | Stream 1 Weiner Creek<br>Stream 2R1<br>Stream 2R2<br>Stream 3<br>Stream 4R1<br>Stream 4R2<br>Stream 5<br>Stream 6<br>Stream 7<br>FSF 1 | Falling and/or Skidding or Yarding Across a Stream | No<br>No<br>No<br>No<br>No<br>Yes<br>No<br>No<br>No<br>No |

# CUTBLOCK AND ROAD SITE PLAN

Stream 1 is located adjacent to the North side of the boundary. Stream 1 is an S2 stream that has been defaulted to fish bearing. Coho Salmon were noted 830m downstream (FISS 1970 imap). A buffer of 30 meters or greater has been left on stream 9.

Stream 2 has been broken up into 2 reaches. Reach 1 is greater than 1.5m on average and defaults to an S3 creek. A 2m fish break was found and identified as a fish break where stream 2R1 intersects Weiner Creek. Reach 2 is less than 1.5m and connects to a swamp south west of the block. As it cannot be determined if the swamp is fish bearing stream 2 is being defaulted to fish sensitive.

Stream 3 is an S3 stream that is outside of the block. Along with the required riparian reserve zone, an additional buffer has been created by prescribing a commercial thinning adjacent to the creek.

Stream 4 reach 1 has been defaulted to fish bearing, it is outside the block. Ties were run during the field layout to insure the required buffer of 20m was given. A fish break was identified in the field creating a second reach. Stream 4 reach 2 is a small S4 none fish bearing creek within the setting. A fall away bridge leaner prescription has been given for the creek to ensure operational feasibility.

A Fish Sensitive Feature in between the falling boundary of FC 32 and FC 33 and the west side of spur W15-S4 has been identified. Machine free ribbon has been hung around this feature in the field to ensure sedimentation is minimized to the fullest extent and the potential fish habitat is maintained.

All other creeks have been classified as non-fish bearing S4's. They are within a community watershed with stream widths less than 1.5m, have a low transportation potential and are outside of the proposed harvest area.

**Retain cedar and non-merchantable stems within the RMZ where operationally practicable.**

**RPF SIGNATURE AND SEAL**

**Prepared By:** Andrew Kenyon
Name (Printed)

**Signing RPF:** Andrew Kenyon
RPF Name (Printed)

29/04/13
Date Signed (dd/mm/yy)

4739
RPF Number

REGISTERED PROFESSIONAL FORESTER PROVINCE OF ANDREW KENYON BRITISH COLUMBIA NO. 4739

Andrew Kenyon 2013.04.29 09:34:51 -07'00'

RPF Signature and Seal

*"I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the work."*

# SITE DEGRADATION ESTIMATE

**A: DESCRIPTION OF AREA**

| TENURE |
|---|
| AVCF |

| CP |
|---|
| 04 |

| BLOCK | Ha |
|---|---|
| W15 | 41.7 |

B: Natural Non-Productive

| Type | Ha |
|---|---|
| CREEK | 0.00 |
| SWAMPS | 0.00 |
| SLIDES | 0.00 |
| ROCK OPENINGS | 0.00 |
| OTHER / RESERVES | 0.00 |
| | Total NNP 0.00 |

**C: UNNATURAL NON-PRODUCTIVE (before Rehab.)**

| Type | START | END | AMOUNT | LENGTH (M) | SLOPE | WIDTH (M) | Ha | % |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| **Weiner Connector** | 819 | 973 | 1 | 154 | 15 | 6 | 0.09 | 0.22 |
| | 973 | 1289 | 1 | 316 | 15 | 12 | 0.38 | 0.91 |
| | 1289 | 1371 | 1 | 82 | 15 | 6 | 0.05 | 0.12 |
| | 1371 | 1764 | 1 | 393 | 8 | 12 | 0.47 | 1.13 |
| **W15-S1** | 0 | 218 | 1 | 218 | 10 | 12 | 0.26 | 0.63 |
| **W15-S2** | 0 | 34 | 1 | 34 | 5 | 12 | 0.04 | 0.10 |
| **W15-S3** | 58 | 98 | 1 | 40 | 15 | 6 | 0.02 | 0.06 |
| | 98 | 213 | 1 | 115 | 15 | 12 | 0.14 | 0.33 |
| **W15-S4** | 0 | 50 | 1 | 50 | 8 | 12 | 0.06 | 0.14 |
| | 118 | 440 | 1 | 322 | 10 | 12 | 0.39 | 0.93 |
| **W15-S5** | 0 | 145 | 1 | 145 | 10% | 12 | 0.17 | 0.42 |
| **AS12** | 1148 | 1246 | 1 | 98 | 10% | 12 | 0.12 | 0.28 |
| | 1293 | 1347 | 1 | 54 | 5% | 6 | 0.03 | 0.08 |
| | 1382 | 1805 | 1 | 423 | 10% | 12 | 0.51 | 1.22 |
| | 1805 | 1880 | 1 | 75 | 10% | 6 | 0.05 | 0.11 |
| | 1880 | 2074 | 1 | 194 | 10% | 12 | 0.23 | 0.56 |
| | 2074 | 2099 | 1 | 25 | 10% | 6 | 0.02 | 0.04 |
| **Landings** | - | - | 6 | 15 | 10 | 5 | 0.05 | 0.11 |
| **Totals** | | | | | | | 3.07 | 7.37 |
| | | | | | | | | |
| | | | | | | | | |

**D: SUMMARY**

| TYPE | Ha | % |
|---|---|---|
| GROSS AREA | 41.7 | 100 |
| NATURAL NON-PRODUCTIVE AREA | 0.0 | 0.00 |
| UNNATURAL NON-PRODUCTIVE AREA | 3.1 | 7.4 |
| REHABILITATION AREA | 0.0 | 0.00 |
| NET AREA TO BE REFORESTED | 30.6 | 73.4 |

**E: COMMENTS:**

**PREPARED BY:** A. Kenyon **DATE:** 23-April-2013

**Appendix 8: Block W15 Site Plan Map**

ALBERNI VALLEY COMMUNITY FOREST

**SILVICULTURE INSTRUCTIONS MAP**

# Cutblock: W15

Forest Region: Coast
Forest District: South Island
Land District: Barclay
Cascades: West C
Tenure: K2D
Geographic Coordinates:
Lat: 49° 17' 51"
Long: 125° 00' 44"
Author: B. Bayley
Map Date: 16-Jan-2013

Scale: 1:5,000

N

Datum: NAD83
Mapsheet: 92F.025
Map Revision: 1a
Revised Date: 04-Apr-2013

**SAFETY COORDINATES:**
**Lat: 49° 17' 51"**
**Long: 125° 00' 44"**

## Due Diligence

Two falling corners and/or road stations must be referenced in the field with the release map on a continual basis before, and during the felling of any timber within this setting. If you are unsure of your location, Stop Work and call a supervisor.

## Forest and Range Practices Act

*How to follow plan:*
1) Always read and understand your plans and maps.
2) Always match your plan and map to what you find on the ground and then check that you can do the work.
3) Stop and ask if you cannot follow the plan and map.
4) Know your responsibilities. Ask if you are unsure.
*Due Dilligence means following these steps.*

**Timbermarking requirements:**
**All decked timber must be sufficiently marked (at least 10%) when the setting is inactive.**

## MAP LEGEND

**Boundary Features:**
Falling Boundary
Heli Splitline
Adjacent Block-Planned
Harvested
Legal Boundary
Pruning
Feathering

**Road Features:**
Built Road
Deactivated Road
Proposed Road
Backspar Trail
Access Trail
Bridge
Road Station
Existing Culvert
New Culvert
Culvert to be replaced

**Natural Features:**
Windthrow
Snag
Swamp
Slide
Rock Bluff
Karst Feature

**Resource Features:**
Hazard
Single Tree Retention
Monumental Cedar
Archaeological Feature/CMT
Quarry/Gravel Pit
Bear Den/Bird Nest
Helipad/Service Landing
Index Contour
Intermediate Contour

**Riparian Features:**
Fish Streams (S1-S4)
Non Fish streams (S5, S6)
Unclassified Creek
Non Classified Drainage
Gully
FSZ Stream
Reach Break/Fish Barrier
Stream ID

**Lakes/Wetlands:**
Lakes Class 1, 2, 3, 4
Wetlands Class 1, 2, 3, 4, 5

**Sensitive and Designated Areas:**
Wildlife Tree Retention Area
Timber Leave Area
Special Management Zone

**Field Marking Standards:**

| Activity | Ribbon | Paint |
|---|---|---|
| Falling Boundary | FALLING BOUNDARY | |
| Internal Boundaries | FALLING BOUNDARY | |
| Reconnaissance Lines | | |
| Traverse Stations (All) | | |
| Cruise Strips / Plots | | |
| Road Location | ROAD LOCATION | |
| Culturally Modified Tree | CMT | |
| Landings / Tower Settings | | |
| Deflection Lines | | |
| Streams | | |
| Reserve Zones (All) | FALLING BOUNDARY | |
| Management Zones (All) | | |
| Reserve Trees (Painted) | L | |

| Riparian Class | RMZ | RRZ |
|---|---|---|
| S1 | 20 | 50 |
| S2 | 20 | 30 |
| S3 | 20 | 20 |
| S4 | 30 | 0 |
| S5 | 30 | 0 |
| S6 | 20 | 0 |
| W1 | 40 | 10 |
| W2 | 20 | 10 |
| W3 | 30 | 0 |
| W4 | 30 | 0 |
| W5 | 40 | 10 |
| L1 | 0 | 10 |
| L2 | 20 | 10 |
| L3 | 30 | 0 |
| L4 | 30 | 0 |

**HAZARD ALERT**

1) A rock fall hazard has been identified and workers must be made aware of this.

| SU | Stocking Standards | BEC Zone | Subzone | Variant | Site Series | | Area (ha) |
|---|---|---|---|---|---|---|---|
| | | | | | Dominant (SS) | Related (SS-%) | |
| 1 | 1028571 | CWH | xm | 2 | 01 | 06(5) 07(5) | 24.5 |
| 2 | 1028571 | CWH | xm | 2 | 01 | 06(5) 07(5) | 6.1 |
| | | | | | | | 0.0 |
| | | | | | | | 0.0 |
| Net Area to be Reforested | | | | | | | **30.6** |
| Timbered Leave Areas | | | | | | | 4.2 |
| Wildlife Tree Retention Area | | | | | | | 3.8 |
| Permanent Access Structures (Roads) | | | | | | | 3.1 |
| | | | | | | Total Area Under Prescription: | **41.7** |

**Silviculture Instructions**
SU A
SU B
SU C
SU D
SU E
Partial Cut Area
PAS/Roads
Sensitive Soils

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