# Cheakamus Community Forest K3V Squamish Forest District

Backgrounder for Interpretation and in Support of the



July 23rd, 2010

Prepared by T.Cole

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## **Cheakamus Community Forest K3V**

Formally signed in April 2009 the Community Forest Tenure provides forest management opportunities and obligations for almost 30,000 ha surrounding the Resort Municipality of Whistler.

Initial harvesting rights are for up to 20,000 m3 per year based on an estimated Timber Harvesting Land Base of more than 6,000ha.

The Cheakamus Community Forest Society (CCFS) is made up of three equal partners represented by 2 directors each; The Lil'wat First Nation-The Squamish First nation and The Resort Municipality of Whistler. Under a society charter this Board provides the management direction for the Forest.

Community engagement will occur with support from the RMOW, including the use of the RMOW Information Website, venue and notifications. Annual forums to engage public, interest groups and stakeholders on all management issues will occur. Annual harvesting plans will be only a part of this community participation.

Richmond Plywood Corporation Limited has been engaged by the CCFS to be the operational managing partner to implement the primary forest management activities only. Richply also provides to the Society the upfront capital and management resources while sharing any proceeds (if any) with the society.

Annual harvesting plans and priorities are reviewed by the CCFS with the timing and activity carried out under short term contracts assigned by Richmond Plywood Corporation Ltd.

Coordination with Whistler Fire Department and RMOW to implement treatments under the Community Wildfire Protection Plan is a priority. Selection of treatment areas will done solely through the Fire Chief. Operational leveraging may be used in the Fuel Modification Areas and areas within of Targeted Fuel Types within the Interface Zone (FDU) when road modification are necessary to facilitate stand treatments. Timber volumes, if any, recovered under these treatments will be applied to the K3V annual harvest volume when recovered within the K3V area, marketed from the Intrawest-Commercial Recreation Area or Urban forested areas of the RMOW. Products from the Fuel Reduction Program (CWFPP) will be marketed as logs or used in the support of the RMOW Waste Management Composter.

## 1. FSP Structure and supporting documentation:

#### Preamble

Forest Stewardship Plans are a departure from the historical Forest Development Planning process. This new planning initiative deviates from spatially assigning roads and cut-blocks within an operating units, to a plan that indicates areas that will not be harvested or affected by road development, or if harvesting or road development is to occur, outlines the obligations of the forest tenure holder to carry out in the planning and implementation of road and harvest development.

Also, the results and/or strategies of the FSP define the commitments CCF will abide by to meet those objectives set by government. These forest practice "rules" are applied to meet timber and non-timber objectives and to meet social considerations in forest management. These "rules" when applied to field and planning practices are the basis for judgment of performance and compliance.

This document is meant to be dynamic. Changes over the life of the plan through amendments are anticipated. As new inventories of forest values, society's demands over land use, and resource features are identified, as well as other elements yet to be determined, this plan will be altered to reflect them. Objectives are defined by Government and new objectives assigned after the establishment of this plan will be amended accordingly.

One intent of this amendment process is to allow for innovation to occur in practices as both the proponent and Crown obtain more experience with the "results based" approach to forest management.

## Backgrounder:

The Backgrounder Document is provided to expand the understanding of the Forest Stewardship Plan outside of the legal regime of the Forest and Range Practices Act. It is supplementary to the FSP Document and Map provides the reader and/or statutory decision maker necessary or useful information and rationales used to define and craft a result or strategy (measures) t.

Since Forest and Range Practices Act was designed to be non-prescriptive this background document provides a forum to expand and explain a result or strategy or stocking standard used in the Forest Stewardship Plan Document.

## Forest Development Units:

FDUs were chosen to mirror "management units", subsets of the forest with similar land use designation or physiographic regions (watersheds). These management units can provide a basis for further analysis to meet Ecosystem Based Management goals.

In addition, the Community Forest will have numerous user groups who will need a readily named geographic areas in which to reference planned or ongoing "activities, interests, access etc".

Four FDU's are further subdivided into "Fuel Modification Areas" which are intended to focus forest management activities in order to provide landscape level primary community fuel break in the north and southern areas adjacent to the main urban areas of the RMOW. The INTERFACE FDU includes all areas between the north and south Fuel Modification Areas, including the URBAN portion of the RMOW (Private and developed properties outside of the K3V forest) and those under the Commercial Recreation Area-Intrawest. The Interface FDU is designed in anticipation of Government's streamlining in their ability to authorize fuel management projects throughout, (Cutting Authority, Licence to Cut or through other enactments). In addition the Old Forest Representation found within the RMOW Urban and CRA-Intrawest are intended to support the total forest protection measures to of Forest Ecosystem Management.

## 2. Other Planning Documents for the K3V Forest

The K3V community forest tenure has been a "vision" for local forest management control and has a number of guiding documents developed outside the legal *Forest and Range Practices Act* framework.

- i. Whistler 2020
- ii. Forest Management Plan for K3V
- iii. Interim Ecosystem Based Management Plan
- iv. RMOW Wildfire Risk Management System
- v. Community Wildfire Protection Plan
- vi. Planning Hierarchy for the K3V Forest
- vii. RMOW Protected Area Network
- viii. Whistler Interpretive Forest Objectives
- ix. Local Recreation Use Plan
- x. ILMB Motorized and Non-motorized Zones
- xi. WORCA Trail Inventory

## 3. FSP Commitment(s)

## 3.1 Voluntary Measures for Higher Level Strategic Planning – STS LRMP

Declared in April 2009 the LRMP document provides direction and objectives. However until these objectives are defined by Ministerial Orders they are not within the legal realm of the FRPA. Areas prohibitions have been enacted (Conservancy, Wild lands and Cultural Management Areas). Other objectives and directions have not.

The K3V\_FSP has attempted to provide the District Manager-MoFR, Society Directors, Community of Whistler and other stakeholders with specific measures towards the full implementation of the STS-LRMP objectives. Whether finally initiated by ILMB or not.

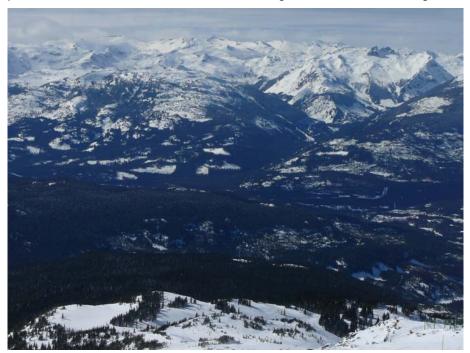
#### CCF-STS-01

The CCF\_K3V at a minimum will have at least one open house to provide a forum for general community and public review of planned harvesting, road and trail construction, and maintenance and fuel treatments. The K3V Society will develop a process to include Commercial and Non-commercial recreation users in meeting the Whistler 2020 vision. The two First Nations partners have also shown interest to expand non-timber forest product for both commercial and non-commercial consumption.

#### CCF-STS-02

The Frontcountry Zone \_LRMP2009 and existing declared Scenic Area is thought to closely overlap one another. Further direction is anticipated with the updated Landscape Sensitivity Analysis for the Frontcountry Zone under the LRMP.

The Silviculture Strategy written as part of the K3V Forest Management Plan provides direction on the type of harvesting by forest type. Small openings, variable dispersed retention and shelterwood type systems will be the norm. As viewed by the public from atop Whistler-Blackcomb these harvest systems will by default provide the scale commensurate with matching the natural and existing variability on this landscape.



SW view from Whistler Peak 2009 - Existing Winter Contrast

It is anticipated that **Visual Assessments** and **Terrain Models** will rarely be required. Adjacency issues will be assessed at the **Compartment** level with consideration of a total forest management chance design. Experimentation with "immediate foreground" is required based on stand types, ages and treatments.

Viewpoints are indicated atop Whistler-Blackcomb and the most restricting viewpoints will be used along the



Random picture- Callaghan Rd 2009

#### CCF-STS-03

The following Data Analysis has used the recently completed TEM for all three Landscape Units. Rare Forested Ecosystems have been identified as those with <2% occurrence. Furthermore 2 forested ecosystems that are regionally unique have been identified and included in the Result.

#### DATA ANALYSIS (SOURCE B. GREEN MSC APRIL 12, 2010)

The complete TEM database for the three LU's was assessed for ecosystem rarity as this is a good source of sub-regional data that is representative of the CCF area. Analysis was relatively straight forward.

- Calculate the area of site units (site series plus other units not recognized in the BEC system) in each polygon component
- Sum the areas of each site unit by biogeoclimatic unit. This method accounts for all polygon components.
- Rank the site units by descending area for each biogeoclimatic unit.
- Determine site units that are naturally rare. Rarity is scale-dependent. In this case, the 137,000 ha covered by the 3 LU is a reasonably sized sub-regional area on which to assess ecosystem rarity. The area is delineated by natural boundaries which is preferred over administratively-defined areas. In the latter case, ecosystem rarity may be "administrative" rather than natural.
- I was unable to find any clear guidance on what is considered "rare". I did find reference to defining rarity in notes from an Old Growth Representation Workshop of the EBM Working Group (Feb, 2007). One approach mentioned was considering ecosystems < 2% of a landscape unit as being "truly rare". In reviewing our data, this seemed like a reasonable cutoff.
- The following table summarizes the information for the dominant forested BGC units (CWHms1, MHmm2). Site units with green highlight are forested. Blue and red highlights are site units that can support blue and red listed plant communities, respectively. The heavy line shows the 2% cutoff by ranked area.
- Naturally rare forested ecosystems in the CWHms1 include RC (11), SS (07), HQ (05), CD (08), CW (09), and LS (10). The two red
  listed communities are included.
- Naturally rare forested ecosystems in the MHmm2 include YC (09), AB (04), MD (06), YS (08)

CWHms1	Area	%	Forest
AM	20176.98	45.205%	Υ
DF	7253.83	16.252%	Υ
AD	3408.37	7.636%	Υ
DK	2535.80	5.681%	Υ
AO	1889.25	4.233%	Υ
TA	1688.73	3.783%	N
AH	1144.14	2.563%	N
LA	997.91	2.236%	N
UR	854.60	1.915%	N
RC	548.62	1.229%	Υ
RO	429.23	0.962%	N
GB	350.76	0.786%	N
OS	334.17	0.749%	N
NTA	294.33	0.659%	N
SS	281.05	0.630%	Υ
PL	274.27	0.614%	N
HQ	251.81	0.564%	Υ
RI	234.58	0.526%	N
CD	216.88	0.486%	Υ
SK	206.02	0.462%	N
FE	186.03	0.417%	N
GC	161.25	0.361%	N
LU	132.41	0.297%	N
RZ	129.81	0.291%	N
GP	76.11	0.171%	N
ES	70.37	0.158%	N
PD	68.58	0.154%	N
CW	66.23	0.148%	Υ
AA	63.31	0.142%	N
OW	51.56	0.116%	N
LS	43.98	0.099%	Υ
GT	35.24	0.079%	N
EX	32.79	0.073%	N
RU	31.17	0.070%	N
LO	29.34	0.066%	N
OF	28.32	0.063%	N
BU	27.70	0.062%	N
RN	19.61	0.044%	N
AS	5.50	0.012%	N
RS	1.71	0.004%	N
СВ	1.06	0.002%	N
SU	0.83	0.002%	N
Total	44634.25	100.000%	

MHmm2	Area	%	Forest
MB	18809.58	46.664%	Υ
MT	3757.63	9.322%	Υ
MM	3714.62	9.215%	Υ
AH	2090.40	5.186%	Ν
TA	1812.19	4.496%	N
YH	1395.39	3.462%	Υ
RO	1018.39	2.526%	N
YB	881.87	2.188%	Υ
AA	880.58	2.185%	N
FR	836.36	2.075%	Υ
AS	781.00	1.938%	N
FH	537.46	1.333%	N
YC	488.25	1.211%	Υ
МО	452.59	1.123%	N
SK	443.49	1.100%	N
MR	418.76	1.039%	N
AB	268.05	0.665%	Υ
FE	247.40	0.614%	N
BV	170.81	0.424%	N
MD	168.30	0.418%	Υ
AM	156.43	0.388%	N
RU	152.76	0.379%	N
BA	114.65	0.284%	N
SM	106.64	0.265%	N
YS	105.71	0.262%	Υ
LA	83.96	0.208%	N
GB	66.64	0.165%	N
PD	62.00	0.154%	N
RI	57.57	0.143%	N
AK	54.51	0.135%	N
WP	38.75	0.096%	N
ES	38.06	0.094%	N
os	36.41	0.090%	N
MN	30.07	0.075%	N
OW	13.31	0.033%	N
MP	8.55	0.021%	N
LU	5.36	0.013%	N
RZ	3.22	0.008%	N
CL	0.87	0.002%	N
Total	40308.60	100.000%	

#### CCF-STS-04

The two Cultural Management Areas cover 2,651ha and 2,172ha respectively. Forest harvesting in these two **Management Units** is still a permitted activity. The **Whistler Interpretive Forest** (WIF) now covenants the Cheakamus FDU and Cultural Management Area component. The Objectives of the WIF are found in Appendix of the FSP and a Result CCF-STS-07 was developed in absence of the Provincial Government to assist Interpretive Forests objectives.

#### CCF-STS-05

Direction of the **STS\_LRMP** policy indicates a "high biodiversity emphasis" and a revised **Landscape Unit** boundary for the Whistler corridor (not defined). Revisions to the declared and draft landscape unit plans are pending. Direction in the LRMP indicates a target of 19% old and mature forests to be retained. The direction of the Community Forest has been set at >30% old forest protection. During public review and comments from the Forest and Wildlands Advisory Committee – a RMOW Council appointed group requested that other objectives from the LRMP policy be added within the FSP.

Discussion on the implementation of an Old Forest Conservation Project has now been legally inserted to ensure such a process occurs in short order. The target of 19% old and mature will not limit the short term harvesting opportunities given the current areas of moderate to high protection (Wildlands, Parks and Conservancies. The addition the old forests remains within the Timber Licence A830 will provide contribution as they are now under the control of the CCF.

Meeting a target of >30% forest protection may best be served by analyzing the total FDU area (Total Physiographic Landscape Area). Incorporating those known areas of old forest, mature forest and recruitment forest from within the Urban and CRA-Intrawest areas. The RMOW has limited future growth potential due to nodal urban development and the value attributed to old forest within the CRA is well understood and at little risk of liquidation. Risk to the identification of these forests areas for landscape level representation is considered low even though provincial and FRPA protection measures are not available.

#### CCF-STS-06

A number of comments received by stakeholders and public indicated that there is no government objectives set by regulation for Recreation. Given the focus of the tourism economy in the region and the roughly 2,500 member Whistler Off Road Cycling Association, the request to have some legal requirement to acknowledge the existing trail systems has been considered. The use of a generic term, **Defined Recreation Element** has been used to capture all the potential recreation interests. Many will only be known during the consultation stages of forest planning, or during field planning that encounter an existing feature. Confirming the actual expectations and acceptable alteration of forests around existing trails is a primary focus of the community referral and planning process.

## 3.1.1 Current Legal Objectives that apply to Plan Area

#### CCF-WIF-01

The Whistler Interpretive Forest was legally established with Objectives in Nov. 1999 and a request from MoF to provide a measure for that objective was added during review.

There are no funding sources for Interpretive Forests at this time. Maintaining the existing interpretation opportunities, public access and recreation infrastructure was thought important part of these objectives. Therefore primary forest activities planned for the WIF area is the only means of fulfilling this measure. Planning, design and implementation of various harvesting systems may provide extension opportunities to the public. Developing an interactive "harvesting plan" in affiliation with Forest and Wildland Advisory Committee (FWAC) using the RMOW website – Community Forests, may be a cost effective method of explaining integrated forest management decision making. These strategies are therefore subject to actual implementation.

The overlap of First Nation Cultural Management Area may provide additional interpretation if agreed to under a collaborative effort by both First Nations. ILMB has stated that there is no further assistance to develop a Cultural Heritage Resource Plan or Inventory for the Cultural Management Areas.

Current access issues regarding the location and proximity of the Cheakamus east FSR and the new Cheakamus Crossing residences is an issue that will need to be resolved in the short term. All other access requires inventory and will be part of the Community Forest Road Atlas.

#### Order to Establish Objectives for the Whistler Interpretive Forest in the Squamish Forest District

Notice is hereby given that, pursuant to Section 6(3) of the *Forest Practices Code of British Columbia Act*, objectives for the following Ministry of Forest's interpretive forest site are to be established effective *November 20,1999*:

Whistler Interpretive Forest Site, Project 16660-20-6264

The objective of the Whistler Interpretive Forest Site is to provide forest interpretation and education opportunities, while demonstrating integrated resource management. Forest resources, including public recreation, fish, wildlife, timber, forage, water, soil and landscape aesthetics will be managed using a comprehensive planning process. Ecosystem biodiversity will be managed at the landscape level with particular attention given to the conservation of riparian and meadow areas. Forest recreation will be managed for non-motorized and rural recreation experiences. Seasonal two wheel drive access, on designated roads, will be permitted. Opportunities for a wide variety of recreational activities will be available. Roads and day use facilities will be managed for harvesting, utilizing various silvicultural systems. Forest interpretation activities and education on local ecosystems and forest practices will be provided through brochures, self guided interpretive trails and signage.

Paul Kuster

District Manager, Squamish Forest District

Dated November 25, 1999

#### 3.2 OBJECTIVES SET BY GOVERNMENT FRPA S149

### **CCF-SO-01**

**Compartment** level planning will permit assessment of the existing historic disturbances and the permanent access structures needed for pending harvest. Recreation use and needs are also better identified at that scale. Levels set under Section 36 of FPPR will be considered a maximum level at a Compartment unit. Compartment level planning provides efficiencies to the legal authorization to remove, deactivate and reforest historic access structures, and other not needed disturbances.

The CCF when ever funds are available should resolve historical disturbances and reduce to the extent possible the total amount occupied permanently by roads, landing and other disturbed non-forested areas. The four year planning cycle for each compartment is thought reasonable to undertake assessment and implement remediation efforts. Any long term access road required for recreation or future forest management will be covered by a road permit amendment at the expiry of the Compartment Cutting Authority.

#### CCF-TIM-01

**Federal Firesmart** funding directed to those stands identified in the RMOW Community Wildfire Protection Plan require leverage by the CCF Harvest Planning resources. A preliminary approach has been to focus all federal support to only those hazardous fuel types within the INT FDU.

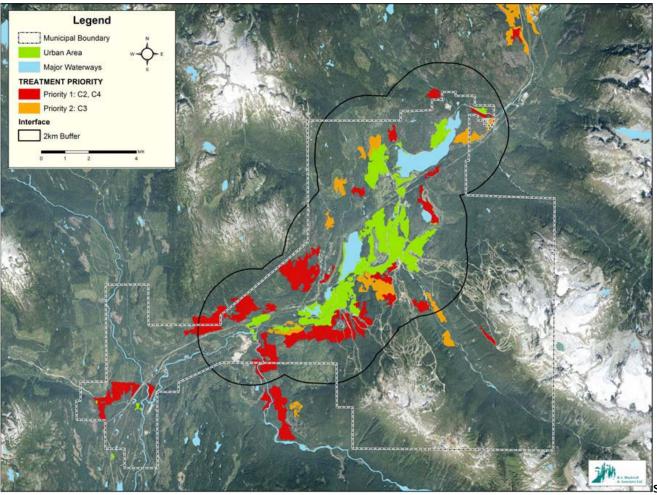
Primary forest activities within the INTEFACE FDU will be subject only to those **Targeted Fuel Types** selected for treatment by the RMOW Fire Chief. The CCF Resources would be used only if it is deemed effective to improve existing access. Cost recovery for those improvements would be considered. (E.g. Removing roadside fuels through commercial harvesting, to an extent needed to offset development upgrade costs to remove the fuels).

Outside of the Interface FDU and in order to plan a defensible **Community Fuel Break**, a combination of commercial harvesting and other forest management activities are planned within the **Fuel Modification Areas** (FMA) outside of the Interface FDU. The location and orientation of the four Fuel Modification Areas were selected based on orientation, adjacency and ability to perpetuate resource road access. Although improvements and modifications to the existing roads and access may be required these areas are relatively unencumbered by residential neighborhoods. These include the two TELUS access roads, existing non-status roads and recreation use roads (now high use recreation trails).

It is not the intent to modify fuels on the entire FMA, rather upon further inventory and assessment a series of commercial harvested "shaded fuel breaks" and other retention type forest harvesting are intended to provide an initial defensible landscape level fuel break. The need for a validation model of fire behavior in and adjacent to these FMAs will be pursued if funding is available. These may select less than optimal forest types to plan interventions, but may also indicate early stand management options to reduce future fuel type threats.

It is well documented that a Community Fuel Breaks within the FMAs will require future obligations to remove fuel buildup and will therefore require commitments to the permanent resource road access.

Further, within these FMAs there is a commitment to enhance utilization to roadside, remove post harvest slash disposal and lower post harvest regeneration stocking levels. A forested landscape fuel break will be planned in conjunction with the use of existing physical features (roads, power lines, non-forested, deciduous forest types).



RMOW\_Community Wildfire Protection Plan 2005

Access Partial Harvesting is the concept of removing roadside accessible timber under a partial cutting regime. It application in re-establishing historic resource road access in the INTERFACE FDU may full-fill two objectives. Establishes a linear shaded fuel break and provides an ability to recoup low cost timber to offset anticipated road improvement expenses. Other applications of this type of harvesting may occur within other FDUs in constrained but currently accessed forest types. Examples such as forested rock, forested talus and riparian management zones may be available for this concept. Stocking standards in this plan provide the flexibility based on whether the retained trees are permanently retained, planned for future removal or contribute to current stocking objectives.

#### CCF-TIM-02

Verification of sustained yield of timber from this forest may best be pursued under a 3<sup>rd</sup> party certification regime. There is no doubt the K3V has a very high degree of land-based constraints. Issues that will need to be resolved before any **Timber Supply Forecasts** can be accomplished include:

- Cultural Management Area contributions;
- Yields if any, from within the Interface FDU;
- Old forest conservation targets, recruitment and contribution from outside K3V forest;
- Recreation Trail expectation with regard to timber harvesting, adjacency and access;
- Growth impacts from permanent over story retained basal area;
- Carbon Sequestering initiatives and extended Rotation age.

An "annual area harvest" approach should be considered for the K3V forest or for particular Management Units identified within. Only through actual implementation can the actual Harvestable Land Based Area be defined. A Forest Management Plan commitment to review AAC within 5 years may be premature and therefore the result provides other options to the DDM on this commitment. 10 years may be more appropriate timeline for a Timber Supply Review commitment given historic wood product business cycles.

### CCF-WILD-01/02 Ungulate Winter Range

UWR have been established for Goat, Deer and Moose within the TSA. Normally no forest development activities would be planned within Retention Winter Ranges. Rotation Winter Ranges have limited timber harvest opportunities, none are currently established within the K3V but may be considered with the prospects of First Nations aspirations within two Cultural Management Areas.

## **CCF-WILD-03 Grizzly Bear WHAs**

WHAs are recently established and incorporated into this plan and FSP map.

## **CCF-WILD-04 Coastal Tailed Frog**

The recognized WHA candidate acknowledged by other Licence Tenures, just south of the BREW FDU is shown on the FSP Map and in part meets the Section 7 notice for the District.

In addition, the intended RESULT of assigning additional tree retention from a "Major Stream" designation, will be assigned on those permanent hill slope streams, dominant on the landscape that are feed continuously year round from alpine areas. It is hoped that extrapolation from those system currently known to contain Coastal Tailed Frogs would be used for the identification MAJOR S5 or S6 system rather than physical sampling requirements. Refer to CCF-RIP-02.

### CCF-WILD-06 Spotted Owl Habitat in SRMZ #19 and #20

The K3V forest contains portions of SRMZ #19 and #20. A resource management plan has not been prepared and was exempted in the Strategic Component Nov. 1997. The 67% suitable habitat target was also not required for these SRMZ. However, past experience of operational guidelines components was carried out by Richply. Offering 40 of the largest 80 TPH to remain standing, was a key operational approach to maintaining structural attributes. It is considered prudent to have a qualified professional review at the Compartment Level the harvest opportunities and requirements of maintaining or enhancing habitat.

#### CCF-LU-01 Biodiversity and Wildlife Resources (Landscape Level)

Compartment level planning will provide options to incorporate adjacency under the direction of the Forest Management Plan\_Silviculture Strategy written and approved by the MoF for the K3V forest. Opening size under a clear-cut even aged regime is voluntarily limited to 10ha, and more frequented 5ha.

#### CCF-LU-02/03 Biodiversity and Wildlife Resources (Landscape Level)

Until such time as the Landscape Units are amalgamated and an "old forest conservation" project completed, **Old Forest** protection within the K3V Forest will be carried out by the following:

- 1) Recognizing all legally established OGMA provided in Ministerial Order for the Soo LU.
- 2) Acknowledgement of other spatial constraints containing old forests under Wildlife Orders, Wild lands and contributing Parks, Wildlands and Conservancies.
- 2) Defining and retaining all potentially "high value" old forests less than 800m in elevation when directly adjacent to the major waterways found in the forest as shown on the FSP map (Blue Highlight).
- 3) Identifying "Old Forests" within the Compartment Plan that can be permanently retained or define areas in the Compartment that can be used as old forest recruitment options due to known constraints.

It is expected that the revised Landscape Unit Plans when put into effect the CCF-LU-02 and CCF-LU-03 would be amended.

Major valley bottom water ways have all been accessed adjacent by either railway, roadway, logging road, historic use or recreation trails. In the unlikely event that no "access" is actually adjacent, then 200m distance will be used from river-bank edge to define this zone. This conservative RESULT will ensure that **Old Forests** containing potentially large veteran Douglas-fir remain on the landscape and can be inventoried under the "old forest conservation project" yet to be completed. It is also believed by the author that the **Riparian Recreation Corridor** defined in the plan has the greatest opportunity for Recreation priorities (commercial or not).

Email Com J. Hammons:

I dusted off the GIS database that DR System and BCTS produced for us for our earlier community forest work. It was for a larger community forest so I had to cut it down to the present CCF boundary. It may not be current, but should be close enough for now.

It short, this database identified 1,584 hectares in the CCF Riparian Reserve Zone (RRZ) using FRPA definitions. Out of that, 580 hectares are in age class 9 (old) with the split between productive and non-productive being 475 and 105 respectively. The legal UWR polygons had no RRZ age class 9 area. The Soo legal OGMA had 19 productive hectares in RRZ, age class 9 (an overlap). The Callaghan and Whistler draft OGMAs had 99 productive and 1 non-productive hectares in RRZ, age class 9 (an overlap again). I have the shapes if you need them. Hope this saves you some work. John Hammons RPF

## **Current analysis of the amount of Old & Mature Forest are as follows:**

Source: Interim Cheakamus Community Forest EBM Plan 2009

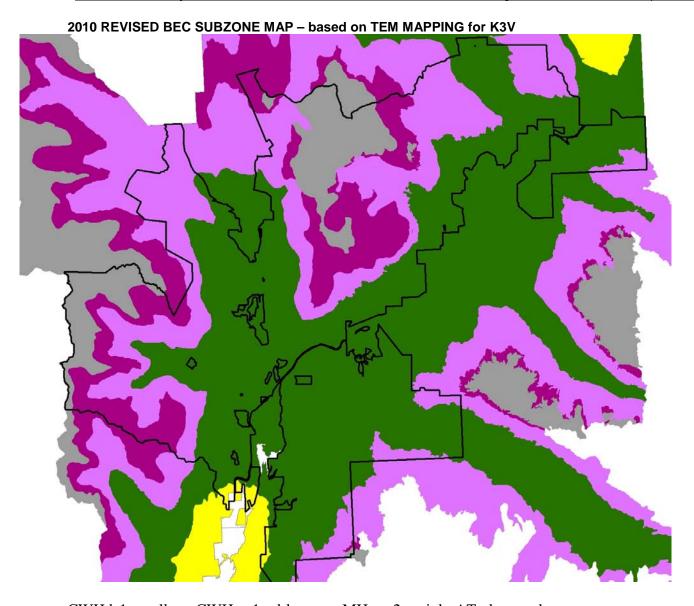
Table 16 Total Old

BEC variant	Total Area (ha)	Total Productiv e Area in CCF (ha)	Total Old & Mature (ha)	% of BEC variant Prod. with Old & Mature	Total Old & Mature in Protected Areas (ha)	% of BEC variant Prod. with Old & Mature Protected
CMAunp	5,535	151	131	87%	90	60%
CWHds1	1,414	1,186	330	28%	107	9%
CWHms1	18,594	16,437	8,525	52%	2,512	15%
ESSFmw	113	111	111	100%	0	0%
MHmm2	7,190	3,918	3,320	85%	1,039	27%
Totals	32,846	21,802	12,416	57%	3,747	17%

#### CHEAKAMUS COMMUNITY FOREST AREA SUMMARY (2009 with TLs)

	<b>EARLY</b>	MID	MATURE	OLD	FOREST	NON-FOREST	<b>Grand Total</b>
CMA	11.9		52.7	166.6	231.2	2,718.5	2,949.6
CWHds1	8.7		157.1	0.6	166.4	18.1	184.5
CWHms1	5,871.2	860.3	2,322.1	5,998.1	15,051.8	1,472.1	16,523.9
MHmm2	621.7	387.7	733.7	5,244.1	6,987.2	1,141.7	8,128.9
MHmmp2	36.5	32.7	91.2	1,371.4	1,531.8	2,415.7	3,947.6
	6,550.0	1,280.7	3,356.9	12,780.9	23,968.4	7,766.1	31,734.5

	<b>EARLY</b>	MID	MATURE	OLD	MATURE+OLD	FOREST
CMA	5.1%	0.0%	22.8%	72.1%	94.9%	100.0%
CWHds1	5.2%	0.0%	94.4%	0.3%	94.8%	100.0%
CWHms1	39.0%	5.7%	15.4%	39.9%	55.3%	100.0%
MHmm2	8.9%	5.5%	10.5%	75.1%	85.6%	100.0%
MHmmp2	2.4%	2.1%	6.0%	89.5%	95.5%	100.0%



CWHds1 = yellow; CWHms1= drk green; MHmm2 = pink; AT =burgundy

## CCF-WT-01 / 02 Biodiversity and Wildlife Resources (Stand Level)

Future WTP percentages for pending revisions to landscape units are anticipated. Information on Wildlife Tree utilization in the montane CWH forests is very limited. In 1990's Richmond Plywood Corp Ltd requested a Bird Survey by Forest Type for the upper Soo River Valley. This survey and inventory attempted to define valuable tree attributes and species use information. As a summary, overall avian use and abundance was greatest in the Wetland – Forest edge, second to other Forested Openings, such as riparian draws, talus, slide tracks and avalanche chutes. Lowest use and abundance was the uniform forested conifer areas.

In the interim the strategy for Wildlife Trees and Patches at the Stand Level will be as follows:

1) Assign a minimum total patch area on a % basis for the total **Opening** areas harvested within the 4 year period within each **Compartment** by existing LU and BEC Variant. Disperse these patches throughout the **Compartment** based on previous disturbance levels, visual requirements and stand attributes. Identifying recruitment options by identifying newly constrained young forests and determining if enhancement treatments are possible.

- 2) Acknowledging the contribution and prorate the permanent tree retention (Retained Basal Area) by harvest unit as per the *Silviculture Strategy April 2008* and *Wildlife Tree Retention: Management Guidance 2006:*
- 3) Appropriately consider longevity and recruitment potentials for both WT's and CWD at all planning levels.

Where ever possible these patches should be identified within the inoperable areas, constrained areas, riparian areas and include sensitive or identified rare ecosystems within the compartment.

The contribution of permanently retained green trees within the harvest units is an important component of managing timber supply impacts. The management plan for the CCF\_K3V forest refers to additional retention within most all **Openings** and most all **Forest** Types.

Therefore during the development of the **OLD FOREST** conservation project, consideration on the amount of WTP% specified should reflect this "green tree" management regime. Variable green tree retention and multi pass shelterwood retention will be quantified (Retained Basal Area RBA) under FRPA Results Reporting by **Compartment**.

Permanently retained green trees intended to meet aesthetic social acceptance may not necessarily provide opportunities to conserve biodiversity or assure wildlife utilization. Finally all Wildlife Tree management at the stand level must be flexible enough to ensure worker safety at all times and be applied with variety across the various management units (FDUs).

### **CCF-RIP-02** Riparian Retention Levels

Classification of stream and their management width carry forward previous planning regulations and are defined in sections **FPPR** S.47, 48, and 49 (effective Dec. 2004), of the Forest Planning and Practices Regulation.

Stream Class	Reserve Width	Management Width	Example of Tree Retention Strategy within Management Width by TPH.	Description
S1A	0	100m	Site Specific	Specific Condition (not found within planning unit)
S1B S2	50m 30m	20m 20m	Within the first 10m of the RMZ retain 60-0% of the total trees. Within the last 10m adjacent to the RZ, retain 100-0%	Target 80% retention within the entire RMZ, removing the most merchantable trees and those with favorable lean. The lower limits up to 0% retention will only be implemented subject to the "specific conditions" below.
S3	20m	20m	Within the first 10m of the RMZ retain 10- 0% of the total trees. Within the last 10m adjacent to the RZ, retain 90-0%	Target 50% retention within the entire RMZ, removing the most merchantable trees and those with favorable lean. The lower limits up to 0% retention will only be implemented subject to the "specific conditions"

Stream Class	Reserve Width	Management Width	Example of Tree Retention Strategy within Management Width by TPH.	Description
S5 major	Om	30m	Within the first 10m of the RMZ retain 0% of the total trees. Within 2 <sup>nd</sup> 10m retain 50-0%, and within the 10m adjacent to the stream retain 100-0%.	Target 50% retention within the entire RMZ, removing the most merchantable trees and those with favorable lean. The lower limits up to 0% retention will only be implemented subject to the "specific conditions"
S4	0m	30m	Within the first 15m of the RMZ retain 0% of the total trees. Within the last 15m adjacent to the RZ, retain 40-0%	Target 20% retention within the entire RMZ, removing the most merchantable trees and those with favorable lean. The lower limit of 0% retention will only be implemented subject to the "specific conditions"
S5 minor	0m	30m	Within the first 20m of the RMZ retain 0% of the total trees. Within the last 10m adjacent to the RZ, retain 40-0%	Target 20% retention within the entire RMZ, removing the most merchantable trees and those with favorable lean. The lower limits up to 0% retention will only be implemented subject to the "specific conditions"
S6 major	Om	20m	Within the first 10m of the RMZ retain 0% of the total trees. Within the last 10m adjacent to the RZ, retain 40-0%	Target 20% retention within the entire RMZ, removing the most merchantable trees and those with favorable lean. The lower limits up to 0% retention will only be implemented subject to the "specific conditions"
S6 minor	0m	20m	Within the entire 20m retain no merchantable trees.	Target 0% retention within the entire RMZ.

Alternative TARGET RETENTION Example: On larger stream systems it may be prudent to simply calculate by area, the amount of the Riparian Management Zone not planned for any tree removal and compare that with the amount planned for harvesting. Therefore TARGET RETENTION of 50% by area. E.g. RMZ Total = 2.2ha with 1.1 being clear felled would result in a 50% TARGET RETENTION. The boundary delineating the harvest may vary throughout the actual management zone in width based on physical limitations, terrain or other features encountered (Trails).

**Classification**: Major or Minor adjectives are applied to streams within the Site Plan of each Compartment. Selection of this sub-classification is based upon the characteristics outlined below and in consideration for the operational flexibility of managing a particular watercourse-RMZ for more than just their conveyance of water.

An "S5 Major" describes valley bottom or side hill watercourses with consistent and constant flow regimes that dominate the landscape and are not generally repeated within 500m of each other. They are primary linkages for wildlife movement; however, they can also pose cross slope barriers, or be associated with gullies, draws and canyons.

An "S5 Minor" are watercourses that because of their orientation and position on the landscape are not as significant for other resource values. They can be associated with more periodic flows, associated with gullies draws and spring melt-waters or simply wider outwash (alluvial) sections of S6 streams.

An "S6 Major" are well-defined primary side-hill streams that because of their defined location can be managed for more than just riparian protection. Normally these form boundaries of harvest units, or provide opportunities for enhanced tree retention without considerable increases to harvesting costs or safety considerations. These form opportunities to anchor other stand retention elements and incorporate Wildlife Trees and existing windfalls for CWD. S6 majors have moderate to high water power index and would, if clear felled, require some form of fall and yard away and/or post harvest debris management.

An "S6 Minor" watercourse trend towards non-classified streams, or seepages and are considered minor systems with low to moderate waterpower index. There may be cases because of proximity of two or more S6 streams that one is arbitrarily given enhanced protection (Major) over the other (Minor) to provide operational flexibility.

**Riparian Management Zone "Target Retention":** Specified widths are measured by slope distance to an accuracy of +/- 5m from the edge of the average high water mark. The **target % retention** is a weighted average of all trees of all merchantable species and diameters. (E.g.: clear cutting the first 10m and retaining 100% of next 10m width results in **50% Target Retention**) This prorating approach mirrors the kind of safe selection practices of falling out and away from the identified watercourse.

**Tree Retention Strategy:** The practicality of safely retaining an even distribution of trees from within the entire RMA specified widths have not been realized. In the past this approach has often resulted in RMZ been left un-harvested, or over-harvested. To safely remove coastal timber, workers are limited to within 10-15m of the open face, often less if uphill slopes are the general falling direction. The strategy above is measurable based on the distance from the stream edge. Trees retained are normally left for a full rotation or longer; therefore, trees of lower merchantable characteristics are retained. Dominant trees with defect often contain habitat attributes while the non-merchantable diameters may provide options for advance regen stocking options.

- "Specific Conditions" for not meeting Target Retention: Within the Silviculture Site Plan, the prescribing forester may reduce the target retention based on any one of the following conditions at his or her discretion, if:
  - 1) There is no reasonable expectation that the adjacent side of the watercourse will ever be harvested.
  - 2) The watercourse is not a primary valley bottom feature and is, within the area of planned harvesting, entirely dominated by bedrock, so that stream-bank stability is not a function of adjacent tree influence.
  - 3) The watercourse is not a direct tributary or within 50m or less upstream of a fish bearing stream.
  - **4)** The RMZ is predicted as a "high wind throw risk" and by reducing trees and/or implementing topping and limbing treatments to the remaining trees in the RMZ or RRZ it will reduce the potential impact to streamside trees and lower the cost of treatment.

#### **CCF-RIP-03** Activities permitted within Reserve Zone

In addition to those activities permitted under FPPR S51, this result is intended to document the practice of stand management or modification in order to enable various non timber improvements within the RESERVE ZONE-Riparian area. At the Compartment level it is the intent to carry out all options for remedial stand

management subject to funding and access under a Stand Management Prescription. Recreation access much of which has already occurred should not be considered a detriment within the forested riparian zone.

#### **CCF-RIP-04 Machine Free Zones**

This result is intended to increase protection of small wetlands and open bodies of water. Every effort to locate road and trail construction away from these >0.1 Ha features will be considered. When old roads or trails can be relocated, the obligation to rehabilitate the unused area exists. Anchoring these small features into Wildlife Tree Patches provide additional protection. Overlanding techniques using coarse rock fills are expected to lessen impacts on hydrology, important in maintaining the integrity and floristic of these habitats. Within the Ms1 subzone vernal features include the following plant communities; hard-hack (spirea sp), hawthorn (mallus sp), red-osier dogwood (cornus sp) and are normally associated with the periodically wetted or ponded elements.

### **CCF-CW-01** Brew Creek Community Watershed

The largest at 1407 ha, the Brew Creek (Brew FDU) Community Watershed has experienced recent activities from 3 previous tenure holders since early 1990s. The most recent Hydrologic Assessment (CARSON 2008 amd 2010) identified no visible effects of the past harvest on the stream morphology. All of its recommendation is still valid. The intent of this Strategy is to limit the rate of cut to 1% per year for the total Watershed Area. This prudent yet cautious approach considers the existing development and high standard primary road construction. The guiding document Silviculture Strategy for k3V requires small opening, shelterwood and retention harvesting systems. These types of small forested opening may actually increase the duration of water yields by retaining snow packs further into the spring freshets.

If over any five year period the area of Forest Cover is removed in excess of 70ha (clearcut equivalent) then Re-assessment and 3<sup>rd</sup> party verification of Watershed status and risk assessment will be required.

Brew Creek Community Watershed – Conclusions and Recommendations (Carson 2008). A recent addendum to the 2008 Assessment is found in the Appendix.

#### **III. CONCLUSIONS**

- 1. With reasonable care given in reopening the road and harvesting of Blocks CM008 and CM009, no measurable changes are expected in water quality or discharge.
- 2. Ongoing, low levels of harvesting, such as has occurred since 1997 (1-2 % per year) with the concurrent high management standards maintained, is unlikely to measurably affect existing water quality, quantity and timing of flows within the Brew Creek Watershed.
- 3. No new roads are planned for the immediate harvesting that has been proposed and thus the present development will not alter road density. Given the high quality of existing road construction and drainage management observed within the Brew Creek Watershed, and the on going attention to deactivation of unused roads, a modest future increase in road construction is unlikely to have any measurable impact on stream hydrology.
- 4. The re-activating of the main line to access Cutblocks CM008 and CM009 should be straightforward. The Licensee is reminded, as was noted in the original CWAP, that the highly fractured and weathered sheer zones in the phyllitic bedrock are unsuited for road surfacing material within Riparian Management Areas (RMAs), as they tend to break down to form red clays.
- 5. Future forest roads may provide increased recreation access which in turn may be considered to poise additional risks of fires and faecal contamination. Good planning and management of the active road network through signage, road closures and implementing degrees of deactivation can minimize these risks.
- 6. The lower reaches of Brew Creek stream channel appears to be in good condition given the nature of the terrain. There has been very little forestry-related disturbance within any of the riparian areas within the

watershed. Stream crossings have been located, designed and managed with considerable care. Concentration of road ditch discharge has been avoided. Windthrow has been minimized.

7. Because the water users no longer draw water directly from Brew Creek, risks associated with the occasional natural (and potentially human induced) turbidity events are substantially down-graded.

#### IV. Recommendations

The following recommendations guide sensitive watershed management for the Brew Community Watershed.

- 1. While no new roads are planned at this time, they are likely to be built in the future. Licensee should continue to ensure appropriate location, design and construction of all new roads and adopt a high level of management for the maintenance and deactivation of all new and actively used roads within the watershed. Stream crossings whether bridged or culverted should be targeted for special attention. Competent surfacing materials, and not the commonly occurring shattered phyllites should be used for capping road surfaces in proximity to natural drainages. Original recommendations provided in the 1997 CWAP are still valid.
- Licensees should ensure well-planned and executed stand harvesting particularly by avoiding soil compaction, soil truncation and forest floor gouging during felling and yarding operations. Heavy machinery operating in wetter areas within the blocks should make use of brush mats. Operations should observe shutdowns during excessively heavy rains.
- 3. Licensees should continue to carefully consider windthrow in their design of riparian buffers.
- 4. The present road condition is good with appropriately placed cross ditching. The permanent deactivation of most branch road has also been done to a high standard. The continuance of these high standards is recommended.
- 5. Erosion control assessments should be a regular feature of road network management. A rigorous inspection and maintenance schedule should be continued on any active road network within the Brew Creek watershed. This would include routine installation of water bars and cross ditch installation along high priority road segments each autumn.

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#### CCF-CW-02 Other Community Watersheds within Showh and Interface FDUs

Although unlikely two small watershed Agnew (aka Alpine) and Rideau Brook (aka Emerald) show up on the LDRW and may be included into fuel modification stand treatments. The planning and implementing treatments will be based upon hazardous fuel types. These types are further assessed based on risk assessment under the RMOW CWPPs. If small community watershed area becomes a planning priority access improvements may be initiated by the K3V Forest. Therefore the RESULT specified to implement road construction or logging trail activities based upon the lowest risk period for sediment production. Furthermore, a shaded fuel break treatment means a uniform forest cover requirement. Objective of >40% crown closure is thought to be a prudent level of overstory target cover, given that the treatment are planned solely to increase stand resilience, modify fire behavior and potential catastrophic loss only.

#### CCF-VIS-01 Sea to Sky Scenic Area-Whistler

Scenic designations are in affect since 1991 and little difference is anticipated from the potential Front-Country and Whistler Corridor zones under the LRMP.

Visual design will consider points along the paved roads that would have the greatest and longest duration of view. In addition significant viewpoints from atop Whistler-Blackcomb have been selected and placed on the FSP Map.

**Blackcomb Mtn**- Crystal Hut; Rendezvous Day-lodge. **Whistler Mtn**- Pikas Day-Lodge; Peak of Whistler Mtn; Ravens Roost

The Peak to Peak Gondola was also selected but it views are mainly to the upper Fitzsimmons Valley (Commercial Recreation Area) and the INTERFACE FDU only.

Given the Silviculture Strategy it is not anticipated that detailed visual design models will be required for each Opening within a Compartment. Rather if prominent areas are visible, alteration in retention, selection of permanent reserves and the scale of development planned would be altered.

## **CCF-VIS-02** Immediate Foreground Visual Management

Two foreground zones have been considered for specific management consideration. The paved roadway of Highway #99 and that of the new Callaghan Road. The "foreground zone" should be considered linear, much like a Riparian Management Zone and extends from the edge of the paved roadway perpendicular into the forest stand. Powerline rights of ways, clearings, pits and quarries if within this zone are included and not compensated for. Strategic use of tree patches or islands, individual dispersed tree retention and corridor type logging is preferred over the "picket fence" or "timber screens"

For the lack of better terminology, a **Defined Recreation Element (DRE)** will be used to describe any feature within the Compartment that has not been designated under Section 56 or 57 of FRPA. For the most part these will be linear trails, but it may include indistinct viewpoints, a structure or other unknown feature encountered during layout or provided through public interaction, user group referrals or annual harvest plan reviews.

The Strategy is premised on a minimum commitment to retain trees along a portion of this zone when within a planned Opening. User and public expectations along "declared recreation trails" may use the same approach if they are not specified within the objectives set by government for the particular site or trail. Again, the foreground zone will extend perpendicular or radiate away from any DRE.

#### **CCF-CULT-01** Herbicide Ban

The use of non chemical brush control meets the Whistler 2020 Plan and those of both First Nations partners.

#### **CCF-CULT-02 Information Sharing**

This basic form of information sharing will continue to each first nation land and resource group, however all plans are vetted through the CCF Board of Directors of which 4 of the 6 members represent First Nations interests.

Further direction through Ministerial Orders are anticipated with regards to the process for determining protection of First Nation Cultural Heritage. A higher level of First Nation planning is anticipated for both the Callaghan and Cheakamus Cultural Management Areas.

#### **CCF-CULT-03 Notification to First Nations**

This Strategy may evolve into a process of fostering advance opportunities for gathering, or identification of forest types or other areas of interest in botanical and non-timber products.

### 4 SILVICULTURE STOCKING STANDARDS

The increased use of retention harvesting systems requires acknowledgement of the site occupation of those trees and whether the trees retained can continue to contribute to stocking or are simply legacies remaining for biodiversity/wildlife/visuals.

The Silviculture Strategy for K3V April 2008 provides flexibility on how retention strategies are used. The use of Deviation from Potential approach will be explored as a standardized system to quantify retention within harvest units ranging from 5-60m2 of Retained Basal Area.

The following stocking standards were based on the following Provincial publications:

- Tree Species and free Growing Stocking Standards Guidelines (May 2000) for the Vancouver Forest Region;
- Establishment to Free Growing Guidebook (Version 2.2, revised May 2000);
- A Field Guide for Site Identification and Interpretation for the Vancouver Forest region (1994, Land Management Handbook Number 28)
- Proposed Stocking Stds for Single Entry Dispersed Retention CRIT Nov 2009

#### 4.1 EVEN-AGED MANAGEMENT

These standards apply to harvest units and/or standards units where even aged management is practiced or to a portion of the standard unit that is un-influenced by standing timber. Generally applicable to the following silviculture systems:

- Clearcut or Patch-Cut with Group Reserves or very low levels or Dispersed Reserves <5m2;</li>
- Grouped or Strip Shelter-wood
- Retention, where regeneration is not under influence of residual trees RBA<5m2.</li>

The tables cover site series commonly found within the K3V Forest Area for the following biogeoclimatic (BEC) variants: CWHds1, CWHms1, MHmm2.

NOTE: All Regen Delay dates have been moved to 6 years to enable the one time administration by Compartment (ie four year permits). It will be expected that all areas planned for planting would be carried out within 1.5 years regardless.

### 4.11 Standard Stocking Standards Table S1, S2 and S3

These tables follow the standard approach for assessing regeneration and are assigned by ecological site series or standard unit matrix.

## 4.11 Standard Stocking Standards Table S4

This table is a modified approach to stocking and species selection which will be applied to the regeneration with Fuel Modification Areas. Generally reducing stocking targets and promoting some non-conifer species in considered.

## 4.12 Moderate to High Permanent Retention Table S5-S7

These standards apply where management consideration requires moderate to high levels of permanent tree retention which influences understory regeneration and for which the overstory is determined to contribute to the overall site stocking. Generally applicable to the following silviculture systems:

Retention, where regeneration is under the influence of residual trees Retained Basal Area (RBA)
 Moderate 5-20m2 or RBA High 20m2 +

The tables cover site series commonly found within the K3V Forest Area for the following biogeoclimatic (BEC) variants: CWHds1, CWHms1, MHmm2. by using the ecologically suitable regeneration layer from Tables S1; S2; S3 and S4

### **Deviation From Potential Application:**

Is a new direction for assessing stocking when overstory trees are permanently retained. Coast Resource Implementation Team 2009 has endorsed this approach and recommends its application for the coast region.

Application is voluntary and revisions are likely to tailor it for the range of silviculture systems planned for the K3V. In general Table S5 and S6 will be used as an interim approach for monitoring post harvest residual trees, infill of regeneration etc. Table S7 will be used as the format for reporting out at Free Growing.

## 4.13 Single Stem Harvesting Standards:

Single stem harvest is the one time removal of individual stems (trees) or small groups of trees using either "standing stem" harvest by helicopter, or conventional falling and yarding by helicopter or other equipment. The residual stand that remains does not have a free growing requirement. There are no reforestation requirements for this type of cutting subject to the following standard:

### **Stocking Standards for Single Stem Harvesting**

Regeneration stocking standards are not required for harvest units or standard units that:

- create openings created by single tree or small group harvest of less than 0.1 Ha in size; and,
- the species composition of all retained trees within the harvest unit are similar in percentage (within variation +/15%) to the pre-harvest block species composition, and;
- the quantity and distribution of trees retained within the harvest unit must be at a level that will ensure the area remains adequately stocked for a period of 12 months after completion of harvest (FPPR s.44(4))

## Standards for Retained Trees in Single Stem Harvesting

The preferred and acceptable species listed in the even-aged stocking standards by biogeoclimatic zone, variant and site series are to be considered "preferred" when assessing the harvest unit. The residual tree form, health and vigor will be representative of the original stand condition.

### 4.14 Intermediate Harvest (Thinnings)

Commercial harvest entries into stands less than 100 years in the sub-maritime variants that are partially harvested. The application of uniform intermediate or access partial harvest results in a stand stem reduction prior to the normal target culmination age. The following standards will apply to intermediate harvest units.

#### **Standards for Retained Trees**

Regeneration stocking standards are not required or applied to intermediate harvest units where;

- the maximum reduction of pre-harvest stand basal area is < 60%, and;
- a minimum of 150 SPH are retained on sub maritime portion of the sub zone that meet the specified criteria and ecological species preference, and;
- any areas > 0.5 ha which as a result of stem removal exceeds more than 60% Basal Area or less than the minimum SPH by sub zone will be subject to Table S1-S3 standards.

### 4.15 Small Openings

Salvage logging, danger tree felling, pest removal, cone picking or other activities that remove timber are exempt from stocking standards if the size and impact of those activities are minimized, regardless if the trees felled are recovered and utilized. A minimum volume threshold and dispersion requirement have been added to provide reference and assurance that this is not a harvesting design.

### **Stocking Standard for small openings**

- small openings or gaps <0.1 ha in size are a result of tree cutting do not require stocking standards, or;
- when opening size or gap size is >0.1 but less than 0.25ha then DFP Tables apply or;
- when opening size or gap (patch) size is >0.25 ha then even aged stocking standards S1-S4 apply

#### 4.2 UN-EVEN-AGED MANAGEMENT

Application of a SELECTION SYSTEM approach in forest management is limited and stocking standards require detailed stand inventory to determine diameter class distribution. Standards would be site specific and amendment into this plan as developed.

## INDEX of other PLANS Guiding Forest Management of the K3V

- i. Whistler 2020
- ii. Forest Management Plan for K3V
- iii. Interim Ecosystem Based Management Plan
- iv. RMOW Wildfire Risk Management System
- v. Community Wildfire Protection Plan
- vi. RMOW PAN
- vii. Whistler Interpretive Forest Objectives
- viii. Local Recreation Use Plan
  - ix. Motorized and Non-motorized Zones
  - x. WORCA Trail Inventory and Letter of Agreement