

REPORT TO COUNCIL

Date: January 20, 2015

To: Nikki Gilmore, Chief Administrative Officer

From: Sheena Fraser, Manager of Corporate & Legislative Services

Subject: Community Forest Update

PURPOSE

The purpose of this report is to provide Council an update on the work that has taken place respecting the development of a Community Forest in Pemberton.

BACKGROUND

In 1998, the *Forest Act* was amended to create the Community Forest Agreement (CFA). This new form of forest tenure was designed to allow more communities and First Nations to participate in the management of forests in their local areas. A pilot project was initiated in which the Ministry of Forests (MOF) issued a special form of tenure referred to as a Community Forest Pilot Agreement (CFPA). These agreements were limited to five years over which time the tenure was evaluated and if successful a holder would possibly be offered a CFA with a term of 25 – 99 years. As of 2003, eight CFPA's had been issued and under the Forest Revitalization Plan the province committed to increasing the volume of timber that would be allocated to community-based forest ventures.

In 2001, Village Council took into consideration this opportunity given the changes that were taking place in the Forest Industry at the time and determined it would be prudent to investigate the possibility of establishing a Community Forest in the Pemberton area. Although application was not made at that time there continued to be interest and in 2004 the Village of Pemberton and Mount Currie Band agreed to form a partnership with the intent to pursue a Community Forest Agreement with the Province. This resulted in an Expression of Interest being sent to the Minister of Forests. (Appendix A)

In early 2005, Village Council established a Forestry Committee for a one year term to advise on forestry issues related to the Pemberton Valley. The Committee was to develop recommendations to Council related to a Community Wildfire Protection Plan, review the work being done as part of the Fuel Management Plan and investigate options for a Community Forest as a result of receiving an invitation to apply for a CFA from the Ministry of Forests (MOF). Work progressed on the Wildfire Protection Plan and the Fuel Management plan but there was little activity related to the Community Forest.

In July, 2006 a meeting took place between MOF officials and Village Council and staff regarding the Community Forest Program. As a result correspondence was sent to MOF identifying areas that the Village wished to have assessed for consideration of a Community Forest as follows:

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- 1. From the west side of Birkenhead Lake to height of land;
- 2. East side of Lillooet to height of land north to where the Ryan River enters the Pemberton Valley;
- West side of Lillooet height of land back to Pemberton (including north and south Miller Creeks);
- 4. Incorporate Pemberton Creek;
- 5. North and south sides of Rutherford to height of land;
- 6. East side of Green river to height of land as far as Graval Creek.

In 2007, the MOF commissioned a timber supply analysis for a number of Woodlot Licences and Community Forest Agreement Areas. This resulted in a report titled "Pemberton Community Forest Agreement – Revised Area Timber Supply Analysis". (Appendix B)

In 2009, MOF officials attended a Committee of the Whole meeting and provided an update on the status of the Village of Pemberton's expression of interest for a Community Forest and referred to the above noted report. The Village was also provided information about the application process referencing the MOF guidelines titled *Community Forest Agreement (CFA) Application Requirements (Direct Invitation to apply)*¹.

Due to other priorities, including the 2010 Olympics, work on Community Forest Agreement opportunities was limited; however, in 2011 Council committed to "explore and develop Community Forest opportunities within the greater Pemberton Area" as a strategic priority under Theme One: Economic Vitality as a means of facilitating revenue creation alternatives for the Village. In early 2012, Ministry of Forests, Lands & Natural Resource Operations (MFLNRO) staff met with the Village and provided an overview of the process to make application for a CFA (Appendix C). This in included information related to developing community support, timelines for preparing a proposal and what information must be included in a submission (see Table 2 of Appendix C), estimated set up costs to prepare and operate a community forest (see Table 6 of Appendix C) and next steps for the Village of Pemberton. Consideration was given to allocating funds to this project in the 2012 budget; however, due to the estimated cost of \$100,000 to undertake this initiative, and due to other priorities at that time, no funding was allocated. Regardless of the lack of funding, this initiative remained on the strategic plan.

In 2013, the BC Community Forest Association (BCCFA) made a presentation to Council providing an overview of the role of the BCCFA and Village staff continued to meet with Ministry officials to gather further information which included consideration of a tabletop mapping exercise.

In 2014, activity respecting a CFA increased and a meeting was arranged between the Village, MFLNRO and British Columbia Timber Sales (BCTS) representatives to discuss opportunities for partnership. Subsequently, BCTS was invited to make a presentation to Council which took place on September 16, 2014 (Appendix D). As well, MFLNRO representatives attended a Committee of the Whole meeting on October 21, 2014 and made a presentation on the "ABC's

¹ Community Forest Agreement (CFA) Application Requirements (Direct Invitation to apply) https://www.for.gov.bc.ca/ftp/hth/external/!publish/web/timber-tenures/community/cfa-application-requirements-jul-1-2009.pdf

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of Applying for a Community Forest Agreement", which included an area map of potential Community Forest locations (Appendix E & F).

As a result of the presentations and further information gathered by both staff and Council it was determined that it would be appropriate to undertake a feasibility study which would help establish a vision and strategy, undertake preliminary community consultation to determine interest, review the existing tenure areas and timber supply, investigate financial impacts, identify possible business models/partnerships and options for organizational structures. The timeline to undertake this study would be approximately three (3) months and depending on the depth of the study would be in the range of \$20,000 - \$30,000. In this regard, Council passed the following resolution at the Regular Council Meeting No. 1382, held November 4, 2014:

Moved/Seconded

THAT staff be directed to include the Community Forest Application in the 2015 budget deliberations and strategic planning process;

AND THAT correspondence be sent to the British Columbia Timber Sales and Ministry of Forest, Lands and Natural Resources advising that the Village is still interested in the concept of a Community Forest and consideration will be given to undertaking a feasibility study as part of the 2015 budget and strategic planning discussions.

CARRIED

Correspondence was sent to both BCTS and MFLNRO and copied to Lil'wat Nation respecting the Village's continued interest in pursuing this initiative and advising that consideration of a CFA feasibility study will be part of the Village's strategic planning and budget deliberation process in 2015.

DISCUSSION & COMMENTS

As noted above, this initiative will be brought forward for discussion as part of the strategic planning process and an allocation of funds will be identified in the budget for discussions with Council.

It should be noted that the Village has not had formal discussions with Lil'wat Nation about potential opportunities or interest in participating with the Village in a Community Forest. Lil'wat Nation staff were invited to attend both the BCTS and MFLNRO presentations to Council held in 2014 and are aware of the Village's interest in pursuing a CFA.

At this time, the Village does not have the in-house capacity or the professional expertise to undertake the development of a feasibility study or to prepare an application for a CFA. Should it be determined that this is a priority of Council that must be initiated before strategic planning and budget, a review of current priorities would need to be conducted in order to adjust the work program and to defer some activities.

It is Staff's recommendation, which is supported by the above resolution of Council, that a feasibility study be conducted which would help to inform Council with respects to the costs associated with the development of a proposal, understand the timber supply and possible community forest areas, partnership opportunities and potential business models.

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There have also been discussions surrounding the creation of a Community Forest Committee to be made up of a combination of interested community members, staff and elected officials. It is Staff's recommendation that should Council commit to proceeding with the feasibility study, following the allocation of funds through the budget deliberations, that such a committee be created to assist the information gathering process of the feasibility study and to assist with the remaining deliverables in making a formal application should Council wish to proceed with this initiative.

COMMUNICATIONS

At this time, there has been no public or community consultation related to the development or establishment of a Community Forest. A key component to moving an application for a CFA forward is developing community support. In this regard, prior to moving forward with an application consideration must be made to developing a full community consultation and communications plan that will inform the application.

LEGAL CONSIDERATIONS

Staff have been advised that it would be in the best interest of the Village to ensure that any Agreements (Partnership or otherwise) are close to being concluded or are in place at the time the CFA application is submitted.

The Ministry of Forest, Lands and Natural Resource Operations has developed a sample agreement document which is a guideline for the CFA. Other agreements with partners will need to be drafted and negotiated and legal review will be required.

IMPACT ON BUDGET & STAFFING

At this time, no funds have been allocated to the development of a Community Forest Agreement in the budget. In past years, funding for this initiative has been included in the budget deliberations but due to other priorities no budget has been allocated.

The Village has been provided information from the MFLNRO that suggests the estimated initial set up costs to prepare and operate a community forest could be anywhere from \$100,000 to \$200,000 (see Table 2/Appendix C). These costs could be broken down to identify the different phases of the process and span multiple budget years to minimize the financial impacts. The feasibility study should provide the next steps and identify where the Village currently is in the process and how and when the next steps could proceed.

INTERDEPARTMENTAL IMPACT & APPROVAL

At this time, the Office of the CAO and Corporate & Legislative Services have been the departments involved in the information gathering process, which involves historical review of the Community Forest initiative over the years and meeting with agency members identified above, in addition to interested members of the community. At this time, this initiative has not been identified on either department's work plan.

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ALTERNATIVE OPTIONS

There are no alternative options for consideration at this time..

POTENTIAL GOVERNANCE CONSIDERATIONS

The Community Forest initiative was included in the Village of Pemberton's Strategic Plan under Strategic Priority One: Economic Vitality as a means to support a competitive and diversified economy with engaged corporate citizens.

RECOMMENDATIONS

THAT a Request for Proposal for a Community Forest Feasibility Study be prepared and issued as a means to inform budget deliberations.

Attachments:

Appendix A Village of Pemberton/Lil'wat Nation proposal – October, 2004.

Appendix B Pemberton Community Forest Agreement Revised Area Timber Supply Analysis

May 31, 2007.

Appendix C Community Forest Agreements – Village of Pemberton Presentation

February 2, 2012

Appendix D BCTS Presentation – September 16, 2014 Appendix E MFLNRO Presentation – October 21, 2014

Links to Information:

Application Requirements:

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https://www.for.gov.bc.ca/ftp/hth/external/!publish/web/timber-tenures/community/cfaapplication-requirements-jul-1-2009.pdf

Coast Forest Region Direct Invitation Application Process:

https://www.for.gov.bc.ca/ftp/hth/external/!publish/web/timber-tenures/community/coast-region-community-forests-direct-award-business-process.jpg

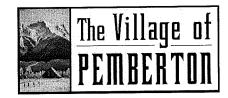
Sheena Fraser

Manager of Corporate and Legislative Services

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore, Chief Administrative Officer





Pemberton Valley Community Forest

Introduction

The Corporation of the Village of Pemberton and the Mount Currie First Nation have agreed to form a partnership (herein referred to as the 'Co-op') and wish to enter into a Community Forest Agreement with the Province of British Columbia. The following material outlines the general area of interest, the initial details on the format of cooperative, the potential management objectives, and details regarding an annual allowable cut.

The Village of Pemberton (VOP) and Mount Currie First Nation (MCFN) have been hit hard by the downturn in the forest industry and have suffered through the loss of jobs, and the subsequent loss of spending in the valley. By entering into a Community Forest Agreement (CFA) they hope to ease the effect of this downturn by increasing local resource-based employment. The Co-op believes that a community forest will reduce conflicts regarding harvesting in the valley and provide greater certainty for the management of Crown lands within and adjacent to our communities.

Potential Land Base

After a review of potentially available areas within the Pemberton Valley, the Co-op suggests that all Crown land adjacent to our communities be parceled together as a community forest. This parcel of land would include, but not be limited to, the following:

- The Pemberton Creek Watershed;
- The Miller Creek Watershed;
- Crown land around and adjacent to 1 Mile Lake and Nairn Park;
- The Weyerhaeuser TL on Signal Hill;
- The Ure Creek Watershed;
- The Owl Creek Watershed;
- Mosquito Lake;
- Mackenzie Basin; and
- The Mount Currie hillside from Green River east.

The areas chosen are based on their proximity to the municipality and the desire to have a role in forest management adjacent to, and within proximity of, urban development.

Administrative Authority & Structure

The body that overseas the management of the community forest will be an equal partnership between the Village of Pemberton and the Mount Currie First Nation. At this preliminary stage, the exact format and mandate is still to be determined.

Initial thoughts are to form a Community Forest Steering Committee that contains an equal number of members from each organization. Members of the committee will be elected officials from both councils, as they have received the public support and confidence necessary to take office. A Community Forest Manager(s) (CFM) will be employed/contracted to conduct daily business operations for the community forest. An advisory committee will be established that consists of resource management experts and local operators to provide specialized and local advice to the CFM and the committee.

Stewardship and Management Objectives and Regimes

Since no committee has been established, no formal objectives have been determined for the Community Forest. Potential management objectives may involve, but are not limited to, the following:

- Practice ecosystem-based and sustainable forest management while encompassing the local socio-economical and First Nation's values in the Pemberton Valley;
- Incorporate the Mount Currie Cultural Heritage Resource Plan (CHRP);
- Protect drinking water (Pemberton Creek Watershed);
- Reduce wildfire threat through forest management in the Wildland Urban Interface;
- Manage effects on viewscapes through Visual Quality Objectives;
- Promote wildlife habitat and ecosystem restoration;
- Improve biodiversity and forest health;
- Protect and enhance wildlife and fish habitat;
- Increase recreation and tourism through management of a forested trail system (for snow mobiles, horses, mountain bikes, and hiking trails);
- Improve botanical forest product production (mushrooms, traditional berries);
- Utilize innovative harvesting techniques as required; and
- Pursue forest certification.

Goals associated with these objectives would involve:

- Protecting First Nations' cultural and spiritual endeavours;
- Assuring employment and training for local residents;
- Generating revenue for local infrastructure, and educational and social programs;
- Monitoring and researching harvest and treatment effects; and
- Providing fibre for local value-added manufacturing.

Annual Allowable Cut (AAC)

Once the Co-op receives an 'invitation-to-apply' from the Ministry of Forests and knows the land base to which it has access, an analysis will be performed to determine a sustainable AAC. The Co-op appreciates the high costs associated with operating a community forest and wants to take advantage of the economies of scale. In order to do so, it is anticipated that the Co-operative would pursue the maximum possible AAC, providing it is sustainable for the chosen land base.

Conclusion

The Village of Pemberton and Mount Currie First Nation are excited to be pursuing a Community Forest Agreement with the Ministry of Forests. The agreement is seen as an opportunity to steer forest management within the valley and to increase and promote the important role of forestry in the local economy. The Co-operative is willing and able to embark on the task of submitting a full proposal upon receiving an invitation to apply.



Pemberton Community Forest Agreement Revised Area Timber Supply Analysis FINAL

Prepared For:

Gary Gwilt

Tenures Forester

Coast Forest Region, MOFR

Balvinder Biring Tenures Forester

Squamish Forest District, MOFR

Date:

May 31, 2007

Prepared By:

D.R. systems inc.

2599 McCullough Road, Nanaimo BC V9S 4M9

Ph: 250-760-1070 Toll free: 1-877-377-9786 Fax: 250-760-1071

 ${\bf Email:} \ \, \underline{info@drsystemsinc.com} \quad \, \underline{www.drsystemsinc.com}$

Contact: Mark Perdue

Executive Summary

This report documents the timber supply analysis for the proposed area of the Pemberton Community Forest Agreement (Pemberton CFA). The analysis follows the management and modelling assumption of the Soo Timber Supply Area Analysis completed in 1999, with updates for recent disturbances (end of 2006), ownership changes and other land management directives. The analysis was conducted using the public software *Forest Planning Studio - Atlas* version 6.0.2.0 (FPS or ATLAS).

The total area of the proposed CFA is approximately 12,702 hectares (ha), of this area approximately 8,118 ha (64%) is productive forestland, and approximately 2,125 ha (17%) is currently within the timber harvesting landbase (THLB).

The current THLB is comprised largely (67%) of fir timber types, with approximately 18% cedar and spruce types, 14% hemlock and balsam types, and less than 1% of the pine and cottonwood types. Approximately 37% of the proposed timber harvesting landbase is comprised of medium sites, 24% is classified into the good site group and 22% is classified as poor. Based on the TSR II classification of the cedar/spruce type, 16% of the THLB is classified as good/medium, while the remaining 1% of the area is unclassified pine and cottonwood types.

The THLB-area weighted average site class, excluding the non-merchantable types, is 20.5 m at breast height age 50, with a mean weighted MAI of 3.7 m³/ha/yr. These values result in a theoretical long-run sustained yield (LRSY) of 7,985 m³/yr. Based on this analysis the short and long-term harvest level is approximately 5,881 m³/yr. This is approximately 74% the CFA's theoretical LRSY.

Based on current management assumptions the visual quality obejctives, deer management and community watershed forest cover requirements do not impact short-term timber harvesting opportunities.

A sensitivity analysis carried out after the basecase determined that the addition of all volume from timber licence T0744 in the CFA increased the short and long-term harvest level to 5,889 m³/yr. The small impact of including this additional volume reflects: 1) the small area of existing merchantable timber, 2) shortfalls in the timber supply of the basecase occurring beyond the TL reversion period.

A second sensitivity was carried out to determined the impact of increasing the site index by 10%, which increased the projected short and long-term harvest level to 6,801 m³/yr. Although it is believed that if the site index of all stands were to increase by 10%, this projected harvest level would be an under estimate.



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1 Introduction

The BC Ministry of Forests and Range is in the process of reallocating timber harvest volume from major licensees to expand the areas of the "Community Forest Agreement" (CFA) and "Woodlot Licence" (WL) program unders the Forestry revitalization Plan.

To ensure that the proposed tenures provide sufficient harvest opportunities that sustain an even harvest rate over the short-, mid- and long-terms, the Coast Forest Region of the Ministry of Forests and Range requires a timber supply analysis for each identified new area.

Econ Consulting (ECON) in collaboration with D.R. systems inc. (DRSI) were contracted to complete the timber supply analyses for 20 Woodlot Licence (Woodlot or WL) areas and 7 Community Forest Agreement (CFA) areas. ECON assumed responsibility for the analysis of the 20 Woodlots while DRSI is responsible for the CFA analyses.

DRSI completed the initial analysis and determined the initial CFA boundaries could support an AAC of approximately 2,790 m³/year, short of the 10,000 m³/year target AAC. As a result of the initial analysis, Squamish District staff identified additional candidate areas for inclusion in the Pemberton CFA and requested an analysis of the revised area. This report outlines the landbase, growth and yield and management assumptions as well as the modelling results for the timber supply analysis of the revised CFA area.



2 Description of the Pemberton CFA

The Pemberton CFA encompasses a total area of approximately 12,702 ha, and is located within the Squamish Forest District and the Soo Timber Supply Area (TSA) in the Squamish Forest District. Figure 1 denotes the location of the original and revised boundaries, as well as the individual units that comprise the proposed Pemberton CFA. The original boundaries are shaded light green (areas 1, 3, 5, 6 and 8), the dark green areas are the recently added boundaries (areas 2, 4, 7 and 9). There are two Timber Licences within the proposed boundaries, T0741 and T0744. These areas are shaded black in Figure 1.

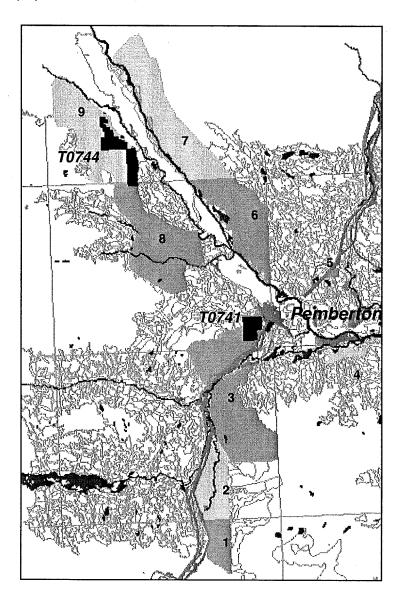


Figure 1: The proposed boundary of the Pemberton Community Forest Agreement.



3 Land Base Assumptions

The total area of the Pemberton CFA is approximately 12,702 hectares (ha), of this area approximately 8,118 ha (64%) is productive forestland, and 2,125 ha (17%) is currently within the timber harvesting landbase (THLB).

Table 1 describes the hierarchical reductions applied to the total area within Pemberton CFA. Collectively, these reductions determine the timber harvesting landbase. Generally, these reductions are consistent with the 1999 Soo Timber Supply Review report (TSR II) and 2000 Soo Timber Supply Area Rationale for Allowable Cut Determination, although some deviations were necessary to reflect the specific conditions of the Pemberton CFA, or to allow for a more appropriate modelling technique. Each of the land base assumptions is described below.

Table 1: Timber harvesting land base.

Landbase Reduction	Total Area	Net Area
TOTAL AREA	12702.3	12702.3
Area not managed by MoFR	491.8	491.8
Existing Timber Licences (greater than 106yrs)	176.3	176.3
Non-Forest	4095.5	<u>3916.4</u>
TOTAL PRODUCTIVE FOREST LAND		8117.8
Non-Commercial	46.9	31.2
Designated Parks (Nairn Park)	150.2	6.7
Inoperable Areas	6622.7	3166.9
Sites with Low Productivity	4516.9	659.4
Non-Merchantable Timber Types	153.7	124.4
Ungulate Winter Range - Deer and Moose Retention Areas	1536.6	946.9
Ungulate Winter Range - Goat Areas	551.6	35.1
Old Growth Management Areas	908.8	145.1
Spotted Owl Long Term Habitat Areas	00	0
AREAS COMPLETELY DEFERRED FROM THLB		<i>5115.7</i>
ESA - Highly Sensitive Soils	1321.0	67.1
ESA - High Recreation Value	146.8	30.3
ESA - Highly Sensitive Wildlife Habitat (excludes ungulate)	13.9	0
ESA - Highly Sensitive for Regeneration	2034.7	43.3
ESA - Avalanche Areas	0	0
ESA - Moderately Sensitive Soils	1045.1	104.8
ESA - Moderately Sensitive Wildlife Habitat (excludes ungulate)	0	0
AREAS PARTIALLY DEFERRED FROM THLB		<u>245.5</u>
Existing Roads/Trails/Landing	1650.1	212.5
Riparian Reserve Zones	2756.7	247.4
Wildlife Tree Retention Areas	2756.7	121.0
Spotted Owl WTP Augmentation Area	1095.6	37.7
IWMS Areas	1314.2	12.8
TOTAL NETDOWN LAND		<i>631.4</i>
TOTAL PRODUCTIVE FOREST LAND REDUCTIONS		5992.6
CURRENT TIMBER HARVESTING LANDBASE		2125.2
Future Road Area	50.3	51.6
Future TL Additions Net of IWMS ¹	176.3	27.5
FUTURE THLB	· · · · · · · · · · · · · · · · · · ·	2101.1

¹ IWMS: Identified Wildlife Management Strategy



Page 3

3.1 Areas Not Managed by the Ministry of Forests and Range

Within the Pemberton CFA boundaries, lands classified in the owner-schedule combinations as private land, Indian Reserve, Crown U.R.E.P. Reserve, Provincial Parks and miscellaneous reserves were excluded entirely from the THLB. This is consistent with TSR II. There are approximately 492 ha of areas not managed by the MoFR.

3.2 <u>Timber Licence Reversions</u>

There are two Timber Licences within the proposed Pemberton CFA - T0741 and T0744. This analysis included all existing and future timber volume from timber licence T0741. Existing timber on T0744 was excluded from the analysis and area with merchantable timber (stands greater than 106 years of age) were reverted to crown land over a 30 year period. Timber grown on reverted land was available for harvest in this analysis. To model these reversions the total area of merchantable stands (stands older than 106 years of age) within T0744, initially excluded from the THLB, were introduced into the THLB as regenerated stands in five-year-intervals.

There are a total of approximately 176 ha of merchantable TL areas within the proposed CFA. Where applicable, reverted TL land was deferred and THLB area was netted down. A total of approximately 176 ha of the reverted TL areas were unconstrained and reintroduced into the THLB over the first 30 years of the planning horizon.

3.3 Non-forest Land and non-commercial

All land classified as non-forested, such as lakes, swamp, rock and alpine, were excluded from the productive forest land base. Potentially productive non-commercial (NC and NCBR) types were also removed from the THLB. There are approximately 4,142 ha of non-productive and non-forested land within the Pemberton CFA. This reduction is consistent with TSR II.

3.4 Parks and Designated Areas

Park lands and Designated areas (including proposed Designated areas) were included in the modelling database although removed from the timber harvesting landbase. Nairn Park is within the Pemberton CFA boundaries as outlined by District staff and is approximately 150 ha in size.

3.5 Inoperable Stands

Operability designations were based on the procedures outlined in TSR II. Stands considered operable using conventional logging methods were included within the THLB. Inoperable stands were excluded from the THLB. Based on these classification schemes, approximately 6,623 ha were considered inoperable. The eligibility of stands for helicopter operability were based on the revised helicopter logging criteria as outlined in TSR II. Within the Pemberton CFA there are approximately 1,428 ha of helicopter operable stands, and approximately 727 ha of this area is within the THLB. The harvest volume from helicopter stands is displayed in Figure 5.

3.6 Low Timber Growing Potential Types

Based on the analysis unit classifications outlined in the TSR, older fir, hemlock/balsam and western redcedar stands with less than 350 m³/ha, as well as younger stands of the same leading species projected to achieve less than 350 m³/ha by the age of 140 years, were excluded from the THLB. Similarly, spruce and pine stands with less that 300 m³/ha, as well as younger stands of the same leading species projected to achieve less than 300 m³/ha by the age of 140 years, were also excluded from the THLB. Cottonwood stands with less than 150 m³/ha were also excluded from the THLB. Approximately 4,517 ha were designated as sites of low timber growing potential, and were excluded from the THLB.



3.7 Problem Forest Types

Stands with leading species of larch, as well as all deciduous stands other than cottonwood, were excluded from the THLB. This is consistent with TSR II. There are approximately 154 ha of non-merchantable forest within the Pemberton CFA.

3.8 Deer Management Areas

Areas identified as Deer Retention Winter Range were excluded from the timber harvesting landbase. There are approximately 1,537 ha of Rention Winter Range within the Pemberton CFA.

Areas identified as Deer Rotation Winter Range were modelled to maintain a minimum of 20% of the rotation range as 80 years or older and then to allow 20% of the rotation range to be harvested every 20 years.

This differs from TSR II and follows Order – Ungulate Winter Range #U2_005 issued on February 28, 2005. TSR II excluded areas classified as ESA_1 – wildlife, ESA_W – Deer, and within the draft deer management plan designated as a Retention habitat type.

3.9 Goat Management Retention Areas

Areas identified as Goat Winter Range were excluded from the timber harvesting landbase. There are approximately 552 ha of Rention Winter Range within the Pemberton CFA.

This differs from TSR II and follows Order - Ungulate Winter Range #U2-002.

3.10 Old Growth Management Areas

In TSR II old seral targets were applied to address landscape-level biodiversity guidelines. Since the TSR II analysis old growth management areas (OGMAs) have been established for the five landscape units within the Pemberton CFA. The five landscape units are: Billygoat, Birkenhead, Railway, Ryan and Soo. Only three of these landscape units (Railroad, Ryan and Soo) have OGMAs within the boundaries of the proposed CFA. Only a small area of the Billygoat and Birkenhead landscape units are contained within the CFA boundaries and these areas do not have any OGMAs. In this analysis the approved OGMAs were excluded from the THLB. There are approximately 909 ha of OGMA within the Pemberton CFA.

3.11 Spotted Owl

All Spotted Owl Long Term Habitat Areas were excluded from the THLB as per direction received from district staff. This differs from TSR II, where spotted owl Special Resource Manager Zones were managed with a forest cover constraint that maintained a minimum of 67% of SRMZs as 100 years old or older. There is no long term spotted owl habitat in the Pemberton CFA.

3.12 Environmentally Sensitive Areas

A number of stands within the Pemberton CFA are considered environmentally sensitive. A THLB reduction was applied to sites with highly or moderately sensitive soils, high recreation value, high or moderate wildlife values sites (excluding ungulate and goat which are addressed in the Deer Management Retention Zone and Goat Winter Range), as well as areas of high regeneration or avalanche concerns. The THLB reductions for these sensitive areas are consistent with those identified in TSR II. Within the Pemberton CFA approximately 4,562 ha are designated as environmentally sensitive sites.



3.13 Roads, Trails and Landings

Existing permanent roads, trails and landings were removed from the Pemberton CFA modelling database. There are currently approximately 213 ha of permanent roads, trails and landings within the THLB portion of the Pemberton CFA. This reduction is consistent with TSR II.

Within the Pemberton CFA areas classified as age-class 5 and greater were considered undeveloped. For undeveloped areas 5.4% of the area would become permanently removed from the THLB after the initial harvest to represent the impact of future road development. This was modelled by applying an additional operational adjustment factor of 5.4% to future conventionally harvested stands. This operational adjustment factor was not applied to stands identified for helicopter logging. The projected 5.4% THLB reduction associated with future roads is approximately 50 ha.

This modelling approach is similar to the method used in the TSR II analysis.

3.14 Riparian Management Areas

Riparian reserve zones (RRZ) were modelled as a 4.8% reduction in THLB area and Riparian management zones were modelled as a 4.2% reduction in the THLB area, excluding approximately 247 ha from the THLB. Riparian management zones (RMZ) were not modelled in TSR II.

3.15 Wildlife Tree Retention

During TSR II it was determined that the Soo TSA required 5.8% wildlife tree retention, and that 75% of this retention was achieved from areas already removed from the THLB. Thus, the THLB was reduced a further 1.45% to meet the wildlife tree retention target. In addition, the THLB was reduced by 3% for the impact of residual stand volume resulting from partial harvest systems used in the 2000 AAC determination. In this analysis 4.45% of the otherwise unfettered landbase was excluded from the THLB. This reduction represents approximately 121 ha within the Pemberton CFA.

3.16 Spotted Owl Augmentation Areas

A 5% WTP reduction was applied to all designated (existing and potential) spotted owl habitat. Approximately 1,096 ha were within the augmentation areas and represent a reduction to the THLB of approximately 38 ha. No reductions were made to areas that are under retention or partial retention VQO and community watershed management strategies.

3.17 Identified Wildlife Management Strategy

A 1% reduction was applied to the THLB for existing stands older than 60 years of age as per the 2000 AAC Determination and the Information Concerning Wildlife Habitat. The THLB was reduced by 13 ha in the Pemberton CFA.



4 Current Forest Conditions

4.1 Age Class Distribution

Figure 2 represents the productive forest land base of the Pemberton CFA, within each age-class the timber harvesting landbase and non-contributing landbase are distinguished, and the future TL additions are excluded.

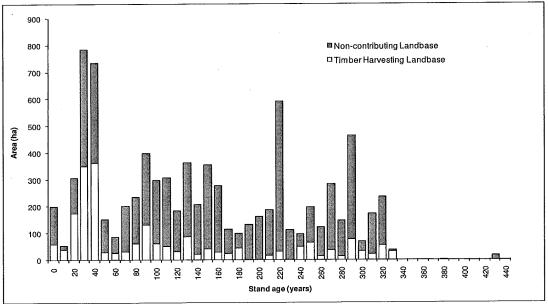


Figure 2: Age-class distribution of the Pemberton CFA. Non-productive inventory type groups and merchantable stands within future TL additions are not included in either the THLB or the NCLB.



4.2 Species Distribution

The dominant tree species type group in the proposed CFA is fir, representing approximately 65% of the THLB. Approximately 17% of the THLB is comprised of cedar/spruce stand types, whereas the hemlock/balsam types make up 14% of the THLB. The pine types represent 3% of the THLB and cottonwood represents less than 1% of the THLB. Non-productive and non-merchantable inventory types are not found in the THLB. Table 2 reports the THLB, non-contributing and total area (ha) of stands by the respective species type groups, excluding the 176 ha of future TL additions.

Table 2: Species distribution of the Pemberton CFA, excluding the 176 ha of future TL additions.

Leading Species	Timber Harvesting Landbase (ha)	Non-contributing Landbase (ha)	Total
No species	0	4,135.9	4,135.9
Cedar/spruce	366.3	221.5	587.8
Cottonwood	14.5	110.1	124.6
Douglas-fir	1,355.9	3,217.6	4,573.5
Hemlock/balsam	288.0	1,769.3	2,057.3
Non-merch (Larch & Deciduous)	0	153.7	153.7
Pine	71.4	822.0	893.4
Total	2,096.1	10,430.1	12,526.2

Figure 3 shows the species distribution, further broken into class groups, for the timber harvesting landbase.

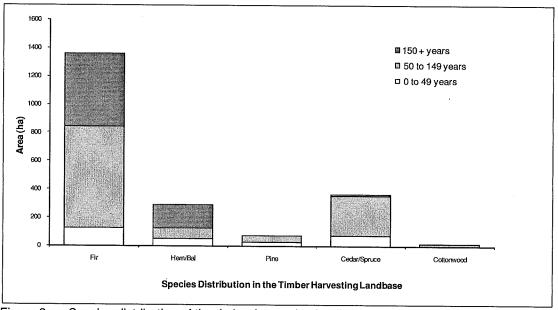


Figure 3: Species distribution of the timber harvesting landbase, by age class and area.



4.3 Site Productivity

Figure 4 shows the distribution of site productivity within each species type. Approximately 47% of the timber harvesting landbase is comprised of poor sites, 25% of the THLB is classified into the medium site group and 13% of the THLB is classified as good. The good/medium site classes of the cedar/spruce type group makes up 11% of the timber harvesting landbase. Approximately 4% of the THLB is comprised of a range of site classes supporting the pine and cottonwood types.

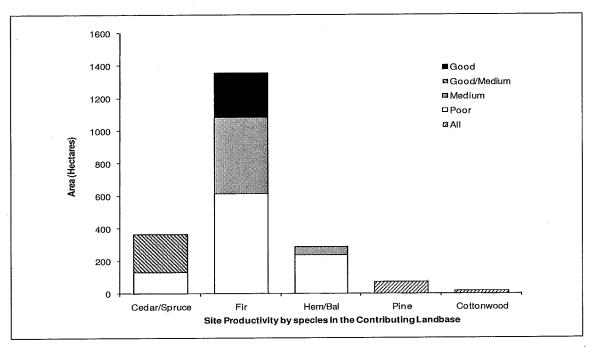


Figure 4: Species distribution of the timber harvesting landbase, by site class and area. The pine and cottonwood type groups each have a single site class.



Table 3 presents the species types, the area weighted site index values, and the managed stand maximum MAI values derived from the yield curves.

Table 3: Area weighted site index values and maximum mean annual increment (MAI) values, by type group. Excludes future TL additions (176 ha), non-merchantable (153.7 ha) and non-productive (4,143 ha) areas.

Analysis Unit	Area (ha)	Area Weighted SI (m @ BHA 50)	Maximum MAI (m3/ha/yr)
Cedar/Spruce – Good/Medium	236.7	23.3	6.2
Cedar/Spruce – Poor	129.6	15.4	3.1
Cottonwood	14.5	26.4	3.3
Fir – Good	272.0	27.9	6.3
Fir – Medium	470.0	22.6	4.6
Fir – Poor	613.84	18.0	1.8
Hemlock/Balsam – Medium	51.5	21.5	6.4
Hemlock/Balsam – Poor	236.5	14.6	2.0
Pine – All	71.4	16.7	1.1



5 Growth & Yield Assumptions

5.1 Yield Model Assignment

The table interpolation program for stand yields (*TIPSY*, ver. 3.2b), developed by the B.C. Ministry of Forests and Range, Research Branch was used to estimate timber volumes for existing and future managed stands. Managed stands were defined as Douglas-fir leading stands younger than 37 years of age, western hemlock and balsam stands younger than 27 and cedar and spruce stands younger than 17 years of age.

The variable density yield prediction (*WinVDYP* ver. 6.6d) model developed by the B.C. Ministry of Forests and Range, Resources Inventory Branch, was used for estimating the timber volumes of unmanaged stands. Unmanaged stands were defined as those older than the managed stand ages defined above.

These growth models and regeneration assumptions are consistent with TSR II.

5.2 Utilization Levels / Decay Waste and Breakage

The utilization standards for all species was a minimum top diameter inside bark (DIB) of 10 cm, a minimum diameter at breast height (DBH) of 17.5 cm and a maximum stump height of 30 cm. These standards are consistent with TSR II.

5.3 Operational Adjustment Factors

Operational Adjustment Factor 1 (OAF1) was set to 15% for all managed regeneration regimes. Initially, an Operational Adjustment Factor 2 (OAF2) was set at 5% for managed stands, although this value was adjusted to account for gains anticipated for additional silvicultural treatments. To represent gains resulting from genetically improved stock a 3% genetic gain was applied in *TIPSY* for all managed good and medium site Douglas-fir stands. An additional operational adjustment factor of 5.4% was applied to future managed conventionally harvested stands to account for the future loss of productive land associated with development of permanent roads, trails and landings.

5.4 Yield Curve Attributes

Yield curves were derived for each analysis unit, by compiling the area weighted site index, species composition¹ and other attributes of the stands within each analysis unit. The procedure is consistent with the methods outlined in *Supplemental Guide for Preparing Timber Supply Analysis Data Packages*. Analysis unit leading species site index values were used, and the default site index values as applied by *TIPSY* or *VDYP* for additional species were used.



¹ VDYP accepts up to 6 species, either conifer or deciduous and TIPSY accepts up to 5 species types, but only conifer. Species compositions of the existing analysis units for the managed and unmanaged stands were used, and prorated to the maximum number of species accepted by the growth models.

6 Management Assumptions

6.1 Recent Disturbances and Approved Cutting Permits

Areas disturbed since the TSR II analysis were updated to 2006 by spatially overlaying 2006 forest inventory file with the TSR II data. Recently disturbed areas were assigned the attributes in the 2006 inventory file.

Standing timber within areas with an approved cutting permit was considered unavailable to the Pemberton CFA, although future stand volume was included in the analysis. Only those cutting permits identified in the MSRM Land and Resource Data Warehouse Forest Tenure Cut Block coverage were considered. Active cutting permit areas were included in the THLB and assigned a 2006 age of 0.

6.2 Not Satisfactorily Restocked Areas

TSR II reports that approximately 84% (3,180 ha of 3,754 ha) of all NSR areas were considered current NSR while the remaining 16% were classified as backlog NSR. In TSR II backlog areas were brought back into the THLB over a ten-year period. Based on the TSR II database the Pemberton CFA includes a total of approximately 105.4 ha of NSR, 97.1 ha within the non-contributing landbase and 8.3 ha within the THLB. For the purpose of this analysis it was assumed that all NSR areas were current and were assigned a 2006 age of 0.

6.3 Minimum Harvest Age

To be eligible for harvest, stands must reach a minimum harvest age. The primary criterion is culmination age, stands must be at least 90% of culmination age (the age at which the maximum mean annual increment is achieved) to be eligible for harvest. In helicopter accessible stands there is an additional criteria where the stand must meet a minimum volume of 400 m³/ha. Table 4 presents the minimum harvest based on these criteria for each analysis unit within the Pemberton CFA.

This approach is consistent with TSR II although the exact values depart from the Soo analysis because of differences between the Soo TSA and the Pemberton CFA landbase.

Table 4: Minimum harvest ages by analysis unit and operability classification.

Analysis Unit	Minimum Harvestable Age Existing Yield Tables	Minimum Harvestable Age Managed Yield Tables	
	Conventional and Helicopter Landbase	Conventional Landbase	Helicopter Landbase
Fir - good	73	76	76
Fir - medium	101	81	87
Fir - poor	183	115	N/A
Cedar/Spruce - good/medium	93	94	94
Cedar/Spruce - poor	350	108	129
Hemlock/Balsam - medium	88	88	88
Hemlock/Balsam - poor	163	180	204
Pine - all	348	105	N/A
Cottonwood - all	47	N/A	N/A



6.4 <u>Unsalvaged Losses</u>

TSR II estimated the average annual unsalvaged losses to be 34,000 m³/yr. Within the Pemberton CFA unsalvaged losses were estimated as a proportion of the TSA losses, based on the ratio of the CFA THLB area to the TSA THLB area. Based on this ratio the total modelled annual harvest volume was reduced by approximately 591 m³/yr.

6.5 Silviculture Systems

It is currently assumed that within the Pemberton CFA all stands will be managed under an even-aged, clearcut regime. Assumptions for regeneration method, regeneration delay, initial density and species composition are provided in Table 5, below.



Table 5: Regeneration Assumptions for the Pemberton CFA. Slight departures from the TSR II are due to revisions to the version of the TYPSY model. Cottonwood species types were projected with VDYP using the crown closure and site index values of the existing stands.

Analysis Unit	Site Index Range	Area Weighted Site Index	Regen Delay	Seedling 9pA	OAF1	OAF2	Establishmen t Type	8 8 8	Genetic nisD	Initial Density	Target Spacing Density
Fir - G	>25.9	27.2	2	-	15	5	Planted	100	က	2500	009
Fir - M	20 - 25.9	22.8	2	1	15	5	Planted	100	3	2500	009
Fir - P	<20	16.8	2	-	15	5	Planted	100	0	1500	200
C/S - G/M	>19.9	23.2	2	-	15	5	Planted	100	0	3000	700
C/S - P	<20	12.5	2	_	15	5	Planted	100	0	2000	-
H/B - G	>24.9	27.2	2	-	15	5	Planted	100	. 0	4000	700
H/B - M	20 - <24.9	22.8	2	—	15	5	Planted	100	0	4000	009
H/B - P	<20	14.5	2	——————————————————————————————————————	15	5	Natural	100	0	1800	
Pine - All	>10.9	18.7	2	-	15	5	Planted	100	0	2000	700
Cottonwood - All >18	>18	35.2	2	vdyp	vdyp	vdyp	dýby	100	0	vdyp	vdyp



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6.6 Visual Quality - Green Up Constraints

Within the Pemberton CFA there are a number of landscape units and visual quality objectives. Specific green-up heights and maximum percentage of area not greened-up were assigned to each unit.

In the Pemberton CFA, there were small, isolated areas of the IRM type and retention VQO unit. Due to their small size, these areas were converted to the nearest VQO type that was larger in size. This resulted in all of the IRM and rentention VQO types being converted to either the modification or partial retention VQO code.

For modelling purposes the time to reach the required green-up height was determined using the Ministry of Forests, Research Branch *Site Tools* program, based on the area-weighted site index and species composition (major species) within the THLB. For each unit the green-up age and maximum allowable area not green-up are presented in Table 6.

Table 6: Green-up age and maximum allowable area specifications.

Landscape Unite Name – VQO Code	Area weighted Green-up height (m)/age (yrs)	Maximum allowable area not greened-up (%)
Ryan - M	5/26	25
Birkenhead - PR	N/A	N/A
Railroad - PR	5/18	15
Ryan - PR	5/21	15
Soo - PR	5/21	15

Note: The Birkenhead – PR type only occurs in the non-contributing landbase.

6.7 Community Watersheds

There is one watershed (CWS) located within the Pemberton CFA. The CWS present in the CFA is approximately 24 ha in size. Within the CWS, a forest cover requirement was applied so that a maximum of 5% of the total forested area could be less than or equal to 5 years of age at any point in time.



7 Modelling Results

The timber supply analysis was conducted using the public software *Forest Planning Studio - Atlas* version 6.0.2.0 (FPS or ATLAS). ATLAS is a simulation based, spatially explicit, forest estate model developed by Dr. John Nelson at the University of British Columbia. The model has been used extensively academically and industrially, and has been model used on numerous Timber Supply Analyses throughout British Columbia recently.

The planning horizon for this analysis was 250 years, with the planning periods set to 5-year increments. In ATLAS the length of the planning period influences growth and yield estimates, management objectives and constraints. Overly narrow planning periods tend to overstate the operational reality of targets and constraints while overly broad planning periods provide unrealistic flexibility in meeting these targets and constraints. We believe that a planning period of 5 years depicts operational circumstances reasonably.

7.1 Harvest Volume

Based on this analysis the projected short- and long-term harvest level for the Pemberton CFA is approximately 5,881 m³/yr. This harvest level is approximately 74% the CFA's theoretical long-run sustained yield (LRSY) of 7,985 m³/yr². This level of harvest is sustained throughout the planning horizon without depleting the THLB growing stock. Figure 5 presents the ATLAS model harvest results for the Pemberton CFA, including the volume harvested from helicopter stands.

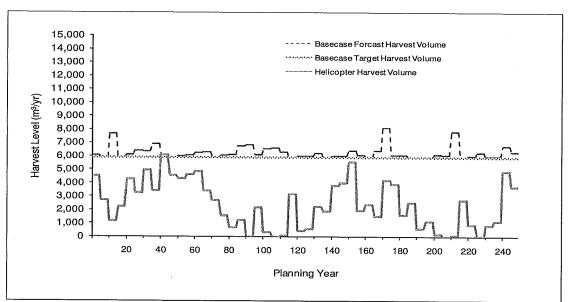


Figure 5: Timber supply forecast for the Pemberton CFA.



² Theoretical LRSY calculation excludes the contribution of low sites, alder and non-merchantable species, and does not account for forest cover management objectives (such as visual quality objectives and community watershed forest cover requirements).

7.2 Transition from Unmanaged to Managed Stands

In the first 80 years of the planning horizon harvest volume is largely comprised of unmanaged stands, a transition from unmanaged to managed stands is expected through to year 110 beyond which harvest volumes will primarily be from managed stands. Figure 6 presents graphically the transition from unmanaged stands to managed stands.

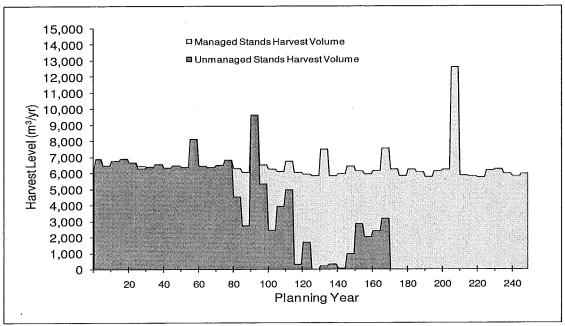


Figure 6: Transition of harvest volume from unmanaged stands to managed stands.



7.3 Growing Stock

Growing stock within the THLB is expected to remain constant throughout the planning horizon. An additional analysis using a 500 year planning horizon was carried out to ensure the sustainability of the final harvest level. Figure 7 presents the growing stock within the non-contributing land base, the timber harvesting landbase and overall.

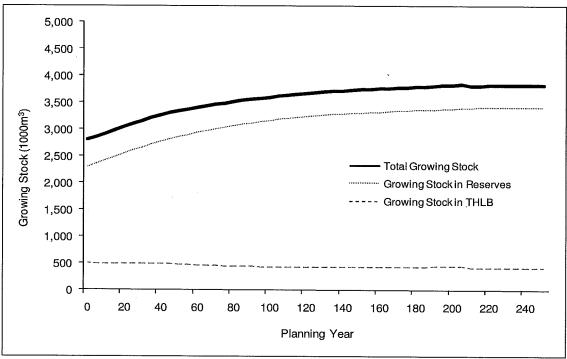


Figure 7: Growing Stock for the Pemberton CFA.



7.4 Harvest Volume Characteristics

Throughout the planning horizon the harvest volume is largely comprised of Douglas-fir type groups, on average this type represents approximately 67% of all harvest volume. Western redcedar and spruce types represent approximately 18% of harvest volume over the entire planning horizon. The Hemlock/balsam type groups represent 14% of the total harvest volume. Cottonwood and pine types represents approximately 1% of the total harvest volume. Figure 8 presents harvest volume by species group over the planning horizon.

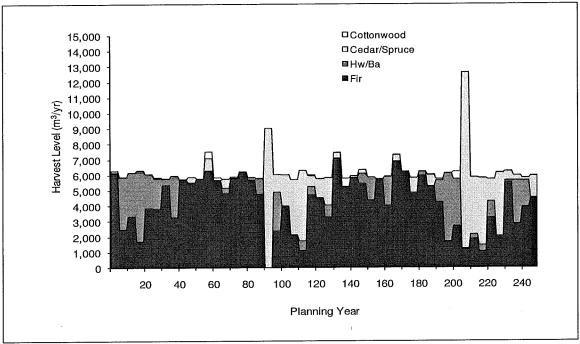


Figure 8: Species type composition of harvest volume.



For the first 30 years of the planning horizon the source of harvest volume will predominantly be from poor and medium productivity sites. Throughout the remainder of the planning horizon harvesting activities are occur predominantly from medium sites (37%), good sites(24%), poor (22%), good/medium sites (16%) and finally the all sites combined (1%). Figure 9 illustrates the source of harvest volume over the planning horizon.

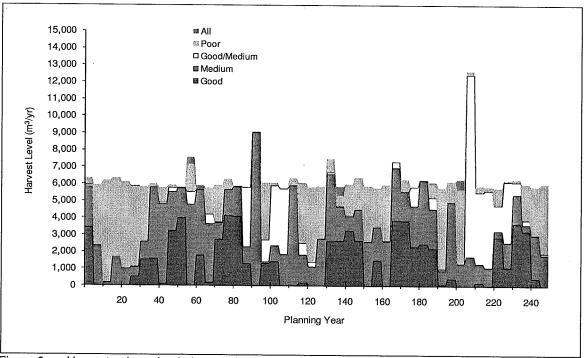


Figure 9: Harvest volume by timber productivity class for the Pemberton CFA.



The transition from harvesting old unmanaged stands to younger managed stands results in a decrease in the average stand age of harvest volume. In the immediate future the volume-weighted stand harvest age is approximately 315 years, this is expected to drop to approximately 130 years over the next 80 years. Figure 10 depicts the average harvest volume stand age for the planning horizon.

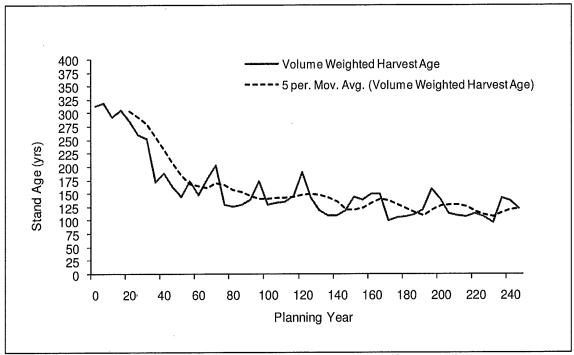


Figure 10: Volume weighted stand harvest age for the Pemberton CFA.



Stand volume is expected to decline gradually, from approximately 700 m³/ha to approximately 500 m³/ha over the next 100 years. By the end of the planning horizon the average stand volume will be approximately 300 m³/ha. This reduction in average stand volume reflects the changing stand harvest age. Figure 11 presents the harvest stand volume over the planning horizon.

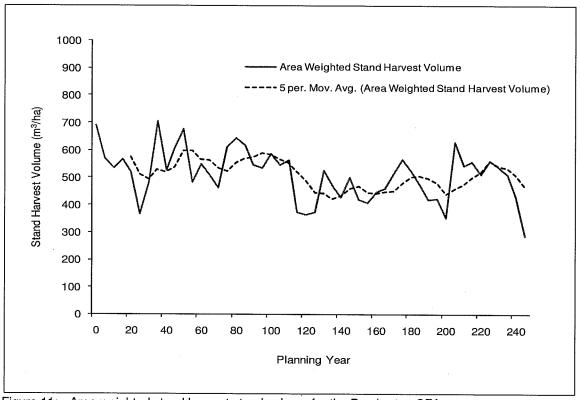


Figure 11: Area weighted stand harvest stand volume for the Pemberton CFA.



Corresponding with the gradual decline in stand harvest age and volume, is an increase in area harvested annually, shown in Figure 12. This is due to the lower volumes found in younger stands, which results in larger areas being harvested to maintain the annual harvest level. In the initial planning period the area harvested is expected to be approximately 12 ha, in the long-term the area fluctuates between 15 and 20 ha.

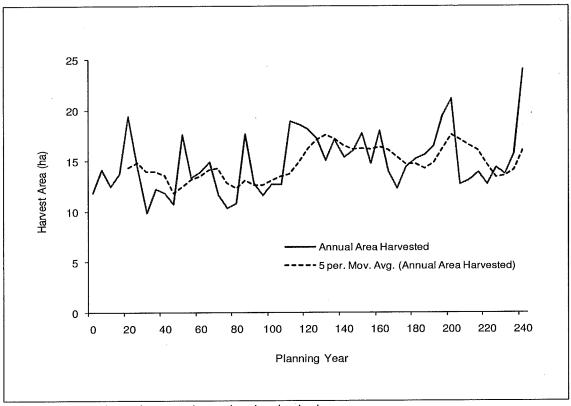


Figure 12: Annual area harvested over the planning horizon.



8 Short-term Constraints

Actual harvest levels often depart from the theoretical long-run sustained yield in part because of operational limitations (i.e. minimum harvest age threshold, variations in age class distributions, etc.) and non-timber forest management objectives that define levels of disturbance associated with timber harvesting activities. For the Pemberton CFA two forest level management objectives have been defined; these include visual quality objectives and community watersheds. Based on the management criteria for each of these objectives, current forest conditions are described below.

8.1 <u>Visual Quality - Green Up Constraints</u>

At the forest level, visual quality objectives are set by forest cover requirements. All areas are subject to visual quality objectives, those areas not assigned to more restrictive VQO codes were assigned to the IRM type. For each VQO code the green-up height requirement was converted to a green-up age requirement, based on the area-weighted by species type/site productivity combination. Green-up requirements are target maximums, and timber supply is constrained where these maximums are exceeded. In Figures 13 and 14 the target values define the maximum level of area for each VQO unit and code.

Visual quality forest cover requirements were applied to all forested portions of each VQO unit. A total of 7,834 ha were assigned to visual quality polygons, of which 2.123 ha are in the THLB. Based on current management assumptions, VQO objectives do not have an impact on timber harvesting activities. Figures 13 and 14 illustrate the actual target maximum levels of disturbance for the recommended visual quality conditions of modification (m) and partial retention (pr), respectively.

The single modification unit does not exceed the target maximum level of disturbance, as shown in figure 13.

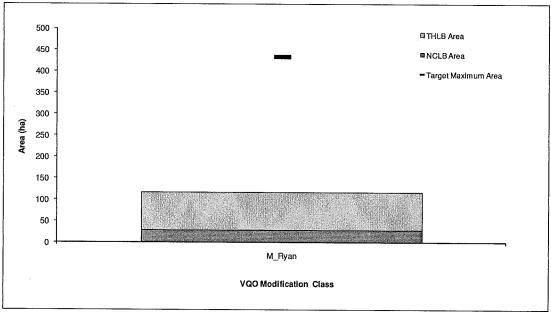


Figure 13: Current actual and target (maximums) forest cover conditions for each VQO unit and modification classification.



Figure 14 demonstrates that within the partial retention classification, the Birkenhead unit exceeds the maximum level of disturbance although there is no THLB within this unit.

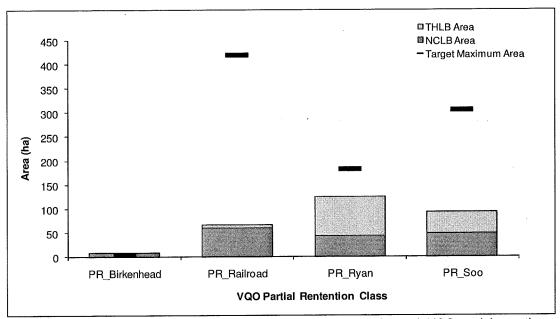


Figure 14: Current actual and target (maximums) VQO conditions for each VQO partial retention classification.



8.2 Ungulate Winter Range

Areas identified as rotation Deer Winter Range were modelled using a rule that maintained a minimum of 20% of the rotation area as functional winter range and then allowed limited harvesting of 20% of the area every 20 years. The amount of functional winter range was analyzed with two different minimum ages. The first analysis tested the impact of retaining 20% of the rotation winter range over the age of 80 (figure 15) and the second analysis tested the impact of using a minimum age of 100 years of age (figure 16). The 100 years was noted in the appendix of order #U2-005 and the 80 years was provided by district staff.

Figures 15 and 16 show the minimum functional habitat within the deer management units for minimum ages of 80 and 100 years. All of the deer management units meet the target minimum for functional winter range for either minimum age.

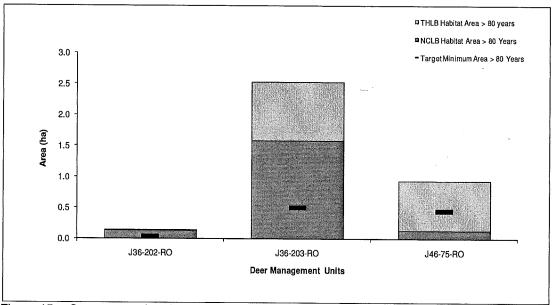


Figure 15: Current actual and target (minimums) of functional winter range with a minimum age of 80 years for each deer management unit.



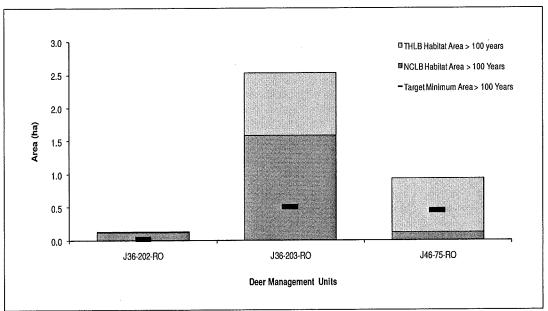
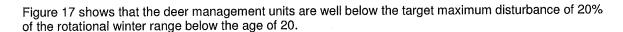


Figure 16: Current actual and target (minimums) of functional winter range with a minimum age of 100 years for each deer management unit unit.



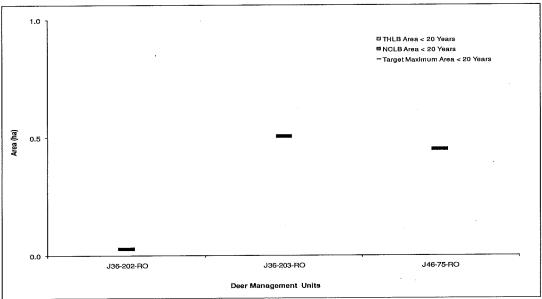


Figure 17: Current actual and target (maximum) levels of disturbance within each deer management unit.



8.3 Community Watersheds

There is one community watershed within the Pemberton CFA. Community watershed areas are subject to forest cover requirements; these requirements represent targets for maximum disturbance. Stands less than 5 years are considered disturbed, and a maximum of 5% of the forested area within each watershed may be disturbed at any time. Figure 18 presents the target maximum disturbance and actual area disturbed for the community watershed within the Pemberton CFA. Based on current management assumptions and forest inventory information, the community watershed has not been disturbed and it is within the target maximum levels of disturbance.

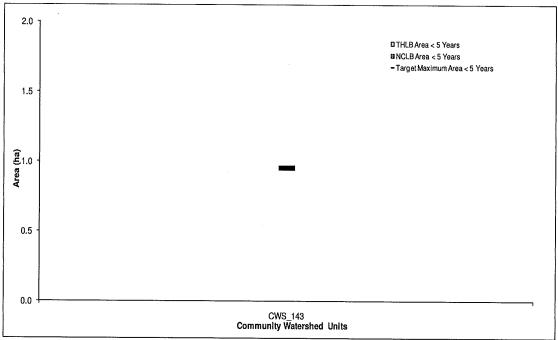


Figure 18: Maximum target disturbance and actual disturbance levels for the community watershed within the Pemberton CFA.



9 Sensivity Analysis: Include all TL Volume

The sensitivity analysis included all volume from timber licences T0741 and T0744 (included all existing and future timber volume). Based on this analysis, the projected short and long-term harvest level for the Pemberton CFA is approximately 5,889 m³/yr. This level of harvest is sustained throughout the planning horizon. The timber harvesting landbase in T0744 included in this analysis is approximately 28 ha. The addition of the TL did increase the harvest level by 8 m³/yr more than the basecase (5,881 m³/yr). The increase is limited due to the small size of the THLB within this TL (28 ha) and the timber supply shortfalls are beyond the 30 year reversion period, therefore the impact is spreadout over a longer period of time. Figures 20 and 21 provide information on this TL.

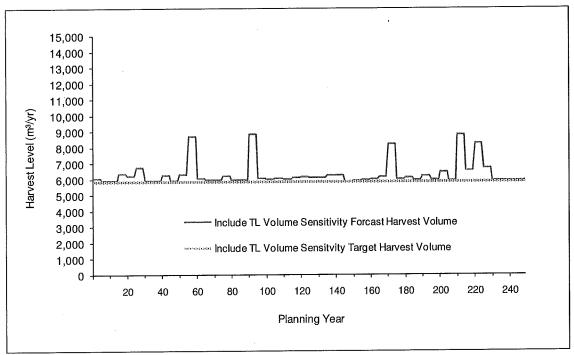


Figure 19: Timber supply for the Pemberton CFA with the inclusion of all TL volume.



Timber Licence 0744 Information

Figure 20 shows the total area of Timber Licence T0744 by age (greater or less than 106 years of age) broken down by species and site index. This graph includes both the timber harvesting and non-contributing landbase within the TL.

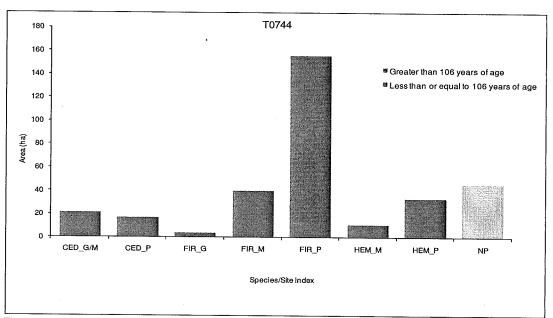


Figure 20: T0744 area broken down by age, species and site index. Includes both timber harvesting and non-contributing landbases.



Figure 21 shows the merchantable area (greater than 106 years of age) in T0744 broken down by timber harvesting and non-contributing landbase. The majority of area with merchantable timber is in the non-contributing landbase.

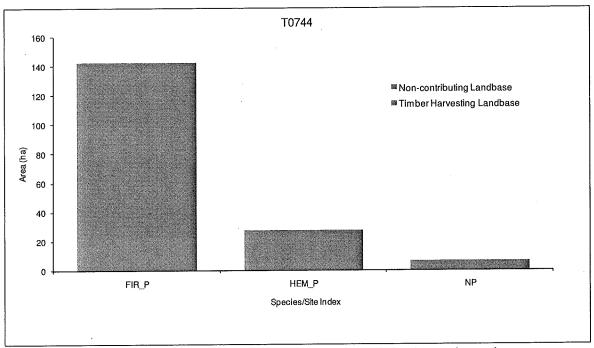


Figure 21: Area of merchantable timber in T0744 broken down by timber harvesting and non-contributing landbase.



10 Sensivity Analysis: Site Index Increased 10%

Site index value for each analysis unit was increased by 10% in order to determine the impact on the projected harvest level. In this analysis the area weighted site index for each analysis unit was not adjusted, thus only stands that shifted from one analysis unit to another (e.g. Fir – M to Fir – G) captured the increased productivity. In addition, the green up ages and minimum harvest ages were not recalculated and thus do not reflect the changes in productivity. This coarse analysis does provide a conservative estimate of the potential increase in harvest levels if all sites were to be increased by 10%.

Based on this analysis, the projected short and long-term harvest level for the Pemberton CFA is approximately 6,801 m³/yr. This level of harvest is sustained throughout the planning horizon. The increase in site index did increase the harvest level by 920 m³/yr more than the basecase (5,881 m³/yr). Figure 22 presents the ATLAS model harvest results for this sensitivity.

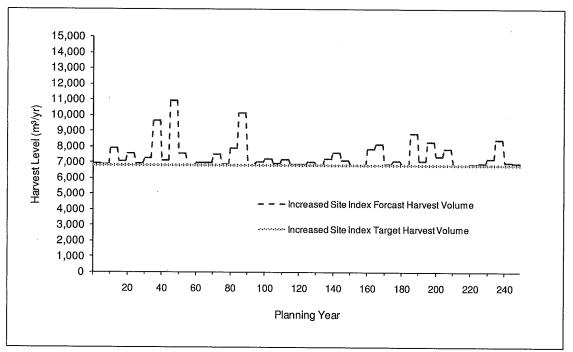


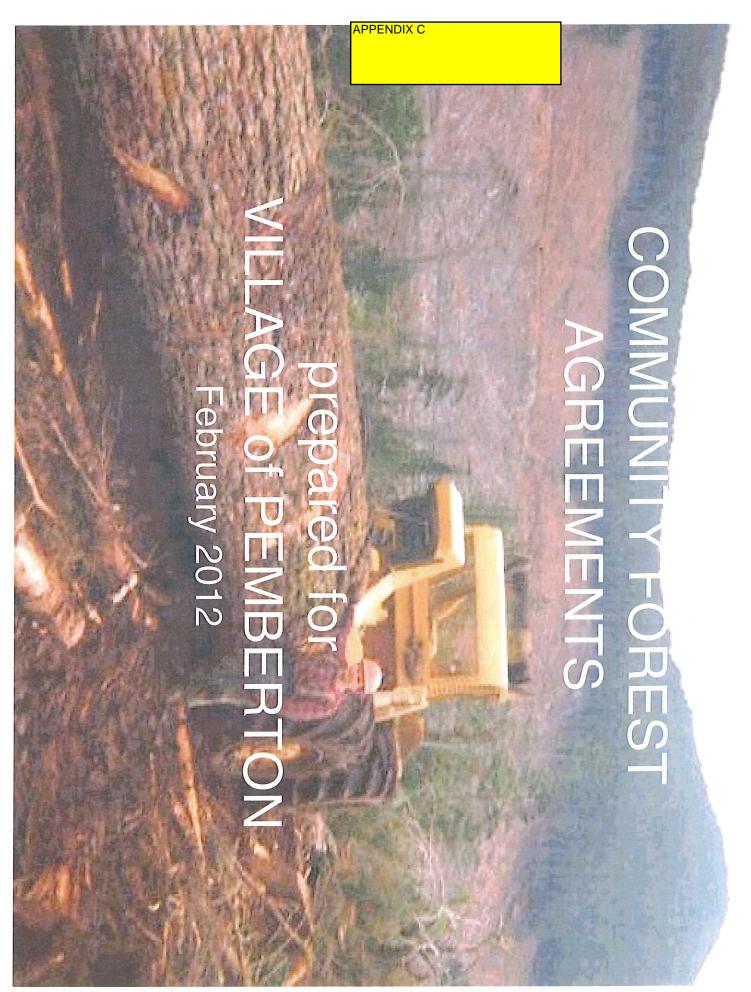
Figure 22: Timber supply for the Pemberton CFA with a 10% increase in site index.



11 Conclusion

The target harvest level for the Proposed Pemberton CFA is 10,000 m³/yr. The initial timber supply analysis projected a short and long-term harvest level of 2,789 m³/yr. As result of the initial results, the Squamish District staff identified additional candidate areas for inclusion in the Pemberton CFA and requested an analysis of the revised area. The analysis of the revised area projected a short and long-term harvest level of 5,881 m³/yr. A sensitivity analysis was performed to determine the impact of including all existing and future volume from imber licence T0744. The addition of this TL resulted in the harvest level increasing to 5,889 m³/yr (8 m³/yr more than the basecase). A second sensitivity was carried out to determine the impact of increasing the site index by 10%. This increase in productivity resulted in a harvest level of 6,801 m³/yr, 920 m³/yr higher than the basecase.





10.0073

Speaking Notes

Meeting with Village of Pemberton

Regarding Community Forest Agreement(s) (CFA)

February 2, 2012

Who We Are:

Why We Are Here:

- 1. Follow up 2011 UBCM;
- 2. Follow up regarding 2005 Intention to Invite (attached);
- 3. Answer your questions regarding what a CFA is/is not;
- 4. Move 2005 intention to invite forward or bring to closure in the relatively near future so government can pursue other opportunities for British Columbia with volume that is currently being held in abeyance.

What is a CFA and Government Objectives for CFA Program:

What's in it for you:

Video:

Economic Viability:

- Proponent due diligence;
- 10,000 m3 AAC on the small side for economies of scale;
- Upfront work and costs (see Community Forestry Guidebook, specific excerpts attached);
- Up front capital, roads and infrastructure costs;
- Quality and ease of access to timber;
- Harvesting and Post Harvest treatment costs;
- Revenue:
 - Market driven
- Non Monetary Values:
 - Dependent on objectives of community

Partnering Opportunities: (Not an exclusive list)

- Broader community (i.e. a Community Forest is just not the Village of Pemberton Forest); Mount Currie Band;
- BCTS operating area however, market pricing must be maintained by BCTS;
- Experienced Forest Professionals, Timber Managers, Logging contractors business side, brokering of wood/products (<u>draw on community members</u>);
- o Squamish

AAC Value or cost to Increase AAC:

- Need a willing seller of AAC;
- AAC cost most likely between \$30 to \$50/m3 of AAC. However this is purely speculation

Impact to Local Forest Industry:

- None;
- Current Apportionment of AAC within Soo TSA has set aside volume commitment of 10,000;
- Improvements unknown valuation

Upfront Set-up Costs:

- Area selection;
- Building Partnerships and Relationships;
- Application Preparation including setting up a legal entity to hold the agreement

After You have the Agreement:

- Annual rent (\$ 0.37/m3 i.e. AAC of 10,000 \$3,700 annually);
- Capital Development Costs (Roads (build rebuild));
- Stumpage (currently "tab rates" approx. 30% of average sawlog rate by species)

Other Communities:

- British Columbia Community Forest Association (\$500 / year, includes some extension services);
- Powell River;
- Sechelt

Environmental

- Essentially this is up to the agreement holder and the community to establish objectives that balance environmental and economics
- Outlined in management plan and in forest stewardship plan and practiced through operations

Management Structures

- Legal counsel is best to provide options available to community for legal entity/structure;
- Must be a legal entity in accordance with Community Tenures Regulation;
- Require a planning team, lead logging contractor, log broker, professional staff, consultants, contractors to carry out licence obligations.

Next Steps:

- Locate Area for CFA (including exploring potential partnerships with other Communities (e.g. Squamish) FN's and/or BCTS);
- Timber Supply Analysis to confirm area supports planned AAC (first TSA provided by government);
- Government will then formally invite an application for CFA;
- Application Requirements:
 - Application package;
 - Legal entity (<u>can be a tricky bit</u>);
 - Management plan;
 - AAC and AAC rationale;
 - o FN Consultation (with all overlapping FN's)(can be a tricky bit);
 - o Public and Community Consultation
- Government review and approval of application. District manager approves management plan and AAC determination;
- Offer of agreement essentially the agreement document prepared and sent to legal entity to sign;
- Execution of agreement by agreement holder and Regional Executive Director signing;
- Forest Stewardship Plan (prepare new or sign on to existing FSP for the area);
- Submission of cutting permits to harvest timber.

Timelines:

Highly variable.

Examples, from formal minister invite (after the agreement area has been identified and agreed on with proponent and consultation with First Nation's (no significant issues) on the area completed). Best case approximately 1 year, worst case greater than 5 years. Whistler took better part of 4 years and Squamish is about the same place as you.

Randy Aitken RPF

Tenures Forester, Coast Area Ministry of Forests, Lands and natural Resource Operations

February 2, 2012



NEWS RELEASE

For Immediate Release 2005FOR0045-000531 April 18, 2005

Ministry of Forests

THREE SEA-TO-SKY COMMUNITIES GAIN COMMUNITY FORESTS

WHISTLER – The communities of Pemberton, Whistler, and Squamish will be invited to apply for five-year probationary community forest licences that will provide each with up to 10,000 cubic metres of timber annually.

"These community forests will allow these three communities to plan and manage forest resources based on their own unique vision, character and priorities," said West Vancouver-Garibaldi MLA Ted Nebbeling, who made the announcement on behalf of Forests Minister Michael de Jong. "This is a part of our province that will be the focus of the world's attention in just a few short years, and when the world looks, they'll see three communities demonstrating how British Columbia's forest practices lead the world."

The three community forests will be located near each of the communities within the Soo timber supply area. Timber volume to support the community forests comes from reallocated timber made available through the Forestry Revitalization Plan. Before a formal invitation can be extended, the Ministry of Forests must consult with potentially affected First Nations.

"Our community forest is an opportunity for us to show how forestry and tourism can co-exist," said Whistler Mayor Hugh O'Reilly. "We depend on our forests not only for their spectacular impact on our world visitors, but also to help us achieve the vision for our resort community."

"Our community has long and strong ties to the forest industry," said Squamish Mayor Ian Sutherland. "Through this community forest, we can ensure our links to good jobs in forestry remain strong."

"Forests have always been an important part of our community," said Pemberton Mayor Elinor Warner. "We depend on our local forests for our jobs, for our water, and for the magnificent setting we've made our home. This opportunity will let us manage our forests for those values."

Community forest agreements are a mechanism by which the province transfers decision-making to communities that wish to more fully participate in the stewardship of their local land base. Community forest tenures are area-based, giving the holders exclusive stewardship of a geographic area of forest land over the term of the agreement. The probationary agreements are initially for five years, at which time they may be extended for another five years or replaced with a long-term agreement of 25 to 99 years. Since August 2004, government has provided or announced its intention to provide community forest opportunities to 29 communities.

-30-

1 backgrounder(s) attached.

Media

Don McDonald

contact:

Communications Director

Ministry of Forests

250 387-8486

Visit the Province's website at www.gov.bc.ca for online information and services.

Government's Objectives for Community Forest Agreements

This form of tenure is intended to provide new opportunities for community management of Crown forest land.

By providing communities with greater flexibility to manage local forests, government seeks to:

- provide long-term opportunities for achieving a range of community objectives, values and priorities
- diversify the use of and benefits derived from the community forest agreement area
- provide social and economic benefits to British Columbia
- undertake community forestry consistent with sound principles of environmental stewardship that reflect a broad spectrum of values
- promote community involvement and participation
- promote communication and strengthen relationships between Aboriginal and non-Aboriginal communities and persons
- foster innovation
- advocate forest worker safety

TABLE 2 Important steps in establishing a community forest

Phase	Activity	Responsibility of	Time required
PRELIMINARY RESEARCH AND INVESTIGATION	Developing community support	Everyone in the community	At least one year
PROPOSAL DEVELOPMENT	Forming partnerships	Planning group, First Nation	At least one year; concurrent with community support building
	Setting up the organization	Planning group	1-6 months
	Securing financing	Planning group	Several months
	Community involvement	Planning group	Ongoing
	Management plan	Registered Professional Forester (RPF)	1–2 months
LICENCE NEGOTIATION	Securing forest tenure	Community; B.C. Ministry of Forests	Several months
	Community involvement	Planning group or Board of Directors; staff	Ongoing
Initial development	Hiring staff	Board of Directors	4 months
	Policy development	Board of Directors	6 months; ongoing
	Community involvement	Planning group or Board of Directors; staff	Ongoing
	Monitoring and evaluation	Board of Directors, Staff	1–2 months; ongoing
	Forest development plan - Assemble information - Public review - Revise plan	RPF; community; B.C. Ministry of Forests	1 month 60 days 2 months
	Field work and cutblock layout	RPF	4+ months
	Site plans	RPF; B.C. Ministry of Forests	1–2 months
	Cutting and road permits	RPF; B.C. Ministry of Forests	2 months
TOTAL			3+ years

When searching for a potential land base, analyze the type of land you may be getting. Get information on:

- forest development history of the area (this information should be available from the Ministry of Forests)
- · land productivity
- land constraints (e.g., is it a community watershed? do you want or can you handle the responsibility that goes with this?)
- habitat issues (e.g., is it all core grizzly bear habitat?)
- access (e.g., what roads exist?); roads are expensive and it would be better if you didn't have to spend your first years developing access roads⁸

STRATEGIC PLANNING

What's the Purpose of Your Community Forest?

Community forests are many things to many people. After looking at the available examples in the province, each community must collectively decide what type of forestry arrangement they wish to pursue. This also is an exercise in determining your community forest's management priorities. Some communities will take a more traditional approach, deciding to use the forests as a fibre source with other values being important, but secondary. Other communities may decide that water quality, or recreation, are primary management objectives and design harvest layouts to reflect this. For long-term viability, your community forest must be economically, ecologically, and socially sustainable.

Opinions will differ about the best use for your community forest. Your management and business plans can allocate resources such that all aspects receive equal priority. In this way, it is possible to have recreation and tourism, timber, non-timber forest products, research and education, and anything else that is important to your community. Keep two things in mind, however. First, don't expect that all these things will

happen at once. Second, determine which management issue will take initial priority on the basis of your available funding. Planning for the long term (especially when initially investing in non-revenue generating objectives) can keep all of your options alive.

Important questions to ask include:

- What is the long-term vision for your community forest?
- What benefits do you want to derive from managing the forest?
- What range of values are important to your community?
- · What are your priorities?

When deciding on forest values, consider the following examples.

- · Domestic water quality
- · Forest industry jobs
- · Long-term sustainability
- Scenery
- · Biodiversity and wildlife habitat protection
- · Logging according to an ecosystem-based plan
- · Non-logging jobs dependent on forests
- Hunting
- · Motorized access for recreation
- · Non-motorized recreation
- Educational opportunities
- Spiritual values
- · Forest fire protection around residential areas
- · Traditional Aboriginal values
- · Cultural heritage and archaeological values
- · Non-timber forest products

Your community's vision for the forest will shape the financial realities of the organization. The community forest's goals and objectives, identified through strategic planning, will have a direct influence over the expected financial return generated by short- and long-term management.

Your vision can be pure inspiration, but your bottom line has to be realistic and achievable.

-Cliff Manning, Burns Lake

⁸ The Ministry of Forests district office will help you get this information.

WHAT ARE GOALS AND OBJECTIVES?

Goal: Goals provide general purpose and direction. They are the end result or ultimate accomplishment towards which an effort is directed. They generally should reflect perceived present and future needs. You must be capable of effectively pursuing goals.

Objective: The end result(s) that must be achieved through management at any given administrative level. Objectives are measurable and indicate when things will happen and who is responsible to carry out activities.

Temper discussions about these questions with realism. Any community forest should be built and approached as a business. Depending on your situation, the profits may initially not be high enough to build municipal infrastructure or to support local community services. In fact, many community forest organizations won't see any profits in the first few years of operation.

If the community decides that managing for values such as drinking water, recreation, and scenery is the priority, then your organization may choose to forego profits. This decision is best made before establishing the community forest. Keep in mind that a modern industrial approach to forestry is likely the least labour-intensive option, whereas an ecosystem-based management approach is the most labour intensive. Alternative types of forest management may require more advance work and a longer time frame to generate supporting income. However, these approaches may bring additional benefits such as management that is better suited to local needs and the land base.

Financial Benefits to the Community

How will potential revenue be managed and shared? Do you have a list of potential benefactors?

Will it go into the city or town's general revenue account? Can revenues fund various municipal programs? Some of these questions will depend on the type of administrative structure you choose to govern your community forest. For example, if you are a non-profit society, then you will be looking for ways to invest surplus funds in the society.

Given the amount of time it can take to generate a profit, it may seem premature to make decisions about how to disperse financial benefits. Taking the critical step in the early stages, however, will help you avoid any future conflict in your community.

Here are some questions to consider (depending on your administrative structure) about financial benefits.

- Who will own the shares of the community forest?
- Who will see the profit?
- For what will these revenues be used?

FINANCIAL BENEFITS TO THE COMMUNITY

Our first priority is to make sure our Forest Reserve Fund is topped up. This fund allows for uncompromised forest management during economic downturns. After this, we normally provide funding to larger community infrastructure projects, as directed by our Municipal Council.

We have also contributed to a stabilization fund that will cover new or unexpected municipal expenditures such as those downloaded from other levels of government. All contributions go to support the educational, historical, safety, recreation, environmental, and cultural objectives of the community.

— Kim Allan, Mission Community Forest

TABLE 6 Estimated initial setup costs to prepare and operate a community forest in the Interior of British Columbia (assumes an allowable annual cut of 50 000 m³)

Phase	Activity description	Optional cost	Estimated cost	
			Min (\$)	Max (\$)
Preliminary Research and Investigation	Ground Work Visit other community forests Research and phone calls		2 000	5 000
	Preliminary Meetings Advertising, hall rentals, guest speakers Maps Ministry of Forests/industry/First Nation meetings 		5 000	10 000
	Feasibility Study	5 000		
PROPOSAL DEVELOPMENT	Management Objectives Develop guiding management objectives How will your community forest work? How will the various resources be managed?		5 000	
	Land Base Determination/AAC Analysis Where will the boundaries be? Area-based tenure? What land-based constraints exist? How big? How much AAC?		5 000	15 000
	 Preliminary Forest Management Plan Take management objectives and develop strategies to achieve these objectives. How will you accomplish your goals? What will you do on the land base? How will you manage the land base? 		5 000	8 000
	Preliminary Forest Development Plan Where and how will your management objectives "play out" on your developed areas? What strategies will be implemented and how will you achieve these?		10 000	15 000
	Business Plan Is the venture economically feasible? How much support in the community? How will revenue and costs be dealt with? How will start-up loans be managed? Will capital acquisitions be financed?		8 000	15 000
LICENCE NEGOTIATION	Licence Negotiation Review documentation Community input Meetings and liaison with various groups		2 000	5 000
INITIAL DEVELOPMENT	Office Administrative Equipment Air photos, maps, desks, cabinetsPhone, fax, printers, computers		5 000	20 000
	Field Equipment Truck lease All-terrain vehicle or snowmobile Forestry equipment (hypsometer, increment borer, cruising vests, compass, GPS)		15 000	30 000
	Initial Forest Development – 20 000 m ³ • Interior (\$2–3/m ³) • Coastal (\$8–10/m ³ ?)		40 000	60 000
TOTAL		5 000	102 000	183 000

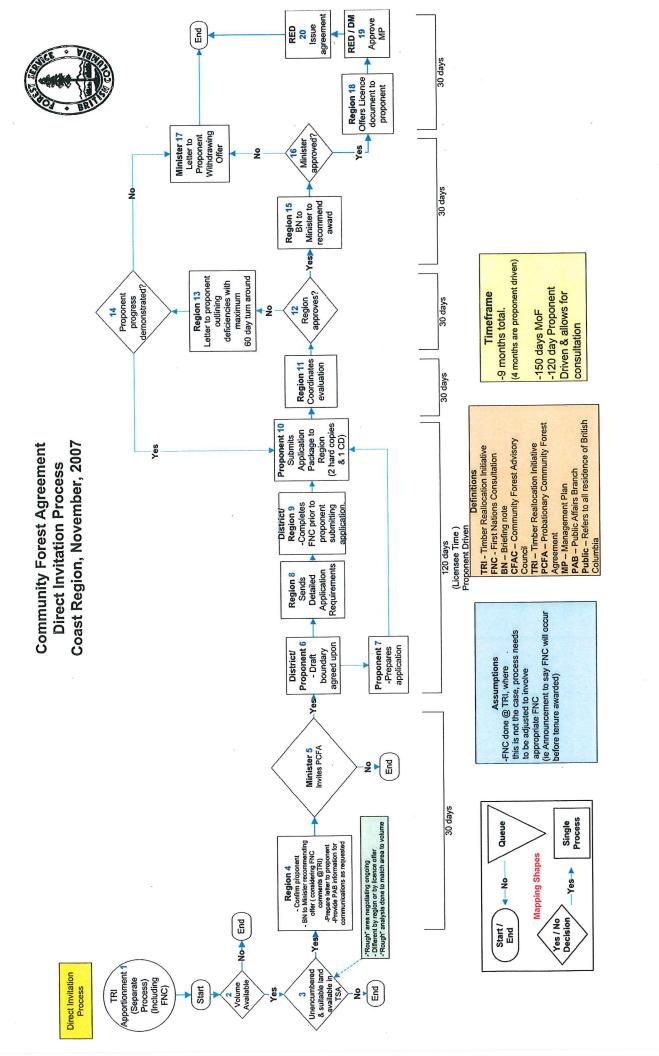


COMMUNITY FOREST AGREEMENT PROCESS NEXT STEP Village of Pemberton

Approximate steps in the process:

- 1. Village of Pemberton due diligence and decision to proceed further or not with 2005 opportunity;
- 2. Village of Pemberton pursues or not relationships with other potential CFA partners;
- 3. Village of Pemberton engages community and obtains "community support for CFA;
- 4. Proponent and district manager agree on an area; 🔸
- 5. Government Consults with First Nation(s) (area selection, management plan, Allowable Annual Cut determination);
- 6. Ministry of Forests Lands and Natural Resource Operations (MFLNRO) completes a timber supply analysis on final area;
- 7. MFLNRO delegated decision maker issues a formal invitation to community to apply for a CFA;
- 8. Regional Executive Director (RED), sends proponent, detailed application requirements (prepare management plan, etc.) which starts clock for formal 120 day application period;
- 9. MFLNRO reviews and approves application, district manager approves management plan and determines Allowable Annual Cut
- 10. Minister or delegate approves and directs RED to enter into a CFA;
- 11. Agreement holder and RED execute agreement;
- 12. Agreement holder prepares a Forest Stewardship Plan (FSP);
- 13. District managers approves FSP;
- 14. Agreement holder submits a cutting permit. Once issued, the harvesting may proceed.

Realistically, all the above can take 1 to 3 years based on the priority given by the Village of Pemberton, any "partners" engaged, and subject to negotiations with MFLNRO, First Nation's and BCTS.



CFA Tenure Flow Sheet

Community:		District:		
Tenure #:	m3	Term:	Start Date:	

	Mandate for CFA:(date)	Initial & Date	Time
Reg/Dist Pre Work	Volume available:(Y/N) Area Identified:(Y/N) Area Deletion Completed:(date) Volume to Area Calculations Completed:(date) Initial Timber Supply Analysis Completed:(date)		
Ten For Invitation	 Prepare <u>Invitation to Apply Letter</u> with <u>BN for RED</u> Add attachments: <u>Application Requirements</u> from Branch website. Assemble invitation package and follow Correspondence process: * Update <u>CFA Tracking Document</u> (with Invitation date) First Nation consultation initiated for tenure issuance: (Initiation date) 		T=30
Ten For Application	- Proponent prepared Application		T=120
Ten For Reg/District Evaluation	- Review application package and management plan for content/completeness - Secure and add proof of Legal Entity. (Certificate of Incorporation) - Business Plan provided - Strategy for Provincial CFA objectives - Annual Reporting Strategy provided AAC rationale provided - Check status of legal entity in BC Online (date checked) - Accept application and update CFA Tracking Document (date) - Update CLIENT or verify applicant in CLIENT (client #) - Download tenure document from Branch website Licence Document (CFA)		T=30
District Specialist	- Prepare Consultation summary - Include all letters and correspondence - Summary received from district:(date)		T=15
Ten For Offer	- Prepare application, review and offer Package: - Offer Letter for CFA (notification of Annual Rent invoice) - Attach Management Plan/AAC approval by District Manager		T=60
Ten For <u>Issuance</u>	- Receive signed licence (2 copies) - Check status of legal entity in BC Online (date checked) - Forward 2 copies of licence document and award BN for RED execution Prepare Conveyance Letter for licence for RED signature Update FTA (Tenure Issuance) - Update CFA Tracking Document (Licence Execution date) - Send PDF copy of executed licence document to key district contacts		T=60- 90
Dist. Specialist.	- Notify Bands on consultation list that tenure has been issued		
Timber Supply Resource Clerk	- Cut control profile setup - Issue invoice for Annual Rent Invoice #:		
Ten For	- Tear down working file and distribute to appropriate ORCS file use New File Request - 19460-20 – management planning and related information - 19460-25 – legal/licence information		
Comments:			

Date



Pemberton Community Forest

Partnership Discussion September 16, 2014



BCTS Reason for Being

- Softwood Lumber Agreement (SLA) requires BC to demonstrate that licensees are not being subsidized.
- BCTS required to sell 20% of timber volume sold from Crown Lands and must mimic the forest industry profile.
- BCTS apportionment in Sea to Sky Forest District -=105,200 m³; TFL =42,200 m³
- **BCTS Primary Goals**: To provide credible representative price and cost benchmark data for the Market Pricing System.
- **BCTS Primary Objective**: To sell the full apportionment over a 5 year business cycle.



Benefits of Working with BCTS

- □ BCTS is has strong Environmental Management System (EMS) and maintains Forest Certification with SFI.
- ☐ All Licensees must be WorkSafe Certified.
- BCTS has capacity to prepare Management Plans, Stewardship Plans, to Consult/Info Share, Develop Timber Sale Packages and Monitor Sales Activity and Enforce conditions.
- BCTS returning to the previous Five Year Development Planning Model (roads and blocks).
- ☐ BCTS is hiring a Woodlands Supervisor to reside in Squamish and improve community engagement and program oversight.



Benefits of Working with BCTS

- BCTS must remain transparent in all of their activities and are subject to audit at anytime by the FPB, third party audits related to forest certification, in-house audits related to policy and budgets.
- ☐ Staff are members of the larger community of Sea to Sky.
- Pemberton would not require capacity to manage the license area but would share in the profit. BCTS would recover development costs and include the volume in the pricing data base satisfying the SLA.
- BCTS and its predecessor the Small Business Forest Enterprise Program has been in existence for over two decades. It is considered by industry as an essential component of the sector – Roles and Effectiveness Review 2013.



Discussion

- ❖ Forest planning and development may take up to three years to get a sale to advertisement.
- ❖ Building an inventory of sales is critical to meeting the objective of selling the apportionment.
- Access is always the first consideration and may include negotiating agreements.
- ❖ Development within BCTS pricing areas is on-going unless there are valid reasons to hold in abeyance.
- *BCTS Pricing Areas are must be protected to maintain a valid pricing model and provide for long range planning.



Discussion

- ❖BCTS would entertain a tri-party CFA with Pemberton, L'ilwat and BCTS.
- *Currently there is not a lot of flexibility around procurement of services in government. We are compelled to test the marketplace in our contract offerings.
- Legislation is in catch-up mode to allow BCTS to develop a business to business partnership. We have pilots underway.
- ❖Current development in the Pemberton Area of Interest (MAP).



Partnership Example

PHASE	MODEL
PROCESS	Transfer AAC from CFA to BCTS (legislated req'mt)
PLANNING	BCTS
DEVELOPMENT+ HARVESTING+ MARKETING	BCTS
SILVICULTURE	BCTS/VOP
Total Revenue (\$/m3)	Upset Rate + Bonus Bid
PROFIT SHARING	VOP = 85% of Bonus Bid BCTS = 15% of Bonus Bid



Thank-you for listening

Questions?



CFA 101: ABC's of Applying for a Community Forest Agreement

Village of Pemberton
October 21 2014

"WHAT" is a Community Forest Agreement?

- Area Based Tenure

 (i.e. a specific area of Crown land managed in accordance with Community Values)
- Direct Invitation (no competition) to Apply for the Rights to Apply to Harvest Crown Timber
- Entered into with a Legal Entity that has the Demonstrated Support of the Community



"How" a CFA Comes to Be (process)

- Pre-invitation
- Invitation
- Application
- Evaluation
- Government Decisions
- Executed Agreement
- Additional Work and Plans
- Harvest Timber



Pre Invitation Stage

- Volume is Set Aside in Timber Supply Area;
- Convert Volume to Area (Hectares of THLB);
- Locate those hectares of THLB on the ground;
- RESOLVE Conflicts/Competing Interests:
 - BC Timber Sales;
 - Other Licences and Potential Licences;
 - FIRST NATIONs Strength of Claim of Title (post June 2014 Supreme Court of Canada)
- First Nation's Consultation

ABC's of the Application Process

- Proponent receives invitation letter from the Minister or their delegate (still a ways off)
- Invitation includes map showing the area and Application Requirements
- Application Requirements: Considered
 Minister's Policy (direction)...Minister or
 delegate WILL NOT BE SATISFIED unless they
 are followed



Application Requirements

- Basics (Title Page, Executive Summary, Appendices, etc)
 PLUS +++
- Legal Entity (to hold the agreement);
- CFA Area Overview;
- Management Plan (professional document...i.e. Must be prepared, signed and sealed by RPF)
 - Proposed Allowable Annual Cut (AAC)
- Community Awareness, Support and Involvement;
- Administrative Authority;
- Business Plan;
- Not For Public Disclosure.

The W's

- Where Is the Pemberton CFA at in Process?
 - Pre-Invitation
- Where Are We Going?
 - Proceeding Towards Invite (note: Government is still assessing impacts of SoC "William" Decision on Long Term Area Based Tenure Opportunities)
- Who Needs to Do What?
 - FLNR finish resolving area conflicts
 - VoP is this (area/opportunity) what you want?
- When Are We Going to Get There?
 - FLNR Goal to have Area Identification Complete by March 31, 2015
 - Formal Invitation from Minister or Delegate:
 Government is still assessing impacts of SoC "William" Decision on Long Term Area Based Tenure Opportunities



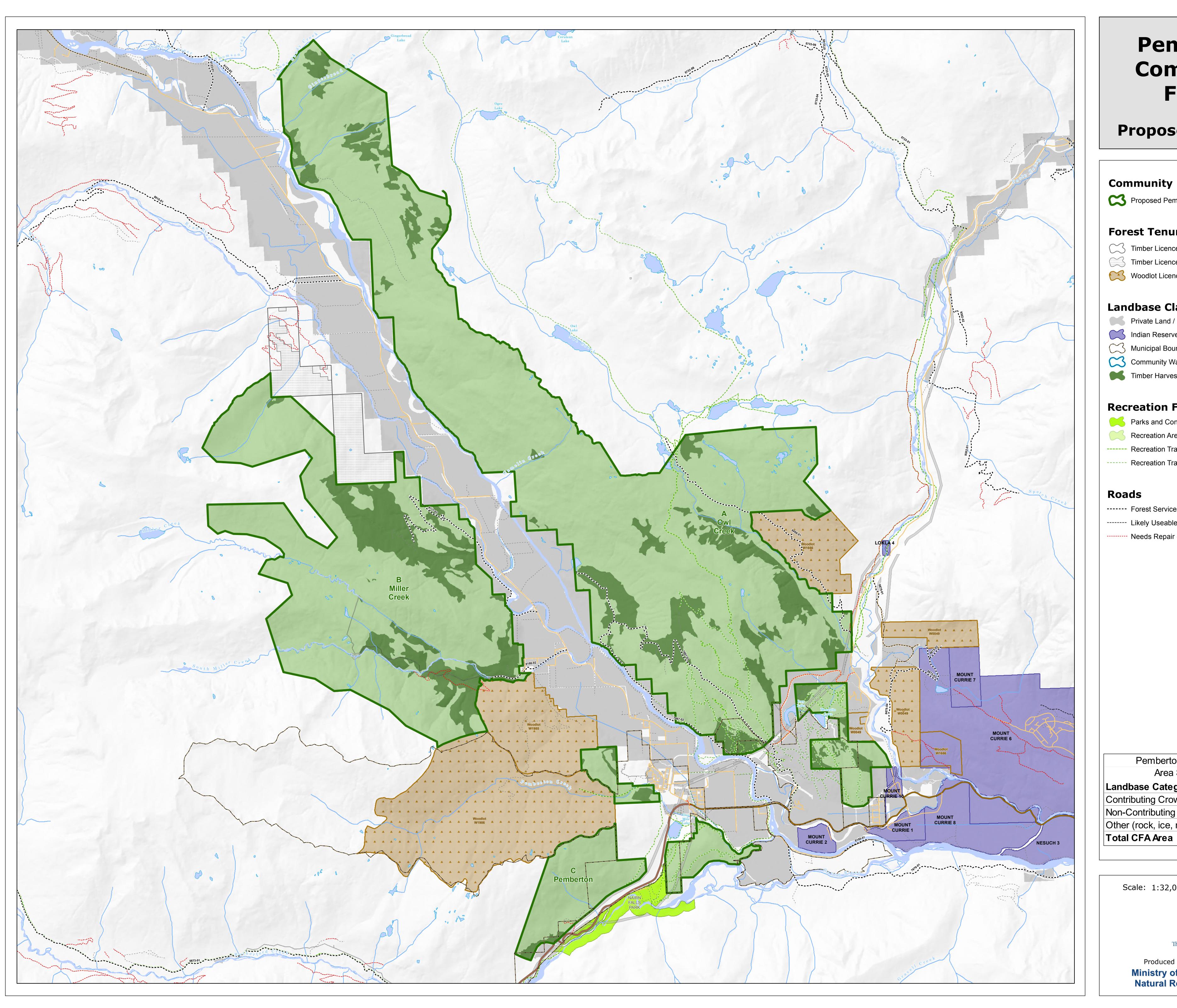
RESOURCES

- FLNR Staff:
 - Sea to Sky District
 - Coast Area Forest Tenures
- Forest Tenures Branch Website
- Application Requirements
- BC Community Forest Association http://www.bccfa.ca/
- Other Communities---elected Officials and staff
- Consultants

QUESTIONS

STEPs After Agreement Executed

- Forest Stewardship Plan
- Timber Development
- Cutting Permit Application
- Harvesting
- Post Harvest Obligations
- Reporting



Pemberton Community Forest

Proposed Area Map



Proposed Pemberton CFA Area

Forest Tenure

Timber Licence Boundary

Timber Licence Remaining

Woodlot Licence

Landbase Classification

Private Land / ROW

Indian Reserves

Municipal Boundary

Community Watershed

Timber Harvesting Landbase (TSR3 2011)

Recreation Features

Parks and Conservancies

Recreation Areas - FLNR

----- Recreation Trail - FLNR

----- Recreation Trail - Other

Roads

----- Forest Service Road

----- Likely Useable (2009 Inventory)

Needs Repair or Upgrade (2009 Inventory)

Pemberton Community Forest Area Summary Table Area (ha) Landbase Category Contributing Crown Forest 1,941 Non-Contributing Crown Forest 6,700 4,284 Other (rock, ice, nonforested)

Scale: 1:32,000 September 15, 2014

12,925

Produced By: Sea to Sky District Ministry of Forests, Lands and Natural Resource Operations

BRITISH COLUMBIA

The Best Place on Earth