

Appendix E

Wetzin'kwa Community Forest K2P

Management Plan

Licensee:

Wetzin'kwa Community Forest Corporation

**Bulkley Timber Supply Area
Skeena – Stikine Forest District**

Prepared by Harold Reedy, RFT

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

Dean Daly, RPF # 2100

seal

Submitted by:

Ron Bowles

President

Wetzin'kwa Community Forest Corporation

Approved by:

Barry Smith

District Manager

Skeena – Stikine Forest District

signature

signature

September 2006

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September 12, 2006

District Manager
Ministry of Forests and Range
Skeena – Stikine Forest District
Bag 6000,
Smithers, BC
VOJ 2N0

Attention: Barry Smith, District Manager

Dear Barry,

Re: Wetzin'kwa Community Forest K2P – submission of a Management Plan

We have submitted our application for a Probationary Community Forest Agreement to the MOFR Regional Manager, Northern Interior Forest Region, in Prince George.

Within our application is a Management Plan. The Management Plan meets the content requirements specified in a Probationary Community Forest Agreement as per Section 43.3 f) of the Forest Act. The Management Plan requires the Regional Manager's (or District Manager's) approval before a Probationary Community Forest Agreement can be issued.

We have enclosed one paper copy and one CD copy of the Management Plan for your review and approval.

As there is bark beetle damaged timber in the community forest area that need harvesting, an expedited review and approval of our Management Plan would be appreciated.

Yours truly,

Ron Bowles
President

pc: MOFR Regional Manager, Northern Forest Region, Prince George

Appendix E – Management Plan

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1.0 Executive Summary

Wetzin'kwa Community Forest Corporation is submitting this **Management Plan** for the Wetzin'kwa Community Forest area located near Smithers, BC. The anticipated Probationary Community Forest licence number will be K2P. This Management Plan document is a legal requirement under *Section 43.3 of the Forest Act* and must be approved by the regional or district manager (Ministry of Forests and Range) prior to government issuing a Probationary Community Forest Agreement (PCFA).

This Management Plan is being submitted in conjunction with Wetzin'kwa Community Forest Corporation's application for a Probationary Community Forest Agreement. This Management Plan submission replaces the section *Attachment D – Outline of Plan for Management of Forest Resources* outlined in the *Probationary Community Forest Agreement (PCFA) Application Requirements*. The Management Plan provides more comprehensive and detailed information than would normally be included in an 'outline of plan for management of forest resources'.

The main purpose of this Management Plan submission at the same time as the PCFA application is to expedite approval of the Management Plan and subsequent issuance of the PCFA tenure so that harvesting of mountain pine bark beetle damaged stands can commence.

The community forest area selected is 100% provincial crown land located west of the Town of Smithers. No private land, Indian Reserve lands, or municipal lands are included in the area. See the Appendices for a map of the area. The selection of this area was mutually agreed upon by the Ministry of Forests and Range and the Wetzin'kwa Community Forest Corporation.

The Management Plan primarily focuses on resource inventories and factors affecting annual allowable cut (AAC) or sustainable timber harvesting levels for the community forest area. The Appendices contain a *Sustainable Harvest Level Review* report indicating that an AAC of 30,000 cubic metres is reasonable for the community forest area. Wetzin'kwa Community Forest Corporation proposes the AAC of 30,000 cubic metres. This is the same volume offered to our local communities by Forest Minister Coleman for a Probationary Community Forest Agreement.

Ministry of Forests and Range staff from the Skeena–Stikine Forest District and Northern Interior Forest Region provided direction to consultant Industrial Forestry Service Ltd. (IFS) for their computer modeling to generate the *Sustainable Harvest Level Review* report. IFS used up-to-date inventory data and information from the Bulkley Land and Resources Plan and Landscape Unit Plans for the area. For example, the *Review* takes into account the current harvesting constraints associated with protecting and conserving the various non-timber resource values.

The Management Plan contains the 'Management Commitments' made in the PCFA application. It also provides Wetzin'kwa Community Forest Corporation's management objectives for harvesting, protecting, and reforesting areas. The Plan explains how communication exchanges will continue with the public, Wet'suwet'en first nations, and other resource users in the area to manage the area for multiple users and community values into the future.

The Management Plan does NOT specify specific strategies and measurable results / steps in relation to government's resource management objectives. This is the purpose of a *Forest Stewardship Plan* that is yet to be developed and approved for the community forest area.

This Management Plan is consistent with current legislation and higher level plans including the Bulkley Land and Resources Management Plan. Although solicited, there have been no specific directives received from the regional or district manager for the preparation of this Management Plan.

2.0 Statement of Goals and Guiding Principles

Goals

Wetzin'kwa Community Forest Corp's goal is to manage the area for the long term economic, environmental, and social benefit of the residents of the Bulkley Valley. This includes:

- planning and management that will reflect the local communities' values;
- encouraging compatible multiple uses on the landbase by various resource users; and
- maintaining functional integrity of ecosystems on the landbase for long term sustainability and diversity of plant and animal species.

Guiding Principles

Wetzin'kwa Community Forest Corporation and its informal partners (NEWPRO and the Office of the Wet'suwet'en) share a number of common core values with their management vision for the Community Forest. These core values have been presented at Open Houses in the local communities and have been well received.

These '**Core Values**' include managing the lands, timber, and non-timber forest resources:

- to sustain a financially viable forest resources business for the long term benefit of residents in the Bulkley Valley;
- to maintain and sustain functional integrity of ecosystems;
- to protect water quality in watersheds;
- to maintain a healthy balance of all plants and animals;
- to recognize the Wet'suwet'en people and their culture;
- to establish long lasting, respectful relationships between the partners;
- to expand local small business opportunities and employment when and where feasible;
- to provide a safe and environmentally friendly work environment;
- to enhance outdoor educational and recreational opportunities;
- to increase community involvement in resource management; and
- to reflect community values in decision making.

The above Core Values provide guidance to the Board of Directors and resource managers in decision making.

Other guiding principles include managing the lands consistent with the Smithers Community Forest Plan (2000); and the Bulkley Land and Resource Management Plan and subsidiary Copper, Bulkley Valley, and Telkwa Landscape Unit Plans.

The Office of the Wet'suwet'en is developing a 'Wet'suwet'en Territorial Stewardship Plan'. Once this Plan is complete and accepted by the Wetzin'kwa Community Forest Corporation's board of directors, then this Management Plan will be amended to include reference that 'land management will be consistent with the principles of the Wet'suwet'en Territorial Stewardship Plan'. Wetzin'kwa Community Forest Corporation is committed to working closely with the Office of the Wet'suwet'en Hereditary Chiefs to ensure responsible stewardship of the land.

Wetzin'kwa Community Forest Corporation intends to follow applicable government legislation, regulations, and policies in managing the community forest tenure.

General Management Objectives

Wetzin'kwa Community Forest Corporation's general management objectives include:

Environmental

- to manage for sustainability of all resources (timber and non-timber resources);
- to manage for plant and animal diversity;
- to protect water quality in watersheds;
- to implement good forest stewardship activities on the land base and minimize negative environmental impacts; and
- to harvest damaged timber as a priority (pine beetle, fire, blowdown, etc).

Social

- to facilitate local community involvement into forest management decisions;
- to manage for community values;
- to establish respect and a good working relationship between the Office of Wet'suwet'en, Town of Smithers, Village of Telkwa, and Newpro;
- to enhance outdoor recreation and education opportunities;
- to conserve / preserve cultural heritage sites / features; and
- to increase community awareness of forest management.

Economic

- to manage for long-term profitable operations;
- to manage for long term economic benefits to the local communities;
- to sustain, expand, and diversify local forestry related employment; and
- to promote opportunities to harvest botanical products.

3.0 Management Commitments from PCFA Application

The following are Wetzin'kwa Community Forest Corporation's management commitments that have been made in their application for a Community Forest.

1. Commitments for Community Involvement and Input

- Annual Open Houses combined with public meetings held in the communities of Telkwa, Smithers, and Moricetown where past year's activities are summarized and the future year's plans are presented and feedback received.
- A guided field trip for interested members of the community will be conducted through the community forest area on a schedule of a minimum of one trip every two years.
- Form a Resource User's Group including representation from the following to review and provide input for planning purposes as well as provide general feedback on operations:
 - Registered water users
 - Registered trappers
 - Registered guide outfitters
 - Adjacent landowners – Willow Lake area and Copper River Guest Ranch
 - BV Cross Country Ski Club
 - BV Naturalists and other groups on the existing Smithers Community Forest's steering committee
 - Non-motorized recreation clubs (BV Backpackers & Alpine Club of Canada)
 - Motorized recreation clubs (ATV & Snowmobile Clubs)
 - BV Rod & Gun Club
 - Ski and Ride Smithers
 - BV Community Resources Board
 - Adjacent woodlot licence tenure holder (W1481)
 - Adjacent forest licence tenure holder (Pacific Inland Resources)
 - Adjacent tenure holder BC Timber Sales
- Develop a 'Total Resources Plan' - an ongoing, living document and large scale map that the public, resource users and stakeholders can easily review and provide ongoing input to. The foundation data and resource values for initiating the plan will include those outlined in the Bulkley LRMP; the Bulkley Valley, Copper, and Telkwa Landscape Unit Plans, and existing Smithers Community Forest Plan (2000).

2. Commitments to Work with Wet'suwet'en Peoples

- Meet twice annually with the Office of the Wet'suwet'en and the Hereditary Chiefs to discuss various ways to improve relationships between our native and non-native communities and determine what social, environmental, and economic projects could assist relationship building.

3. Commitments to Land Stewardship

- Complete a Forest Stewardship Plan (FSP) for the area.
- Follow direction outlined in the FSP, the Bulkley LRMP, the Landscape Unit Plans, Smithers community forest management plan (2000), and community input for planned development and harvesting.
- Focus primary harvesting operations on pine beetle infested, damaged, or susceptible stands. (This is conditional to ensuring other non-timber resource values such as biodiversity, ecological sustainability, recreation and aesthetic values have been considered.)
- Review various timber and non-timber resource inventory data to determine whether it is sufficient in the short and long term to make good management decisions. Prepare a schedule and plan for improving inventory data that is insufficient.

4. Commitments to Enhancing Outdoor Recreation and Education

- Work with 'Recreation Sites and Trails Unit' of the Ministry of Tourism, Sport, and the Arts to maintain the Dennis Lake Recreation Site.
- Work with Scouts Canada – Smithers group - to identify and construct a permanent camping site within the Community Forest for youth activities.
- Meet annually with the BV Cross-Country Ski Club, BV Naturalists, and hiking groups on long term planning for recreation trail development in the existing Smithers Community Forest area.
- Meet annually with Northwest Community College and School District #54 to discuss and encourage their involvement in outdoor education programming utilizing the Community Forest area.

5. Commitments to a Healthy Community Forest Economy

- Research timber and non-timber forest product market opportunities.
- Subject to log markets and economics, harvest the Allowable Annual Cut.
- Utilize local contractors to conduct road building, harvesting, log hauling and silviculture activities.
- Research and promote opportunities to diversify and expand employment opportunities.
- When harvesting, sort and sell logs to value-added operators where possible.

4.0 Higher Level Plans

The *Bulkley Land and Resources Plan* (Bulkley LRMP) and parts of the Bulkley Valley, Telkwa, and Copper Landscape Unit Plans are considered 'higher level plans' for the community forest area.

Other Plans

Other Plans that will be considered when managing the community forest are:

- Existing *Smithers Community Forest Plan (2000)*
- *Wet'suwet'en Territorial Stewardship Plan* (once complete and accepted by WCFC).

5.0 Resource Inventories and Resource Values

5.1 Existing Timber Inventories

Forest cover maps for the Bulkley Timber Supply and the community forest area have had disturbances and labels updated to year 2000. During 1999 and 2000, the Ministry of Forests conducted a 'depletion update' matching satellite imagery to the forest cover maps to ensure currency and accuracy. There has been very little harvesting conducted in the community forest area since year 2000 (estimated to be less than 50 hectares).

For the community forest area, in 2006, the Ministry of Forests and Range updated the forest cover attributes (volume, height, and age corrected) to year 2004 before running harvesting scenarios / models to provide sustainable annual allowable cut (AAC) data for the area.

The existing inventory information appears to be good as well as up-to-date and no further timber inventory or re-inventory work is anticipated for many years, subject to a catastrophic incident(s).

5.2 Botanical Forest Products

Wetzin'kwa Community Forest Corporation requests that harvesting of botanical forest products, in addition to the harvesting of timber, be included in the Probationary Community Forest Agreement.

There are no existing inventories specifically listing botanical forest products for the community forest areas. Ecosystems for the areas are primarily SBS and ESSF which generally have low potential for commercial mushroom harvesting. In the past, there has been no known commercial berry picking operations in the area; however, there is future potential for making berry and medicinal products as well as collecting decorative balsam (subalpine-fir) boughs for making products for commercial sale. (i.e. Christmas wreaths).

Identifying the various botanical forest products, researching their commercial values, and developing inventory maps for commercially valuable plants will be the steps associated, over time, to establish an inventory for the community forest area. Good forest cover and ecosystem mapping will aid in the development of these merchantable plant inventories. Developing this inventory is not a priority unless research shows profitable marketing opportunities.

5.3 Other Inventories / Resource Values

Other Inventories

There are other resource inventories available for the area, including:

- Biogeoclimatic Zone, Sub-zone, and Variant mapping.
- 'Fish' or 'no-fish' stream inventories by Triton Environmental Consultants.
- Critical Spawning Salmon Habitat Sensitivity mapping.
- Wildlife Habitat (including High Value Habitat) mapping.
- Environmentally Sensitive Areas mapping.
- Recreational Visual Landscape Inventory (and Features) mapping.
- Landscape Unit Plan Visual / Scenic Areas mapping.
- Land and Resources Plan Ecosystems and Landscape Corridors mapping.
- Cultural Heritage and Archeological Potential mapping.
- Fall 2005 Bark Beetle Overview Flight mapping.
- Other available mapping includes first nation's traditional territory boundaries, registered trapline boundaries, registered guide-outfitter boundaries, range tenure boundaries, recreational sites, inventory research permanent sample plot locations, mineral claim boundaries, coal lease boundaries, and TRIM contour mapping.

The above good inventory and mapping information will be utilized for operational forest planning.

Resource Values

Traditionally, local Bulkley Valley residents have been progressive at identifying non-timber resource values and working with government to inventory, map, and protect these resource values. The Bulkley Valley Community Resources Board was very active in ensuring these non-timber resource values were protected or conserved as they developed the Bulkley Land and Resource Management Plan (LRMP) for the Bulkley Timber Supply Area in the 1990's. The LRMP outlines each geographic area in the Timber Supply Area and its resource values along with management direction to manage each resource. The LRMP reflects community values and is highly accepted and endorsed by community residents. Sub-plans of the LRMP, or Landscape Unit Plans, are complete for the community forest area that help provide detail for management (Telkwa, Copper, and Bulkley Valley Landscape Unit Plans) and biodiversity objectives. For further details regarding the Bulkley LRMP and the Landscape Unit Plans, they can be viewed at website www.gov.bc.ca/dss

The existing *Smithers Community Forest Plan (2000)* outlines wildlife, education, and recreation values for the existing 'Smithers Community Forest' area, particularly in regards to non-motorized recreation and education opportunities (i.e. nature and hiking trails; and cross-country ski trails). The existing 'Smithers Community Forest' area is a name only, it is not a community forest agreement tenure. This existing 'Smithers Community Forest' area will be merged into and managed as part of the Wetzin'kwa Community Forest Agreement tenure area. The Map in the Appendices outlines the existing 'Smithers Community Forest' area and its boundaries.

The Wet'suwet'en Territorial Stewardship Plan, once completed and accepted by the Wetzin'kwa Community Forest Corporation, will also identify resource values.

6.0 Proposed Annual Allowable Cut (AAC) - Timber

6.1 Timber Inventory

Wetzin'kwa Community Forest Corporation is requesting the full 30,000 cubic metres of timber allowable annual cut (AAC) that has been offered by the Forest Minister in his July 2006 invitation letter to apply for a PCFA.

The forest cover information for the community forest area is considered good and up-to-date. Prior to conducting the recent allowable cut analysis for the area, the Ministry of Forests and Range updated the forest cover attributes (volume, height, and age corrected) to year 2004 to provide the best information available for a timber analysis.

The Ministry of Forests and Range contracted Industrial Forest Services Ltd (IFS) to conduct an Allowable Annual Cut (AAC) analysis to assist determination of the boundaries and area for the Community Forest that would accommodate the Forest Minister's allocated 30,000 cubic metres of timber within the Bulkley Timber Supply Area. The Ministry of Forests and Range requested IFS to run several AAC scenarios with harvesting constraints and area scenarios. See the final generated report in the Appendices - *Sustainable Harvest Level Review*, dated April 5, 2006.

Based on the recent *Sustainable Harvest Level Review* report it appears that a reasonable long term AAC for the community forest area is 30,000 cubic metres of conifer volume. It is expected that the district manager will utilize this report to 'determine the AAC' for the community forest tenure.

6.2 Sustainable Harvest Level Review

See the Appendices for the *Sustainable Harvest Level Review* for the report, dated April 5, 2006, which provides a recent AAC analysis specifically for the community forest area.

The methodology for this AAC analysis or *Sustainable Harvest Level Review* was directed by Ministry of Forests and Range staff.

The methodology used in conducting the above *Sustainable Harvest Level Review* included management assumptions consistent with the last Bulkley Timber Supply Review conducted in 2001 (TSR2).

6.3 Timber Harvest Specifications

The Bulkley Timber Supply Review 2 conducted in 2001 used the following timber utilization standards:

- 12.5+ cm diameter at breast height for predominately pine stands; and
- 15.0+ cm diameter at breast height for all other stands / species.

These timber harvesting specifications are assumed to have been used for the recent *Sustainable Harvest Level Review*.

The *Sustainable Harvest Level Review* considered only conifer volumes. Deciduous volumes on the community forest area are considered low and currently have very low - nil merchantable value.

6.4 Harvesting Constraints Due to Other Resource Values

Revised October 2006

Harvesting activities (size, density, and pattern of cutblocks) will be constrained in many areas due to protecting or conserving non-timber resource values including visual quality, water quality, sensitive soils, goat habitat, winter ungulate habitat, high fisheries values, cultural heritage resources, recreation trails, etc. These resource values are outlined in the higher level plans: Bulkley Land and Resource Management Plan and Landscape Unit Plans (LUPs) for the area (Bulkley Valley, Copper, and Telkwa LUPs). No cutting, selective cutting, or small patch clear-cutting versus large clearcuts may be used in many sensitive or highly constrained areas.

The recent timber inventory AAC analysis (see Appendices *Sustainable Harvest Level Review*) applied applicable forest cover constraints (harvesting constraints) and reduced the AAC levels in accordance with Timber Supply Review 2 assumptions. As per page 4 of the Sustainable Harvest Level Review report:

“Forest cover constraints were applied by biogeoclimatic zone as outlined in the Bulkley Timber Supply Review (TSR) of April 2001.

- *Forest cover requirements for visually sensitive areas were applied by preservation, retention, partial, retention, and modification VQO's.*
- *Old seral constraints were applied to “Core Ecosystems” and “Landscape Corridors”.*
- *Old growth constraints were applied by landscape unit and BEC according to the assumption that 45% of the LU/BEC was low biodiversity, 45% medium and 10% high (as per the TSR2).*
- *Riparian constraints were applied by reducing the yield tables by 2.3 %.”*

6.5 Silviculture Practices

The intent is to keep the productive timber landbase stocked with trees. Silviculture activities will be conducted to meet or exceed the Free-to-Grow time frames specified in the Forest Stewardship Plan. Particular attention will be paid to timely scheduling of reforestation to minimize vegetation competition and reduce regeneration delay. It is the intent to plant cutblocks within two years of harvesting; or where appropriate, consider natural regeneration. Species selected for planting will be ecologically suited to the site. No fertilizer treatments are planned. No herbicides or pesticides will be used. Manual brushing or other non-herbicide methods will be used for vegetation management where needed.

Intensive silviculture treatments (in addition to Free-to-Grow obligations) including stand thinning and pruning will be considered on a site-specific basis. These silviculture activities may be conducted where there is a positive benefit versus cost analysis and funding is available.

6.6 Forest Health Factors

There are various forest health factors that must be considered in making management decisions. During the next ten years, the primary forest health issue in the community forest is expected to be bark beetle, particularly mountain pine bark beetle. The mature pine inventory component is estimated to be approximately 25 percent of the total area and could incur high mortality over the next ten years with a predicted pine bark beetle epidemic in the local area. This could impact the AAC long-term sustained yield level. Each bark beetle infested / damaged stand will be assessed

to determine which treatment, including clearcut logging, partial cutting or no treatment, will provide the best, long-term environmental and economic benefits to the community.

Due to the potential mountain pine bark beetle epidemic in the community forest area, an accelerated or increased AAC (uplift) may be requested from the district manager at the time of the epidemic. A harvesting uplift will reduce timber value losses by being able to harvest and sell damaged timber while it still has commercial value.

After a bark beetle epidemic or other catastrophic damage to the community forest area has occurred, another allowable annual cut review will be needed to provide more up-to-date inventory information upon which the District Manager can determine a lower, revised and sustainable AAC that reflects the inventory changes.

6.7 Anticipated Reductions to Productive Landbase

There is potential to lose productive landbase to mining development activities associated with the Davidson moly property near Glacier Gulch - east side of Hudson Bay Mountain and Telkwa coal leases near the southeast boundary of the proposed area.

As reductions to the productive landbase occur that are beyond the Community Forest's control, we request government give consideration to adding landbase to compensate for lost contributing timber harvesting landbase area(s). For example, losses due to mining and / or oil & gas exploration and development.

The primary 'main access roads' within the community forest were built more than a decade ago and their associated reduction to the productive landbase is accounted for in the recent AAC analysis. Over time, there will be a further small reduction in productive landbase with the future construction of additional permanent secondary road structures, landings, gravel / rock quarries, and cross-country ski trails.

6.8 Other Factors Impacting AAC

This area is in close proximity to the Town of Smithers and Village of Telkwa which are becoming internationally known for the local area's scenic beauty and outdoor recreation opportunities. There will be continuing tourism pressure to constrain harvesting activities. Ultimately, this may apply downward pressure on the Allowable Annual Cut (AAC) in the future.

6.9 Summary of AAC Rationale

Revised October 2006

Wetzin'kwa Community Forest Corporation proposes an allowable annual cut (AAC) of 30,000 cubic metres for the community forest area. See Appendices - *Sustainable Harvest Level Review* for the report of the AAC analysis that provides the basis of the proposed AAC.

This *Sustainable Harvest Level Review* report summarizes the technical, computer analysis upon which sustainable harvest levels are forecasted. Pages 3 and 4 of the report provide the methodology used in the sustainable harvest level review.

As per page 4 of the *Sustainable Harvest Level Review*, four different scenarios were modeled to compare harvest flows:

- Scenario #1 is Base Case and calculated the maximum non-declining yield for the entire area. For an area in the southeast section of the community forest (page 8 – red area) the Visual Quality Objective (VQO) designation of Retention was used.
- Scenario #2 builds on the Base Case but calculates an accelerated harvest level for the first 5 periods declining no more than 10 percent per decade. (This was modeled for a potential bark beetle epidemic.) For the area in the southeast section of the community forest (page 8 – red area) the Visual Quality Objective (VQO) designation of Retention was used.
- Scenario #3 changes the VQO constraint designation for the area in the southeast section of the community forest (page 8 – red area) from Retention to Partial Retention.
- Scenario #4 changes the VQO constraint designation for the area in the southeast section of the community forest (page 8 – red area) from Retention to Modification.

Visual Quality Objectives (VQO) describe the degree of acceptable visual change to the natural landscape from harvesting and road building when viewed from established viewpoints.

Retention: Resource management activities may not be clearly visible to the average viewer, although discernable. Disturbances should appear to be from natural causes.

Partial Retention: Resource management activities must blend well with the natural appearance of the landscape, even though visible.

Modification: Resource management activities are visible and apparent to the average viewer.

The scenario modeling was directed by the MOFR Skeena - Stikine forest district manager and staff. The resultant annual harvest level forecasts for the four scenarios over a 250 year period are shown on page 13 of the *Sustainable Harvest Level Review* [section 4.5 Summary Table of Harvest Flow Results – Table 6].

For the first 10 years the annual harvest level forecasts for each of the four scenarios are:

Scenario #1	Scenario #2	Scenario #3	Scenario #4
27,507 m ³	39,812 m ³	30,618 m ³	33, 205 m ³

Through discussions with the MOFR Skeena – Stikine forest district staff (Ron Donnelly), it was agreed that Scenario #3 provides the most realistic model (of the four scenarios) of forest management and harvesting for the near future. Also, Scenario #3 supports the 30,000 cubic metres allocated to the community forest agreement tenure.

The *Sustainable Harvest Level Review* report has considered all the known and relevant information that is needed to model and generate good data to support a long term allowable annual cut (AAC) of 30,000 cubic metres for the proposed area.

- The methodology used in conducting the above *Sustainable Harvest Level Review* included management assumptions consistent with the last Bulkley Timber Supply Review conducted in 2001 (TSR2). [See pages 3 and 4 *Sustainable Harvest Level Review*.]
 - Constraints on forest cover included Visual Quality Objectives; Landscape Corridors; Core Ecosystems; Old Growth constraints by landscape unit combined with biogeoclimatic zone and subzone; and riparian zones.

The *Sustainable Harvest Level Review* report can be utilized by the district manager as support rationale upon which 'to formally determine the AAC' for the community forest tenure.

7.0 Proposed Management Objectives

7.1 Priorities and Methods for Timber Cutting and Removal

Timber Cutting Priorities

Priority One: Damaged stands (beetle, blowdown, fire, etc) where there is immediate risk of volume and value loss.

Priority Two: Stands that are over-mature and the volume and value are in decline; or stands that are considered highly susceptible to bark beetle infestation and mortality; or stands where volume is in decline due to disease or non-beetle type insects (root decay, defoliators, etc).

Priority Three: Healthy, mature stands.

Silviculture Systems

Various silviculture systems will be used within the community forest area. The selected silviculture system for a harvesting site will be based on specific management objectives for the site.

Methods for Timber Cutting and Removal

Harvesting methods and systems will vary depending on the silviculture system selected, ground conditions, terrain, size of area, season of harvest, log market conditions, availability of equipment, etc. The vast majority of harvesting, if not all, will be by ground-based skidding systems using horse, rubber tired and / or track type skidding machines, and / or hoe-chucking equipment. There is some potential for cable and / or aerial logging methods where very steep terrain is encountered or there is accessibility issues. Timber falling will be by hand fallers or large, mechanized falling equipment. Log transport from bush to market will be by highway-sized logging trucks.

7.2 Timber Harvest Utilization

Obligatory Species and Grades

All conifer species of Interior Grades 1 and 2 will be obligatory utilization.

Optional Species and Grades

All conifer species with Interior Grades other than 1 or 2 will be optional utilization.

All deciduous tree species of all Interior Grades will be optional utilization.

Timber Utilization Specifications

Timber Utilization Specifications will be consistent with interior timber merchantability specifications as outlined in the *Provincial Logging Residue and Waste Measurements Procedures Manual*.

Maximum stump height (measured from the high ground side)	30 cm
Minimum diameter at stump height	
Lodgepole pine	15 cm
All other species	20 cm
Top diameter or slab thickness	
All species and ages, except Cedar older than 141 years	10 cm
For Cedar older than 141 years	15 cm
Minimum length	
Log or slab	3 metres

7.3 Management and Harvesting of Botanical Forest Products

Currently, there is no management of botanical forest products and nil to low harvesting of botanical forest products in the community forest area. Berries are picked by local residents for personal use. There is no known commercial harvesting of botanical forest products in the area.

Wetzin'kwa Community Forest Corporation intends to research markets for botanical forest products and encourage commercial ventures, particularly with Wet'suwet'en peoples, to help diversify the economy and increase jobs.

Until there is high commercial demand for botanical forest products from the community forest area, there will be no management plans or harvesting levels developed for botanicals. Should there be a time of high commercial demand, then management plans, harvest levels, and harvest practices will be developed, in conjunction with the Office of the Wet'suwet'en Hereditary Chiefs, to ensure that these merchantable plants are managed on a sustainable basis.

7.4 Protection and Conservation of Non-timber Resource Values

The Bulkley LRMP and Bulkley Valley, Copper, and Telkwa Landscape Unit Plans (LUPs) are higher level plans that will be followed to ensure that non-timber resource values are protected or conserved. Community and government have already identified various non-timber resource values and they are mapped and documented in the LRMP and LUPs with written management direction.

Botanical Forest Products

The objective will be to manage for sustainability and increased production of specific plants and products once these specific plants are determined to be commercially valuable.

Cultural Heritage Sites / Resources

The objective is to protect and conserve cultural heritage sites, features, and values and to maintain and enhance a good working relationship with Wet'suwet'en peoples. Maps of known cultural heritage sites are kept confidential from the public by the Office of the Wet'suwet'en in order to better protect sites from disturbance. Hence these known sites are not shown on the LRMP and LUP maps. Consequently, harvesting and road development plans will be referred to the Office of the Wet'suwet'en to ensure known cultural heritage sites and resource values are identified and protected or conserved from harvesting disturbances, dependent upon their nature. Due to the chances of finding unknown cultural heritage sites / features when timber development is underway, the following steps will be taken:

- a. Stop any development work or harvesting in the vicinity of where there are indications of a cultural heritage resource site / feature being found;
- b. GPS and map any heritage resource features; and
- c. Provide a location map and communicate findings to the Office of the Wet'suwet'en and request their review of the importance of the feature and advice as to the steps to be taken to protect and conserve the heritage resource.

Range Land

The objective will be to work cooperatively with any grazing tenure holders to maintain natural range barriers. Currently, there is extremely low use of the community forest area for grazing purposes.

Visual Quality

Management for visual quality will include using the existing Visual Quality Objective (VQO) mapping and identified viewpoints when planning block size, boundary shape, and boundary location to ensure adherence with the visual quality objectives. Digital terrain modeling may be used to assist visual quality management.

Soils

The management of activities on the landbase includes minimizing damage to soils that could decrease their productivity to grow trees and plants. For example, if wet or fine textured soils are encountered on a planned timber harvesting site, then harvesting operations will be scheduled for a time of dry or frozen soils to prevent soil compaction, excessive soil disturbance, and / or rutting of the soil. Areas where the soil has been exposed on a slope will be grass seeded to prevent soil erosion. In some places, temporary roads will be considered versus permanent roads to reduce permanent reductions to the timber growing landbase.

Biodiversity *Revised October 2006*

The management objective will be to maintain biodiversity. Biodiversity objectives have already been established for the community forest area in higher level plans (LRMP and LUPs). Work completed to date by government includes mapping of *Core Ecosystems* – areas identified to provide long term ecosystem representation (no current harvesting – AAC modeled with a 1000 year harvesting rotation). Mapping of *Landscape Corridors* has been completed that will provide wildlife habitat connectivity corridors (no current harvesting - AAC modeled for 267 year harvesting rotation). It is a management objective to maintain a diversity of conifer and deciduous species representing the natural species composition for each biogeoclimatic subzone. Another biodiversity objective will be to maintain a diversity of attributes of old forest (coarse woody debris and large standing dead and live trees) as well as various younger stands.

Water Quality

The objective will be to maintain clean water quality in streams and lakes. Streams, wetlands, and lakes will be classified and mapped. Riparian zones will be flagged on the ground where roads and / or harvesting is planned so as to minimize soil disturbance near water courses. Grass seeding of drainage ditches, road right-of-ways and soil-exposed slopes will reduce soil sedimentation movement. Equipment refueling will not be allowed in riparian areas.

Fish Habitat

There are high fish values in different parts of the community forest area that must be maintained. Maintaining fish habitat is a priority over other uses or activities on the land. Many streams have had fish inventories completed and classification and mapping is available. This information will be used to ensure that proposed roads and harvesting do not impact fish or their habitat. For installation or construction of major drainage structures at stream crossing, the established 'in-stream work timeline windows' based on various fish species and geographic area will be used to minimize impacts to fish. Streams that have not been inventoried / classified for fish will default to a fish stream until they are proven otherwise.

Wildlife Habitat

The management objective will be to maintain various wildlife populations and their habitat. Moose, mountain goat, grizzly bear, black bear, and deer are the large wildlife species in the area. Government has completed critical habitat mapping and provided objectives in higher level plans (LRMP and LUPs) for managing these areas. Wildlife tree patches will be established.

Recreation Resources

The objective will be to maintain or enhance a diverse range of recreational values and opportunities and to work cooperatively with recreation user groups.

Recreational access for motorized and non-motorized users is controversial for the area. Over the next few years, government plans to meet with recreation users to develop a Recreation Access Management Plan (RAMP) that will provide direction for the area. The objective will then be to maintain reasonable access to recreational opportunities based on the RAMP.

Outdoor Education Resources

The objective will be to work with School District #54, Northwest Community College, and the local Scouts group to provide outdoor education opportunities for their needs.

7.5 Forest Fire Protection and Suppression

Harvesting operations will be conducted in accordance with the Wildfire Act and Regulations.

7.6 Forest Health and Pest Management *Revised January 13, 2007*

The objective will be to monitor forest health and pests and develop strategies to reduce timber and plantation losses. In order to achieve this objective, the Wetzin'kwa Community Forest Corporation will manage forest health concerns in a manner consistent with the Forest Health Strategy of the Skeena Stikine Forest District.

Bark Beetles *Revised January 13, 2007*

The Wetzin'kwa Community Forest Corporation will have a representative sit on the Bulkley Bark Beetle Task Force Committee to discuss and implement strategies to minimize timber losses from Mountain Pine, Spruce and Balsam Bark beetles in the community forest area.

Annual overview flight maps showing beetle infested areas will be reviewed and areas will be ground probed to determine beetle infestation levels and recommended treatment activities to minimize timber losses. Treatment activities may include no treatment, harvesting, pheromone one year – then harvest, or fall and burn the infested trees. Fall and burn activities may be subject to available funding from the Forest Investment Account or other outside funding source.

Bark Beetle Harvesting – Potential Conflicts with Other Resource Values

Areas of non-timber resource values including visual quality, wildlife habitat, recreation resources, biological biodiversity, and / or areas having botanical forest products may be harvested in a sensitive manner (selectively or small patch clearcuts) to remove live, 'current' beetle infested trees and / or beetle killed trees. In these scenarios, harvesting should occur when the removal of these infested trees has a good chance of preventing bark beetles from spreading and / or negatively impacting the non-timber resource value(s). Each specific area will need to be judged separately for the pro's and con's of harvesting versus not harvesting.

Conversely, no harvesting – with, or without, beetle infestation will occur which would negatively impact the following non-timber resource values: fish, fish habitat, water quality, and / or a cultural heritage site.

Forest Health and Pests in Young Stands *Revised January 13, 2007*

Various pests and diseases, such as tomentosus root rot and dothistroma needle blight, are associated with forests in the Skeena-Stikine Forest District. To ensure Free Growing status is achieved in a timely manner, monitoring of plantations every couple of years during their first 10 years of growth is important. This is to ensure that seedling and sapling mortality from pests or other damaging agents do not create an under-stocked plantation that will not meet the stocking standards or Free Growing criteria. Under-stocked plantations will be fill-planted to increase stocking to acceptable levels.

7.7 Silviculture Treatments *Revised October 2006*

Silviculture treatments and activities will be conducted to meet or exceed the Free-to-Grow time frames specified in the stocking standards in the Forest Stewardship Plan.

All proposed cutblocks will have Site Plans completed on them to recommend treatments and their scheduling following harvest for the purpose of restocking the site with preferred and acceptable tree species for the ecosystem and meet specified standards.

It is anticipated that the vast majority of harvested areas will require artificial reforestation. Tree seed (Class 'A' seed where possible) will be purchased from the government or major licensees as needed. Should seed be in short supply, Wetzin'kwa Community Forest Corporation will collect cones for reforestation seed purposes. Seedlings will be grown in local forest tree nurseries Woodmere Nursery and / or PRT Summit Nursery.

It is the intent to ensure that areas harvested are reforested within two years of harvest. Any areas planned for natural regeneration will be monitored closely to ensure that the regeneration delay period meets or exceeds stocking standards. Species selected for planting will be ecologically suited to the site. Particular attention will be paid to timely scheduling of silviculture treatments to minimize vegetation competition. No fertilizer is planned to be used. No herbicides or pesticides will be used. Manual brushing or other non-herbicide methods will be used for vegetation management where needed. Silviculture regime treatments will emphasize tree and plant diversity for benefits to wildlife, forest health, and community for the long term.

Intensive silviculture treatments (beyond Free-to-Grow obligations) including stand thinning and pruning will be considered on a site-specific basis. These silviculture activities may be conducted where there is a positive benefit versus the cost, and funding is available.

All silviculture treatments will have follow-up monitoring to review the results and degree of success. Under-stocked plantations will be fill-planted to increase stocking to acceptable levels.

Other licensees and BC Timber Sales, who have harvested cutblocks in the past (pre 2007) that have not achieved Free Growing status will retain silviculture obligations for those cutblocks until they are declared Free Growing.

Wetzin'kwa Community Forest Corporation will request the Ministry of Forests and Range's local district staff to provide a list of cutblocks harvested pre 2007 and their individual Free Growing status to determine if there are outstanding silviculture obligations that need addressed by previous licensees, including BC Timber Sales. The intent of this exercise is to review and help facilitate expediting Free Growing status on previously harvested cutblocks.

7.8 Road Construction, Maintenance, and Deactivation

Wetzin'kwa Community Forest Corporation (WCFC) will be assuming road management obligations including road maintenance under a Road Permit for the community forest area. WCFC will request road inventory information from the Ministry of Forests & Range including known road hazards, culvert inventory, bridge inspections, road inspections, etc. to assist the transition of responsibilities.

It is important to note that there will be other users of the community forest roads, both public and industrial. Wetzin'kwa Community Forest Corporation will need to work closely with other road users to coordinate access and road maintenance in the area.

Road Construction

Much of the community forest area already has a network of permanent and temporary forest roads. 'Total Chance' planning will be conducted for areas requiring new road development access. This planning is to reduce the amount of new road construction required, determine road locations that are environmentally acceptable, and provide efficient access that makes timber harvesting physically possible and economically viable.

Permanent roads reduce the timber harvesting landbase and negatively impact the allowable annual timber harvest over the long term. Hence it is important to determine at the planning stage how much timber volume, over what time period, in what seasons, will be required of the road structure. Therefore planned roads will be identified as permanent or temporary. Some temporary roads will be reclaimed and planted with trees, other temporary roads will be deactivated but kept passable (narrow) for plantation ATV access, fire trail access, and / or hiking trails.

Road Maintenance

Permanent, active forest roads will be inspected a minimum of twice annually (spring and fall) to determine maintenance requirements and scheduling. Road maintenance activities will include day-lighting corners, danger tree falling, surface repairs, surface grading, cleaning ditches, erosion control, ensuring drainage structures are functioning, minor bridge repairs, road signage installations, and ensuring that roads are safe for the public and industrial users. Snowplowing will be conducted only where winter operations warrant snow removal.

In accordance with government policies for Forest Service Roads, financial assistance from government may be requested to repair and / or replace major road or bridge structures (i.e. due to road and / or bridge washouts).

Some of the forest roads will be shared with BC Timber Sales operators, Pacific Inland Resources contractors, a woodlot licence operator, and potentially oil & gas and mining exploration operators. Where there is shared road use with non-community forest industrial users, written agreements between Wetzin'kwa Community Forest Corp and other industrial users will outline safe use of the road and the sharing of maintenance costs associated with use.

Deactivation

For various environmental, economic, and / or social reasons some roads may be closed or deactivated under the direction of government or Wetzin'kwa Community Forest Corp. Wetzin'kwa Community Forest Corp will try and communicate with other applicable resource users and stakeholders when planning closure or deactivation of a road so as to discuss the purpose, type of deactivation planned, and length of time road closed to reduce negative impacts on other resource users or stakeholders. Deactivation or road closure may include gating, removal of drainage structures, and / or rehabilitation back to productive lands. Erosion control measures such as water bars and / or grass seeding will be applied where applicable.

7.9 Fees Charged to Others**Botanical Forest Product Harvesters**

For the foreseeable future, there will be no fees charged for persons or companies harvesting botanical forest products. Our goal is to encourage research and development of commercial ideas without any disincentives.

Industrial Road Users

Road use fees will be charged to other industrial users of Community Forest maintained roads to ensure that maintenance costs are shared fairly between users. Fees will be calculated using commonly accepted formula based on prorated, shared use. Specific damage to roads caused by one industrial user may require surcharge fees, or damages repaired by the user who caused the damage.

Wetzin'kwa Community Forest Corporation will likely become a member of the Bulkley Road User's Committee for the Bulkley Timber Supply Area (TSA). This committee helps administer shared forest road maintenance and maintenance fees.

8.0 Information Sharing and Public Input

8.1 Information Sharing and Public Input for the Community Forest Application

The 'Application - Appendix A' submitted for the probationary community forest agreement outlines in significant detail the information sharing, community input, and documentation of community support to date (August 2006). In summary:

- Meetings were held with the Office of the Wet'suwet'en Hereditary Chiefs.
- Numerous newspaper articles (and Open House advertising) published in relation to the application for this community forest tenure.
- Numerous radio news releases and advertising of public meetings / Open Houses.
- Several television interviews and notices regarding the public meetings / Open Houses.
- Six Open Houses / public meetings were held (two each in Moricetown, Smithers, and Telkwa).
- Presentations were given to the Bulkley Valley Community Resources Board; and Smithers and District and Chamber of Commerce.
- 116 letters were directly mailed out to local individuals, organizations, and companies that have a potential interest, or are a stakeholder, or resource user in the community forest area.
- Meetings were held with several interested individuals and organizations to discuss the community forest area and boundaries.
- Notice of opportunity and time given for individuals or organizations to respond to the concept of having a local community forest agreement tenure.
- Numerous letters in support of our community forest application were received from various organizations and individuals.

Overall, there was strong community support to obtain a community forest agreement tenure.

8.2 Ongoing Measures for Information Sharing

8.2.1 Information Sharing With First Nations

The entire area is within the Wet'suwet'en traditional territory. The Office of the Wet'suwet'en has a seat on the board of directors for Wetzin'kwa Community Forest Corporation.

There will be information sharing with the Office of the Wet'suwet'en in regards to forest management planning documents.

As per Management Commitments made in the PCFA Application there are commitments to work with Wet'suwet'en peoples; including the following:

- Meet twice annually with the Office of the Wet'suwet'en and the Hereditary Chiefs to discuss various ways to improve relationships between our native and non-native communities and determine what social, environmental, and economic projects could assist relationship building.
- There will be an annual Open House / meeting held in the village of Moricetown.

8.2.2 Information Sharing With Other Resource Users

At each major planning stage, Wetzin'kwa Community Forest Corporation will conduct referrals to resource users and stakeholders.

Wetzin'kwa Community Forest Corporation has developed a mailing list (PCFA Application - Appendix A.2) of resource users that will continue to be updated. The current list of 116 contacts does not include all the nearby registered water users. The vast majority of the community forest area's watersheds do not have registered water users. A registered water user list will be developed if activities are planned in 'water user's' watersheds.

As per Management Commitments made in the PCFA Application, Wetzin'kwa Community Forest Corporation will form a Resource User's Group including representation from the following to review and provide input for planning purposes as well as provide general feedback on community forest operations:

- Registered water users
- Registered trappers
- Registered Guide Outfitters
- Adjacent landowners – Willow Lake area and Copper River Guest Ranch
- BV Cross Country Ski Club
- BV Naturalists and other groups on the existing Smithers Community Forest's steering committee
- Non-Motorized Recreation Clubs (BV Backpackers & Alpine Club of Canada)
- Motorized Recreation Clubs (ATV & Snowmobile Clubs)
- BV Rod & Gun Club
- Ski and Ride Smithers
- BV Community Resources Board
- Adjacent woodlot licence tenure holder (W1481)
- Adjacent forest licence tenure holder (Pacific Inland Resources)
- Adjacent tenure holder BC Timber Sales

8.2.3 Information Sharing With Community

There will be ongoing, periodic newspaper and radio news articles related to the Community Forest. There will be public annual meetings in Telkwa, Smithers, and Moricetown to show plans, answer questions, and receive input regarding any topic associated with the community forest area. These annual meetings will be advertised in the local newspaper. A 'Total Resources Plan' and large scale map will be developed for the Community Forest area which will be used to assist information exchange with the public, resource users, and first nations.

8.2.4 Information Sharing With Governments (local and provincial)

Government agencies will be sent referrals for comment when the Forest Stewardship Plan is developed and at other times when major planning is being done. Local governments (Village of Telkwa and Town of Smithers) will be informed by their representatives sitting on the Wetzin'kwa Community Forest Corporation's board of directors.

9.0 Provision for Revisions

Either at the request of government, or at the initiative of the Wetzin'kwa Community Forest Corporation, this Management Plan may be revised and submitted to the MOFR district manager for approval.

Appendices

MP-1 Sustainable Harvest Level Review Report

MP-2 Map of the Community Forest Area