COMMUNITY FOREST PILOT AGREEMENT PROPOSAL

APPLICATION FOR A COMMUNITY FOREST LICENCE

Submitted by the
HARROP-PROCTER WATERSHED PROTECTION SOCIETY

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Introduction

Dear Honourable David Zirnhelt and the Pilot Project Advisory Committee:

Thank you for giving us the opportunity to submit this proposal on behalf of the Harrop-Procter Watershed Protection Society (HPWPS). The enclosed proposal is our application for a Community Forest Pilot Agreement under the BC Government's Jobs and Timber Accord.

The HPWPS understands and is familiar with all aspects of this proposal, and every effort has been made to ensure all requirements in the request for proposal have been met or exceeded herein.

This is an exceptional opportunity for our communities to enhance the economic possibilities available in BC while participating in decisions concerning development of our watersheds. The forests that surround us are a big part of our lives, and the HPWPS sees this as the perfect opportunity to depart from the divisive land use planning processes that have been familiar in the past.

We are looking forward to working with the BC Government to create local employment and to bring our land use plan into reality.

Sincerely,

Rami Rothkop
President, HPWPS

Ramona Faust
Director, HPWPS

EXECUTIVE SUMMARY

The Honourable David Zirnhelt's personal invitation (CBC Radio, November 1997) to submit this proposal triggered excitement in the Harrop-Procter community. Finally, after 22 years of public involvement, there appeared to be the potential for a win-win situation. The Harrop-Procter Watershed Protection Society (HPWPS) sees this as a great opportunity to implement our ecosystem-based land use plan. Submitting this proposal is the culmination of months of hard work by the community. The majority of local residents support this plan. It protects a broad range of values important to us, and pro-actively addresses sustainable forestry practices and long-range economic development. Due to a change in licensees and a long-standing history of public involvement, there have been no forest-related activities in the area for 20 years. If the HPWPS is successful in obtaining tenure over this land base, we are confident that there will be an expansion of a variety of economic activities in the community of Harrop-Procter which will expand into the surrounding Kootenay Lake area. While it has been difficult for prospective business interests to make firm commitments for the future until a community forest agreement is signed, the HPWPS has been encouraged by the range of local and regional companies interested in the economic opportunities which would flow from the creation of a community forest (see Appendices D5, E2 and E3).

The HPWPS chose an ecosystem-based planning approach to help us evaluate our land base, and to determine present and future uses available to us (see Appendix G). Our approach was based on many considerations.

- ☑ It answers community sentiment expressed repeatedly in three separate surveys (1976[1], 1992[2], 1995) (See Appendix D1).
- ☑ It follows the principles of the BC Land Use Charter.
- ☑ It embraces the principles guiding the Forest Practices Code (FPC), as stated in the preamble to the FPC Act.
- ☑ It recognizes and builds on the work of Kootenay-Boundary Commission on Resources and the Environment (CORE) Table and the resulting Kootenay Boundary Land Use Plan (KBLUP) (Oct. 1994) recommendations.
- ☑ It is fully substantiated by the planning approach recommended by the Clayoquot Sound Scientific Panel which "differs from current planning methods." A similar scientific panel was recommended for the Harrop area (see KBLUP recommendation #62 – Appendix C5).

This proposal lays out how the HPWPS will move forward into the 21st century with an innovative and visionary approach to forest management.

The Community Forest land base encompasses approximately 10,600 ha of Provincial Forest Crown land on the South Shore of the West Arm of Kootenay Lake. The area is almost surrounded by Kootenay Lake and the newly established West Arm (Wilderness) Park. The majority of the forestland was burned in 1901 (leaving a few scattered pockets of old growth),

[1] D. Ailman, J. Baron, B. Fraser, *Forest Planning for the West Arm of Kootenay Lake* - Planning Unit 3 - South Shore, Selkirk College - 1976

[2] Appropriate Forestry Services & Associates, *Survey of Community Forest Values in the Vicinity of the West Arm Demonstration Forest (Kootenay Lake Forest District)* - March 1992

and its main use has been as water supply sheds for irrigating a thriving orchard industry in the 1930's. There has been reduced farm use and increased domestic use since then. Mill Lake (in the westerly portion) and an old logging road (toward the east) have been popular areas for hiking, fishing, berry picking and other recreational activities.

The HPWPS met with the District Manager of the Kootenay Lake Forest District to secure the portion of the Allowable Annual Cut (AAC) needed for the operation of our community forest. A letter from the District Manager states that there is 5000 m^3 of AAC available from the forest service reserve to allocate towards our community forest proposal (see Appendix C3). The land base in question is under the Small Business Program, and it does not have a five-year plan or any active operation. This fact is in our favour as granting our community forest licence will not displace any licensee or small business operator.

The community forest will operate as a cooperative. The Harrop-Procter Community Cooperative (HPCC) has applied to be registered under the Cooperative Association Act of British Columbia (see Appendix B2). This is the best corporate structure for conducting community business as it allows for meaningful public participation while maintaining accountability and creating an appropriate vehicle to undertake business operations.

Since 1976, residents of the Harrop-Procter area have voiced their concern about logging in domestic watersheds; they have also repeatedly stated what changes they would like to see in logging practices.

> *"Small operators, with good performance histories, selective logging or small clearcuts, good field supervision, careful road location, reduced logging waste, low soil disturbance, yarding systems and good liaison with the public were among the many suggestions that were put forward." (MOF Survey, 1976)*[3]

While the above suggestions came from small "kitchen meetings" organized by local residents who took an active interest in forest management, a second Ministry of Forests (MOF) survey in 1992[4] intentionally focussed on randomly selected residents with hopes of reaching the normally silent majority. The executive summary based on the results of this survey states

> *"The resident's message to the MOF is: 'reduce the cut', 'don't clear-cut', 'manage for water and viewscape' and 'stay well back from creeks and wet areas, unless using single-tree selection systems with very light equipment or horses'. Above all, listen to the people, they hold the ultimate veto"*

Community support for this project has grown over the past few years in a powerful, inclusive way. The HPWPS has 276 members in the community, and membership has grown steadily since the Society was founded. The HPWPS members have taken great care to reach, and

[3] D. Ailman, J. Baron, B. Fraser, *Forest Planning for the West Arm of Kootenay Lake* - Planning Unit 3 - South Shore, Selkirk College - 1976

[4] Appropriate Forestry Services & Associates, *Survey of Community Forest Values in the Vicinity of the West Arm Demonstration Forest (Kootenay Lake Forest District)* - March 1992

include, all segments of the local population. Recommendations obtained from water users, local business and professional people, community groups, and First Nations have been included in this plan. The HPWPS has the strong foundation of support required to make this community forest a model for local decision-making and resident participation.

The following list identifies the various ways in which the Harrop-Procter Community Forest could be used by the citizens of BC:

- an example of partnership management with the MOF;
- an example of ecosystem-based forest management which can be used to obtain Forest Stewardship Council certification (many European buyers insist on this certification and BC will want to capture this business opportunity); and
- an example of job creation through more labour-intensive logging systems, agroforestry projects, and value-added manufacturing.

Much thought and a tremendous amount of research has gone into preparing our proposal. The HPWPS has a viable proposal utilizing a variety of harvesting systems, which respects other less profitable values such as biodiversity and viewscapes, as well as wildlife habitat and movement corridors. Our business plan considers expansion of a small, local sawmill providing customized material to value-added operations, with plans to establish our own value-added manufacturing facility. As an added bonus, the HPWPS is planning to produce 'eco-certified' wood, which is generally not available in BC at this time. Botanical forest products and craft tree licences will also increase revenue from the land base. As well, the business plan looks at tourism potential with trails to some of the numerous scenic mountain lakes. By such diversification, the HPWPS will be less dependent on a high volume of timber, as each tree cut will create higher-than-average revenue for the community and the province of BC. For the purposes of this application, the HPWPS has conservatively estimated the number of jobs which will be created as a result of obtaining a Community Pilot agreement. It is believed that as the community and region become confident in the long-range security of the tenure; this will attract a diverse range of business interests and thereby provide more jobs.

The management of our community forest focuses on the future. Our long-term goals include the continued health of our local environment, the growth and harvest of high quality wood, and the assurance of local employment. The HPWPS is using a conservative, precautionary approach, treading lightly on a fragile land base that is steep and not easily accessible. Our planning process has been taken to the stand level, and indications are that these are productive sites with a healthy diverse mix of merchantable timber.

Neither community forests nor ecosystem-based plans are new concepts. A combination of both can be found in the 1945 Royal Commission Report, where the Hon. G. McG. Sloan discusses them:

> *"These community forests, apart from the timber production therefrom, have proven to be of considerable value in the United States as a means of acquainting the public with the benefits to be secured from the practice of sustained yield forestry, the necessity of fire protection, and related subjects. I refer, for instance, to watershed protection and other multiple forest uses. A tree is a plant and to secure an economic return from the soil producing its growth, the tree must be harvested.* ***At the same time it must be kept in mind that a tree may be of more real value in place in the forest than when converted into lumber. The difficulty lies in striking a balance between these two values."*** [5] (emphasis added)

The members believe that our ecosystem plan strikes this balance.

In closing, the HPWPS thinks that our sentiments are best expressed with a quote from our MLA, Corky Evans, in response to the throne speech (March 25, 1992).

> *"Lastly, we don't want any Coquihalla. We don't want any presents in a box, any northeast coal or any steel mill. We don't want this government, or any government, or Murray Pezim, or a bank.... We do not want any bag of money, pot of power, or ideologically-driven decision-making process to solve our problems. We want to let the communities decide what is good for the communities. We want to let the patient heal itself. Thank you so much."* [6]

[5] Hon. Gordon McG Sloan, Chief Justice of British Columbia, *The Forest Resources of British Columbia* - Report of the Commissioner - 1945 (p. Q. 147)

[6] Corky Evans, M.L.A. (Nelson-Creston), Province of British Columbia, 1st session, 35th Parliament, Official Report of *Response to the Throne Speech* (Excerpt) - March 25, 1992

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1.0 COMMUNITY FOREST LAND BASE

Figure 1: View of the Harrop-Procter Watersheds looking West from Kootenay Lake

The communities of Harrop and Procter are situated approximately 30 km northeast of the city of Nelson on the west arm of Kootenay Lake (See Figures 2 and 3. For more detailed maps see Appendix G). They can be reached only via a car cable-ferry; a daily routine for many of the 650 residents either going to work or attending school. The "island" feeling of living here is emphasized by the fact that the forested land surrounding both communities' borders, the West Arm Wilderness Park (west and south), and the Midge Creek Wildlife Management Area (east). The Harrop-Procter area was included in two recent provincial land use planning processes - the Commission on Resources and Environment (CORE) and the Protected Area Strategy (PAS).

The land base contributing to our proposed community forest encompasses approximately 10,600 ha of crown land in the Lardeau Provincial Forest, and surrounds the 2,271 ha block of private land adjacent to the lakeshore. Included in the private land base is a large lot under the jurisdiction of Ministry of Forests (District Lot 309). Slocan Forest Products holds part of Lot 309 in a timber agreement. They have indicated they want to return it to the Crown. This lot is not presently part of the provincial forest thus not under the jurisdiction of the Ministry of Forests (MOF); however, it may become part of our community forest at a later date.

The majority of the forested land was burned in 1901. This has produced an extensive, young, but merchantable, forest of seral species (Douglas fir, larch, and pine). An understory of shade tolerant species (cedar, hemlock, and grand fir) has developed. There are a few scattered pockets of old growth, often in the riparian zones. The forest displays the typical elevational range of productivity with highly productive sites in lower elevations and sparse sub-alpine and alpine forests in the upper reaches. The slopes are often steep and incised, breaking into benches. As part of the Southern Columbian Mountain (SCM) Ecosection, the area is considered interior

rainforest and includes several biogeoclimatic zones (ICH 2, ESSF, and AT). A predominantly northern exposure further emphasizes the rain forest aspect.

Due to an inconsistent history of tenure rights, the Crown land base here remains undeveloped except for Alexander Road (east of Procter), which was built to access Stafford Lumber Company's timber sales X72384 from 1961 - 1965 (about 50 ha). Victor Road (west of Procter) provided logging access to parts of District Lot 309. Selective logging has been carried out on several parcels of private land above the settled areas.

Although the only two existing roads traversing crown land are Alexander and Victor Roads, the HPWPS has confirmed with the Ministry of Lands and the MOF that there is land to facilitate access into all areas needed for our development plans. This access will be provided via some lands that are under the jurisdiction of BC Lands and Assets Corporation (see Appendix C1).

Historically, some use of the area has been recreational. Mill Lake, in the headwaters of Harrop Creek, is a popular fishing area accessible via an old, overgrown trail, or by helicopter. The second area of recreational activity is an old logging road (Alexander Road) which accesses the height of land just east of Procter. The Harrop-to-Irvine Creek drainages also provide the viewscape for the resort town of Balfour, and for the thousands of passengers who travel on the Kootenay Lake Ferry each year.

More important, perhaps, is the use of the area as water supply sheds. In the 1930's, the area supported a thriving orchard industry and the water was needed for irrigation. Now the farm use has decreased, but new residential homes are placing an ever-increasing demand on the domestic water supply. Residents in the Harrop-Procter area depend on the creeks and surface springs in the surrounding forests to provide their drinking and irrigation water. The small streams and numerous shallow surface springs found on the land units between the four major creeks are extremely vulnerable to changes in forest cover. Some of the streams surface only intermittently during the summer, and it is almost impossible to define where the flows of the surface springs originate. Large storage tanks are needed to transform the meager flow of these springs into a viable domestic water system. The MOF's refusal of a woodlot application in 1988 between Narrows Creek and Slater Creek is proof of just how fragile these face units are.

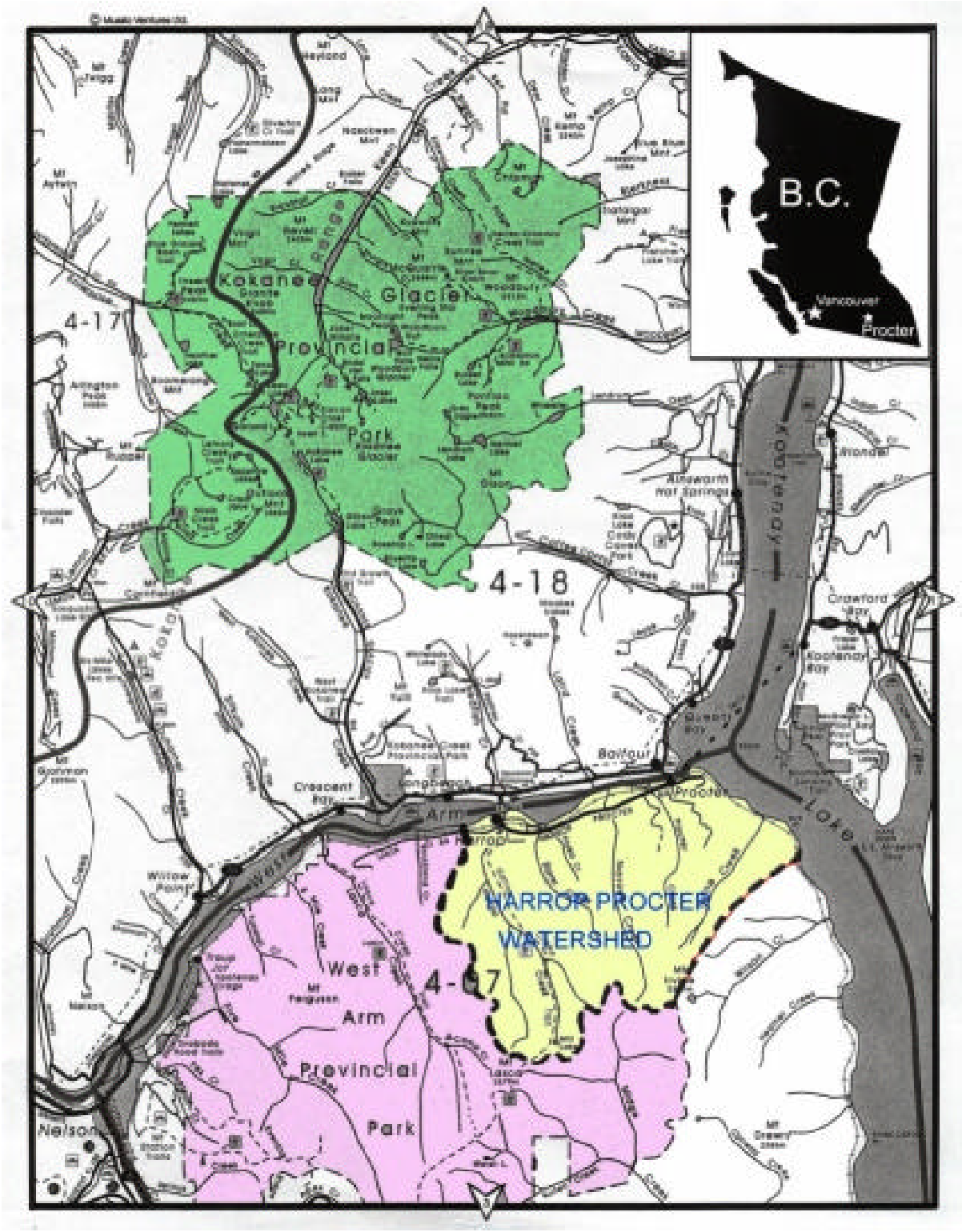
A trapline has existed in the Narrows Creek drainage for some time; however, the HPWPS has confirmed that the registered owner is recently deceased. The Ministry of Environment, Lands and Parks will be contacted prior to operations to confirm the status of the trapline. There are two mineral claims registered at the east end of the Harrop-Procter forest. The HPWPS wrote to the registered owner, Mr. George Stoll, of Nelson, BC. On December 15, 1998, during a telephone call between Mr. Stoll and HPWPS director, Ramona Faust, he assured us that his claims were in the Darkwoods Forest Company's private land holdings. There are no back-country recreation licences issued on this land base (see Appendix D12).

In 1993, the Protected Area Strategy (PAS) analysis rated the Harrop-Procter area as Number 2 of the 30 priority II areas stressing its importance as grizzly bear habitat and its potential for woodland caribou habitat (see Appendix C5). The decision made by Stephen Owen’s KBLUP (Oct. 1994) to only protect the easterly half (Narrows Creek to Midge Creek) came as a bitter disappointment to those community members working hard on the West Arm Wilderness

proposal (and blockading the Lasca Road). The final KBLUP (March 1995) had traded this easterly portion for the Lasca Creek watershed. Now the entire Harrop-Procter area was open for resource development. This situation initiated a rekindling of the Harrop-Procter Watershed Protection Committee in the fall of 1995.

The committee's board took the question of preservation or locally-controlled development to the residents of the community using a survey and a newsletter containing articles in support of both questions. While 50% of the respondents supported controlled development, 25% still favoured preservation. The committee persuaded most of the preservationists to support an application for a Community Forest Licence, and more specifically, to support development of the Ecosystem-based Plan the Silva Forest Foundation was to prepare for the Harrop-Procter area. The committee achieved society status to be eligible to apply for a community forest licence under the New Opportunities for Wood Program in 1996. The HPWPS was not successful in obtaining tenure under that program, but has continued to pursue a licence under the Community Forest Pilot Agreement. It is difficult to predict what will happen if this application is turned down.

The community forest land will be used in a variety of ways. Sensitive logging, agroforestry, craft-tree harvesting, and tourism will all be part of our long-term land use plan. These various uses are explained in detail throughout this proposal in the business plan, the Silva landscape level plan, and the management plan. As a separate, but related feature of the community forest, the HPWPS intends to use this model for research and education within the community, the region and the province.



Proposed Harrop-Procter Community Forest

Figure 2: Map of Kootenay Lake Area including Harrop-Procter Watershed

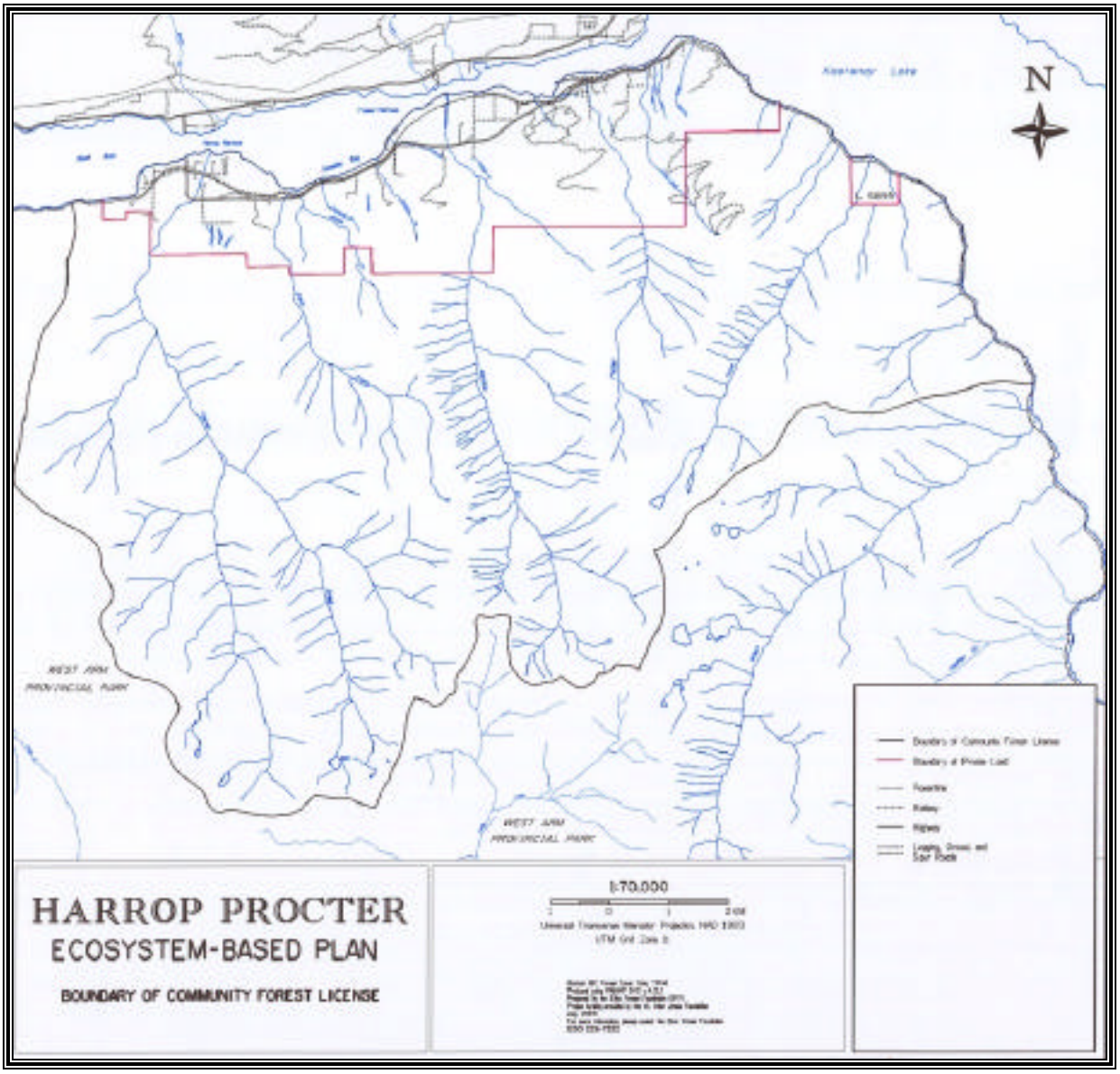


Figure 3: Map of Harrop-Procter Community Forest

1.1 ALLOWABLE ANNUAL CUT (AAC)

The land base is within the Small Business Enterprise Program in the Kootenay Lake Timber Supply Area. The Allowable Annual Cut for the Pilot Agreement will be supported by the Kootenay Lake Timber Reserve (see Appendices C2 and C3). The Harrop-Procter area was unallocated between the summer of 1995 and 1997. The community of Harrop-Procter requested that the land be left unallocated until government made a decision regarding Community Resource Boards and the New Opportunities for Wood Program. Unfortunately, it was not possible for the District Manager to leave the area without a tenure designation. The area was

calculated into the Small Business Forest Enterprise Program. As yet, there are no small business registrants operating in the Harrop-Procter forest.

The Harrop-Procter Watershed Protection Society (HPWPS) contacted the eight Small Business Registrants (SBR) in Category 1 who are active in the Kootenay Lake Area (from South Slocan to Ainsworth) by letter and by phone. The HPWPS was able to establish contact with seven; one is rumoured to be out of the province. Out of those contacted, four registered small business licence holders and one associate attended a meeting held on November 16, 1998, between the Small Business Registrants (SBR) and HPWPS. The meeting was to promote understanding, listen to concerns and ask for their support to decrease the harvest level of the Small Business Program and/or to utilize the Kootenay Lake Small Business undercut to facilitate the Community Forest Pilot Agreement.

Due to their lack of familiarity with the Community Forest Pilot Agreement, some SBR members had numerous (and sometimes unwarranted) concerns. Some were not aware there was a small business undercut. Many of those present felt that Harrop-Procter would be a difficult area to work in because of the history of community involvement with forestry. Their concerns included the following points.

- The logs should be made available on the open market.
- The harvesting goals for Small Business would be lowered.
- Productive land would be locked up.
- Would hiring be local and what are the criteria for "local"?
- One registrant viewed the Pilot as a gift.

During the meeting, two of the SBR said they would support the community managing the land if the community did not get the wood. They expressed that the HPWPS had good intentions.

The Harrop-Procter Watershed Protection Society has tried to address some of the concerns of the SBR within the Application for a Community Pilot by committing to

- a call for proposals on harvesting;
- a call for proposals on road building;
- sell a percentage of wood on the open market; and
- secure the required volume through the Forest Service Reserve.

1.1.1 Support of Small Business Registrants

Four of the seven SBR have stated they would support the use of either the Kootenay Lake District Forest Reserve, the Small Business Undercut, or decreasing the harvest level of the Small Business Program to free up AAC for our proposal. Of the four, one stated that he would only support us if the wood was put up for sale.

The HPWPS has also had conversations with Huscroft Lumber of Creston regarding AAC, but conversations have remained inconclusive.

2.0 STEWARDSHIP AND MANAGEMENT OBJECTIVES AND REGIMES

INTRODUCTION

The Harrop-Procter Community Forest is located on the West Arm of Kootenay Lake in the Nelson Forest Region and encompasses 10,676 ha. Mountains with steep valleys characterize the area. Elevations range between 523m at lake level, and 2400m in the alpine. The area is bordered on the north and east by Kootenay Lake, and on the west and south by the West Arm Wilderness Park. A cable ferry provides the only vehicular access to this relatively isolated community of 650 people.

Forests are very diverse and productive as this area. It is classified as an interior rain forest and is within the Southern Columbia Mountain Ecosection. Lower and middle elevations are dominated by the Interior Cedar Hemlock Dry Warm (ICH dw) and Moist Warm (ICH mw2) biogeoclimatic zones. Engelmann Spruce Sub-alpine Fir (ESSF) biogeoclimatic zones and the Alpine Tundra (AT) are found at higher elevations. Numerous tree species, including Douglas fir, western larch, paper birch, western white pine, Engelmann spruce, western red cedar and western hemlock persist throughout.

Figure 4: Alpine Forest in the Harrop-Procter Watershed

Most harvesting in the area has occurred on private land, and very little has occurred on crown land. Many of the forests are approximately 100 years old and are of fire origin. Stands over 300 years old and isolated veterans that were missed by the last fires, or only lightly burned, are scattered throughout. Water is highly valued, as are visual, recreation, wildlife, and timber resources.

The Harrop-Procter management area is immediately across the lake from the West Arm Demonstration Forest (WADF). The WADF was established in 1992 by the Ministry of Forests. Innovative planning processes and research projects have been initiated, and harvesting techniques tried - many which are applicable to the Harrop-Procter management area. Examples include the Total Resource Design planning process, research on natural disturbance processes, operational use of variable retention silvicultural systems, and research on Douglas-fir beetle risk. Alternative approaches tried in the WADF and those proposed for the Harrop-Procter management area are complimentary and offer a showcase for demonstrating innovative forestry in the province of BC.

2.1 STATEMENT OF GOALS AND GUIDING PRINCIPLES

2.1.1 MANAGEMENT PHILOSOPHY

Healthy economies and communities require maintaining a healthy forest ecosystem by recognizing ecological limits. The management philosophy for the Harrop-Procter area is to provide community stability and sustainability by increasing employment opportunities through economic diversification. This diversification includes timber management, tourism and a variety of small businesses. Integral to this philosophy is meaningful community participation.

Ecosystem-based management philosophies incorporated into planning will ensure future options and flexibility are maintained that allow for changing social and ecological requirements.

2.1.2 RESOURCE MANAGEMENT GOALS

Resource values that exist within the Harrop-Procter area include water, tourism potential, recreation opportunities, wildlife habitat, Kokanee salmon, timber, and wild-crafting opportunities. A survey of community members initiated in 1996 by the Harrop-Procter Watershed Protection Society (HPWPS) identified protection of domestic water as a high priority (see Appendix D1). The majority of the community agrees that it is important to protect tourism potential and visual integrity, while providing opportunities for ecologically responsible timber management.

Resource management goals for the period covered by this Management Plan include the following:

- to manage forests in a variety of ways to maintain a fully functioning forest from the landscape to the stand level;
- to manage ecosystems for a variety of timber and non-timber products while protecting other values that provide community benefits, such as viewscape, water, and tourism potential;
- to explore value-added opportunities;
- to explore wild-crafting and agroforestry opportunities;
- to utilize innovative planning processes to ensure sustainability of timber and non-timber resources; and
- to provide opportunities for meaningful public participation.

2.2.3 MANAGEMENT OBJECTIVES AND STRATEGIES

Management objectives and strategies occur at two levels - landscape and stand. Landscape level objectives and strategies provide a guiding framework for stand level objectives and strategies. Two landscape planning tools exist for the Harrop-Procter area. They are the Ecosystem-based Forest Use Plan for Harrop-Procter Watersheds prepared by the Silva Forest Foundation, and the Kootenay-Boundary Land Use Plan - Implementation Strategy (KBLUP-IS). Stand level plans include Forest Development Plans and site-specific operating plans, as required, under the Forest Practices Code Act of British Columbia and associated regulations. The Ecosystem-based Plan will be the primary planning tool at landscape and stand levels.

Legal requirements developed by the government for Community Forest Licences will be adhered to. In addition, Total Resource Planning will be integrated as per requirements of the Kootenay Lake Forest District.

Management objectives for the Harrop-Procter area integrate identified timber and non-timber resources as listed below. Each objective attempts to adhere to the concept of ecosystem management and ecosystem-based planning such that functions, structures and natural processes are maintained in managed stands.

Integrating the various values and maintaining ecosystem functioning is fundamental to maintaining flexibility and options for the future. Activities and opportunities will be planned to ensure future options exist that can adjust to changing community priorities. Developing economic diversity is important for community development and sustainability.

The strategies listed detail possible options to be considered during landscape level and stand level planning and operations. Not all are applicable to every management situation and appropriate measures will be determined on a landscape or stand-by-stand basis. Although objectives tend to be over a longer term than is covered by this management plan, strategies are listed that can be begun during the initial five-year period.

2.2 TIMBER RESOURCE OBJECTIVES

Objectives

1. Manage ecosystems for resource extraction while maintaining ecosystem functioning, structures and natural processes.
2. Ensure long-term community economic sustainability by ensuring long-term sustainable level of harvest by maintaining or creating opportunities for economic diversity based on maintaining/building upon other values.
3. Manage forests for a diverse range of products including sawlogs, peelers, building logs, poles, fence posts, pulp wood and specialty wood for value-added products.
4. Manage for large, high quality, high value timber over the long-term.

Strategies

1. Increase understanding of natural disturbance processes within and outside harvest areas to incorporate, where appropriate, into planning.
2. Improve inventory of timber resources.
3. Manage for a wide range of forest products suitable to the various growing sites.
4. Actively seek value-added opportunities.
5. Actively participate in and support area projects to initiate a log sort yard.
6. Apply for eco-certification of all timber and non-timber products.

2.3 NON-TIMBER VALUES AND RESOURCE OBJECTIVES

2.3.1 WATER MANAGEMENT

The entire Harrop-Procter Community Forest licence area is classified as either a Community or Domestic Watershed and there are 240 licenced water users. Procter Creek is the only

Community Watershed. Water is the primary resource in the entire licence area and must be considered as such in all planning.

Roads are recognized as major contributors to water sedimentation and flow interruption issues. Impacts to the water resource will be minimized by careful planning (spatial and temporal) within drainages. Cutting rates and spatial distribution of cutting areas are also major contributors to disruption of water quality, quantity and timing of flow.

Objectives

1. To manage timber and non-timber resources such that water quality, quantity, and timing of flow are not impacted in either the short or long-terms.

Strategies

Many of the strategies in the Soil Management Section also pertain to protecting the water resource.

1. Ensure harvest areas are "Total Chance Planned" to minimize short- and long-term road requirements.
2. Frequent road inspections will be carried out, especially during spring run-off and following heavy rainfall, to identify areas requiring maintenance.
3. Deactivate roads as determined appropriate (permanent versus semi-permanent) following management activities.
4. Stringent riparian protection strategies will be determined on a road-by-road and block-by-block basis, including implementing riparian reserve zones.
5. Crossing over major water courses (i.e., Procter Creek, Narrows Creek, and Harrop Creek) will be avoided.
6. Harvest systems, equipment and season of harvest will be appropriately chosen to minimize soil disturbance (possible sediment source).
7. Culverts will be installed in locations to maintain natural water courses.
8. Re-vegetate right-of-ways, cut slopes, road surfaces, and landings.
9. Partial cut to protect timing of flow.
10. Limit exposed mineral soil in harvest areas by minimizing bladed structures.
11. Apply for funding for water sedimentation monitoring for Carson, Narrows and Harrop Creeks.

2.3.2 SOIL MANAGEMENT

Objectives

1. Maintain soil functioning and productivity.

Strategies

1. Select a logging system that is appropriate to the terrain.
2. Minimize permanent access structures.
3. Consider use of forwarding trails versus new haul roads where appropriate.
4. Utilize snow trails when appropriate.
5. Pre-determine skid trails prior to harvesting.
6. Use small, low ground pressure skidding equipment to reduce trail size and areas of compacted soils.
7. Utilize 'pulling-line' to reduce trail density.

8. Cease harvesting during wet periods.
9. Construct narrow roads and right-of-ways.
10. Plan small landings in locations that will be used in future harvesting passes.
11. Utilize snowpacks during harvesting, especially in areas with thin duff.
12. Choose appropriate harvest systems and equipment including cable yarding for soil conditions.
13. Buck and limb in stand to recycle organic matter to maintain soil fertility.
14. Construct major roads two years prior to harvesting.

2.3.3 VISUAL LANDSCAPE MANAGEMENT

The Harrop-Procter management area provides an important viewscape for Kootenay Lake and from north shore communities. The area is visible from several beaches and from the ferries and boats. This area is a year-round, highly traveled tourist corridor.

The Visual Quality Objective for the Harrop-Procter watershed is Partial Retention. Protecting visual values will protect growing tourism industry potential. Tourism is a growing industry in the area and this trend will likely increase due to the range of recreation opportunities, the mild climate and the beauty of the many lakes and mountains. It is considered an 'undiscovered' corner of the province, providing unique tourist and recreation experiences.

Objectives

1. Minimize visual impact of harvesting and road building activities.
2. Maintain tourism potential.

Strategies

1. Investigate various visual design strategies to incorporate into landscape level planning.
2. Build roads with narrow right-of-ways and fit roads into the shape of the terrain.
3. Use partial cutting silvicultural systems.

2.3.4 BIOLOGICAL DIVERSITY

The Harrop-Procter Community Forest Licence area is within Resource Management Zone (RMZ) K-S05 and more specifically, within Landscape Unit (LU) K-9, as described within the KBLUP-IS. This area is within a Special Resource Management Zone due to a high concentration of regionally significant and sensitive resource values. These include the presence of community and domestic watersheds, medium-high densities of grizzly bears at high elevations, ungulate winter range, and high fisheries values. In regional significance for maintaining biodiversity, the Protected Area Strategy Team rated this area 24th out of 102. However, the biodiversity emphasis option is still rated as low. This report stated that most of the biodiversity in the Southern Columbia Mountains is contained in this area (see Appendix F1).

Figure 5: Typical Harrop-Procter Forest

The management area extends from low elevation dry stands to mid-elevation moist stands to high elevation alpine stands. Many natural structures and disturbance processes interact across this range to provide a biologically diverse landscape. Structures include mixed species stands, snags, fire escape patches with old trees, riparian areas, dry or rock outcrops, and brush patches. Disturbance processes providing many of these structures include high intensity stand replacing fires, low intensity stand maintaining fires, root disease, white pine blister rust, bark beetles and larch dwarf mistletoe. Maintaining and enhancing these types of processes is one way to protect many of these structures' biological diversity.

Objectives

1. Maintain biological diversity when planning and implementing forest management activities to ensure ecosystem functioning.
2. Ensure old growth is distributed spatially and temporally within natural range of variability.
3. Minimize habitat loss and fragmentation during planning.
4. Identify and protect rare or endangered stand types.

Strategies

1. Identify range of natural disturbance processes for the various ecosystem types during field review of potential harvest areas.
2. Confirm existing Old Growth areas as identified in the Ecosystem-based Plan.
3. Begin to identify potential Old Growth recruitment areas and strategies for recruitment (structure development and timing).
4. Accumulate information pertaining to range of species and species habitats in the area.
5. Protect existing coarse, woody debris (CWD) and contribute additional large CWD where determined in deficit for water retention capability, germination sites, and mammal/reptile runways and denning opportunities.
6. Incorporate permanent reserve trees, wildlife trees and patches into management areas.
7. Plan harvest in appropriate-sized patches that will account for natural processes.
8. Plan harvesting that targets certain seral stages.
9. Retain hardwood component where appropriate.
10. Incorporate connectivity corridors into planning to maintain genetic exchange opportunities.
11. Maintain a range of seral stages in large management units.

2.3.5 WILDLIFE MANAGEMENT

Numerous wildlife species are found within the Harrop-Procter Community Forest Licence area. Wildlife species include bald eagles, osprey, cougars, white-tailed deer, grizzly and black bears. In landscape unit K-9, several red-listed (including leopard frogs and peregrine falcons), and blue-listed species (including great blue herons and wolverines) have been identified. Portions of the area are recognized as potential caribou habitat as it is adjacent to currently used areas of the last remaining herd that travels between the United States and Canada. The frequency of major creek valleys and deeply incised canyons present considerable obstacles to animal movement across the landscape.

The licence area encompasses Priority 2 and 3 grizzly bear habitat as described within the KBLUP-IS. Access management of humans and protection of riparian zones must be considered during planning within important grizzly bear habitat areas.

Objectives

1. Maintain structures and functioning to ensure habitat potential exists for the various wildlife species.

Strategies

1. Incorporate wildlife corridors and habitat requirements in landscape level planning.
2. Identify and manage stand structures requiring protection during development.
3. Manage large areas to avoid habitat loss through fracturing the landscape into small units.
4. Designate wildlife trees and patches during operational plans.
5. Identify any critical ungulate summer and winter range areas.
6. Work with MOELP to enhance connectivity between Harrop-Procter, the West Arm Park and the Midge Wildlife Management Area.
7. Seek funding to inventory the range of wildlife and fish species and their habitats in the management area, especially for red and blue-listed species.

2.3.6 FISHERIES MANAGEMENT

Bulltrout, Kokanee salmon and Rainbow trout have been identified as occurring in the Harrop and Narrows Creeks. Bulltrout and Kokanee salmon have been observed in Procter Creek. Protection of riparian areas is critical and will be determined during landscape level planning.

Objectives

1. Provide appropriate riparian protection to fish and fish habitat.

Strategies

1. Seek funding to inventory fish species and habitat potential in major creeks.
2. Seek funding to improve fish habitat, if determined beneficial, following habitat potential studies.

2.3.7 RECREATION MANAGEMENT

Present recreation uses include hiking, berry picking, herbal plant collection, mountain biking, hunting, snowmobiling, cross-country skiing, wildlife viewing, horseback riding, lake fishing and llama trekking. Increasing recreation opportunities would provide the community with a greater commitment to the land base, and can provide economic opportunities within the

community through increased tourist service needs. However, caution must be applied when considering potential negative impacts on water quality through contamination. Changes in recreation use will require very careful planning and active community involvement.

Objectives

1. Maintain setting of back-country recreation experience.
2. Ensure new recreation projects respect goals of established recreation experiences.
3. Review existing services in local communities for recreation users and tourists to determine adequacy and explore economic opportunities in the community for additional tourist services.
4. Manage recreation opportunities recognizing water as the most important resource.

Strategies

1. Explore existing and potential recreation opportunities, particularly near Irvine, Wilson and Mill Lakes.
2. Seek funding for an inventory of existing recreation trails and an assessment of their condition and suitability.
3. Consider and assess Old Growth areas for recreation opportunities.
4. Seek public input on where and how much recreation is acceptable.
5. Disperse and control recreation use over a large area to protect water resources.
6. Work toward a tenure system for back-country operators.
7. Utilize the Ministry of Environment "E" Team Program.

2.3.8 RIPARIAN MANAGEMENT

Riparian management is a critical element to ecosystem-based planning. Maintaining riparian functions protects water values, fish and wildlife habitat.

Objectives

1. Protect large and small riparian areas from the influence of resource management.

Strategies

1. Utilize riparian reserve and management areas, depending on field assessments.
2. Maintain soil stability in riparian areas.

2.3.9 CULTURAL HERITAGE MANAGEMENT

The Ktunaxa and the Sinixt First Nations have been contacted by the HPWPS and have indicated that the Harrop-Procter management area is of cultural significance to First Nations' people. The Sinixt have rated the entire area as medium priority due to the high concentration of past use for summer and/or winter camps. An archeological assessment has not been conducted, but both First Nations' groups have identified areas of cultural significance. Cultural features discovered during forest management activities will be protected. These features may include First Nations' sites and old mining cabins. All information collected will be filed with the Kootenay Lake Forest District office.

Objectives

1. Protect identified cultural heritage features.

Strategies

1. Provide opportunities for meaningful involvement of First Nations' people in planning and managing cultural heritage.
2. Seek funding to complete studies to assess First Nations' needs.
3. Proposed roads and cutblocks will receive an overview assessment by a qualified archaeologist and include the participation of First Nations.
4. Archeological Impact Assessments will be completed if requested by the District Manager or First Nations.

2.3.10 BOTANICAL FOREST PRODUCTS

Herbal supplements and remedies are rapidly gaining popularity and markets exist in Canada and the United States for herbs growing in the Harrop-Procter forests. Horsetail, Oregon grape, kinikinnik, devil's club and fireweed root are present and have economic value when sold in bulk as dried herbs. Herbs that grow close to existing and new logging roads and have predictable harvest seasons will be of particular interest. Rare or fragile herbs would not be considered for harvesting. The greatest return from medicinal herbs is to add value by producing tinctures and lotions locally. With the assistance of a trained clinical herbalist, at least ten herbs and fungi will be targeted for investigating economic opportunities for use in clinical practice.

The harvesting of edible mushrooms is currently a hobby for local residents who use them as a food source. It is possible to stimulate the growth of a variety of species in order to initiate a local mushroom supply business.

Other wild-crafting opportunities include harvest of birch, willow and alder whips for bentwood furniture makers, collecting cedar bark for basket making, and collecting a variety of materials for crafts and floral use.

Objectives

1. Maximize economic potential of the landbase for the community by encouraging controlled development of various wild-crafting and agroforestry ventures.
2. Increase capability as a supplier of medicinal herbs, craft materials, floral materials and food products.

Strategies

1. Pursue funding to inventory economically lucrative herbs and assess their volume and occurrence across the landscape.
2. Initiate field testing of regeneration capabilities to determine sustainability of herbs which may be targeted for harvest.
3. Investigate securing a drying facility and markets for dried herbs.
4. Encourage local cultivation on farms and in greenhouses of medicinal herb species.
5. Investigate market opportunities for by-products of logging such as cedar and pine boughs for the Christmas home decorating market.
6. Investigate opportunities for harvesting cedar branches for the production of cedar oil.

2.4 HARVESTING OPPORTUNITIES IDENTIFIED FOR THIS MANAGEMENT PLAN

The Ecosytem-based Plan has identified many potential timber harvesting areas. Field assessments were completed in 1998 for approximately 300 hectares of potential harvest area comprising well over five years of operations. Proposed road locations were established, preliminary prescriptions have been completed, grid terrain mapping is done, and harvest volumes have been calculated. Considerable time and resources have been spent to determine inventories in the Community Forest. The HPWPS is committed to completing assessments as required by the Ministry of Forests.

In ecosystem-based planning, the shape of the terrain, slope gradient, soil depth, soil texture, amount of available moisture and local climatic conditions are key factors for determining ecological limits to human use of forest ecosystems. It is assumed that logging sensitive sites often results in impacts that exceed the capacity of an ecosystem to absorb disturbance without substantial ecological change. Harvesting areas for this Management Plan have been selected and field assessed while considering these criteria.

Three areas have been identified as candidate areas that are ecologically suitable for timber harvest during the first five-year cut-control period. The first operational area, a 100 ha unit, has been identified on an existing road network on the east side of the licence area on Alexander Road. For harvesting plans for Alexander Road see Appendix F3.

2.4.1 NARROWS CREEK AREA

Two additional areas are located in the next drainage, Narrows Creek. These areas may be entered into late within this Management Plan. A new road will be required. Its location has been determined and has been field assessed for stability. One area has a fire-escape overstorey dominated by 40m tall Douglas fir, western larch and western red cedar. A 100-year-old, 25m tall, second cohort of western red cedar and western hemlock has developed post-fire. Timber extraction will concentrate on this layer utilizing partial cutting, though a small volume may be removed of the larger component if suitable value-added markets are available. A variable retention silvicultural system will be implemented that considers stand functioning following harvesting. Dry areas may be opened up to promote regeneration of early seral species and to encourage open growing structures of fire maintained stands. Moist areas will retain a greater percentage of climax species and retention levels will be greater.

Figure 6: Narrows Creek Drainage

The area is primarily Terrain Stability Class III; therefore, harvesting should not affect stability. There is a low to moderate hazard of landslides resulting from road building. There are areas with a moderate likelihood of landslides following harvest, and a moderate to high likelihood following road building. There is a moderate to high surface erosion hazard, and a low to moderate hazard that debris resulting from a landslide will deposit in a stream. Short sections of the proposed road are within these areas. Measures will be taken during road construction, maintenance and deactivation that will minimize risk to the water resource. These measures will be determined in consultation with terrain and road building experts during operational planning. A professional hydrologist has inspected this road location and has written a report (see Appendix F2).

The second area in Narrows Creek is much like the first area, but without the significant veteran component. It will be managed in much the same way as ages, species mixes, and apparent disturbance processes are similar. The greatest difference is that it appears to have burned hotter during the last fire as the veteran component is much smaller. This area is more stable than the previous area with Terrain Stability Class II and III dominating the area. There is a high hazard for surface erosion and a mostly low hazard of debris from landslides being deposited in a stream. As above, measures will be taken to assess and mitigate any risks associated with development in the area.

The first entry into the area will be an intermediate sanitation cut to remove most of the low vigour and damaged stems in all height classes. In the drier open areas, the initial cut volume will be higher than that of the wet areas to allow for regeneration of light dependent species such as Douglas fir and western larch. In the wet areas, some of the large diameter stems will be removed to help offset the high costs of partial cutting and to provide growing space for shade

tolerant species. After careful evaluation of stand functioning following the first entry, further cuts can be considered. Passes of 20-30 years to remove a percentage of the stand are possible.

2.5 SILVICULTURE

Objectives

1. Plan silvicultural activities that ensure fully functioning forests from the landscape to the stand level.
2. Ensure a free-growing stand is established within approved time frames.

Strategies

1. Natural regeneration, including utilizing advanced regeneration in partial cut areas, is the preferred reforestation technique.
2. Preferred trees will be free from damage and disease, and will have good form.
3. Planting will be used, as required, for fill planting and for species conversion (e.g., establishing larch or ponderosa pine).
4. Advanced regeneration will be protected during harvesting.
5. Understorey burning in fire maintained stands might be prescribed.

2.6 FOREST PROTECTION

2.6.1 FOREST HEALTH

Forest health agents typical to the stand types in the Harrop-Procter Forest include Armillaria root disease, Douglas-fir bark beetles, mountain pine beetles, larch dwarf mistletoe, and white pine blister rust. Armillaria is known to exist throughout stands in the ICH as a secondary mortality agent killing weakened trees and as a primary mortality agent acting in root disease centres. Preliminary observations reveal root disease throughout the proposed harvest areas; however, stands are vigorous and well stocked.

It is important to recognize that although each forest health agent may impact volume production, each enhances other non-timber values. For example, dwarf mistletoe brooms provide valuable raptor, owl and marten nesting habitat; root disease provides snags for cavity nesters and gaps dominated by shrubs and grasses for forage; bark beetles provide forage for woodpeckers; and dead white pine have loose bark providing nest sites for brown creepers and roost sites for bats. Also, the downed, coarse, woody debris increases the water-holding capacity of the soil. The key is to ensure an acceptable balance is achieved between timber production and other non-timber values.

Objectives

1. To maintain forest health by recognizing the natural role of forest health agents.

Strategies

1. Maintain diversity of forest composition and structures.
2. Control as a hazard rather than an outbreak.
3. Hazard will be assessed on an ongoing basis using field data and provincially recognized hazard rating systems.

4. Incidence will be noted during field assessments and compared with hazards to determine risk and treatment regime if required.
5. Silvicultural systems will be planned to manage appropriate hazards and maintain stands within natural disturbance regimes (that are also socially acceptable and do not jeopardize water values).
6. Operations will account for increased hazards as a result of past human intervention (i.e., old partial cutting and fire suppression).

2.6.2 FIRE

Fire hazard will depend on actual stand characteristics and harvesting strategies. The proposed management objectives for fire prevention and suppression include Licensees' responsibilities under fire control legislation, Forest Practices Code Act Part 5 Divisions 2 and 3, and Forest Practices Code Regulations 169/95.

De-limbing and bucking will occur within the stand to retain organic matter. Large concentrated fuel accumulations are not expected following operations due to the light removal over a large area; therefore, it is not expected that hazard will be excessive following harvest.

Objectives

1. To maintain fire hazard within acceptable levels.

Strategies

1. Complete a fire preparedness plan prior to operations, in consultation with a designated forest official, if required by legislation.
2. Hand piling with the option of chipping is the preferred method of reducing hazard.
3. Consider burning to reduce fire hazard if within range of natural disturbance processes.
4. Investigate an alternative use for excessive debris and slash (i.e., firewood) while ensuring coarse woody debris requirements are not impacted.

2.7 ROAD CONSTRUCTION, MAINTENANCE AND DEACTIVATION

Any modification or construction will be in accordance with site specific terrain information and will meet the requirements of the FPC Act and regulations. Regular road maintenance will include inspections of haul roads, permanent skid trails, ditches, landings and bridges, and will be conducted in accordance with the requirements of the FPC Act and regulations.

New permanent and temporary access structures (landings, borrow pits, permanent skid trails) will be deactivated or rehabilitated depending on terrain and scheduling of future entries. All roads will be deactivated in accordance to the requirements of the FPC Act and regulations.

Objectives

1. To construct, maintain and deactivate roads to standards that protect water values and minimize soil instability.

Strategies

1. Minimize permanent access structures.
2. Build narrow roads with narrow right-of-ways.

3. Maintenance inspections will be completed on a regular basis, especially during spring run-off and following heavy rainstorms.
4. Exposed mineral soil from road construction will be seeded within one year of disturbance and re-vegetated within two years.
5. Conduct road drainage assessments, where applicable.

2.8 PUBLIC PARTICIPATION

Meaningful public participation will be sought to ensure equitable distribution of timber and non-timber benefits. The Harrop-Procter Watershed Protection Society (HPWPS) has, over recent years, worked with the community to choose a direction that incorporates most philosophies in regard to managing adjacent forests. Public meetings and a door-to-door campaign covering 100% of Harrop-Procter households have been conducted in order to inform residents of the Community Forest Pilot Project proposal. Meetings have also been held with First Nations' representatives. Direction for pursuing the Pilot Project was provided in part by results from a public survey in 1996 in which over one-half of the respondents indicated support for community and ecosystem-based planning. At present, over one-half of all Harrop-Procter residents 18 years of age and older have purchased memberships in HPWPS. This demonstrates the strong support behind the HPWPS proposal for the Pilot Agreement.

Upon issuance of a Community Forest Licence, public participation will be encouraged in several ways including

- membership in the Harrop-Procter Community Cooperative;
- membership in the HPWPS;
- elected Director of the Cooperative;
- elected Director of HPWPS;
- public meetings;
- licenced water users will be contacted for each drainage affected at least 6 months prior to operations; and
- personal communication initiated by board directors on major issues.

The Cooperative will make management decisions pertaining to forest planning and operations as well as product research, development and marketing. Members of the community will be encouraged to apply for election as directors of the Cooperative. The HPWPS will also hold a number of seats on the board. These positions are available to all community members through the election process. Board members will represent the various geographical units where possible - Harrop, Narrows, and Procter Creeks, and the two face units between these creeks.

All residents, whether members of the Cooperative or not, will have the opportunity to express concerns on management issues. All concerns will be discussed by the Board of Directors and incorporated, or the board will provide rationale for exclusion.

All Harrop-Procter residents can become involved in any of these processes. The two First Nations living outside the geographical area, yet potentially affected by decisions, are considered residents and can also become involved.

Initial goals are to continue to raise community awareness, educate the interested public, and seek real community involvement from the community members.

2.9 RESOURCE INVENTORIES

2.9.1 TIMBER RESOURCE INVENTORY

The MOF provided the current inventory based on air photo interpretation and cruise plot data. This information was used to calculate the current AAC in the Ecosystem-based Plan. An updated inventory may be considered during the second forest development planning stage (2004-2008). Most timber is mature and approximately 100 years old. Western larch, Douglas fir, western red cedar and western hemlock are the predominant species. Lodgepole pine is also common throughout in mixed species stands. Western red cedar and western hemlock are common in the understorey. Few Ponderosa pine are at lower elevations. This inventory will be updated as disturbances occur on the licence area.

2.9.2 TERRAIN STABILITY INVENTORY

A Level B Terrain Stability interpretation was completed for crown land in the Harrop-Narrows-Procter Creeks in 1998, by William H. Wells Consulting. These creeks constitute most of the interest area. Irvine and Slater Creeks were not included. Interpretations for terrain stability hazard, surface erosion hazard, and landslide induced stream sedimentation hazard were included. No recent development has occurred within the study area; therefore, observed terrain instability issues are associated with natural disturbances.

IMPORTANT NOTE: This terrain stability report was completed following data entry for the Ecosystem-based Plan; therefore, it has not yet been fully integrated. Steps will be taken to identify areas of disagreement in interpreting terrain stability data, specifically in timber management zones for this Management Plan, prior to the commencement of development work.

2.9.3 HARROP CREEK

Numerous gullies exist along the main creek channel. Several debris slide scars were observed associated with these gullies; therefore, much of this area was classified as unstable. Many of the slides have been caused by naturally diverted streams and are contributing large amounts of sediment to Harrop Creek. Surface erosion is also a concern as soils are likely worn away due to the extensively gullied terrain, fine textured material, and low coarse fragment content. Erosion has been observed on the Harrop Creek foot trail and on roads on the Harrop face unit. Much of the middle slope in Harrop has high ratings for landslide-induced stream sedimentation due to gullies that are linked to streams and major tributaries. It is recommended that development in the Harrop Creek area must not concentrate and redirect slope drainage.

2.9.4 PROCTER AND NARROWS CREEKS:

The west sides of Procter and Narrows Creeks are steep, gullied, and unstable; they are typically rated Terrain Class V and IV. The long, uniform slopes and observed past debris flow activity have contributed to this rating. The east sides of the creek channels are more stable; however, they have unfavorable bedrock structures that are likely to be unstable during wet periods when

the soil is saturated. Several small slides have occurred on steep slopes above Procter and Narrows Creeks.

In the Alexander Road/Carson Creek area, there are numerous old skid trails and roads. Kootenay Lake Forest Service officials have expressed some concern regarding stability in this area; therefore, further assessment (Level A) will be required prior to development.

Figure 7: Alexander Road Face above Procter

2.9.5 Watershed Assessment Inventory

An Interior Watershed Assessment Procedure (IWAP) has not been completed in the Procter Community Watershed. This procedure will be completed if required by regulation or the District Manager. It is unlikely an IWAP will be required as the proposed operational area lies outside of the Procter Creek Community Watershed Boundaries.

2.9.6 Fish Stream Classification Assessment

A fish stream classification assessment may be required for Harrop, Narrows and Procter Creeks, and will be completed following recommendations by the District Manager and designated environment official. Until assessments are complete, operations will be planned assuming fish occur in the three major drainages.

2.9.7 Archeological Overview Assessment

Proposed roads and cutblocks will receive an overview assessment by a qualified archaeologist, who may recommend more detailed Archaeological Impact Assessments (AIAs) if the locations appear likely to contain archeological sites. AIAs will be completed if requested by the District Manager. There are no known archaeological sites within the Community Forest area; however, important sites do exist at lower elevations.

2.9.8 Visual Quality Assessment

The Kootenay Lake Forest District has established visual-quality polygons. The Harrop-Procter area is highly visible from the highways, Kootenay Lake, and the communities of Balfour and Longbeach. The area is primarily rated as Partial Retention.

2.10 PROPOSED HARVEST RATES AND METHODS OF SELF-REGULATION

2.10.1 PROPOSED HARVEST RATE FOR TIMBER

A harvest rate of 2,603m^3/yr was determined during ecosystem-based planning as described below and in Table 1. This rate of harvest may fluctuate upwards by approximately 10%. The Cooperative will also explore the possibility of harvesting inaccessible, stable areas by helicopter.

2.10.2 PROPOSED HARVEST RATE FOR OTHER RESOURCES

Harvest rates have not yet been determined for the various wild-crafting and agroforestry products. Information is required to identify areas with the greatest financial benefits that do not impact future opportunities, as listed in Section 2.3.9. The Cooperative is dedicated to investigating these options and completing sustainable use studies to create opportunities that aid community sustainability within the time-frame of this Management Plan.

2.10.3 HOW HARVEST RATES WERE DEVELOPED

Timber harvest rates were determined by the Silva Forest Foundation and were based primarily on air photo interpretation with some field checks. Standard netdowns included non-forested and non-commercial forest, inoperable areas, low stand volume, and site quality areas. Netdowns specific to Silva methodology further include riparian ecosystems, steep terrain (>60%), protected landscape network components, and headwaters protection zones. This information is detailed in Table 1. For a complete summary of the Ecosystem-based Plan, see Appendix G.

It is important to note that MOF Netdowns are incomplete in this table, and in reality will be much greater. Efforts to determine an AAC for WADF[7] are in progress. It is expected that the AAC will be between 4,000 and 8,000 m^3/year for a 13,500 ha operating area. Proportionally speaking, this represents an approximate harvest rate of 3,160 to 6,320 m^3/yr for the Harrop-Procter Forest (10,676 ha). This very rough approximation does not account for the more difficult and unstable terrain in the Harrop-Procter area.

Table 1: Netdowns affecting potential harvest areas and volumes as per the Ecosystem-based Plan

NETDOWN FACTORS	AREA (HA)	BALANCE (HA)	NET MAI* (M3/YR)	BALANCE MAI (M3/YR)
Total Area	10,676	10,676	17,040	17,040
Non-Forested and Non-Commercial Forest	1,835	8,842	1,161	15,878
MOF Netdowns	2,783	6,058	3,944	11,935
Silva Netdowns	4,176	1,883	8,167	3,768
Protected Landscape Network Components	296	1,587	512	3,256
Protected Forest Use Zones	283	1,304	653	**2,603**

**MAI – mean annual increment*

[7] Working Committee, 1998 "*Strategic Plan for the West Arm Demonstration Forest, Version 1*". Ministry of Forests, Nelson Region and Kootenay Lake District.

It is expected that estimates may vary by 10% depending on subsequent field verification of operability lines. Values may also vary with new inventory information that will adjust MAI estimates. Estimates do not account for harvesting of deciduous trees. Markets for deciduous species have been identified in the local area, thereby providing additional benefits for local employment and harvest rates.

Timber harvest rates, following required assessments, are likely lower for ecosystem-based forestry versus conventional forestry; however, employment and revenue differences will be mitigated through intensive forestry planning, labour intensive partial cutting methods, and through the implementation of value-added wood products manufacturing.

2.10.4 PLANS TO UPDATE RATES

Harvest rates were recently established in 1998, in the Ecosystem-based Plan; therefore, updates are minimal. Initiatives to fine tune timber harvest rates are as follows:

- confirm boundaries of harvest areas in field;
- collect better growth-rate information in harvest areas, such as site index and mean annual increment to update harvest levels; and
- seek funding for re-inventory.

2.10.5 PROPOSED METHODOLOGY TO DEVELOP HARVEST RATES

Harvest rates for non-timber resources are required. Initial strategies were described in Section 2.3. Species must be identified that have current markets. The abundance and location of these species must be identified, and regeneration rates must be determined.

2.10.6 MECHANISMS EMPLOYED TO ENSURE SUSTAINABLE USE (TIMBER AND NON-TIMBER)

Ensuring sustainable timber and non-timber use of the Harrop-Procter Forest is fundamental to developing long term community stability. The Ecosystem-based Plan for the Harrop-Procter area incorporates principles of maintaining functioning ecosystems to ensure that social and economic values remain viable. What is left following harvesting is more important than what is removed.

In addition, ecosystem-based forestry is more labour-intensive, which will result in significantly more employment per volume of timber than conventional approaches. This is further aided by initiatives to developing value-added, wild-crafting and increasing tourism opportunities. The long-term goal is to provide a diverse economy where more opportunities exist per unit of timber or land. Less timber is required and sustainable use is accomplished.

Research is required to ensure that sustainable use of non-timber resources is realized. These strategies have been discussed and will include field testing of regeneration capabilities of targeted herb and fungi species to determine sustainability of herbs which may be harvested. Literature will also be reviewed, and ecology and wild-crafting experts interviewed such that this opportunity can be available as quickly as possible.

The flow of benefits to the community has been discussed and encompasses economic diversity. Benefits to the province include stable employment as well as increased revenue in an area recognized as having higher than average unemployment. Increased revenue in the form of

income tax and stumpage will also benefit the province. The HPWPS is confident that new economic possibilities from wild-crafting activities will stimulate the local economy and that the annual rent paid on the landbase will facilitate this opportunity.

2.10.7 RESOURCE PLANNING

Resource planning at the landscape level has been initiated in the ecosystem-based Forest Use Plan for Harrop-Procter Watersheds prepared by the Silva Forest Foundation. Other plans will include the Management Plan, Forest Development Plan, and site specific plans as required by the FPC.

The landscape level plan includes a preliminary AAC and a mapped operable land base. Recommendations from this plan will be used as a guide for other levels of planning. Operational plans will be completed following FPC legislation and Silva Forest Standards for eco-certification. All resource planning will incorporate legislated requirements and in addition will incorporate requirements for achieving eco-certification of harvested products.

The final Management Plan will be developed incorporating FPC requirements (in addition to Silva Forest Foundation standards for eco-certification), community expertise and knowledge, as well as outside help as required. Inventories required for Forest Development Planning will be identified and priorized. Budgets will be estimated, and funding will be applied for to complete inventories based on priorities.

Ecosystem-based planning requires active community participation. To date, the community has been involved in conceptual planning for landscape level and stand level plans. The opportunity was presented to provide input in beginning stages, as well as during the final review and comment. Continued participation is required to ensure all values are considered.

3.0 COMMUNITY INVOLVEMENT, SUPPORT AND AWARENESS

3.1 THE COMMUNITY OF HARROP-PROCTER

(Figures taken from Statistics Canada on Census 1996) See Appendix D11

The community of Harrop-Procter lies on the south shore of the west arm of Kootenay Lake and is comprised of an unbroken strip of properties that line the lake and highway. It is rural with the majority of the 245 homes built on small parcels of land between 0.50 and 30.0 acres. The town of Procter is unincorporated; with a general store, two churches, a community hall and a former school building that serves as a center for businesses and community groups. Despite its history of being an important Canadian Pacific Rail Station and paddlewheel stop, the area now has only one large employer. Pacific Regeneration Technology Tree Nursery employs many people from the area on a seasonal basis with some residents working full time.

The population includes 650 full time residents, and expands to 1,150 (estimate) with summer cottage owners. There are 460 adult residents. Home ownership is high, proportionally, with 220 out of 245 homes being owned by those who reside in them. The bulk of the population is under 55 and the average income is $48,367 per household. Children and youth (0-24 years) make up the largest single component of the population. Married couples are the predominant family unit.

Since the population is comprised of many young people, any local jobs generated will help the employment situation in our community. The labour force over 15 years of age is 320 people. Home based business, construction related services, government services, health services, hospitality and retail are the major employers of the population. Logging and forest industries employ 15 individuals according to 1996 census data.

The community has numerous hobby farms, two bed-and-breakfasts, and several recreation operators. There are many interest groups whose members are involved in a variety of functions from local equestrian enthusiasts to community hall supporters. Harrop-Procter has a history of strong public participation in many different facets of the community.

3.2 HISTORY OF PUBLIC PARTICIPATION IN HARROP-PROCTER

It has been said that the Kootenays was the birthplace of public participation in BC. If that is true, the Harrop-Procter area might well have been its cradle. In 1976, Bruce Fraser of Selkirk College, Castlegar, in a process called 'Forest Planning for the West Arm of Kootenay Lake', met with residents of the Harrop-Procter area:

> *"To conduct discussions with people on the South Shore who depend on the watersheds in order to find out what might be their concerns about their management."*

A portfolio of resource maps that clearly indicated the physical conditions and resource distribution in the various watersheds had been prepared prior to the visits and was presented to several ‘kitchen meetings’.

Several important points were made in this report establishing the cooperative spirit of our community at that time.

> *"…Their concerns about logging come from considerable exposure to previous logging practices that they have seen degrade stream systems. Despite these concerns, and the wealth of anecdotal experiences related to document them, not one person interviewed felt that logging should be prohibited on the South Shore…".*
>
> *"…every group interviewed expressed their appreciation of the initiative taken by the Forest Service in consulting them in the early stages of planning…".*
>
> *"Although the residents were concerned about damage to their environment, they were prepared to work with the Forest Service if they knew that there would be a sincere effort to seek alternatives to extensive clear cutting and high road impact. Time and again, people mentioned the concept of "Showcase" or "Model" efforts on the South Shore by means of an Industry, Forest Service and Public cooperation scheme. A good demonstration would go a long way - plans must be followed by performance."*
>
> *"Small operators, with good performance histories, selective logging or small clearcuts, good field supervision, better Forest Service staffing, careful road location, reduced waste, low soil disturbance yarding systems and good liaison with the public were among the many suggestions that were put forward.... Most people were pleasantly surprised to be given an opportunity to make their contributions early in the planning process than to be presented with a minimally changeable end result."*

Bruce Fraser recommended that the Forest Service…

> *"Use the time available between now and future harvest applications to initiate a long range plan for the South Shore and to involve the public constructively from the beginning…"*

One other recommendation deserves to be quoted…

> *"The proposed road location is in conflict with other resources in a number of lower elevation sites involving visibility, soil stability and domestic water intakes. Extensive revision of the road system is especially necessary above Harrop."*[8]

[8] D. Ailman, J. Baron, B. Fraser, *Forest Planning for the West Arm of Kootenay Lake* - Planning Unit 3 - South Shore, Selkirk College - 1976

In April 1984 (eight years later), a concerned resident approached the Ministry of Forests district office in response to renewed rumours of logging activity. A public meeting at the Harrop Hall was called to address this issue. A logging plan for Lasca Creek was presented by BC Timber staff which included a main-haul road gaining access to the Lasca Creek drainage by switch-backing the westerly slope of Harrop Creek (the road location being essentially the same which Bruce Fraser had condemned in 1976). Also, very much contrary to expectations raised, Harrop residents were again "presented with a minimally changeable end result". In a letter to the Minister of Forests the contact committee, chosen at this meeting, wrote:

> *"We insist that we be given time to study the proposals in detail, without the fear of the bulldozer hanging over our heads; and that the spirit of the previous Cooperative resource development planning be reborn.... Sir, the citizens of the area have many ideas, and we urge you to allow us to share them with you in the formulation of logging plans."*[9]

In a follow-up letter, two weeks later, the contact committee recorded the Forest District's demands.

> *"We have been told during discussions with your representatives that this project is going through - that a portion of the logging haulage road will be built in the Harrop Creek Watershed - and that we would be wise to limit ourselves to the options that you have given us.... We refuse to give last-minute sanctions to a pre-arranged packaged plan developed in isolation from our community."*[10]

The Kootenay Lake Forest District (KLFD) rejected an alternate road location as too expensive and questioned the authority of the contact committee to act as spokespersons for the community. Nevertheless, a letter from the contact committee to the Regional Manager sounded hopeful.

> *"We have been informed that the South Shore is the largest area of good timber left in the Southern Interior of British Columbia, and dare we hope that with good will on all sides, we can evolve a logging operation that will include the minimum of environmental damage and the maximum of economic and social benefits? An operation that will be a credit to the planning expertise of the Ministry of Forests and industry, and the wisdom that resides in every community and forms the basis of every democratic society."*[11]

On Sept 10,1984, a public meeting at the Harrop Hall resulted in the formation of the Harrop-Procter Community and Watershed Protection Committee (HPCWPC). This committee corresponded and met with KLFD staff until the fall of 1986. By then, the focus of its concern

[9] Harrop Contact Committee & Harrop-Procter Community and Watershed Protection Committee, *Letter to the Ministry of Forests,* July 12,1984
[10] Harrop Contact Committee & Harrop-Procter Community and Watershed Protection Committee, *Letter to the Ministry of Forests,* July 23, 1984
[11] Harrop Contact Committee & Harrop-Procter Community and Watershed Protection Committee, *Letter to the Ministry of Foresst, A*ugust 21, 1984

had shifted to the visual impact of the logging in Redfish Creek. In 1987, the HPWPC was instrumental in forming the West Arm Watershed Alliance (WAWA) and some of its members sat on the WAWA executive.

WAWA attempted to influence forest management on a strategic level and for several years cooperated with the MOF writing a weekly column in the Nelson Daily News called 'West Arm Forest Views'. In April of 1990, one of the present directors of HPWPS presented a brief to the Forest Resources Commission (on behalf of WAWA) stressing land use planning and meaningful public participation as top priorities. While both of WAWA's recommendations became an integral part of the Resources Commission's report, "*The Future of our Forests*", government's approach did not follow the strategies laid down by the Commission. Local planning groups were to be the core working groups in land use planning with regional planning groups an option to act as coordinators. Instead, the core was changed to Commission on Resources and the Environment (CORE) - a regional planning group making the land-use decisions. Public participation was to be 'established as a balance to the interests of the primary stakeholders' and the Commission recommended that…

> *"If the process is to work effectively, the public must be convinced that more than lip service is being paid to the concept of public participation. As well, they must be able to see for themselves, through an open process, that their participation is having an impact. It must be emphasized that public participation should occur at the appropriate times in the planning and management process - early enough to have an impact on decision making."* [12]

In 1991, no long-range plan existed for the Harrop-Procter area, despite Bruce Fraser's recommendation and repeated pleas by the HPCWPC.

> *"We should take advantage of absence of pressure to formulate more complete guidelines for prospective licensees. Once a licence has been granted, fundamental ecological concerns are always more difficult to resolve…. In the spirit of Cooperation, we would welcome an early meeting to discuss future plans."*[13]

> *"We still maintain that there are basic principles and objectives which should not change for any given licensee and therefore, should remain the MOF's responsibility…. Basic Management Objectives do not change with a licence. Thus, they can be stated now. Indeed, they must be stated now so the licensee can incorporate these in his plans."*[14]

Thus, in the winter of 1992, a Procter resident, whose parents had been involved in the 1976 survey, thought that the Federal Government's invitation for proposals for a Model Forest was a unique opportunity to establish a true partnership between local communities and the various

[12] Forest Resources Commission, *The Future of our Forests* - April 1991
[13] Harrop Contact Committee & Harrop-Procter Community and Watershed Protection Committee, *Letter to the Ministry of Forests,* Oct 12, 1985
[14] Harrop Contact Committee & Harrop-Procter Community and Watershed Protection Committee, *Letter to the Ministry of Forests,* June 18, 1986

levels of government. A group of volunteers from the community produced a proposal that was surprisingly progressive for the time.

> *"The goal is to set in place an integrated partnership management of the model forest (Partnership Committee) to ensure sustainable forest use with emphasis on the importance of a healthy biological diversity; of old growth forest and wildlife survival; economic benefits of value-added timber manufacturing; and enhancement of public awareness and education."*
>
> *"To implement 'sustainability' (BC Round Table) in the practice of forestry, the first step is to see ourselves as part of the forest in a harmonious relationship to it, rather than in a dominant position with the attitude of exploiting and controlling it."*
>
> *"An equitable partnership to include all interests must be developed. A management approach that recognizes all values, must replace the traditional approach, where exploitation of the forest for profit alone was the guiding principle.... A change in attitude would be reflected in forest management by the use of several local community forest boards which would feed into the Partnership Committee."*[15]

The Model Forest proposal was eventually rejected.

In the spring of 1992, the MOF commissioned a new survey of public concerns in the Balfour and Harrop-Procter areas. Of the randomly selected residents, 40% lived in the latter area. The executive summary of the survey report reads…

> *"The residents' message to the MOF is 'reduce the cut', 'don't clearcut', 'manage for water and viewscape', and 'stay well back from creeks and wet areas, unless using single-tree selection systems, with very light equipment or horses' [and] 'Above all, listen to the people, they hold the ultimate veto'."*[16]

It appears that the answers were essentially the same as given by Harrop-Procter residents in 1976.

During the CORE Table and Protected Area Strategy (PAS) negotiations, the community became somewhat divided. While many adopted a wait-and-see attitude, some worked hard on the West Arm Wilderness proposal (which included both the Harrop-Procter area and Lasca Creek), and one of the current HPWPS directors was appointed by the Regional District of Central Kootenay to the Lasca Creek Planning Team.

[15] Kootenay Lake Model Forest Steering Committee, Dana Rothkop, *Kootenay Lake Model Forest Proposal* - February 1992

[16] Appropriate Forestry Services & Associates, *Survey of Community Forest Values in the Vicinity of the West Arm Demonstration Forest (Kootenay Lake Forest District)* - March 1992

One of the PAS Reports, published in November 1993, listed Lasca Creek as #5 (Priority 1 area), Harrop-Procter as #24 (in second place in Priority 2 areas), and 5 Mile Creek as #44 (Priority 3 area).

The West Kootenay Boundary Table of the CORE process failed to reach consensus. Provincial government representatives voted 'yes' on the Table's Policy, but forest industry representatives voted 'no'. The Policy section contained many innovative recommendations such as

- monitoring by grass-roots or community groups;
- watershed management in partnership with water-users; and
- AAC revisions to meet bio-diversity guidelines, maintain other landscape values and harvest the ecologically sustainable yield as statistically proven by field data.

CORE Commissioner, Stephen Owen, attempted to incorporate many of the Table's suggestions in his report. Of special interest for the Harrop-Procter Community, was page 97 of the KBLUP (Kootenay Boundary Land Use Plan - Oct. 1994). This section discussed the identified Special Management Area of Lasca/Harrop Creeks. The easterly portion of what is now the community forest pilot project area, was originally to be included in the West Arm Wilderness Area. Resource development plans and activities were to be reviewed and monitored by an expert review panel.

The final KBLUP, announced in March 1995, brought radical changes for the Harrop-Procter area. The portion east of Narrows Creek was now excluded from the West Arm Wilderness Area and available for timber extraction. Community forests (recommendation #17) were now omitted, as was the expert review panel. However, water-users were still considered "stakeholders" and the report promised that community resource boards would be established or confirmed.

The first draft of the KBLUP Implementation Strategy (KBLUP-IS) further weakened the hopes created by the Kootenay-Boundary CORE Table. The Implementation Strategy relied totally on the Forest Practices Code which, in the opinion of the HPWPS (and the Clayoquot Sound Scientific Panel), is insufficient to protect community and domestic watersheds, local biodiversity or the abundant wildlife population.

Government has not made the decision on Community Resource Boards and therefore, a request made November 1996 by the HPWPS to be confirmed as a Community Resource Board, has not been answered.

Our application for one of the community forest pilot projects is yet another attempt to obtain some decision-making power over what happens in our watersheds. The HPWPS wishes to manage the forest land and its various forest resources in an ecologically responsible manner. Special emphasis will be given to biological diversity and domestic water, and carry out logging operations in the way local residents envisioned them in the 1976 and 1992 surveys.

3.3 COMMUNITY SUPPORT, AWARENESS AND COMMITMENT

3.3.1 PUBLIC SUPPORT

HPWPS has done exhaustive work to inform and educate local residents, interest groups, First Nations, and the general public about this community forest proposal. The initial direction for pursuing the community forest model was taken from a public survey conducted in the spring of 1996 and from many public meetings that confirmed the survey results (see Appendix D1). The majority of residents do not object to logging done in a sustainable and ecological manner with a significant portion of economic benefit staying in the community. Most view this as a good compromise between preservation and the logging methods that have caused concern in the past. Public support and participation are crucial to the success of this venture. With this in mind, the HPWPS has taken many steps to take the Community Forest Proposal to the public.

3.3.2 SURVEY RESULTS

The HPWPS sent the above-mentioned survey to each household in our community. There are 245 full-time residences (1996 census). Out of 130 respondents, 51.3% favoured forest harvesting managed by the community using ecosystem-based planning. Those supporting preservation (25.2%) were evenly split with those who were happy with harvesting as conducted by traditional methods (23.5%). Since the initial survey, support has grown significantly, as evidenced by the strength of our membership.

3.3.3 MEMBERSHIP IN HPWPS WITHIN THE COMMUNITY

In the fall of 1998, members of the HPWPS went to every home in our community to explain our proposal and to give people the opportunity to support this proposal. This involved visiting over 200 houses and speaking with more than 400 residents. The results of this door to door campaign were tabulated by total resident memberships in the HPWPS. As well, signatures have been collected on a petition (see Appendix D4). In determining the level of support for the community forest, the HPWPS considered only Harrop-Procter residents as statistically valid. According to the last Canada census data (1996) there are 460 adults (18 and older) living in our communities. For the purposes of calculating percentage of support the HPWPS has used this census data (see Appendix D11). **There are currently 276 members, which translates to 60% of the population.**

3.3.4 PUBLIC MEETINGS

Over the last three years, the HPWPS has held many public meetings to update people on the evolution of the community forest process. These meetings have been well advertised and open to all. Attendance has grown steadily. The community has shown an active interest in planning the management of their watersheds, and has instructed the HPWPS to continue to advocate for a plan that will create local employment and protect watershed values.

3.3.5 COMMUNITY NEWSLETTERS

The HPWPS has been mailing out quarterly newsletters to all households for the past two years (see Appendix D2). The newsletters have reported on our interactions with government and other forestry professionals. They have also provided educational information on forest planning

and development. By continually informing community members of our activities, the HPWPS has increased membership and been able to reach everyone in the community.

3.4 PUBLIC INPUT SPECIFIC TO THIS APPLICATION

3.4.1 LOCAL BUSINESS SUPPORT

The HPWPS has contacted local businesses to ask for their support. The results have been encouraging with many businesses providing monetary donations as well as indicating their concern for the economic value of clean water and intact scenery. Various local businesses have written letters of support for the community forest proposal (see Appendix D5).

3.4.2 COMMUNITY GROUP SUPPORT

Members of the HPWPS have met and/or consulted with local community groups including Community Hall Societies, Community Watershed Groups, Procter and District Seniors, and the West Arm Outdoorsmen. All groups were pleased with the information and happy to be considered. We have received letters of support from the majority of these groups (see Appendix D6).

3.4.3 REGIONAL DISTRICT OF CENTRAL KOOTENAY SUPPORT

Our community is in Area E of the Regional District of Central Kootenay (RDCK). The elected representative to the RDCK is Mr. Josh Smienk. The HPWPS has kept Josh informed of the evolution of this proposal, and has met with him several times over the past two years. A letter of support from Mr. Smienk as well as an earlier letter of support from the RDCK (see Appendix D7) have been included in this proposal.

3.4.4 FIRST NATIONS CONSULTATION AND SUPPORT

The HPWPS has met with both the Ktunaxa (Kootenay) and Sinixt First Nations. The Sinixt have provided us with a letter of support (see Appendix D8) and a map layer depicting areas of medium and high cultural priority. The map is included in the Silva Ecosystem Based Plan for Harrop-Procter (see Appendix G). Initial mapping of Ktunaxa areas of interest has begun. This is an initial assessment of things such as sacred sites, and will be expanded as the Community Forest evolves. The areas that are mapped are special places for First Nations. The HPWPS respects and supports First Nations' right to keep the nature of these sites private, should they so choose. Due to our light ecological footprint on the land, the HPWPS believes that these planning methods incorporate First Nations' interests. The HPWPS considers the Ktunaxa and Sinixt Nations as residents of the Harrop-Procter area, and would value their participation in shared decision making. The HPWPS understands that tenure agreements may be subject to land claim negotiations.

3.4.5 COMMUNITY ECOSYSTEM BASED PLANNING WORKSHOPS

In the spring and summer of 1998, the HPWPS held a series of workshops to explain the ecosystem-based planning process and how it relates to any future development in our watersheds. The HPWPS held four workshops over a three-month period; fifteen residents attended each workshop. As in the public meetings, community members were encouraged to put values and areas of interest important to them on a map layer as part of our community

involvement process. These workshops provided another important forum for public participation. The information shared in these workshops was valuable, and the response from the community was very positive.

3.4.6 MEETING, DECEMBER 6, 1998

The HPWPS held a well-advertised public meeting specifically to give the residents of Harrop-Procter an opportunity to view the final draft stages of the mapping process, which forms the basis of our management plan. They had the opportunity to view and have input into the operational plans. The HPWPS also provided access to the business plans, and Harrop-Procter Community Cooperative's draft mandate and application for incorporation. The HPWPS presented a slide show and answered questions. Seventy-eight people attended.

3.4.7 TRAP LINE LICENSEE CONSULTATION

There is one registered trap line within the Harrop-Procter land base. HPWPS attempted to contact the owner through the Ministry of Environment, Lands and Parks (MOELP). The registered licence holder is recently deceased (Nov 1, 1998). We will stay in contact with the MOELP over this matter if the HPWPS is awarded the community forest pilot (see Appendix D9).

3.4.8 MINERAL CLAIMS LICENSEE CONSULTATION

There are two mineral claims depicted on the map of the Harrop-Procter area provided by the Gold Commissioner in Nelson, BC. However, after contacting the registered owner of the claims, he assured HPWPS that his claims lie entirely on private land owned by Darkwoods Forestry of North Nelson, BC and not on Crown land (see Appendix D10).

3.4.9 NATIONAL SUPPORT FOR THE PROJECT

The HPWPS has gathered over 2000 petition signatures from across Canada in support of this Community Forest Pilot Agreement application.

4.0 BUSINESS PLAN

4.1 EXECUTIVE SUMMARY

The Harrop-Procter Watershed Protection Society (HPWPS) is the applicant group.

4.1.1 HISTORY OF THE HARROP-PROCTER WATERSHED PROTECTION SOCIETY

The Harrop-Procter Watershed Protection Society is a legally incorporated society under the Society Act of British Columbia (May 13, 1996). The office of the Society is located at 269 - 2nd Avenue, Procter, BC, which is 29km east of Nelson, on the south shore of Kootenay Lake. The mandate of the Society (see Appendix B1) is to act as a steward and increase employment possibilities for the Harrop-Procter watersheds through ecologically based land use. To stimulate the local economy and provide employment, the HPWPS is studying the feasibility of using timber harvested in an ecologically sensitive fashion. The HPWPS currently has 276 members.which is 60% of the adult population of the area.

4.1.2 CORPORATE MAKEUP

In order to efficiently run a business based on the tenure provided by the Community Forest Pilot Agreement, the HPWPS directors have made application under the Cooperative Association Act to form the Harrop-Procter Community Cooperative Association (the Cooperative). The HPWPS directors will retain a number of seats on the ten-member board of directors with the remainder of seats being held by other community members. The Cooperative will function as the decision making body for forest operations, business planning, and development. The Cooperative will retain a forest manager and an administrative assistant on a long-term contract. Other contractors will be hired as necessary to facilitate forest operations. For details on the Cooperative's rules, see Appendix B2.

4.1.3 BUSINESS FOCUS AND PRODUCT

The HPWPS is applying for a Community Forest Pilot Agreement to harvest approximately 2700m^3 of wood annually.

After careful market analysis, the HPWPS directors have determined that the best opportunity for economic growth will be a diversified marketing strategy, and adding an optimum amount of value to forest products before taking them to the marketplace. Consumer interest in environmental issues has prompted them to seek out products that reflect their values. According to Bruce McLean, president of B.W. Creative Wood Industries Ltd., there is a growing request for wood products that are harvested in a sustainable fashion. [Currently wood that has been "eco-certified" is being imported from California as there are no BC producers of this wood – pers. comm., Bruce McLean, Maple Ridge, BC]. The Cooperative will be on the cutting edge of this market. New opportunities to utilize species of trees and forest plants that were once not considered economically valuable will also contribute to the financial success of the Cooperative. Pharmaceutical and herbal supplement production companies will pay premium prices for specific indigenous plants. Tree species such as birch and alder have gained popularity for flooring, cupboard and furniture manufacturing.

The Cooperative will initially focus on four strands of business development utilizing the timber and non-timber values of the Harrop-Procter Community Forest as outlined below. The financial analysis of this business plan will focus on the sales of eco-certified timber.

The four business strands are as follows:

1. Sales of eco-certified timber and lumber to value-added manufacturers and to the public, by utilizing existing small local sawmills and direct log sales.

2. Creation of a value added manufacturing plant, producing consumer goods and giftware designed by students and graduates of the Kootenay School of the Arts Wood Design Program, the BC Centre for Wood Products Design, and other local designers. These products will be marketed internationally.

3. (a) Development of an agroforestry business, integrating wild-crafted herbs and plants from the Harrop-Procter forest lands, with organic commercially grown herbs from the farmlands in Harrop-Procter in order to provide bulk, dried herbs to local, national and U.S. markets.
   (b) Production of medicinal tinctures and balms made with herbs, fungi and plants harvested from the Harrop-Procter Community Forest and herbs grown in the local area. Residents have also expressed an interest in adding agricultural food production to this enterprise.

4. Environmentally low impact tourism.

Business plans for Strands 2 and 3 are still under development. Business Strand 4 will be developed, but will likely not be implemented until after the five-year pilot period.

4.1.4 ECO-CERTIFIED TIMBER AND LUMBER – STRAND 1

Many small-to-medium wood product manufacturers in the Kootenay Region have indicated that they could maintain or expand their businesses by obtaining a secure supply of wood from our Community Forest. They have stated their interest in purchasing this wood from us if it suits their needs (see Appendices E2 and E3). In many cases they have trouble obtaining a high quality wood supply from larger mills in the area. In order to foster financial stability and achieve premium prices, the Cooperative will seek to secure advance orders for wood. If customers require dimensional lumber, Mill Creek Enterprises Sawmill and other local mills will saw logs for the Cooperative.

Another emerging idea is the concept of issuing "Craft-Tree Licences". Small or specialty wood products' craftpersons will obtain a licence to harvest one-to-ten specifically chosen trees in order to fulfill their wood requirements for the year. They would pay premium prices for the wood in exchange for being able to select trees suited to their unique needs, thus adding value at ground level. Our organization would be interested in pursuing this concept if licensing arrangements can be made with the provincial government.

4.1.5 KOOTENAY WOOD DESIGNS (KWD) MANUFACTURING FACILITY – STRAND 2

As an initiative to maximize local jobs, add value to our timber products, and interact at a regional level with existing institutions, the HPWPS has established a relationship with the Kootenay School of the Arts and the BC Centre for Wood Products Design. A small value-added wood manufacturing plant will be developed using selected designs by graduating students and other designers. The eco-certification of our forest operations will add further value to these products. Full details of this project are in Section 4.4 of this proposal.

4.1.6 BOTANICAL FOREST PRODUCTS – STRAND 3

An area of strong potential growth is the harvesting of wild-crafted herbs from the forest understorey. Plants such as devil's club and Oregon grape along with a myriad of others have high value when dried and sold to vitamin and herbal remedy producers in Canada and the United States[17]. In order to be recognized as a competitor in the market place, wild-crafted herbs will have to be marketed in combination with cultivated herbs produced on farms in the area. However, the long-range focus would be to locally produce medicinal remedies from these plants to derive the highest profit from herbs harvested. These products would be marketed locally and within the province. Members of the Harrop-Procter community have determined that growing organic commercial food crops is feasible by utilizing the Cooperative and agroforestry infrastructure (see details in Section 4.4).

4.1.7 ENVIRONMENTALLY LOW-IMPACT TOURISM – STRAND 4

The Cooperative will work with the Ministry of Forests, the Ministry of Environment Lands, and Parks, and the BC Corporation of Lands and Assets Back Country Tourism Department in upgrading hiking trails within the area. The Cooperative will also explore the possibility of building basic overnight tree-house cabins in strategic locations in the Harrop-Procter forest. The Cooperative would take bookings and charge for the use of the treehouses. This unique concept would add to the recreational opportunities available to clients of the local kayaking company and llama trekking guide, as well as guests at existing bed-and-breakfasts. At an expanded local level, the tourism-oriented businesses of nearby Balfour (which includes two golf courses, several restaurants, taverns, motels, campgrounds and a market) will benefit from increased recreational opportunity and business activity in Harrop-Procter. As in a symbiotic relationship, these businesses will provide potential clients for the Cooperative's recreational business endeavours.

4.2 CORPORATE BACKGROUND

The Harrop Procter Community Cooperative is a new business entity. The Cooperative's Mission Statement is

> To stimulate locally based employment from the Harrop-Procter Forest lands which is ecologically sustainable, and socially and economically equitable.[18]

[17] An Economic Strategy to Develop Non-timber Forest Products and Services in British Columbia (DRAFT) 1998, Russel M. Wills and Richard G. Lipsey

[18] Condensed from the Harrop-Procter Community Cooperative Statement of Incorporators

This will be achieved by providing, where possible, the following services to the residents of Harrop-Procter and others in the Kootenay region:

- forest management and forest products' marketing services;
- forest-related educational, recreational, business and employment opportunities;
- the opportunity to model eco-forestry practices;
- the amenities of a fully functioning ecosystem, including maintaining drinking water quality at the current level; and
- the surpluses used for expansion of the Cooperative's business holdings or for community development, as decided by Cooperative members and with input from community groups.

The Cooperative will reflect the goals of the HPWPS as stated in the Executive Summary.

4.3 MANAGEMENT AND ORGANIZATION

The Cooperative will be responsible for the management decisions pertaining to forest planning and operations, as well as product research, development and marketing. The HPWPS will retain its current function providing stewardship and research activities associated with the Harrop-Procter forestland base. The HPWPS will hold a number of seats on the board of directors of the Cooperative.

The rules of the Cooperative will create a strong foundation for public involvement, decision-making and conflict resolution. Membership in the Cooperative will be open to community members' sixteen years of age and older. Those members over eighteen years of age will have an opportunity to run as directors. Decisions pertaining to the Cooperative's financial direction and land use planning will be made at general meetings while decisions involving ongoing business activity and forest operations will be made at regular meetings of the directors. Members of the Cooperative and the public will be kept apprised of decisions and their concerns will be addressed at regular meetings. The Cooperative will function on a consensus basis where possible and will conduct a vote when consensus fails. The rules of the Cooperative contain a dispute resolution mechanism (see Appendix B2).

The Cooperative will form a management committee to work with a forest manager and an administrative assistant, who will be retained on a contractual basis. Together they will be responsible for monitoring forest activities, financial performance and reporting to the Cooperative and the government. Other committees will be created as needed to oversee various business activities. As the four business strands develop, it will be necessary to employ a marketing and productions manager for value-added forest products.

4.8 HUMAN RESOURCES

The application procedure for the Harrop-Procter Community Forest has already generated employment within the community of Harrop-Procter. In the preparation of the application, the HPWPS has paid wages and contracts to two office coordinators, a registered professional forester, a forest technician, a GIS mapping technologist and an economist.

It is expected that forest-related employment will expand as forest operations develop. In order to articulate the number of persons employed, it is necessary to attribute personnel to each of the four strands of business activity that the Cooperative will pursue. The value-added wood manufacturing and herbal remedy portions of our plans are under development, and we do not expect that the success of the Cooperative is dependent on them. The goal will be to diversify into these areas as quickly as is feasible; therefore, exact human resource requirements in these business activities are currently tentative.

It must be noted that it is impossible to attribute wages for subcontractors or to calculate the exact job total of full time equivalent positions.

4.8.1 ROLES, RESPONSIBILITIES AND COSTS

The Board of Directors of the Harrop-Procter Community Cooperative
The Cooperative's Directors are ultimately responsible for decisions pertaining to the planning and operations of the Community Forest Agreement. They will hire senior contract personnel, initiate public participation, guide land use decisions, monitor field operations, make investment and expansion decisions, set product marketing policies, review the Cooperatives financial performance, and carry out duties prescribed by the Cooperative's Rules and Memorandum of Association. The directors of the Cooperative will form management committees as needed to oversee operation of the forest botanicals, tourism, and value-added wood products' enterprises.

Cost of Wages Identified - Volunteer (in kind): value of work performed $33,200.00
Annual expenses for travel, training and incidentals: $3,750.00

Estimated Staff Costs for the First Three Strands of Business
Tables 2, 3 and 4 identify the roles, responsibilities and costs for the first three strands of business of which the Cooperative will be engaged.

Until tenure is secure and financing is obtained, it is difficult to project exact staffing requirements. The HPWPS has based its projections on industry standards and current local practices in both the forest operations and agroforestry sections.

Table 2: Forest Operations Division

JOB TITLE	JOB DESCRIPTION	ANNUAL WAGES	FTE*
Forest Manager	Responsible for administrative duties, co-ordination of contract personnel, operational planning, compliance with the management plans and policies as set by the Cooperative Association's Board of Directors and in compliance with all relevant government laws and regulations.	$17,500.00	0.5
Administrative Assistant/ Secretary/Payroll/ Bookkeeping	Responsible for word processing and general office duties. Will be responsible for payment of contract personnel, maintaining accurate records and conducting financial transactions between the Cooperative and its customers.	$6,000.00	0.2
Professional Services	Required to conduct assessments for watershed impact, road engineering, surveying, accounting, marketing, etc.	See cash flow analysis	0.3
Operations Crew	Comprised of a faller, machine operator, log truck driver, and in some instances, a horse-logging operation (two contract workers and one log truck driver).	See cash flow analysis	1.1
Road-Building Crew	Comprised of a machine operator and truck driver (contract paid for road construction).	See cash flow analysis	C**

**Full Time Equivalent* ***Contract*

Table 3: Forest Botanical Division

JOB TITLE	JOB DESCRIPTION	WAGES	FTE*
Wild-craft Herb Collectors	Responsible for collecting, processing and packaging herbs for shipping. Includes one lead collector with responsibilities for ensuring harvesting takes place in appropriate areas and ensures quality control, oversees processing, supervising other collectors, and sale of final product.	$100/day to $125/day ($17,500 - $22,500/year)	0.4 to 0.8
The following business opportunities remain tentative and are, therefore, not included in financial projections. In order to conduct preliminary research into the agroforestry and tourism business strands, the HPWPS has applied for funding to conduct field studies and to make assessments. These will also provide five part-time jobs in the community on a temporary basis.			
Agroforestry Workers	Seasonally employed contract workers will carry out labour associated with the cultivation and marketing of locally-grown and wild-crafted herbs.	Dependent on amount of land in production.	TBD*
Clinical Herbalist	Required for consultation.	Contract and royalties.	TBD

**To Be Determined*

Table 4: Value-Added Wood Manufacturing Division

JOB TITLE	JOB DESCRIPTION	WAGES	FTE*
Wood Manufacturing Manager	The manager will oversee the day to day operations of the manufacturing facility. The manager will also be involved in production.	Estimated @ $16.00/hour for a total of $29,000.00	1.0
Manufacturing Designers	The Kootenay School of the Arts students, graduates, BC Centre for Wood Products Design and other local designers will be potentially involved in this endeavour.	Based on either royalties or design purchase	TBD*
Production Workers	Responsible for producing and packaging manufactured wood products.	Estimated @ $12.00/hour for a total of $44,000.00	2.0

**To Be Determined*

The initial jobs per year from this project are

- 1.0 in administration, marketing and planning;
- 1.1 in logging and road building;
- 4.0 in primary breakdown;
- 1.0 in craft tree licence; and
- 3.0 in our value-added manufacturing plant.

3.75 JOBS PER 1000M^3 ARE INITIALLY PROJECTED

These projections show that the community forest will result in well above-average employment levels per 1000m^3 of timber harvested.

4.9 FUTURE PLANS

As detailed more thoroughly in other portions of the business plan, the objectives for the Harrop Community Forest are as follows.

4.9.1 SHORT TERM

1. Develop the forested land in the Harrop-Procter area according to ecologically defensible management practices.
2. Develop the Cooperative structure and provide training for Directors.
3. Secure financing for forest operations.
4. Conduct necessary field studies and assessments.
5. Conduct timber harvesting on selected portions of the land base.
6. Use the timber harvested to create local employment.
7. Provide educational opportunities in eco-forestry, ecology, community business, and other related topics.
8. Provide wood to value-added manufacturers in the Kootenay Region.
9. Conduct inventories on recreation and forest botanical resources.

4.9.2 MEDIUM TERM

1. Develop a value-added manufacturing facility utilizing local wood and work force.
2. Provide an option for interactive education with wood design and woodworking students in the region.
3. Work cooperatively with other community forests to build markets and share costs and equipment for business expansion.
4. Explore and develop ecologically sensitive tourism opportunities.
5. Initiate and encourage the growth of agroforestry incorporating both Crown and private land to supply indigenous and cultivated plant species to diverse markets.

4.9.3 LONG TERM

1. Make timber, lumber and other forest resources available to stimulate the creation of more small businesses in the Kootenay Lake area.
2. Provide a model of community land use that in its own right will draw people to our community, creating further economic opportunity.
3. Manage the land to grow high quality wood. The HPWPS believes that in the coming years there will be an increasing shortage of furniture grade lumber. Our timber cutting prescriptions manage for the growth of high quality, tightly ringed wood.
4. Increase eco-tourism potential. Ecosystem-based planning allows for the co-existence of a broad range of business opportunities due to its light ecological footprint.
5. Contribute to the economic and ecological health of the Nelson region by careful forest management in domestic watersheds.

4.10.2 Assumptions Contained in Financial Projections for Harrop-Procter

Note: the following headings are those used in Cash Flow forecast.

Interest Rate.....Assumed to be 10 %, though other interest rates were analyzed.

Ave Selling Price Yard $/m^3 .....Used as base price for revenue projections. Based on stand species composition, silvicultural prescriptions and discussions with local mills.

EcoCert, Mktg & Service Premium ...Assumed premium in % that Cooperative will be able to capture through ecocertification, effective marketing and quality service.

Proportion affected .....Proportion of logs extracted that will benefit from such a premium.

Avg Selling Price $/m3.....Resulting average selling price based on factoring in premium and proportin affected. Set at uncertified price x proportion unaffected + certified price x proportion affected.

Stumpage $/m3 .....As per appraisal calculations. See Appendix E11 for details.

Amount of cut to be milled (m3) .....Volume of total extraction to go to mill. In calculating receipts from timber sales this volume is deducted.

Avg Lumber Price per 1000bf .....Average lumber price per 1000 board feet factoring in ecocertification premium.

CASH RECEIPTS (CASH IN)

Accts Receivable Timber Sales .....Based on(extraction less milled)x(average price factoring in eco-cert premium). This is then adjusted to take into account that December's sales will not be collected until January of the next year, and that last December's sales will be collected in the current January. In 2004, it is assumed for simplicity's sake that December's sales are collected in December to coincide with the end of the tenure.

Acct Receivable Lumber Sales.....Based on milled (@ 4m3/1000 conversion) x average price per 1000 board feet. This is then adjusted to take into account that December's sales will not be collected until January of the next year, and that last December's sales will be collected in the current January.

BOTANICAL PRODUCTS.....Based on assumption that market price will bear collection & processing costs +25% markup. This does not factor in capital investment, processing facility costs and is therefore conservative (e.g. if collection of botanical products did not take place, bottom-line would be largely unaffected). However, if the market can bear a greater markup, then the Cooperative's profits could be significantly improved.

ECOCERTIFICATION GRANT.....Based on discussion with Silva Forest Foundation

SALE OF FIXED ASSETS.....None projected.

LOAN FINANCING.....Based on projected capital requirements as detailed.

OTHER CASH RECEIVED .....None projected.

TOTAL CASH RECEIPTS.....Sum of receipts above.

CASH DISBURSEMENTS

Management and Overhead

COMMUNITY FORESTER.....Based on $35,000 per year at .5 FTE.

SECRETARY/BOOKKEEPER.....Based on 1 day per week 9 months per year in 2000, increasing in 2001 by 1 extra day at month end 10 months/year at $30,000 if full time.

COMMUNITY FOREST OFFICE RENT .....Based on market rates in Harrop-Procter.
REPAIRS AND MAINTENANCE (OFFICE).....As noted.
REPAIRS AND MAINTENANCE (EQUIPMENT) As noted.
MATERIALS AND SUPPLIES .....As noted.
COURIER &POSTAGE .....As noted.
UTILITIES.....Based on $50/month
TRAVEL.....As noted.
TELEPHONE/FAX .....Based on 6 months @ $165 and 6 @95.
LEGAL.....As noted.
ACCOUNTING.....As noted.
INSURANCE .....Based on quotations.
BANK SERVICE CHARGES .....Based on $30/month
MARKETING & ADVERTISING.....Based on 1.5% of timber vlaue and 2% of lumber value + $500/year.

BUSINESS DEVELOPMENT AND PLANNING To finance business plan development of items currently considered future plans.

DIRECTOR'S EXPENSES .....As noted.
COMMUNITY LIASON .....As noted.
5-YEAR EVALUATION .....$5000 in year 5 only.
BAD DEBT.....Based on bad debt on timber sales of 1.75%, lumber of 2%, botanicals of 6%

Timber Operations

ECOCERTIFICATION.....Based on discussions with Silva Forest Foundation
ASSESSMENT.....Based on discussions with MoF staff and local consultants
PLANNING .....Based on planned extraction exclusive of timber removed from road right-of-way at cost of $3.5 per cubic metre

SURVEYING.....As noted. Only required on boundaries of private land.
ROAD BUILDING .....Based on estimates from area contractors.
ROAD UPGRADING.....Based on estimates from area contractors.
ROAD MAINTENANCE .....Based on $500/km/year for all active roads
LOGGING COST .....Based on per m3 rates of road @$20, small cat @$25, cable @$35, horse @$35.
HAULING COST .....Based on 3.5 hour cycle, $75/hour, 33m3 per load
STUMPAGE .....Based on projected stumpage rate x volume extracted.
SILVICULTURE .....Based on $2/m3 of volume extracted 2 years ago.
SILVICULTURAL DEPOSIT.....As noted.

MILLING COST .....Based on $260 per 1000 board feet at 4m3:1000 conversion
KILN, STORAGE AND DELIVERY .....Based on 2/3 of output being kiln dried @ $180 per 1000, and 1/3 of output being air-dried @$50/m3.

Non-timber forest products

PROCESSING FACILITIES & SUPPLIES.....In 2001 $6500 invested in drying racks and equipment. In each year, $100 to outfit new harvesting positions, and $50 to replace worn equipment for pre-existing harvesting positions.

HARVESTERS' WAGES.....Based on 1 harvester in 2001 and 3 in 2002-2004 @$100/day, 5 days/week, 10 weeks. The lead harvester position is from 2001-2004 @$125/day, 5 days/week, 12 weeks.

MKTG &TRANSPORTATION.....Based on 14% incremental cost to harvester's wages.

Rents and Taxes (excl. stumpage)

ANNUAL RENT ($1.25/HA).....Based on 10500 hectares @$1.25/hectare

PROVINCIAL TAXES .....Not calculated, though little anticipated in first five years as earnings are reinvested, and as profits offset loses in first years of operation.

FEDERAL Taxes .....Not calculated, though little anticipated in first five years as earnings are reinvested, and as profits offset loses in first years of operation.

Payments and Interest

INSTALLMENT PAYMENTS ON LOAN .....Includes capital repayment and interest payment. Conservatively assumed repayment occurs at end of year, and that debt is carried at the year's maximum for the entire year.

TOTAL COSTS .....Sum of above costs.

Note: the following headings refer to Balance Sheet Forecasts

CASH & SHORT-TERM DEPOSITS.....Assumed that the Cooperative would maintain cash reserves at a mimimum of $12,500.

ACCOUNTS RECEIVABLE .....Includes 1/12 of value of previous year's timber and lumber sales. Botanicals are assumed paid in full by December 31st.

LESS: ALLOWANCE FOR BAD DEBT .....As detailed above. Assumes bad debt written off at year end.

PREPAID EXPENSES .....None included.

OTHER CURRENT ASSETS.....None included.

Fixed assets

ROADS .....Roads valued conservatively at $7000 per km.

AVAILABLE TIMBER .....Timber yet to be logged in 5 year cut control period valued at $12/m3

Other assets

EQUIPMENT AND FURNITURE .....Includes computer, office furniture, and equipment for botanical division. Assumes liquidation value of 33%, 40% and 50% of purchase price before depreciation is factored in.

DEPRECIATION.....Assumes 15% depreciation on an annual basis.

SILVICULTURAL DEPOSIT .....As per estimated requirement. The deposit is an asset if silvicultural obligations are met as the Cooperative will evenutally be refunded. However, the deposit has not been discounted to obtain a Net Present Value of the deposit. Such a correction would have a minor affect.

LIABILITIES .....To simplify the preparation of financial projections, it was assumed that all accounts were paid as incurred. In reality, the Cooperative will be able to pay some items within 30 days, improving the cash-flow and ultimately the Cooperative's bottom line.

SILVICULTURAL OBLIGATIONS .....Takes into account that the Cooperative will be responsible for silvicultural activities following logging, but that silviculture is delayed for 2 years post harvest. This is then adjusted to take into account those silviculural payments that have already taken place.

BANK LOAN .....Includes capital + interest due.

OTHER DEBT .....None anticipated.

Note: the following headings refer to the Projected Income Statements.

ROAD COSTS .....Includes road building, upgrading and maintenance expenses.

FOREST MANAGEMENT AND PLANNING....Includes ecocertification, assessment, planning and surveying.

OVERHEAD AND ADMINISTRATION .....Includes office rent, repairs and maintenance, materials and supplies, courier and postage, utilities, travel, telephone/fax, legal, accounting, insurance and bank service charges.

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5.0 APPENDICES

5.1 LIST OF APPENDICES

LIST OF CREDITS

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Photo Credits

COVER
Community of Procter – Photo by Rami Rothkop
Skier on Harrop-Procter Ridge – Photo by H. Pendergast
Water – Photo by Hans Elias
Narrows Creek field work – Photo by Rami Rothkop

PHOTOS
Figure 8: Mill Creek Sawmill – Photo provided by Rami Rothkop
Figures 10, 11 & 13: Barbara Bell's Wood Design – Photo provided by Barbara Bell
Figure 9: One Tree Wooden Bow Company – Photo provided by Clarke Dennill
Figure 1: Harrop-Procter Land Base – Photo provided by Rami Rothkop
Figure 4: Alpine Forest in the Harrop-Procter Watershed – Photo provided by Tom Bradley
Figure 6: Narrows Creek Drainage – Photo provided by Rami Rothkop

Production

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