PLANNING A SUSTAINABLE APPROACH TO COMMUNITY FOREST MANAGEMENT WITH THE KATZIE FIRST NATION AT BLUE MOUNTAIN AND DOUGLAS PROVINCIAL FORESTS

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ABSTRACT

The British Columbia Community Forest Agreement program (CFA), founded by the province in 1998, provides a forestry tenure option for communities to engage in, and benefit from, local forestry activities. As the program grows, First Nations are increasingly applying for CFA tenures to gain management control over traditional forested territory and to provide economic and social benefits to their communities. Despite increased Aboriginal interest in community forestry, the opportunities and challenges associated with engagement in the CFA program have yet to be evaluated from a First Nations' perspective. Through a case-study of the forest management priorities of the Katzie First Nation of the lower Fraser Valley, B.C., this study examines how the needs and priorities of B.C. Aboriginal communities can be met through CFA policy. The study concludes with recommendations for First Nations and CFA policy administrators to generate effective community forest agreements suited to First Nation participation.

Keywords: Community Forest Agreement program; community based forest management; community forestry; Aboriginal forestry; First Nation Forestry; Katzie First Nation

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1: INTRODUCTION

The British Columbia Community Forest Agreement program (CFA) was founded by the province in 1998 to formally provide a tenure option for communities to engage in, and benefit from, local forestry activities (MOFR 2009a). The B.C. Minister of Forests and Range defines community forests as, “any forestry operation managed by a local government, community group, or First Nation for the benefit of the entire community” (MOFR 2009a). Goals of community forestry in B.C. include, but are not limited to: undertaking forestry that reflects a broad spectrum of values; encouraging community involvement and participation; and promoting communication and relationships between Aboriginal and non-Aboriginal communities and persons (MOFR 2007).

Since inception, the CFA program has been growing rapidly in British Columbia. Beginning with five pilot community forests in 1998, the program has grown to include 52 communities that are engaged in, planning, or applying for a community forest tenure as of November, 2009 (BCCFA 2009a; appendix 1). Developed in response to dissatisfaction with the long-standing industrial tenure regime in the province, the CFA program is recognized as a step towards devolving resource management decision-making to the community level (McCarthy 2006; Ambus 2008; Pinkerton 2008). Communities are taking a variety of approaches to planning and managing their CFA tenures to reflect the diversity of socio-economic, environmental and economic circumstances of each community. Although the prevailing goal of each participant community in the

CFA program may be to engage in forestry to benefit local citizens, unique community characteristics will dictate how forest planning and management is undertaken, and the level of success achieved.

Unique socio-cultural, historical and political attributes of First Nations across British Columbia make community forestry especially attractive to some Aboriginal communities. Opportunities to exert increased control over land use decisions in traditional territories, gain increased economic benefits from natural resource use and extraction, and govern territory according to First Nation social and environmental values may all contribute to Aboriginal community goals and encourage First Nation participation in the program (BCCFA 2009b; MOFR 2009a). To capitalize on potential benefits, a number of First Nations in B.C. are either currently engaged, or are considering engaging, in the CFA program (Weber 2008; BCCFA 2009a). However, a number of challenges unique to First Nation participation in the CFA program also exist, but have yet to be fully examined.

The body of academic literature addressing CFA program development in B.C is growing, with ongoing interest from local and international scholars investigating community based resource management (Burda 1999; Kellert 2000; Natcher and Hickey 2002; Bradshaw 2003; McCarthy 2006; Pagdee et al. 2006; Teitelbaum 2006; Tyler et al. 2007; Ambus 2008; Bullock and Hanna 2008; Pinkerton 2008). Equally, Aboriginal forestry is gaining increased attention in British Columbia (Curran and M'Gonigle 1999; Karjala and Dewhurst 2003; Parsons and Prest 2003; Hutton 2004; Sherry et al.2005; Grainger et al.2006;

Trosper 2007; Adam and Kneeshaw 2008; Wyatt 2008). Despite a growing number of First Nations participating in the CFA program, literature examining community forestry specifically from a First Nations' perspective in British Columbia is limited (Robinson 2007; Weber 2008). Aboriginal communities entering into community forest agreements face a unique set of circumstances that will influence the planning, development and success of their forestry initiatives. By exploring one community's approach to forestry, this project illuminates the hurdles and potential successes associated with First Nation participation in the CFA program, and generates recommendations for First Nations to consider as they embark on creating their own unique community forests. The report also concludes with several recommendations for consideration by those engaged in CFA policy administration and development to better facilitate successful First Nation community forests.

1.1 The Case Study

The Katzie First Nation, located in the lower Fraser Valley, B.C., is considering applying for a CFA tenure. Katzie administration wish to ensure a sustainable and community-supported approach to planning the forest initiative in order to meet expectations of the community, reflect community values, and benefit all Nation members. By conducting a case study of Katzie First Nation forest uses, values and goals for a community forest, and considering results in light of existing literature addressing community forest program development, I identify potential opportunities and challenges for Katzie as they pursue realization of their tenure. Based on the results, I also generate a list of

recommendations for First Nations to consider while planning a community forest initiative. The case study also illuminates challenges that may be addressed by CFA policy development, and thus concludes with recommendations for policy makers to consider as the CFA program welcomes an increasing number of Aboriginal participants.

Due to the unique attributes of each First Nation in British Columbia, not all results presented in this project will be applicable to each community. Yet, results and recommendations may serve to inform First Nation community forest planning processes facing similar complexities in generating a forestry plan that reflects the values of their distinct Aboriginal groups. Through adding a new perspective to the community forest discourse, this project will contribute to individual communities' forest planning and management processes and enhance the existing body of literature addressing community forest development both locally and beyond the borders of British Columbia.

1.2 Objectives

To consider the process of community forestry from a First Nations' perspective, I worked with the Katzie First Nation to achieve the following objectives:

1. Identify Katzie First Nation forest-use and management priorities.
2. Using the Katzie experience as a case study, identify potential opportunities and challenges for First Nation communities striving to meet community forestry goals through engagement in the B.C. CFA program.

3. Based on findings, generate recommendations for First Nations planning a community forest initiative, and for CFA policy administrators working with First Nation applicants.

1.3 Methods

To achieve the above objectives, I worked with the Katzie First Nation from January 2009 to October 2010. I began by reviewing background literature on the CFA program and investigating archived information on the Katzie Nation's approach to land use and natural resource management. I then conducted semi-structured, key informant interviews with a diversity of community members to identify contemporary priorities for Katzie First Nation community forestry. I combined the results of literature and archival review with contemporary interview data to generate a list of opportunities and challenges for Katzie, and other First Nations facing similar circumstances, to consider when approaching community forest planning. Stemming from the identification of opportunities and challenges, I compiled a list of recommendations for First Nation communities when engaging in community forest initiatives and a list of recommendations for CFA program administrators to consider as they work to meet objectives of First Nation community forestry. Further methodological details for reaching my objectives are outlined in Chapter 4.

1.4 Project Development

This project extends a smaller research endeavour designed specifically for the Katzie First Nation. The original project goals included systematically collecting Katzie community members' forest management priorities to guide a

Katzie community forest application, as well as to inform forestry-based consultation activities and treaty negotiations occurring concurrently within the Nation. Though conducting thorough research into Aboriginal involvement in community forestry remained a goal throughout the project, my primary objective was to complete a project relevant and applicable to the Katzie Nation. Once I completed an initial report for specific Katzie use, I expanded the scope of my research to consider how the Katzie experience could inform other community forest planning processes, and how my research could contribute to the successful development of Aboriginal community forestry in British Columbia. The evolutionary development of the project shaped the design of both the research and the final product.

1.5 Report Outline

This document begins with a background review of the community forest program development in British Columbia, including a description of already identified challenges reported by existing CFA tenure holders. I then describe characteristics of the Katzie First Nation and present background information specific to Katzie pursuance of a CFA. I follow with a detailed description of the methods I employed to complete the research project. Results of investigations into Katzie forest use and management priorities are described in Chapter 5, with a discussion of opportunities and challenges for First Nation community forestry in Chapter 6. I close with a list of recommendations for First Nations and CFA program administrators to consider as they develop community forest tenures in British Columbia.

2: COMMUNITY FORESTRY IN BRITISH COLUMBIA

The following chapter reviews the foundations, history and status of the Community Forest Agreement program in British Columbia. Following the description of the program, I present findings of recent literature reviewing the successes and challenges of ongoing community forest initiatives in the province. The literature presented here will inform the discussion of First Nation community forest planning presented in Chapter 6.

2.1 Global Context for Community Forestry in British Columbia

2.1.1 Community Based Management

The foundations of the community forestry movement are found in the paradigms of international development. The United Nations Commission on Sustainable Development recognizes the importance of community participation for sustainable forest development, particularly for resource dependent communities (UNCSD1992), while countries of the World Summit on Sustainable Development committed to developing indigenous and community-based forest management initiatives (WSSD 2004). Further commitments to community-based forestry initiatives appear in Agenda 21 and the Convention on Biological Diversity from the United Nations Conference on Environment and Development (BCCFA and FORREX 2004). Meanwhile, academic, policy, government and advocacy interest in local and community based management of forests has rapidly increased in recent decades (Ostrom 1999; Berkes 1999; Kellert et al.

2000; Bradshaw 2003; Pagdee et al.2006; Haley and Nelson 2007). Worldwide, forest-based communities and indigenous groups are advocating for increased power over decisions regarding management of their nearby woodlands (Pagdee et al. 2006). Domestically, one of Canada's National Forest Strategy action items is to, "Develop and adapt forest legislation and policies to provide involvement of forest based communities in sustainable forest management decision making and implementation." (NFS 2003:13).

2.1.2 Aboriginal Forestry in Canada

In conjunction with interest in community-based management, Aboriginal forest management is garnering increased attention (Curran and M'Gonigle 1999; Karjala and Dewhurst 2003; Parsons and Prest 2003; Hutton 2004; Sherry et al.2005; Grainger et al.2006; Trosper 2007; Canadian Council of Forest Ministers 2008; Wyatt 2008). The report on the Royal Commission on Aboriginal People (INAC 2006) encourages governments to take interim steps during treaty negotiations to improve First Nation access to natural resources on Crown land and goes as far as to state that efforts beyond incorporation of Aboriginal peoples into existing tenure options will be necessary (RCAP 1996). Similarly, the National Aboriginal Forestry Association suggests that provinces amend forestry legislation to establish a special forest tenure category for holistic resource management by Aboriginal communities in their traditional territory (NAFA 1993). Academic work focuses on the need to support Aboriginal forestry initiatives or First Nations-specific tenure arrangements through viable governance structures (Curran and M'Gonigle 1999; Ross and Smith 2002;

Parfitt 2007), the need to design forest tenures through “bottom-up” community processes (Natcher and Hickey 2002; Karjala and Dewhurst 2003), and the requirement for all tenures in B.C. to acknowledge Aboriginal title (Clogg 2007).

To date, most provinces are encouraging First Nation forestry through existing programs based on historic tenure regimes. The British Columbia government first took action to acknowledge the need for greater First Nation involvement in the forest industry through the province’s 2003 Forest Revitalization Plan. The Plan led to the creation of special Forest and Range Agreements negotiated between the province and First Nations across British Columbia. Forest and Range Agreements usually encompassed short-term, volume based timber licenses and timber-revenue sharing clauses for wood extracted from Nations’ traditional territory (MOFR 2003). However, many First Nations, unsatisfied with volume based agreements, are increasingly applying for tenure under the Community Forest Agreement program in British Columbia. The program, touted as a new approach to forestry that recognizes communities’ interests and rights to manage local resources, is currently the most widespread community forest program in Canada (Teitelbaum et al. 2006).

2.2 CFA Program History

Advocacy for a locally-focused, community-based tenure option in British Columbia appeared as early as 1945 when Royal Commissioner Gordon Sloan recommended that municipalities have control of nearby forested lands in order to manage for multiple uses and watershed protection (Sloan 1946:5). However, the province of British Columbia went on in the 1940s and 1950s to form the

foundations of the industrial forest model that most provincial residents are familiar with today (McCarthy 2006). Recommendations for increased control of forest resources by communities appeared again in the Pearse Commission (1976) and Peel Forest Resources Commission (1991), but the province did little to implement suggestions.

Despite a lack of provincial commitment to establishing tenure options for municipalities or communities to participate in commercial forestry, several entities within B.C. managed to coordinate what they viewed as community forest operations. The District of North Cowichan established a community forest on municipally owned land in 1946, the municipality of Mission began operating a Tree Farm License (TFL) in 1958, while the Village of Revelstoke purchased a TFL in 1993 (Municipality of North Cowichan 2009; Revelstoke Community Forest Corporation 2009; Allan and Frank 1994). Even considering the best efforts of several municipalities, community forestry remained restricted by legislation, and generally under-pursued by most communities (Allan and Frank 1994; Ambus 2008;25).

During the 1980s, public discontent with the dominant form of logging on industrial tenures grew. The following decades saw the ‘War in the Woods’, the establishment of the Commission on Resources and the Environment (CORE), and development of the ongoing Land and Regional Management Planning tables (LRMP). These processes led to a wide variety of changes in public land management, including increasing public oversight of land management decisions through consensus-based, stakeholder-led regional planning

processes, increasing Crown land allocated to parks and protected areas, and creating a new regulatory approach to forestry through the Forestry Practices Code legislation (Jackson and Currie 2004; McCarthy 2006; ILMB 2007). However, the provincial government avoided the question of official tenure reform for community forests until 1997 when they formed the multi-stakeholder Community Forest Advisory Committee to begin addressing calls for more community control over forest resources (McIlveen and Bradshaw 2005/2006). The final report from the Community Forest Advisory Committee suggested widespread changes for the accommodation of a community forest program, and suggested communities not only become eligible for a tenure arrangement granting rights to timber management, but that eligible communities also receive rights to non-timber resources, recreation, range management, and gravel extraction, among others (McIlveen and Bradshaw 2005/2006; Ambus 2008).

2.2.1 CFA Program Establishment

In July, 1998, following release of the Community Forest Advisory Committee's report, the government of B.C. founded the Community Forest Agreement Pilot Program through Bill 34 of *Forest Statutes Amendment Act* (S.B. C. 1998, c. 29, s. 1-4), adding new sections to the *Forest Act* (R.S.B.C. 1996, c. 157, s. 43.1-43.53; MOFR 1996). Like industrial tenures established under the same legislation, community forests must comply with provincial forest policies and regulations including required management, site planning, and reforestation. Additionally, CFA holders must assure continued community involvement and support. Legislatively, community forest agreements are most similar to other

area-based tenures such as TFLs and Woodlots, with potential tenure holders expanded to communities and First Nations (Mcarthy 2006).

At inception, the CFA program invited communities to apply to participate in the community forest pilot program. Pilot forests were chosen to test a variety of sizes, governance models and management approaches. For example, Harrop-Procter's 10 860 ha community forest pilot program has a small annual allowable cut (AAC) of 2 603 m^3 and has a stated goal of protection of water quality, while Burns Lake community forest focuses on timber extraction and is 84 886 hectares with an AAC of 86 000 m^3. Bamfield community forest, with an area of only 418 ha and an AAC of 1 000 m^3 focuses largely on education, research and tourism (Ambus 2008).

2.2.2 CFA Program Developments 2002- Present

Since launching the CFA program, forest regulations in B.C. have undergone a variety of changes. In 2002, the results-based Forest and Range Practices Act (FRPA) replaced the regulations-based Forest Practices Act of 1997, affecting all tenure holders in the province. In March 2003, the provincial government unveiled its Forest Revitalization Plan that stipulated a 20% take-back of forestlands tenured to major licensees for reallocation to BC Timber Sales (BCTS), community forests, woodlots, and First Nations (MOFR 2003). In 2004 the community forest pilot program became a full-fledged program under the Ministry of Forests and Range, where pilot agreements were rolled into five-year probationary agreements, to be renewed as 25 to 99 year replaceable terms if successful. At this point, minimum cut control regulations were also relaxed

across tenure holders, loosening the minimum volume of timber each tenure holder was required to remove from a tenure area within a five-year period (MOFR 2009a). As of March, 2009 under pressure from existing community forests and the BCCFA, the province agreed to abolish the five-year probationary period for all community forests (BCCFA 2009; MOFR 2009a). Existing probationary agreements have been granted 25 year tenures, while all new community forests will negotiate a long-term tenure agreement with no probationary period (MOFR 2009a).

Since becoming a full program in 2004, the community forest program has expanded rapidly. Currently, 39 community forests are active and another 13 communities are in the application process to encompass approximately 900 000 ha of provincial land, supplying 1.5% of the annual provincial harvest (BCCFA 2009; MOFR 2009a). Approximately seven CFAs appear to be exclusively First Nations operated, while a number operate as partnerships between First Nations and neighbouring non-native communities (see appendix 1 for a list of active community forests in B.C.).

2.3 Characteristics of the Community Forest Program

2.3.1 CFA Objectives

The Ministry of Forests and Range lists the following as goals for the community forest program in British Columbia (MOFR 2007; MOFR 2009a);

- provide long-term opportunities for achieving a range of community objectives, values and priorities;

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

2.3.2 Unique Regulatory Characteristics

As Community Forest Agreements are established under the same legislation as Tree Farm Licenses (TFLs) and Woodlots, they share similar regulatory characteristics (see Table 1). Nevertheless, several aspects differ, making the CFA tenure unique. Specifically, the four distinct characteristics of CFAs are (adapted from Ambus 2008; MOFR 1996):

1. Community Based Organizations

Eligibility for CFA agreements is restricted to community-based organizations. Community-based organizations are expected to represent, interact with, and account for diverse community interests while also being capable of operating as a business. Legislation allows community based organizations to take the form of local governments, First Nations, registered

societies, registered corporations, registered cooperatives and partnerships between multiple community based organizations.

2. Rights to Non-Timber Forest Products

In addition to timber harvesting rights, CFA holders also hold the rights to harvest Non-Timber Forest Products (NTFPs) from the community forest area. Unlike timber harvesting rights, harvesting rights for NTFPs are not exclusive, as British Columbia has no regulatory instrument to limit NTFP harvest by members of the public. Further, no regulatory instruments exist to govern the sustainable harvest of NTFPs by tenure holders, though CFA forest managers are currently calling for increased regulatory mechanisms to govern NTFP extraction.

3. Evergreen Agreement

A CFA is considered a long-term agreement that can be granted for anywhere from 25 to 99 years. Given the recent elimination of the five-year probationary period for all new CFAs, the 25 year agreement will become the norm. Long term CFAs can be replaced every ten years making the agreements potentially perpetual.

4. Cost Reductions

To reduce administrative costs, CFAs are exempt from provincial requirements for timber appraisals. Further, stumpage rates for CFAs are different than for other forms of provincial tenure. As of 1996, community forest stumpage rates were reduced by 70% for coastal forests and 85% for interior CFAs as compared to similar-sized industrial tenures.

Table 1: Comparison of Area-based Timber Tenures in British Columbia (modified from MOFR 1996 and Ambus 2008)

Tenure Type	Tenure Holders	Resource Rights	Duration	Major Responsibilities
Tree Farm Licence	Applicant with the highest bid for an established TFL and who the minister considers to be qualified to carry out the requirements for management of a TFL.	Issues exclusive right to harvest timber and manage forests in a specified area that includes private and Crown land.	Term is 25 years, replaceable every 5-10 years.	Strategic and operational planning, inventories, reforestation, and stumpage payments.
Woodlot Licence	Individual, First Nation or cooperation who is not a society	Issues exclusive right to harvest an AAC and manage forests in a specified area	Term is up to 20 years, replaceable every 5-10 years.	Strategic and operational planning, inventories, reforestation and stumpage payments.
Community Forest Agreement	Community based organizations including local governments, First Nations, registered societies, registered corporations, registered cooperatives and partnerships.	Issues exclusive right to a First Nation, municipality or regional district to harvest an AAC in a specified area. May include right to harvest, manage and charge fees for botanical forest products. May be competitively or directly awarded.	Term is from 25 up to 99 years, replaceable every 10 years.	Strategic and operational planning (but no legal requirement for timber cruising), inventories, reforestation, and modified stumpage payments.

2.4 CFA Review from Literature

The CFA program was initially launched as a pilot program to undergo review following the initiation of the first ten probationary licenses. However, a formal, empirical evaluation of the program by the government was never completed (Ambus 2008;4). Nevertheless, an ongoing accumulation of government and scholarly literature is beginning to identify where challenges for CFA program participants exist (Bradshaw 2003; McCarthy 2006; MNP 2006; Pagdee et al. 2006; Tyler et al. 2007; Ambus 2008; Bullock and Hanna 2008; Pinkerton 2008; Weber 2008). The opportunities and challenges reported below are derived largely from literature examining non-Aboriginal participant experience, as little information exists reporting specific characteristics of First Nation run community forests. Points below, however, will be applicable to any community considering the CFA program, including First Nations.

2.4.1 Expectations and Achievements

CFAs have been touted as a forest management system that can address many of the criticisms of the traditional forestry tenure model in British Columbia. Government websites and academic resources suggest community forests can achieve a number of diverse goals, including;

- improving public participation in resource management, while promoting assertion of community values, goals and vision (Bradshaw 2003; Bullock and Hanna 2008; Pinkerton et al. 2008);
- delegating resource extraction decision-making to local authorities who live within proximity of the harvestable area, resulting in a greater

investment in sustainability planning and responsible resource management (BCCFA 2009);

- promoting conservation, responsible use, and incorporation of culture and tradition in forest management (Parsons and Prest 2003; Sherry et al. 2005; BCCFA 2009);
- managing the forest for non-timber forest products and selling harvested products to contribute to the economic returns of the community forest (Ambus 2008; 41);
- mitigating conflict over control of natural resources (Beckley 1998; Bullock and Hannah 2008);
- increasing labour intensity, increasing the use of environmentally sensitive harvest methods, and seeking higher value for each piece of wood extracted from the forest (Ambus 2008;41); and
- granting opportunities to First Nations to exert increased control over traditional territory, while generating economic development opportunities for Nation members (MOFR 2009a).

The BCCFA reported in 2007 that communities participating in the CFA program witnessed benefits in the sectors of: quality of life, economic and local employment, environment, tourism and recreation, management of local values, education and research, and training and partnership building. Participating communities also reported increased economic investments in local infrastructure, increased steady employment, increased influence in local wood markets, and increased community support, among other benefits (BCCFA 2008).

2.4.2 Challenges

In practice, CFAs in British Columbia pose both challenges and opportunities to participants. Critics suggest that existing CFAs rarely operate differently than traditional tenure systems, are not currently meeting community management goals, and struggle to be economically viable (Beckley 1998; Kellert et al. 2000; Bradshaw 2003; Ambus 2008; Pinkerton et al. 2008). Consideration of the challenges reported by existing CFA participants will be crucial to planning an approach to community forestry that will best meet the needs of First Nations applicants. The following is a preliminary description of challenges reported in the literature as reported by some existing CFA tenure holders.

2.4.2.1 Community Decision Making Power

Though the community forest program was instituted in B.C. in response to a call for major tenure reform, and was touted as a dramatic shift from existing tenure options in the province, recent evaluations of the program (Ambus 2008; Weber 2008) suggest that in reality, community forest tenures are strikingly similar to other forms of industrial tenure. Operating much like small TFLs, proponents must comply with the same legislative and administrative restrictions as other area-based tenures. Considering the range of possible management powers that could be transferred to a community through a CFA agreement, Ambus found that communities were experiencing a relatively small devolution of powers to the local level.

Specifically, communities reported having a low level of control over strategic-level planning and management, including the ability to govern their own land use planning, resource inventories, harvest levels, allocations of resource rights, economic rent, standards of practice and compliance and enforcement rules. Practically, this means that that the provincial government still holds the rights over land use decisions, while granting only the operational powers to carry out the land use to the community forest managers. Once rent is paid, the community accrues the majority of the economic benefits, but the methods for generating benefits remain largely outside of the community's own control (Ambus 2008; Weber 2008).

2.4.2.2 AAC determination

An especially critical example of challenges brought by the limited powers of communities to strategically and tactically govern their own community forest is in the allocation of the annual allowable cut (AAC) and determination of cut control levels (MOFR 1996; B.C. Reg. 14/2004). The MOFR invites communities to apply for a community forest with a pre-determined AAC, or maximum rate of timber that can be extracted from a tenure area over a five year period. Communities may negotiate the AAC with the government, but the province has the final authority over the decision. Likewise, a minimum volume of timber to be harvested from a community forest is stipulated in each community forest licence agreement (*Forest Act,* R.S.B.C. 1996, s.43.3, 75-77) to ensure community forests harvest and produce stumpage in similar volumes as they would from other tenures on the same land base. Though Forest Stewardship Plans are

generated by tenure holders to design a harvest system for the tenure area, and presumably to reflect community values, stipulations within the Forest Planning and Practices Regulation (B.C. Reg. 14/2004, Sections 5, 7, 8, 8.1, 8.2, 9, 9.1) state planning for soil, biodiversity, wildlife and community water resources conservation must occur, “without unduly reducing the supply of timber from British Columbia’s Forests…”. As of 2008, no reports exist of community forests choosing not to harvest their forest resources to the satisfaction of their agreement with British Columbia (Ambus 2008). However, the province can penalize licence holders for not harvesting the minimum cut written in their licence documents through sections 75, 76 and 77 of the *Forest Act (*R.S.B.C 1996) by re-allocating surplus volume, suspending, or cancelling a community forest licence.

Only one forest, the Harrop Procter community forest, reportedly managed to negotiate a significantly lower AAC than desired by the province. The negotiation was lengthy and required in-depth landscape analysis and forest inventory (Harrop Procter 2001; Pinkerton et al. 2008). The Harrop Procter experience demonstrates that communities may have to exert considerable political pressure to ensure that management planning for the CFA area truly reflects the goals of the community rather than those of the province (Ambus 2008; 39).

For those communities wishing to manage forests for a variety of ecosystem values, consideration of economic viability must also influence AAC determination. In fact, the 2006 CFA program review suggests the prime

determining factor of a forest's size and AAC should be economic viability (MNP 2006;4). Based on economic analysis, the BCCFA recommends that a community forest have a minimum cut of 50 000 m^3 for interior forests and 20 000 m^3 for coastal forests (Pinkerton et al. 2008), while some communities have expressed that they need a minimum AAC of 100 000m^3 (Parfitt 2007; 29,63). Considering that many of the existing community forest harvest levels are well below 20 000 m^3, an investigation into the viability of these different sizes would provide valuable information for planning and negotiation purposes. I found no publicly available literature on the subject.

2.4.2.3 Non Timber Forest Products (NTFPs)

One of the unique characteristics and stated objectives of community forestry is the expectation that harvesting of non-timber forest products will be a part of economic development activities of the forest. However, Ambus (2008) found that that the majority of CFA holders thus far have not diversified operations to include harvest of NTFPs. For those that have pursued NTFP initiatives, only several sell the products commercially, and sales contribute negligibly to overall CFA benefits.

Low harvests of NTFPs do not necessarily reflect a lack of interest or potential. Many forests reported that NTFPs may be a focus following the establishment of a lucrative timber business, while others stated plans to pursue NTFP harvesting once preliminary inventories and planning exercises are complete (Ambus 2008). Non Timber Forest Products have the potential to be profitable, though little empirical research exists that measures their potential in

community forests in British Columbia. However, one study suggests NTFP harvest generated direct business revenues of $280 million and overall provincial revenues of over $680 million in 1997, making NTFP harvest an important component of provincial revenue (Gagne 2004).

Those considering NTFP initiatives within the community forests face challenges beyond the harvest and marketing of goods. The lack of provincial legislation and the condition that rights to NTFP harvesting are not exclusively granted to CFA tenure holders necessitates that community forests devise *de facto* rules and management structures to effectively regulate harvest of NTFP products (Gagne 2004; Ambus 2008). NTFP planning will most likely have to be a collaborative process with already established professional organizations and community harvesters to ensure establishment of sound ecological and social management principles.

2.4.2.4 Competitiveness

Overall, CFAs have struggled to gain a foothold in a competitive timber marketplace. In part, difficulties can be explained by the recent development of the CFA program in British Columbia and challenges encountered during the last decade including the Pine Beetle epidemic and the recently depressed economy. Nevertheless, some longer standing economic challenges exist for aspiring community forests to consider.

One goal and praised attribute of CFAs is that alternative forms of silviculture activities will be more frequently used in CFAs as compared to the industrial model. However, the industrial model is employed because of its

efficiency and cost effective approach. Though the industrial model may not truly be the most cost efficient if all social and ecological costs associated with timber harvest are considered, current approaches to timber valuation that include only monetized values over a short time horizon result in timber businesses favouring silvicultural approaches for forestry activities. Though community forests are promoted as taking a more holistic approach to harvesting that consider multiple priorities for forest management beyond short term monetary considerations, in practice, Ambus (2008) found only marginal differences in siliviculture techniques practiced by community forests as compared to industrial forest operations. Those operations that do practice selective logging and ecosystem-based management reported that they had to make difficult financial tradeoffs in order to realize their community goals. For example, the majority of the Harrop Procter workforce are volunteers, reducing labour costs and allowing for selective logging to be the main approach to timber extraction. However, a low quantity of timber is extracted from the forest, leading to lower economic returns (Ambus 2008; Pinkerton et al. 2008).

Likewise, community forests are expected to use more labour intensive methods and reportedly are more labour intensive per unit of wood harvested. Increased labour intensity helps to meet some social objectives of CFAs but diminishes profits and influences competitiveness in the marketplace (Ambus 2008). On the subject of employment, Ambus concluded that, “whereas major licensees have sought to reduce their operating costs by shedding labour, the stated intention and broad expectation of community forests is to do the opposite,

even though they are also expected to be competitive in the same markets as the major players" (Ambus 2008; 64). Similarly, due to the stipulations of the *Forest Act,* community forests must undertake similar levels of pre- and post- harvest planning, with the exception of timber cruising, as industrial tenures. Therefore, comparable expense must be dispensed for a far lower return on harvested timber (Ambus 2008).

One approach of CFAs to increase their competitiveness is to ensure that the most value possible is gained from each unit of wood extracted from the forest. Adding value to wood through milling and manufacturing is a goal of most CFAs, and forest policy in general in B.C. For those community forests that have successfully implemented a value-added component to their operation, benefits proportional with investment are reported (Ambus 2008). However, few CFAs have ventured beyond solely harvesting timber and selling raw logs. For a small operation, adding a manufacturing component increases initial investment costs, requires increased skilled labour and adds risk to the business venture. Additionally, wood processing facilities require a sustainable supply of timber of a desired quality—a supply many smaller forest operations may not be able to provide. Again, review of the struggle for community forests to meet the expectations set out for them resulted in Ambus concluding that, "CFA holders are expected to be the vanguards of the sector and be willing to absorb business risk that few private sector companies would likely be willing to take on" (Ambus 2008;64). However, when opportunities arise to help offset initial investments or economic risk through government support, it may become easier for community

forests to venture more successfully into the value added sector (Ambus 2008;62).

2.4.2.5 Community Capacity

For small communities and First Nations entering the forest business, a significant limiting factor is finding local capacity, in terms of experience, knowledge, skills and time available to learn and devote to a community forest project. To initiate CFA agreements, many community forests have relied on contributions from volunteers, who reportedly show a high level of burn-out (Bradshaw 2003; Ambus 2008; Pinkerton 2008). Despite CFAs generally reporting larger labour inputs to initiate community forestry as opposed to industrial tenures, First Nation forestry operations stand apart by reporting a far lower number of employees per volume of timber harvested and a lower number of employees in the service and supply sectors associated with forest operations than non-Aboriginal community forests (Hanuse et al. 2008). Community forestry for some First Nations may therefore not be meeting community goals and expectations for employment, or conversely, First Nations may not have the capacity or population to fill required roles, and therefore operate with a limited staff. Communities with limited capacity may look outside the bounds of their own community to address the technical aspects of forest management, which increases costs (Bradshaw 2003). Opportunities to increase community capacity may come through government programs, especially for First Nations, and should be addressed during the initial negotiation processes of a project (Bradshaw 2003).

2.4.2.6 Managing for Multiple Forest Values

The objectives of the community forest program specifically address managing for a range of community objectives including employment, forest-related education and skills training and social, environmental and economic benefits, along with meeting environmental stewardship objectives, cultural protection and needs of multiple stakeholders (MNP 2006; MOFR 2009a). However, the main focus of any CFA tenure remains timber extraction. Managing for successful, economically viable and environmentally responsible timber extraction while also meeting objectives of the CFA program, including those of individual communities and stakeholders, will require creativity, diligence and high ability to adapt. Further, as the CFA agreement generally allocates only timber and non-timber forest product extraction rights to communities, engagement in other aspects of land and forest management such as recreation and conservation may require more lengthy negotiations with the province during the approval process, as well as additional agreements with other government agencies (Ambus 2008; Weber 2008).

2.4.2.7 First Nations Considerations

To date, few studies examining successes and challenges of First Nation community forests are available. A University of British Columbia thesis (Weber 2008), considering whether the community forest model is the best tenure arrangement for the Stellat'en First Nation, may currently be the most useful study for First Nations. A project by Hutton (2004) examining forest management priorities of the Cowichan Tribes in B.C. considers "Crown Tenure" as a tenure

option for the Tribes, but does not address community forests specifically. Both studies found that the First Nations highly value managing a forest for multiple purposes to reflect traditional, cultural, economic and community values, but that provincial or community forest tenures could not fully meet their community goals (Hutton 2004; Weber 2008). Crown tenures, including community forests, requiring Nations to work within already established forest policy while granting Nations only small parcels of land to manage, create difficulties for communities working to manage forests holistically and from an ecosystem based management perspective (Hutton 2004; Weber 2008). Nevertheless, Hutton (2004) recognizes with proper planning, sufficient tenure size and longevity, and flexibility by government regulators, Crown tenures may be able to meet the expectations of Cowichan Tribes for forest management.

First Nations are also concerned that the CFA program inherently delegates land ownership to the Crown, not recognizing Aboriginal title. First Nations must ask permission of the Crown to harvest their own resources, and pay stumpage on timber extracted. Further, the existing tenure system does not recognize Aboriginal approaches to property ownership and duties (Clogg 2007). This challenge, though beyond the scope of this report, should be considered along with the implications of forestry tenure agreements for treaty negotiations when entering CFA negotiation and agreement processes.

2.5 Conclusion to CFA Review from Literature

The Community Forest Agreement program was derived in response to longstanding dissatisfaction with current industrial tenure regimes in British

Columbia. Though falling short of providing First Nations a unique tenure option, the CFA program offers First Nations the opportunity to exert control over forested public lands within their traditional territory to benefit local citizens. The program thus far has proven in high demand and continues to grow throughout B.C., though First Nation participation lags behind non-Aboriginal communities (appendix 1).

As the program matures, communities report both opportunities and challenges related to participating in the CFA program. The aforementioned challenges addressing economic viability, capacity and management will be applicable in full or in part to any communities considering a CFA agreement, including First Nations. However, the list may not be inclusive of opportunities and challenges specific to the unique contexts of First Nation communities.

The remainder of this report will consider community forestry based on the perspective of a First Nation considering engagement in the CFA program. Examination of the Katzie First Nation's unique circumstances and community priorities will help to illuminate how Aboriginal groups entering the CFA program can best design community forest planning and management to meet their desired goals. The analysis will further consider how the province can more effectively engage with First Nations to generate Community Forest Agreements that will meet provincial and First Nations needs, and be sustainable over the long term.

3: KATZIE COMMUNITY FOREST PLANNING

3.1 Introduction to the Katzie First Nation

The Katzie First Nation is located east of greater Vancouver, in the South West portion of BC (see map appendix 2). A part of the Coast Salish tradition and Mainland Halkomelem language group, Katzie currently have 497 registered individuals and five reserves, with their Band Offices situated along the north banks of the Fraser River in the community of Pitt Meadows (INAC 2008). Katzie traditional territory encompasses the Pitt Lake watershed in the north, including Alouette Lake to the east, and extending south to comprise portions of the Fraser River and the present day communities of Ladner and White Rock (Katzie 2002; see map appendix 2). The northern portions of Katzie traditional territory include portions of Golden Ears and Garibaldi Provincial parks and extensive forested Crown lands beyond park boundaries (appendix 2). To date, Katzie have little management control of forests falling outside of their reserves. Through treaty negotiations, consultation activities and application for a community forest tenure, the community hopes to increase their influence over forests lying in Katzie traditional territory. Specifically, Katzie hope to establish a community forest at Blue Mountain and Douglas Provincial Forests, in the north-east portion of their traditional territory (see appendix 3 for map of CFA area of intent).

3.2 Historical Katzie Land and Forest Use

Traditionally, Katzie moved throughout their territory with the seasons, establishing winter villages near Pitt Lake and Port Hammond to gather

resources from the mountain areas, before spending spring, summer and fall harvesting resources from the Fraser River and sloughs and wetlands throughout their territory (Jenness 1955). Though summer harvest of roots and berries and late summer harvest of sockeye salmon were particularly important to provide nutritional and cultural sustenance for Katzie, forest products supplemented subsistence, provided the tools for harvest and storage of supplies, and also played a prominent role in social and cultural ceremony (Jenness 1955; Suttles 1955; Woodcock 1996).

Compiled records of Katzie traditional use of forest resources reflect extensive use of wood products. Cedar and cedar bark were particularly prominent, being used for everything from fish net floats and hunting tools to baskets and ceremonial adornments. Forest shrubs, understory plants, berries and mushrooms were further gathered and used for food, medicinal and ceremonial purposes (Jenness 1955; Suttles 1955; Woodcock 1996). Forest animals were harvested for their meat and hides, including mountain goat, elk and deer, with wildfowl also forming part of Katzie diet and cultural practice (Jenness 1955; Suttles 1955; Woodcock 1996). Although literature does not explicitly address active forest management by Katzie, authors do describe ethics of sustainability, reciprocity and caution towards over-harvest of forest goods (Jenness 1955; Suttles 1955; see results, Chapter 5).

Contemporary Katzie use of traditional territory differs largely from historical practices. Current Katzie communities lie along the banks of the Fraser River at IR 1 in Pitt Meadows, IR 2 in Langley, and IR 3 on Barnston Island. With

development of the Fraser Valley, sloughs have been drained, dykes built, and large urban communities established surrounding Katzie residential reserves. Only a portion of Barnston Island and Katzie's non-residential reserve at Pitt Lake (IR 4) support forest habitat. Katzie subsistence and cultural practices continue to revolve around resources of the Fraser River, but geographical isolation and development has separated Katzie communities from the forested portions of their territory. Some Katzie make efforts to visit forested areas for recreational, spiritual and subsistence purposes, but feel a general disassociation with their traditional forest territory (see results, Chapter 5). Through social events and a small tourism operation, Katzie remain connected with the forest at IR 4 on the shores of Pitt Lake and refer to this area as especially important, but recognize all of the forest above Pitt and Alouette Lakes as spiritually, culturally and ecologically significant to Katzie identity and wellbeing (personal communication, July 2009). Katzie are now focusing on how they can best contribute to the responsible stewardship of the forests beyond the bounds of their reserves to improve the ecological health of the land, and the wellbeing of the Katzie people.

3.3 Contemporary Forest Management in Katzie Territory

Exclusive of the small plots of forest on Katzie IR4 and IR 3, Katzie administration currently has little opportunity to exert control over the forest resources found within their traditional lands (Katzie 2007). Forest in the northern portions of Katzie territory fall within the bounds of Golden Ears and Garibaldi Provincial Parks, and are governed exclusively by the province (MOE 1990; MOE

2009). In 2006, Katzie signed a shared-management agreement with the province for the newly established Pinecone Burke Provincial Park, located on the eastern shores of Pitt Lake. However, management planning has not yet been instigated and to date Katzie have little involvement (MOE 2009; personal communication January 2009). Those portions of forested lands outside of park boundaries are largely tenured to private forestry companies or BC Timber Sales (BCTS) in the form of volume based timber licenses and woodlots (MOFR 2009b). Katzie involvement in tenured lands is limited to consultation and review of harvest plans.

Katzie are more actively involved in the management of two forested areas in their traditional territory: Malcolm Knapp Research Forest and Blue Mountain Recreation Area. The University of British Columbia owns and operates the Malcolm Knapp Research Forest for forestry research, demonstration, and education. Forest managers for Malcolm Knapp and Katzie First Nation administration share a strong relationship of mutual respect fostered through exchanges of information and forest goods, facilitation of student educational visits, and permission for Katzie to visit the forest (personal communication, July 2009). On November 26, 2009, UBC and the Katzie First Nation formalized their cooperative relationship regarding the Malcolm Knapp Research Forest through the signing of an official agreement of cooperation (Melnychuk 2009).

Katzie have also been involved in management of Blue Mountain Recreation Area through historical planning process (see section 3.3.2.2 for details). Despite repeated attempts by Katzie and Blue Mountain user groups to

collaboratively develop formal management plans for the area, the ecological health of the mountain continues to be a concern. Katzie now see an opportunity to lead management initiatives at Blue Mountain through including the Recreation Area, along with the more northerly Douglas Provincial Forest, within the bounds of the proposed community forest.

3.3.1 The Proposed Katzie Community Forest

Blue Mountain and Douglas Provincial Forests lie along the shores of Alouette Lake in the eastern portion of Katzie traditional territory (appendix 3). Katzie currently aspire to manage Blue Mountain and Douglas Provincial Forests as a Katzie Community Forest, and see the CFA program as a viable avenue to increase the management power exerted over the resources of their traditional territory (personal communication, May 2009). Specifically, Katzie are considering the community forest program over other possible forestry tenure arrangements because the CFA program offers opportunities to (Enfor 2003 and personal communication May, 2009):

- Manage a portion of Crown land according to Katzie community values;
- Engage in long-term, area-based stewardship of a portion of land;
- Benefit economically from resource management in Katzie traditional territory;
- Ensure community members are involved in the planning, management and operations of the forest;

- Lead the management and coordination of multiple user groups interested in the community forest area of intent;
- Pursue the existing Katzie Forest and Range Agreement with the province as a long term-area based tenure (see section 3.3.3 for further details).
- Engage in forest management for Katzie traditional territory before treaty negotiations are concluded

Specific ecological and political characteristics of Blue Mountain and Douglas Provincial Forests, along with previous processes undertaken with the provincial Minister of Forests and Range, will influence the process required for Katzie to apply, plan and manage a Katzie community forest. Sections 3.3.2-3.3.3 outline the specific characteristics of the Katzie Community Forest area of intent.

3.3.2 Characteristics of Blue Mountain and Douglas Provincial Forests

3.3.2.1 Physical Characteristics

Blue Mountain and Douglas Forests are located along the east banks of Alouette Lake in the northeast portion of Katzie territory (appendix 3). The second-growth forest falls within the Coastal Western Hemlock and Mountain Hemlock biogeoclimatic zones (MOFR 2009b) and is dominated by Western Hemlock, Western Redcedar, and Douglas Fir tree species (Meidinger and Pojar 1991). The area is mostly mountainous, ranging in elevation from 120 m along the banks of Alouette Lake to 1300 m at the highest points (appendix 3).

Although detailed inventory and timber analysis of the proposed community forest area is not available, Blue Mountain and Douglas Provincial forests are considered excellent growing sites. Conversation with woodlot owners adjacent to the proposed area suggests the site index , which indicates tree growth over a 50 year period, is remarkably high (personal communication, woodlot owner, July 2009). Additionally, the area has not been harvested for several decades. Though a variety of stand ages exist in the proposed CFA area, large stands of mature timber are widely dispersed throughout (personal communication, July 2009).

The location of the proposed community forest further enhances opportunities for successful management by Katzie. Blue Mountain and Douglas Forests are conveniently close to Katzie reserves as well as to road networks, waterways, mills and processing facilities. Further, the proximity of the forest to major urban centres and tourist attractions creates opportunities for Katzie products to reach large markets, while also presenting recreation and tourism opportunities within Katzie forests.

3.3.2.2 Political Characteristics

Both the Kwantlen First Nation and the Katzie First Nation include Blue Mountain within their traditional territories, while portions of Blue Mountain also fall within the District of Maple Ridge boundary. The mountain is used most frequently by a diversity of recreationalists and is designated a provincial recreation area. However, the area is not actively managed by the Ministry of Tourism, Culture and Arts or any one user-group. Douglas Forest is currently

tenured to British Columbia Timber Sales (BCTS), though to date, little logging activity has occurred there (Enfor 2003; personal communication July 2009).

Due to the complex stakeholder environment at Blue Mountain and Douglas Forests and the multiple governments and interested parties involved in the area, Katzie previously led a collaborative approach to management decision making at Blue Mountain. In 2007, completion of a series of meetings with multiple stakeholders led to a "*Blue Mountain Provincial Forest Sustainability Plan*" (Katzie First Nation and District of Maple Ridge 2007) as well as memorandums of understanding with both the District of Maple Ridge and the Kwantlen First Nation in support of Katzie's pursuit of a CFA. Since 2007, little actions has been completed to follow up on the Sustainability Plan, and the community forest application sat idle as the Nation addressed more pressing issues in other portions of their territory.

In 2009, Katzie regained momentum to establish a community forest at Blue Mountain and Douglas Forests. To realize their aspirations, Katzie are re-engaging with participants from the former collaborative planning processes and re-connecting with the Minister of Forests to generate an effective application. Katzie believe garnering support from local user groups is essential both to receive an invitation as well as to effectively manage the forest once a tenure agreement is reached, while continual communication with the Minister of Forests will be necessary to negotiate an effective forest tenure agreement.

3.3.3 Reaching Agreement for a CFA

In an effort to increase influence and gain benefits from the forest resources extracted from Katzie territory, and alongside ongoing treaty negotiations, Katzie signed a Forest and Range Agreement (FRA) with the province of British Columbia in 2005. The volume based agreement includes rights to 13 890 m^3 of annual timber harvest per year and a revenue sharing agreement for timber extracted from Katzie territory (Katzie First Nation and The Government of British Columbia 2005). However, Katzie have decided to continue to negotiate for a long-term, area-based tenure with the province, believing an area-based tenure more accurately reflects their goal to be responsible stewards of Katzie territory.

Beginning in 2005, Katzie have repeatedly expressed interest to the provincial government in pursuing their FRA as a Community Forest Agreement, centred at Blue Mountain and Douglas Provincial Forests. In summer, 2009, Katzie spoke with the regional Ministry of Forests and Range, who are supporting Katzie's intent to apply for a CFA. However, Katzie must receive a formal invitation to apply from the provincial Ministry to begin the application process. As of May 2010, Katzie have yet to receive an invitation to apply, but continue to plan for the future management of Blue Mountain and Douglas Forests as a Katzie Community Forest.

3.3.4 Planning for the Future

Katzie look forward to participating in the provincial Community Forest Agreement program, and are aspiring to ensure the planning and management of

the forest is primarily considerate of Katzie needs and priorities and encourages community involvement. As Katzie have been only peripherally involved in past forest management exercises, to date little research has been done within the Nation to identify Katzie member priorities for management of forests within their traditional territory. As Katzie administration hopes forestry decisions will be primarily guided by community member desires, a study must be conducted to empirically enumerate priorities. This project was designed in part to address the need to collect Katzie forest management priority data. Results of the identification of Katzie forest management priorities, considered in light of opportunities and challenges of the Community Forest Agreement program, will help Katzie forest planners make appropriate forest management decisions as their tenure reaches fruition. Once a Katzie CFA is established, results of this study will continue to inform forestry management decisions and CFA operations.

3.4 Conclusion to Katzie Community Forest Planning

Katzie members have long used the forest and forest resources throughout the mountainous portions of Katzie territory. Recent decades have seen a slow physical disassociation of Katzie from their forests due to encroaching development and shifting priorities. In efforts to re-engage in active use and management of forests in Katzie territory and contribute to the responsible stewardship of Katzie lands, the community is pursuing a Community Forest Agreement for Blue Mountain and Douglas Provincial Forests.

Management of Blue Mountain and Douglas forests is a complex exercise due to the number of governments, interest groups and individuals invested in

the fate of the lands. Results of past planning processes have failed to be implemented for a number of reasons that include a lack of coordinated action, leadership and vision. The Katzie Nation sees an opportunity to act as leaders in forest management by governing a community forest tenure at Blue Mountain and Douglas Forests in their traditional territory.

To effectively manage a community forest tenure that promotes community involvement and reflects community values, forest planners need guidance from Katzie members. The following chapter describes the methodology employed in this study to identify Katzie member priorities for forest management. Once enumerated, Katzie priorities are discussed in the context of developing an effective CFA for Katzie, and for other Nations considering a similar approach to forest management. Discussions and recommendations stemming from this report can help guide future First Nation forestry decisions as communities pursue their community forest goals in the long-term.

4: METHODOLOGY

4.1 A Community-Based, Case Study Approach

To assess how the Community Forest Agreement program can meet the needs of B.C. First Nations, I conducted a community-based case study with the Katzie First Nation. I made methodological choices to meet the research needs of the Katzie First Nation and academically contribute to the Community Forest discourse in British Columbia. Though narrow in focus, the community-based, case study approach generated rich and thorough research results that will contribute to the Katzie Nation's resource management initiatives and inform other B.C. First Nations pursuing a CFA tenure.

The community-based approach allowed me to interact with project leaders and community members on a daily basis, tailor my research to meet the needs and desires of Nation members, and better understand the nuances involved in a First Nations' approach to research and planning. As my study focuses on the complexities specific to First Nations' forest management and planning processes, my community-based research approach contributed to my understanding of community challenges that are not traditionally accessible through digestion of literature or broad-scale survey methods. Further, researching in the community allowed me to encourage community member involvement, contribute to the capacity building processes of the Nation and generate community interest in forestry issues through informal discussions and formal distribution of results.

Given that the primary goal of my research project with the Katzie First Nation was to investigate and document Katzie forest management priorities of Katzie community members, and secondarily to consider these priorities in the context of the CFA program, I chose to conduct a case study to allow for detailed exploration of Katzie circumstances. To analyze more broadly the suitability of CFA tenures for First Nations, a wider-ranging survey of current CFA participants and First Nations would have been pertinent. However, conducting a case study allowed me to investigate the contemporary complexities of forest planning in one First Nation's community, capturing details and patterns that may have been missed by a broader and more superficial survey of subjects (Berg 2001). Additionally, case studies are a preferred strategy when, "…the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (Yin 2002:1, 13), and are valuable when addressing new topic areas and building theory through examination of real-life phenomenon (Glaser and Strauss 1967; Eisenhardt 1989; Berg 2001). The generation of new theory can help to open doors for further discovery on a new topic of research (Berg 2001), as ideally will be the case for this project in British Columbia.

Generalization of case study results can be a contentious exercise. However, as Berg (2001; 331) explains, "when case studies are properly undertaken, they should not only fit the specific individual, group or event studied but also generally provide understanding about similar individuals, groups and events." Berg's assertion does not suggest findings from the community studied in the project will be applicable to all First Nations, but rather suggests some

insights from this case study may be applicable to communities facing similar circumstances. As First Nations throughout British Columbia are striving to improve management of natural resources in their traditional territories amidst unique environmental, social, legal and economic complexities, exploration of one community's journey will illuminate certain intricacies of the task, which may be applicable beyond the borders of the Nation studied.

4.2 Research Process

To consider Katzie First Nation forest planning and management priorities holistically and augment the legitimacy of my results, I accessed a variety of complementary information sources. I first conducted background research of community ethnographic documents and archived community interviews. I followed by conducting semi-structured interviews with key informants in the community before analysing results in the context of Community Forest Policy as described through existing academic literature treating Aboriginal and community forestry.

4.2.1 Ethnographic Review

To familiarize myself with the Katzie Nation as well as include a historical component to my study of Katzie forest management priorities, I reviewed pertinent ethnographic literature. I focused my ethnographic research on the works of Diamond Jenness and Wayne Suttles, entitled, "Faith of the Coast Salish Indian" (1955) and, "Katzie Ethnographic Notes" (1955) respectively. Though both works were published in 1955, field work was complete for Jenness

(1955) in early 1936, with Suttles (1955) updating Jenness' work with his own in 1952. While reading each work, I extracted passages relating to Katzie historical use of forests, approaches to sustainability and stewardship, and processes of resource ownership and sharing. Reviewing the extracted portions, I identified themes and trends in the data to frame and corroborate results from archived interviews, key-informant interviews and literature review.

4.2.2 Archived Interview Review

The Katzie Nation has undertaken numerous community studies over the past several decades, many addressing community perspectives regarding resource use and land management. Reviewing pertinent interviews allowed me to gain a preliminary understanding of Katzie approaches to resource management and better shape my questions to specifically address forest management priorities in later interviews. After an overall survey of archived Katzie interviews, I identified the "2007 Treaty Related Measures (TRM)", interviews as most pertinent to my research based on the form and content of the interviews. For these interviews, multiple representatives of fifteen Katzie families were interviewed in a small-group, semi-structured fashion to answer the following questions:

1. If you had the whole Katzie territory back, what would you do with it?
2. Looking at all the resources in our territory, which ones do you think we should be using to make money?

3. What kind of rules would you make to ensure that we have some sort of control over the money that is made?

Respondents to the questions provided a wide variety of opinions and ideas. I reviewed the verbatim transcripts of each interview and extracted passages that specifically treated forests and forest resources, as well as broader discussion points treating the use and management of natural resources within Katzie territory, community involvement in resource management, cultural preservation, and economic development, among others. In total, I reviewed 15 interviews, 14 of which mentioned forest resources.

4.2.3 Key Informant Interviews

Interviews with Katzie community members were the focus of this project. I chose to conduct key interviews in lieu of using a broader-survey approach based on discussions with Katzie supervisors and considering time and budget constraints. Katzie historically have had low turn-out for community meetings and workshops, and consistently have the same people expressing opinions. Katzie researchers have found that one-on-one or small, family interviews resulted in the most candid and fruitful information sharing, leading to richer research results.

Further, literature suggests using participatory and qualitative approaches that reflect existing First Nations' traditions are most successful in Aboriginal communities (McDonald and McAvoy 1997; McAvoy 2000). The key-informant interview approach builds on the First Nation oral tradition, encouraging

participants to share stories and ideas as interviewees and teachers (McAvoy et al. 2000). The notion of asking specific community opinion leaders for interviews also reflects the traditional process of referring to recognized leaders for information and insights within the community (Mihesuah 1993). Finally, the personal interaction and informal conversation that accompanies interviews further promotes trust between researcher and interviewer, allows for two-way questioning and information sharing, and generates enthusiasm for discussion items, all of which help generate richer results while putting both the interviewer, and interviewee at ease (McDonald and McAvoy 1997; McAvoy et al. 2000). Though I believe my interview approach was best suited to the context of my research project, choosing to interview only key-informants also poses limitations in the research process and may influence results. See section 4.3, Limitations of Research, for further discussion.

4.2.3.1 Interviewee Selection

I relied heavily on Katzie supervisors and assistants to choose appropriate and representative interviewees. Interview participants were chosen primarily to represent the diversity of the Katzie community, and were also chosen based on their familiarity with the interview subject matter, home reserve, willingness and ability to speak to an outside researcher and availability. Further, I, along with a Katzie assistant, attempted to interview those considered as “opinion leaders” within the Katzie community as identified by Katzie supervisors and as recommended by other interviewees to ensure views of highly regarded community members were included in the study. In total, we requested 27

interviews. We arranged in-home or band-office interviews with everyone who responded positively to our requests, for a total of 12 completed interviews. Despite a relatively small sample size, we succeeded in interviewing a wide diversity of members, including elders, administration, youth, former band office employees, employed and unemployed Katzie members, politically active and politically in-active members of Katzie, and at least one interviewee from each residential Katzie reserve, and one interviewee living off reserve.

4.2.3.2 Interview Design

Interviews were mainly semi-structured in nature, with an oral survey component. Semi-structured interviews can be useful when interviewees are unfamiliar with respondent's lifestyles and cultures. Additionally, semi-structured interviews are especially useful when interviewing a diversity of respondents as they ensure an interview addresses key subjects, but allows for flexibility to explore a variety of responses (Berg 2001). Katzie supervisors favoured the semi-structured approach, recognizing the ability of this approach to put respondents at ease in the presence of an outside researcher while also producing rich interview results.

Administering an oral survey component during the interview facilitated a more in depth consideration of forest management priorities by interviewees, and allowed for clear communication of management priorities to Katzie administration. The survey component asked the interviewees to apply one guiding question, "How important are the following forest management priorities to you?" to 15 priorities. Interviewees assigned importance for each priority on a

Likert scale ranging from one (Not Important at All) to five (Extremely Important), with three being neutral. I discussed reasoning for most survey choices with participants to gain understanding of their motivations for choosing numbers and included these explanations in my qualitative content analysis of results.

Developing the interview questionnaire was an iterative process. The questionnaire was reviewed and re-written several times to reflect the feedback received from Katzie supervisors before interviews began (see appendix 4 for final questionnaire). The questionnaire addressed four overall themes: forest uses, forest management priorities, sharing the forest and decision making/governance for a community forest. Though the questionnaire guided the interview, all interviews included additional, conversational questions and covered a variety of topics pertinent to the interviewee beyond the pre-determined questions. Interviews lasted from 45 minutes to two hours, with most lasting between 1 and 1.5 hours.

4.2.3.3 Interview Process

I aspired to conduct interviews in an informal and conversational manner. Unless otherwise requested, I recorded all interviews and later transcribed each interview verbatim. Where I did not record interviewee answers, I took hand written notes to later type and include with any recorded portion of the transcript. I gave each interviewee the option to review their transcript after completion and to add or delete items. Each interviewee was offered a short information sheet regarding the community forest project to take from the interview (appendix 5)

and those interviewees not on salary with the Katzie First Nation were remunerated for their time with gift cards to local establishments.

4.2.3.4 Content Analysis

Once interviews were complete, I first typed up verbatim interview transcripts. In order to synthesis the interview data, I coded interviews based on Glazer and Strauss' (1967) descriptions of generating Grounded Theory. Using my questionnaire design to designate four broad thematic categories, I inductively coded data falling within each category through iterative reviews of interview transcripts. Codes were developed and altered through the axial coding process until data from all interviews fit within codes (Strauss 1987). Considering descriptions presented in Berg (2001), I blended both quantitative and qualitative content analysis techniques to analyze interview results, focusing on manifest content analysis (focussing on what was said by interviewees rather than interpretations from the data). This allowed me to pinpoint some specific trends quantitatively while still qualitatively assessing the data to see holistic ideas characteristic of First Nations approaches to the natural world.

I entered survey results into Microsoft Excel for basic descriptive statistical analysis. However, in order to consider the contextualization of the survey responses, I also included any explanation given by the interviewee for their survey choices in my content analysis process.

4.2.4 Literature Review

In addition to conducting research to identify specific Katzie forest management priorities, I researched background information and literature pertaining to Aboriginal and community forestry in Canada and British Columbia including numerous government, academic, and industry reports. When possible, I focused on community forestry initiatives involving First Nations as well as reports that critically examined the successes and challenges of partaking in the Community Forest Agreement Program. The literature review contributed to the development of the initial chapters of this project, while also framing results, discussion and recommendations.

4.2.5 Compilation of Results

Once results of the ethnographic review, archived interview review and semi-structured interviews were complete, I examined them in the context of my Aboriginal and community forestry literature review. I specifically considered results in light of my review of community forestry opportunities and challenges and worked to identify where Katzie priorities and CFA policy did not expressly agree. Analysing and presenting my results in this fashion allowed me to highlight where challenges specific to the Katzie community forest experience may arise. Following from this analysis, I generated recommendations that I believe may help the Katzie, and other Nations facing similar circumstances, successfully navigate the community forest agreement process. I also reflected on how the CFA program could be modified and better administered to help First

Nations overcome identified challenges to generate a list of recommendations for CFA program administrators to consider.

4.3 Limitations of Research

Given the time and logistical constraints of this project, a number of limitations exist.

- The small proportion of Katzie interviewed limits the community-level generalizations that can be made while interpreting results. Interviewees were chosen to represent a variety of Katzie members and opinions, though some opinions have surely been omitted and the sample size remains small.
- Interviewing opinion leaders within a community can generate biased results. Individuals recognized as leaders may only truly represent opinions of one sub-set of the community, may present their own personal opinions as opinions held by the whole community, or may use the opportunity of an interview to attempt to influence political affairs within the community. To combat the potential negative consequences of interviewing opinion leaders, I ensured diversity in the interview sample by not only interviewing leaders, but including youth and un-engaged community members in my sample. I further ensured I interviewed people who represented a diversity of families, residential reserves and political experience. Using ethnographic and archived interview materials also helped me to confirm findings and gain a better understanding of the diversity of issues present in the community.
- Interviewees varied in their pre-interview knowledge concerning forest and forestry, political processes, provincial government forestry practices and

research protocol, which was unknown to me but may have influenced their responses.

- I am an outside researcher and newcomer to the Katzie Nation. My presence may have influenced interviewee behaviour and responses. Though I conducted interviews with a Katzie assistant, received positive feedback from interviewees and most participants appeared comfortable and willing to share opinions, some may have been unsure of my research role and unwilling to share their knowledge. Further, though presence of a Katzie assistant was used to improve understanding of interview items for both myself and the interviewee, having Katzie member present could also have influenced interviewee perceptions and responses.
- Due to my limited knowledge of Katzie culture and history, I may have misinterpreted and misunderstood components of ethnographic, archived interview and semi-structured interview findings. Working closely with a Katzie assistant and conducting my work in the band office offered resources to help me address issues that I did not understand, though I may still have made errors.
- Any generalizations I have made from the Katzie case study to apply more broadly to First Nations in British Columbia are at best limited. I recognize that each Nation is a unique community facing a distinct set of circumstances when engaging in forest management. I offer this description and analysis of Katzie experience to provide additional insight into the community forest planning process for those who may be able to draw similarities and learn

from the analysis provided in this report, but do not assert that my findings will be universally applicable beyond the borders of the Katzie Nation.

Despite limitations, I believe I was able to successfully meet my project objectives. The Katzie Nation now has a systematic analysis of their forest management priorities that they can apply to forestry projects throughout their territory. The case study of Katzie experience, analyzed in light of existing community forest literature, enhances the field of Aboriginal community forestry in B.C. by closely examining one community's forest management priorities. My analysis can further be applied to First Nations across British Columbia considering engagement in the Community Forest Agreement program who may find aspects of the study applicable to their own unique circumstances, and may be useful for policy makers engaged in developing community forest agreements.

5: RESULTS

The results from this project came from three sources: a review of ethnographic literature (section 5.1), a review of archived interviews (section 5.2) and completion of semi-structured interviews with Katzie community members (section 5.3). I present a short summary of results to finish the chapter in section 5.4.

5.1 Ethnographic Literature

"Animals and plants possess shadows, vitality or thought, and special talents or powers, but not souls. Their vitality or thought—for the two seem inseparable to the Katzie--... pervades their bodies as it does man's, but it abandons the limbs and trunks of the trees during the winter and retires into their roots, for it comes largely from the sun, and the sun is then far away... it is from the sun, or from fire, that man himself gains warmth, which is also inseparable from vitality... the seed that blows in the wind has vitality, since otherwise it could not sprout; but when you fell or burn a tree, its vitality perishes, for it cannot leave its body and become a ghost as man's does." (Jenness 1955:36)

The above quote offers insight into how Katzie viewed the essence of human and non-human living beings. Full review of Suttles (1955) and Jenness' (1955) ethnographic works reveals the foundations of Katzie approaches to forest resources and their use, ideals of sustainability and stewardship, and resource ownership and distribution. The ethnographic information creates a historical linkage to contemporary Katzie approaches to resource management,

while providing a general context for information emerging from the archived and present-day interview portions of this project.

5.1.1 Use of Forest Resources

" … August, the men industriously netted the salmon, which the women dried on stagings in the sun and stored away in large square cedar-bark baskets or in similar baskets made of rushes fitted with both handles and lids. In leisure moments women also gathered large quantities of salal-berries, huckleberries and other fruits" (Jenness 1955;8)

Comprehensive summaries of Katzie resource use from ethnographic literature and traditional use interviews exist in detail at the Katzie First Nation and are beyond the scope of this project. However, a general summary of forest resources used historically by Katzie is presented in Table 2.

Katzie used each forest resource for a variety of purposes including consumption, construction, medicinal treatments and as contributions to ceremony and ritual practices. The harvest and uses of the resources usually incorporated a spiritual element through processes such as: prayer to the sun and moon for a successful harvest; belief that animals acted as guardian spirits; and the belief that most animals are either descendants of, or transformed from, humans (Jenness 1955: 10-20, 35,48). The incorporation of spirituality and associated rules of respect and harvest may contribute to an ethic of eco-centrism and sustainable resource extraction that surfaces in contemporary interviews. See further exploration of these ideas in section 5.1.2.

Table 2: Summary of Katzie Historical Use of Forest Resources from Ethnographic Literature

Forest Resources	Use
Dear, elk, goat, black bear, grizzly bear (hide only), small furbearing animals	Clothing, rope, blankets, rain protection, sustenance, weapon construction, ceremony and ritual.
Cedar bark and wood	Dwelling and weapon construction, rain protection, clothing and hats, ropes, storage containers, food storage and preservation, fish net floats, ceremony and ritual
Other woods and bark	Dwelling and weapon construction, lashing, twine, ceremony and ritual
Root vegetables	Sustenance and herbal remedies
Shrubs and undergrowth plants	Sustenance and herbal remedies
Berries (salal, blackberry, huckleberry, etc)	Sustenance, flavouring and herbal remedies

5.1.2 Practices Related to Sustainability and Stewardship

"We wolves were once human beings like you and we will help you. Hereafter when you are out hunting, you will see the fires that we and other animals kindle." (Jenness 1955:49)

Katzie beliefs dictate that most animals, plants, and even some rocks and other inanimate objects are transformed humans, descendents of humans, or alternate between the human and non-human form (Jenness 1955: 10-20). Further, animals and plants are believed to have a kind of "vitality" or "thought", as do rocks, wind, water, sun, moon, and stars. This vitality brings with it special powers. For example, "It is the vitality of thought of the animal that watches the hunter or the trapper and warns it of his presence; that observes improper treatment of game… and that detects a man's… impurity and keeps the game away from him." (Jenness 1955: 6). Each being is endowed with their own gifts which can also be granted to man. The gifts granted by animal beings are to be

used thoughtfully and with respect, as the animals themselves are to be treated with the utmost regard. Failure to offer respect may involve repercussions such as poor hunting or even death. The ideas that man and nature are one and the same, and that each demand mutual respect from the other, create an ethic of humility and partnership between man and elements of the natural world.

Consideration of resources as humans also leads to the belief that familial ties exist both literally and figuratively between humans and other beings. Again, such beliefs lead to harvest restrictions and sustainability measures. For example, the sturgeon is referred to as a sister while ritual restrictions associated with sturgeon harvest impose limits on choices of gear and location for sturgeon fishing, effectively limiting overall harvest (Suttles 1955:22). More prominently, sockeye salmon, Katzie's most valued resource, is referred to as 'elder brother'. Sockeye are believed to take the human form during the oceanic portion of their lifecycle, but return as fish to swim upriver. As a result of the familial ties to the Sockeye, ethnographies list at length the restrictions, rituals and respect associate with Sockeye harvest that effectively regulate the overall Sockeye catch (Jenness 1955:8). Less abundant forest species, specifically the mountain goat and grizzly bear, are also considered significant to Katzie because of their role as helpers. As such, grizzlies reportedly are not be killed for their meat, while mountain goats are to be treated with the utmost respect, their wool providing essential services to survival and ritual in Katzie culture (Suttles 1955:23,25). Examples continue throughout the ethnographic accounts of Katzie relating closely through kinship, spiritual connection or mutually beneficial relationships

with plants and animals, further strengthening their ethic of continuing a respectful cohabitation with their natural surroundings.

5.1.3 Resource Ownership and Sharing

"Finally the Katzie people saw a strange canoe coming from the head of the lake. It was the Douglas people who had built a canoe up there in order to come to New Westminister. They gave the Katzie some of this root, saying, "We've been stealing your food"". (Suttles 1955:13)

In addition to spiritually-derived regulations for treatment of resources, Katzie also enforced rules of allocation and distribution. Streams were considered to be specific property of Katzie families, with outside users requiring permission to extract fish (Suttles 1955:10). Similarly, depending on the location of cranberry patches, families regulated the harvest by other families and non-Katzie visitors (Suttles 1955:26). In spring, families laid claim to areas of land and sloughs through clearing and preparing for harvest of items such as wapato (Indian Potato). Once harvested, the tracts of land returned to communal tenure (Suttles 1955:27).

Visitors to Katzie territory were also required to ask permission for extraction of resources. Permission was always granted, but only when plants and berries were ripe and ready to harvest (Suttles 1955:27). Those taking without permission were considered to be stealing, yet when caught, were forgiven (Suttles 1955:13). Equally, those taking from Katzie territory were not asked for goods in exchange, though compensation through future reciprocal hospitality was expected (Suttles 1955:27). Such ethnographic accounts suggest

that through the informal designation of harvesting rights, Katzie engaged in actively regulating and monitoring the resources of their territory.

5.1.4 Modern Applicability

Records and ethnographies suggest Katzie resources were historically managed in a respectful, sustainable, and somewhat systemized fashion. Many of the rules, rituals and regulations surrounding resource use and extraction are no longer practiced by Katzie today, however, elements of the fundamental approach of respect, ecocentrism and governance of resource allocation prevail in modern Katzie resource management approaches. At the time of writing (1952), Suttles already reports Katzie feeling a loss of their natural resources—a phenomenon that grew in the following decades. Archived and contemporary interviews reflect a great sense of loss by Katzie for the resources of their territory, the authority to regulate activities within their territory, and their ability to act as stewards of their lands. The sense of loss expressed by Katzie members is magnified through archived and contemporary interviews, and further translates into a strong desire for Katzie to access, regulate and benefit from the resources of their territory.

5.2 Archived Interviews

"I know of another community where one chief would not let them cut no trees down for years, like decades…And because they had that good chief then, that would not let them touch their territory, … they're rich with trees."

-anonymous Katzie interviewee

"There is money to be made in forestry too but, you have to be careful"

-anonymous Katzie interviewee

Review of archived interviews reveals previously gathered community perspectives on contemporary Katzie land use and resource management. The information gathered sheds light on the contemporary ethics held by Katzie regarding the management of the resources of their traditional territory. Though no past interviews specifically addressed forest management, interviewees independently spoke to the importance of the forest areas of Katzie territory.

Respondents to the archived interviews generally expressed an ethic of forest conservation for education, cultural practices, fish and wildlife preservation, and sustainable development purposes. Some respondents (3 of 14) recognized the potential revenue-generating opportunities that logging may present to Katzie, while others (10 of 14) presented strong statements against any resource extraction on Katzie territory, especially in the sacred mountainous areas. Some emphasized that the key priority for Katzie is to gain control of Katzie territory to ensure more responsible resource management, and to ensure adequate provision for future Katzie generations (4 if 14). See Table 3 for a summary of points extracted from archived interviews that relate to forest and land management in Katzie territory. Though Table 3 cannot be considered an exhaustive list of Katzie opinions regarding resource management, reviewing the responses given during the interviews greatly broadens the sample of opinions of Katzie members regarding forest management and presents an opportunity to more deeply understand the variety of viewpoints held by Katzie members

regarding resource management in Katzie territory. Combined with ethnographic information and contemporary interviews, a holistic view of Katzie approach to forest management emerges (see section 5.4 for an overview of results).

Table 3: Resource Management Opinions Expressed in Archived Treaty Related Measures Interviews with Katzie Families

Management Category	Opinion
Access to Forested Areas	Katzie access to forests in traditional territory is limited
	Katzie should not have to ask permission to visit forests and pursue traditional practices in their own territory
	Many forested areas that Katzie grandparents accessed now cannot be reached due to regulatory restrictions or because areas are physically overgrown
	Katzie are willing to share land with non-Katzie users
	Katzie need to increase their presence in forests of their territory to confirm their interests in their area and inform other users of the value of Katzie territory
Katzie control of resources	Control over all natural resources, including fish, forests and wildlife are continuously drifting away from Katzie
	When Katzie gain control of lands, non-native harvesters should require a permit for any extraction
Community Involvement	Increased Katzie member involvement in land management decisions is needed
	Major forest management decisions should be voted on by Katzie members
Cultural Considerations	All Katzie culturally sensitive and historical areas and archaeological sites should be protected
	Some areas in Katzie territory need to be set aside for exclusive Katzie spiritual use
	Protection of forested lands is essential for youth cultural education
	Wilderness areas should be set aside for treatment and healing for Katzie members
Economic Development	Natural resources in Katzie territory can be used to generate revenue, but must be done responsibly as to not deplete the land
	Forestry offers good opportunities for revenue and job creation, and Katzie should get involved in the industry
	Logging is no longer a viable industry and Katzie should avoid engaging in it
	Timber extracted from Katzie territory should contribute to development of Katzie infrastructure
	Katzie territory should be used for tourism. Since tourists are visiting the area, Katzie should be the guides
	Better revenue sharing agreements need to be generated for resources extracted from Katzie territory
	Katzie need to be more involved in revenue generation from non-timber forest products on their territory (such as sales of berry products)
	Generating revenue from the mountainous areas in Katzie territory may be considered wrong by some Katzie
Education	Forests need to be protected for cultural and employment training
	Land preservation is important for teaching Halkomelem Language
	Children need to learn about environment and climate change issues

Management Category	Opinion
	Katzie need to be trained to fill forestry jobs
Resource Management	The foremost priority for Katzie land should be resource protection or Katzie will eventually have nothing.
	Some Katzie are “dead set against” logging, gravel pits and mining. Clear cutting has destroyed areas in Katzie territory and should be prohibited
	Reforestation should be a priority
	Forested areas need protection for fish spawning habitats, wildlife habitats, endangered and migratory species
	Katzie should harvest trees, but only take small patches. Katzie should harvest timber in their territory, because if they do not, someone else will.
	Protection services, such as rangers should be engaged to regulate forest activities in Katzie territory
	Other nations who have historically prohibited logging are now “rich with trees”
	Katzie will manage resources more responsibly than any other entity
	An inventory of Katzie resources is necessary before proper management decisions can be made
Hunting and Gathering	Areas for hunting need to be set aside—Katzie cannot hunt in their own territory due to restricted access, logging of hunting areas, and over-population in wooded areas
	Areas for cultural harvesting should be set aside. Current arrangement with Malcolm Knapp research forest works well, but Katzie would like to gather in more areas in their territory.
	Katzie health is deteriorating due to reduced access to traditional foods
Land Use Planning	Forested areas need to be protected against encroaching housing developments
	Unregulated recreation threatens Katzie territory and needs better management
	Katzie need to plan a balance for their territory between residential, industrial, retail, traditional and cultural uses. A strong land use planning process is needed to identify areas best for extraction and best for protection.
	Katzie should increase land in parks to ensure strict protection
Policy	Sharing and working together with other First Nations and user groups should be a priority for Katzie
	Revenue generated by resource extraction should be banked to improve environment for Katzie children
	Strict policies and procedures are needed to ensure Katzie land management. Policies should provide checks and balances for land use decisions, and be continuous through changes in administration.

5.3 Semi-Structured Interviews

Following review of ethnographic and archived interviews, I performed semi-structured interviews with 12 Katzie members representing a variety of sectors of the Katzie community. I specifically asked questions related to: current Katzie uses of forests within Katzie territory; forest management priorities; sharing the forests; and forest management decision making (see Chapter 3 and questionnaire in appendix 4 for further details). The results of each category of questions are presented sequentially in sections 5.3.1 to 5.3.4.

5.3.1 Forest Uses

"I'd camp there, and if it was accessible enough, I'd hunt there. I'd probably if I had permission I'd gather cedar bark there"

-anonymous Katzie interviewee

"I'd use my forest as a play area for a lot of, a lot of different opportunities for children, you know, to use them as an exploration of what does the land mean to them, what does the land mean to me?"

-anonymous Katzie interviewee

Interview questions 1a, b and c (see questionnaire, appendix 4) generated answers treating Nation members' past, current and desired uses of the nearby forests. Respondents discussed what activities they pursued when visiting forests in the past, what limits them from currently undertaking these activities, and what activities they desire to undertake in Katzie forests if access was easy and convenient. They discussed how important it was for them to visit the forest and who they wished to visit the forest with, among other topics.

Table 4 lists the forest uses described by interviewees. The most often cited use of forests in Katzie territory was recreation and camping (10 of 12), while many interviewees also described the importance of cultural and spiritual practices in Katzie forests (7 of 12). Most (8 of 12) interviewees expressed a desire to resume the activities they do not currently pursue in Katzie forests but undertook in the past. Respondents spoke most passionately about visiting the forest to undertake activities with their families, including camping, walking, berry picking and cultural education activities.

Table 4: List of Katzie Forest Uses from Interviews

Katzie Forest Uses	Past	Present	Future	Notes
Extraction of building materials	√		√	- Forest resources used for homes, community buildings, canoes, artisanal goods, etc.
Camping	√	√	√	- Practiced by all respondents - Important family bonding activity - Teaches children responsibility and respect for land and resources
Cedar bark stripping	√	√	√	- Essential part of Katzie culture and education
Cultural/Spiritual practices	√	√	√	- Respondents pursue cultural and spiritual practices in forest areas - Access to forest is essential to maintain Katzie spiritual practices
Cultural education	√	√	√	- Discussed by all participants - Access to forest for cultural education is essential for passing Katzie traditions to younger generations
Employment	√		√	- No interviewees currently working in forest industry. - Several interviewees enjoyed working in forest in past and hope to again in future
Fishing	√	√	√	- Use forest lakes and streams to catch fish - Essential to Katzie survival - Essential part of Katzie culture
Habitation/housing	√		√	- Katzie used to live in forested areas - Desire opportunities to use forest resources to build additional housing for Katzie
Hunting	√		√	- Some Katzie hunt, but not in Katzie forests - Important to teach youth hunting skills
Plant gathering (cultural)	√	√	√	- Access to forests to gather plants for spiritual and ceremonial practices essential for Katzie culture

Katzie Forest Uses	Past	Present	Future	Notes
Plant gathering (food)	√			- More commonly done in the past - Respondents prefer to gather foods (usually berries) in more accessible areas
Plant gathering (medicinal)	√	√	√	- Practiced currently by some Katzie members - Important component of Katzie culture - Important to encourage more members to learn uses of medicinal plants
Recreation	√	√	√	- Important to all respondents - Practiced by most with family and friends
Therapy/Health/Personal fulfilment	√	√	√	- Respondents visit forest to meditate, relax and improve physical health
Treatment	√		√	- Respondents see opportunity to use forests for treatment and rehabilitation programs
Tree harvesting	√		√	- Harvest of timber from Barnston Island in past - Desire by some to harvest for community use and economic development
Tourism			√	- Some respondents expressed desire to increase tourism in Katzie territory

5.3.1.1 Barriers

When asked why interviewees no longer pursued certain undertakings in the forest, respondents universally cited restricted access as the largest barrier to pursuing desired forest activities. Katzie are experiencing both a physical loss of forests near Katzie reserves with the encroachment of development, as well as difficulty in reaching the forests that are available to visit. Though most respondents stated they continue to visit forests at Pitt Lake at IR4 (7 of 12), and

several (3 of 12) seek necessary permission to use the resources from the Malcolm Knapp Research forest, many (7 of 12) said they found it difficult or that it required too much effort to regularly visit forested areas. Most (9 of 12) said they did not know how to reach the community forest area of intent if they wished to visit.

Some respondents (2 of 12) stated that they are discouraged from visiting public forests in Katzie territory because they feel that they are trespassing or doing something wrong. They feel uncomfortable when partaking in traditional practices such as plant gathering or cedar-stripping in forests and parks when they are sharing the area with members of the public. Similarly, some (3 of 12) said they do not enjoy visiting the public forests because they cannot enjoy the experience privately.

5.3.1.2 Using Blue Mountain and Douglas Forests

I asked each respondent if they had previously visited Blue Mountain and Douglas Forests. Three interviewees responded affirmatively, but no respondents frequent the area often. Respondents indicated that most Katzie undertake the majority of activities in forested areas near existing reserves. When asked if they would visit the forest east of Alouette Lake if access were convenient and Katzie gained tenure, most (10 of 12) interviewees responded positively, stating that they imagined the area to be as beautiful as Pitt Lake and offering similar experiences. Several respondents were especially enthusiastic when they considered the possibility of camping and hiking in the area.

5.3.2 Management Priorities

"If we take something from the forest, we should be giving something back"

-anonymous Katzie interviewee

To identify interviewees' perspectives addressing how forests in Katzie territory should be used and managed, I asked three guiding questions (Questions 2a, b, c on questionnaire, appendix 4). Specifically, I first asked if the interviewees had concerns about how forests are currently treated. I followed this question with a quantitative question, asking respondents to rate various management priorities for forests in Katzie territory on a Likert scale of importance from one to five.

5.3.2.1 Forest Management Concerns

Respondents were generally concerned about how forests are managed, with many (10 of 12) stating they thought forests in Katzie territory and all of B.C. are mismanaged or not managed at all. The overall impression was that managers display a lack of foresight, lack of long-term concern, and a lack of respect for the intrinsic value of leaving a forest in a natural state. Additionally, some (4 of 12) interviewees saw no local benefit to Katzie, non-Katzie local communities, or B.C. citizens from the harvest and sale of logs to foreign buyers.

Most concerns of interviewees were also reflected through the survey portion of the interview. Interviewees' management concerns are summarized in Table 5.

Table 5: Katzie Forest Management Concerns Expressed During Interviews

Ecosystem Concerns
• Declining forest biodiversity • Unbalanced ecosystem, resulting in changes in wildlife composition and habitat • High potential for Pine Beetle infestations • High potential for forest fires • Lack of old growth/large trees left in forest
Forest Degradation
• Destruction of visual quality/beauty • Destruction of wildlife and fish habitat • Unregulated development of recreational trails • Over-population/over-use of forested areas • Increased subdivision development replacing forests • Lack of care and maintenance of the re-growing forest on Barnston Island
Forest Industry Practices
• High cost of extracting trees • High quantity of waste from timber extraction activities • Decreasing air quality associated with logging practices • Over-protection of old trees ready to die • Lack of long term planning • Inappropriate land use choices for land base available • Disrespect by forest workers towards Katzie historical sites/historical resources
Katzie Relationship to Forest
• Decreased understanding by Katzie youth of importance of forest and forest resources • Lack of wood available for traditional/cultural purposes • Lack of accessible firewood for community use • Lack of privacy for spiritual practices • Lack of trees at cemetery • Few Katzie-organized forest trips available for young people over the age of eighteen • High potential for disruption of spiritual areas by public • Difficult to access Alouette Lake forest area • Lack of complete ecological and cultural inventory of Alouette Lake forest area
Katzie Involvement in Forest Management
• Lack of observed benefits coming to members from timber harvesting in Katzie territory • No Katzie authority in forest decision making • Too many government regulations dictating how Katzie can use forest natural resources

Katzie Involvement in Forest Management Continued
• Lack of large forested area for Katzie to pursue responsible, yet profitable forestry activities • Disrespect by province/industry regarding Katzie values/requests/desires/needs • Lack of protection for Katzie spiritual, cultural and historical forest resources • Insufficient Katzie capacity/time/experience to handle challenges associated with forest industry/proposed community forest

5.3.2.2 Summary of Survey Responses

The quantitative survey portion of the interviews asked each respondent to rate the importance of forest management priorities from 1 (not important at all) to 5 (extremely important). Statistical conclusions are difficult to draw from a survey conducted with only twelve respondents. However, Figures 1 and 2 demonstrate some clear patterns. See appendix 7 for a table of detailed survey results.

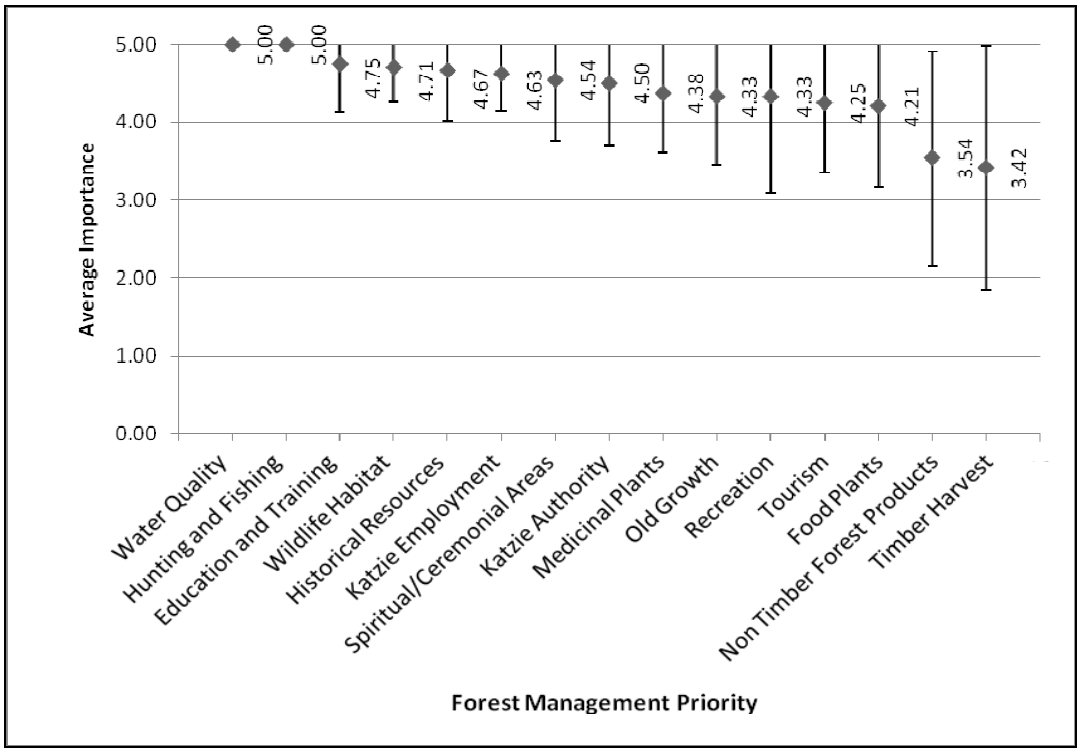

Figure 1: Average Importance of Forest Management Priorities from Community Surveys

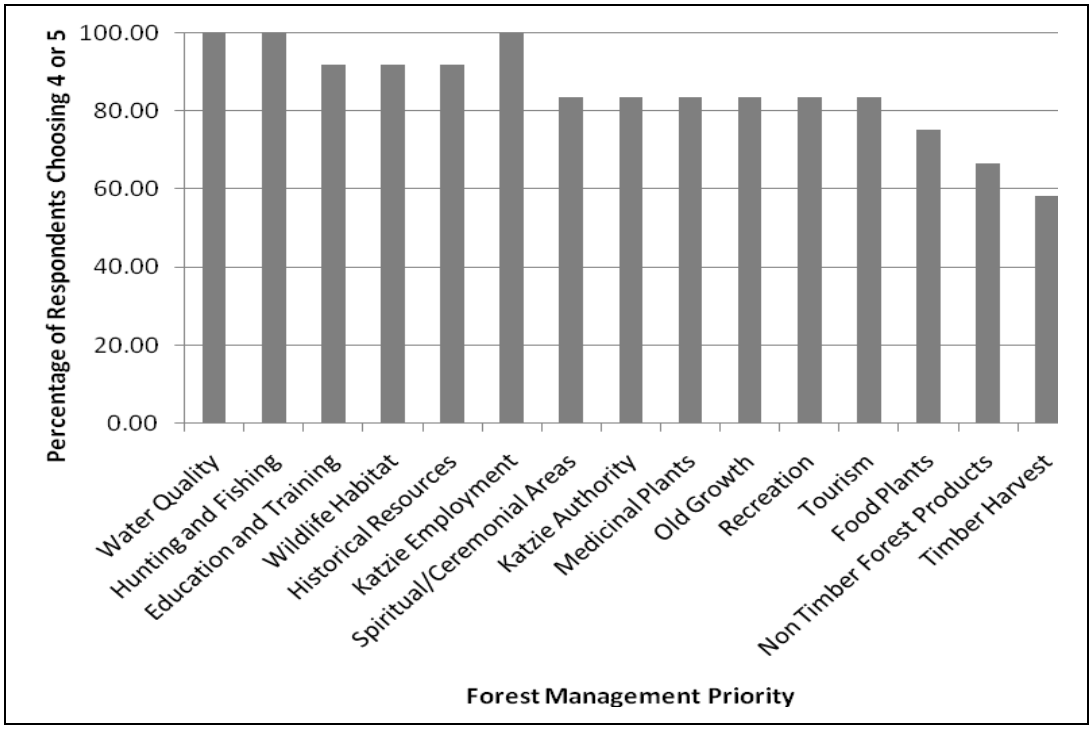

Figure 2: Percentage of Respondents Choosing 4 or 5 (Important or Extremely Important) for Forest Management Priorities

On average, respondents rated “Water Quality” and “Places for hunting and fishing” as the most important priorities for Katzie forest management, with each respondent rating them as five, “extremely important”. Additionally, all respondents rated Katzie employment as “important” or “extremely important”. Conversely, “Harvest of Timber” and “Harvest of non-timber forest products” were rated as the lowest priorities for forest management, with an average score of 3.42 and 3.54 out of 5.0 respectively (see Figures 1 and 2). The percentage of respondents rating harvesting of timber and NTFPs as four or five was also the lowest, with several (2 of 12) respondents assigning harvest of timber a one (see Figures 1 and 2). Additionally, both harvest categories had the highest standard deviation in ratings, meaning respondents disagreed most strongly as to the importance of these categories (Figure 1). However, discussion related to each category revealed only one respondent disagreed with harvesting timber from Katzie forests if the timber would go directly to community use.

5.3.3 Sharing the Forest

“I think everybody’s main objective is the protection of the mountain, first.”

-anonymous Katzie interviewee

Forests in Katzie territory, and specifically the proposed Katzie community forest, are used and governed by a variety of stakeholders and interest groups. I therefore asked respondents how they believe a forest should be shared between Katzie and non-Katzie user groups. I followed that discussion with a question asking how sensitive spiritual or cultural areas in Katzie forests should

be treated when members of the public will be frequent forest users (a concern raised often in archived interviews; Questions 3a and b, see questionnaire, appendix 4).

Though some (4 of 12) respondents expressed that, ideally, Katzie should have exclusive management of more land within their traditional territory, the majority (11 of 12) expressed support for openly sharing both the management and physical space of a Katzie community forest with the public.

5.3.3.1 Sharing Management

Interviewees emphasized the importance of meeting all stakeholder needs and government requirements in order for Katzie to be successful and recognized as strong managers of forest resources. Several respondents (3 of 12) even suggested partnerships with governments such as the municipality of Mission or Maple Ridge or provincial ministries such as B.C. Parks as potentially beneficial to ensure Katzie draw on the expertise of groups more experienced in forest management. Similarly, interviewees (10 of 12) supported the idea that decisions should be made through collaborative meetings with representatives of forest user groups to ensure continuing support and best management practices for the community forest. The results support Katzie's current approach to forest management that includes collaboration with all interested stakeholders. However, interview respondents expressed a strong sentiment that Katzie need to ensure they have the authority for final decision-making. Interviewees felt Katzie members have experienced too many processes where their expressed opinions were not considered during project implementation.

5.3.3.2 Sharing the Forest

Interviewees felt that sharing the forest with the public is desirable, but also that having specific locations for exclusive Katzie use should be important. Suggestions for sharing of the forest included:

- designating trails for specific recreational uses
- providing interpretive information to the public concerning Katzie use of the forest
- developing a referral system for forest user groups to inform Katzie of planned activities in the Katzie community forest
- closing the community forest to public overnight use to discourage vandalism
- increasing Katzie presence in forests through employment, training, recreational use and educational programs for Katzie members
- increasing Katzie presence through a forest caretaker/forest guardian program
- maintaining some areas for Katzie-only access and use, specifically for spiritual undertakings (see following, “spiritual areas” section for further results)

Katzie recognize that sharing the forest is a potential revenue generating opportunity through recreational fees and tourism services. Several (4 of 12) interviewees expressed that they eventually hope to see a formal Katzie interpretive centre located in a forest setting. No matter how the forest is shared, interviewees stressed the importance of keeping a Katzie community forest a clean, well run, and attractive place to visit.

5.3.3.3 Spiritual Areas

"I think it's about time that Katzie step-up, the cultural people of Katzie step-up and say, enough. No. We don't want you groups in this area…"

-anonymous Katzie interviewee

As expressed during the survey component of the interviews, designating a forest area for long term, secure spiritual use is a high priority for Katzie. However, reaching this goal in a forest area that is publicly accessible remains a challenge. Similar to responses in archived Katzie interviews, respondents consistently expressed three opinions on the treatment of spiritual areas.

1. *Prohibit public access to spiritual areas*

Many (5 of 12) respondents believe spiritual areas should be cordoned off completely, limiting any public access. However, most recognize this can be problematic. As expressed by one interviewee, "if you put up a fence, that's just like, little kids standing on the other side seeing a whole bunch of chocolate bars." Public will inevitably enter out of curiosity and may cause harm.

2. *Maintain spiritual areas unidentified and secret*

The second group of respondents (4 of 12) suggested spiritual areas can exist in public places but should not be identified in any way. What the public do not know about or cannot identify, they will not be drawn to investigate. One respondent relayed that placing cultural or ceremonial items in the forest so they it will not be disturbed is the responsibility of the Katzie participant and not forest managers. Several others thought the process of identifying spiritual areas would lead to having them "on display" like artefacts in a museum, which is not the

purpose of Katzie spirituality. However, the approach of not identifying cultural items in the forest has limitations. If members of the public do enter spiritual areas, they will be unaware and uneducated as to what they have encountered, potentially leading to inadvertent removal or destruction.

3. Use educational tools to foster respect for Katzie spiritual areas

Some interviewees (3 of 12) felt education is the primary tool to ensure protection of spiritual areas and objects, believing that with education comes respect and understanding. Several respondents envisioned information and interpretive materials available at public access points and at strategic locations throughout the forest, while others expressed interest in eventually erecting a longhouse or interpretive centre open to the public. Conversely, some felt education would not result in increased respect of Katzie spirituality and would be a waste of resources. Despite best efforts, some visitors will continue to be disrespectful and destructive. Better, devise a barrier or maintain spiritual areas as unadvertised. Nevertheless, most interviewees emphasized that generally increasing the presence of Katzie members in Katzie territory and specifically forest areas will positively increase the respect and acknowledgement of Katzie spiritual practices.

5.3.4 Decision Making/Governance

Addressing the proposed Katzie community forest, I asked respondents how they would like to see the project governed if approved. Specifically, I asked who they envision should make decisions about the forest and how they would like to be involved personally (see questions 3c and d, appendix 4). Discussion

ensued, depending on the interviewee's own position within the Nation and desired vision for community forest governance.

5.3.4.1 Decision Body

In response to the question of who should make decisions regarding community forest management, respondents offered a wide variety of answers. The most common suggestion (10 of 12) was that a committee, panel or board of directors should govern the forest. The following were suggestions for the composition of a management board:

- Include elders, youth, cultural leaders and administration to represent a diversity of opinions. Many respondents emphasized the importance of involving youth, while younger interviewees stressed the importance of having elders and Chief and Council govern the process due to their knowledgeable positions within the community.
- Include non-Katzie people who have needed expertise, but ensure the outside experts are sensitive and knowledgeable regarding Katzie values.
- Remain in contact with the non-Katzie forest-users, stakeholders and governments to work to meet everyone's needs. One respondent suggested an advisory group composed of user-group representatives should be formed to inform the decision making board.

5.3.4.2 The Role of Katzie Administration

Respondents disagreed as to the level of involvement Katzie administration should have in guiding community forest management. Some (3 of 12) respondents saw Chief and Council as the best candidates to make

decisions about the forest since they are the most informed and have the most authority both inside and outside the Nation. Others (3 of 12) emphasized the importance of ensuring the community forest is not a political undertaking. Board members should not be involved in other aspects of administration to ensure fairness and impartiality. Non-political board members would be consistently employed through administrative elections, ensuring a continuous and seamless management process despite changes in the Nation's political arena. One respondent recognized the importance of involving the Katzie treaty team in any community forest management regime, as establishment of a community forest could influence treaty talks and vice versa. Finally, several interviewees (2 of 12) stressed that board members should not be those that already have a large amount of responsibility as they will be stretched too thin to devote sufficient time and energy to the community forest process.

Several (2 of 12) members expressed that a vote would be most appropriate to designate a board of directors for the Katzie community forest, while others (2 of 12) thought they should be appointed by Chief and Council. No matter the mode of their instalment, all respondents suggested they must be accountable to Katzie members first and foremost, and then ensure they are also meeting the needs of the non-Katzie interest groups.

5.3.4.3 Nation Member Involvement

"Oh yah, I would like to be involved, right from the get-go, right until the time it's all said and done"

-anonymous Katzie interviewee

All respondents suggested they would like their opinions included in the management of a community forest. Some (3 of 12) expressed interest in direct involvement such as being members of a board of directors, but the majority only wanted to ensure opportunities exist to voice their opinions, and in turn, have their opinions fairly considered. All respondents emphasized the importance of a transparent process that keeps Katzie members informed. Members do not simply want to know the end result of a decision, but would like to hear about and understand the management process that leads to final decisions.

Respondents emphasized that including the opinion of Katzie members during the initial planning stages of community forestry is essential. Katzie Nation member opinions should be the basis of the vision and initial management directions of the community forest. With the management groundwork laid upon the opinions and approval of Nation members, governance and management of the community forest will be more likely to reflect community values in the long term.

Members suggested meetings, workshops, newsletter postings, phone calls and interviews as effective ways to solicit opinions. Though meeting attendance in the past has been low, some respondents suggested if people have strong enough opinions on a forest management subject, they will attend

meetings to voice their concerns. Most (9 of 12) expressed that they read the Katzie newsletter and think community forest information disseminated regularly in the Katzie newsletter would reach most members.

5.4 Summary of Case Study Results

The results from this project came from three sources: a review of ethnographic literature, a review of archived interviews and completion of semi-structured interviews with Katzie community members.

The ethnographic review provided a historical context for the use of forest resources by Katzie and provided insight into the foundations of the Katzie community's ethic of stewardship of natural resources. Through accounts of Katzie stories, ethnographies clearly conveyed a history of kinship between Katzie and animals, plants and significant landmarks in Katzie territory. A review also demonstrated clear ethical and spiritually-derived boundaries for the harvest and treatment of natural resources, while also describing the role of delineating ownership of resources for their proper use and distribution.

Archived interviews contemporized Katzie views on land and resource management. Comments relating directly to forest management named a variety of priorities for the forested portions of Katzie territory that included using forests for conservation, education, economic development, spiritual practices, hunting and fishing, and others. Having Katzie authority over forested territories and using forests for community development initiatives were also identified as particularly important.

Semi-structured interviews explored opinions of Katzie regarding forest management in greater depth, asking respondents to enumerate their contemporary uses of forest resources and to rate their priorities for forest management. Further, respondents commented on how they would like to see a proposed community forest shared with the public and governed by Katzie authorities. Responses showed Katzie continue to use the forest and desire to increase the frequency of their forest visits. Community members see opportunities for a wide variety of community development initiatives in a community forest setting, but value activities related to traditional harvesting and cultural education higher than activities that will result in economic gain. Though willing to share a community forest and forest resources with non-Katzie users, Katzie desire a high level of authority and decision making power over any community forest. Participants also recognized creative solutions will need development to address issues such as sharing culturally and spiritually significant locations. Finally, Katzie desire a strong and varied membership to govern the community forest to ensure the forest is managed in the best interest of the entire diversity of the Katzie community.

5.5 Generalizing Case Study Results to Apply to B.C. First Nations

Results demonstrate the Katzie Nation is developing forest management plans within unique historical, political and social contexts. The context of Katzie forest management planning will ultimately influence the design of Katzie forest management agreements. Nevertheless, forest management priorities expressed

by Katzie are similar to existing studies of Aboriginal forestry priorities, suggesting study results may also be applicable beyond the Katzie Nation. Weber's 2008 thesis describing Stellat'en First Nation forest management objectives and Sherry et al.'s 2005 study of Tl'azt'en forest management criteria both generated forest management priorities that are similar to those expressed by Katzie. For example, Stellat'en priorities included having a high level of decision making for Stellat'en; ensuring protection of ecosystem integrity; including cultural knowledge in management and decision making; supporting Stellat'en capacity building; and pursuing economic benefit for the Stellat'en Nation. Similarly, Tl'azt'en criteria included local access and control to resources; community health and well-being; capacity development; holistic forest management; maintenance of ecosystem support and function; and support of traditional practices, among others (Sherry et al. 2005). Hutton's 2004 study documenting forestry values of Cowichan Tribes generated results strikingly similar to those recorded at Katzie, with spiritual uses, food and medicine gathering, hunting and fishing, water quality protection and wildlife habitat rating most highly as forest values. Like Katzie, Cowichan Tribe members were strongly divided as to whether timber extraction should occur in their forests (Hutton, 2004). Though formal comparison of First Nation forest management priorities is beyond the scope of this project, recognizing the similarity of reported forestry priorities of various B.C. Nations suggests the Katzie Nation may be facing similar opportunities and challenges as other Nations when attempting to establish a forestry tenure that meets community goals.

5.5.1 Results as a Reflection of Aboriginal Forestry Values

Examining Katzie forest management priorities through review of ethnographic literature and contemporary interviews reveals that Katzie's approach to forest management is uniquely rooted in their Aboriginal heritage. Combining Katzie management priorities with literature investigating Aboriginal forestry (Parsons and Prest 2003; Adam and Kneeshaw 2008; Wyatt 2008; McGregor 2009), reveals that First Nation forestry differs from forestry practiced by non-Aboriginal communities. Elements of the First Nation approach to forestry that are lacking in a non-Aboriginal approach often include:

- Consideration of the longstanding history of First Nation forest use;
- Consideration of the Aboriginal commitment to place;
- Incorporation of cultural and spiritual elements into forest management;
- Recognition of the interconnected nature of animate and inanimate beings across landscapes;
- Recognition of the inherent ethic of stewardship of First Nations;
- Recognition of the desire by First Nations to control resources in traditional territory following a history of systematic exclusion from lands; and,
- Acknowledgement of the struggle for Aboriginal rights and title.

Elements of the above list appeared in almost all interviews conducted with Katzie and are reported in other studies of First Nation forest management priorities (Hutton 2004; Sherry et al. 2005; Weber 2008). As a result, I frame the

following discussion and recommendations as rooted in an Aboriginal perspective to offer a new standpoint in the academic discussion of the CFA program.

6: DISCUSSION

6.1 Opportunities and Challenges for First Nation Community Forestry

The following discussion of opportunities and challenges of the Community Forest Agreement program in British Columbia combines findings from the literature review in section 2.4 with results of the Katzie case study to consider the CFA program from a First Nations' perspective. Though each First Nation will face distinct conditions when approaching community forestry, the following discussion may help to inform and guide Nations encountering similar complexities to Katzie as they plan their community forest operations, as well as inform community forest policy administrators as they engage with First Nations.

6.1.1 Opportunities

Due to First Nations' specific historical context, political positions and community compositions, some First Nations may see community forestry as especially beneficial for reasons including and extending beyond those presented by non-Aboriginal communities.

6.1.1.1 First Nation Authority

As recognized by most communities interested in gaining community forest tenure, the CFA program grants an unprecedented amount of control to communities to manage their local resources on public lands. For all communities across British Columbia who have witnessed unsustainable extraction of resources on local lands without the authority to influence this

process, the opportunity for autonomous decision-making is attractive (Hutton 2004; Sherry 2005; McCarthy 2006; Pinkerton 2008; Weber 2008; BCCFA 2009). For First Nations, who have struggled to gain authority over their traditional territories for more than a century, the community forest agreement is an especially enticing option. As expressed by interview results with the Katzie Nation, gaining authority over a section of off-reserve land is a theme prevailing through historical and contemporary records, and is deemed important by a majority of community members today. Unlike treaty and land claims processes, a community forest agreement is a relatively efficient and uncomplicated route to expanding a First Nation community's authority without a formal transfer of ownership rights (Ambus 2008). For those Nations such as Katzie who are in the midst of treaty negotiations, establishing a Community Forest may be an excellent interim measure to begin exerting decision making control over traditional territory before treaty negotiations are complete.

6.1.1.2 Governing According to Community Values

One of the main goals of the B.C. CFA program is to allow participants to manage local resources according to community values and for the benefit of the community members. For all communities, Aboriginal and non-Aboriginal, this presents an opportunity to express unique community characteristics through forest management. For First Nations, a community forest presents an opportunity to manage a forest where they can promote traditional values of stewardship and reciprocity. Further, control over a section of forest may allow the community to manage for forest values that Katzie members expressed as

particularly important, such as hunting and fishing, cultural education and spiritual practices (see section 5.3.2). For Katzie, establishing locations for spiritual practices in forested areas that can be managed for exclusive Aboriginal use is especially attractive. However, as recognized by numerous interviewees, creative thinking and careful planning will be needed to successfully implement areas of restricted access on public lands. Nevertheless, the opportunity lies in the fact that First Nations across British Columbia planning community forest tenures have the opportunity to design a management system that can consider their values as a Nation, beyond the economic considerations typically guiding forest management processes.

6.1.1.3 Leadership

Many Katzie respondents recognized the CFA tenure as an opportunity to act as community leaders. They believe that by demonstrating a responsible approach to forestry that considers Katzie values while incorporating the views and desires of the multiple user groups interested in the community forest area, Katzie will be recognized as strong resource management leaders. This recognition will allow them to act as role models for other First Nations looking to manage their forest resources as well as to draw the attention of non-Aboriginal neighbours and government leaders to the fact that Katzie are capable and successful managers of their own lands. Such an opportunity can lead to compounding benefits by empowering individual Nation members, the community as a whole, as well as neighbouring First Nations and non-First Nations communities.

6.1.1.4 Capacity Development and Training

For First Nations who, like the Katzie Nation, have members who are largely uninvolved in the forest industry, engaging in community forestry offers an opportunity to develop community capacity in a new employment sector. Forestry positions can range from manual labour to strategic planning and management, offering a diversity of opportunities for Nation members hoping to receive training and gain experience in the forest industry. Forestry jobs are also generally well-paid positions, though long term stability and continuity rarely are guaranteed in the forest industry. Further, a large amount of investment and training may be needed for community members to fill all positions needed to plan and operate a forestry operation.

As recognized by Katzie Nation members, community forestry can also offer opportunities for capacity development in fields unrelated to traditional forestry. In regions such as the Katzie CFA area of intent, opportunities in recreation and tourism planning and management may outweigh forestry positions, while other industries may be viable in other community forest regions. Beyond positions within conventional employment sectors, access and control of local forests for First Nations may lead to increasing community capacity through exploration and encouragement of traditional and cultural practices. The Katzie Nation specifically recognizes the opportunities for youth cultural education and teaching spiritual practices in a forest setting—undertakings that are currently rare due in part to limited forest access for Katzie members.

6.1.1.5 Reconnection to Territory

For the Katzie Nation, whose traditional territory sits within a fast growing urban area, access and connection to forested areas in their traditional territory is becoming increasingly limited and more difficult. For First Nations throughout British Columbia witnessing increased development of forest areas, establishment of a community forest will present an opportunity to ensure a bounded forest area is kept accessible and open to all Nation members. Encouraging community members to participate in forest activities, either through employment, recreation, cultural practices or community activities, offers opportunities to reconnect or affirm connections to traditional lands.

6.1.1.6 Economic Development

A prominent motivating factor for establishment of community forests is to generate revenue that can be managed by, and re-invested into the community. For First Nations looking to gain community income in the face of expanding populations and aging infrastructure, revenue from a community forest will be a welcome addition. Raw materials from community forest areas may also contribute directly to the well-being of the Nation, for example by providing building materials or fuel for homes on reserve. For Nations moving towards settling treaties, a viable forest industry on a portion of their territory can continue to generate revenue post treaty and represents a self-sustaining revenue stream for the Nation. Well-established forestry practices may also be expanded post-treaty, increasing revenue to the Nation. However, the cyclical nature of the forest economy suggests that forestry revenue will have to be just one

contribution to the economic development efforts of Nations and cannot be relied on consistently. Nevertheless, given the case of the Katzie Nation, revenue may be able to be generated from forest resources beyond timber. Opportunities for economic development through recreation and tourism management and small-scale extraction and sale of non-timber forest products may contribute to overall economic development objectives for the community forest.

6.1.1.7 Specific Forest Characteristics

Each Nation will be faced with managing a community forest with distinct physical characteristics, some of which will present unique opportunities. For the Katzie Nation, the location of the community forest presents advantages due to the excellent growing conditions of the lower-mainland and the proximity of timber to processing facilities and market opportunities. Further, proximity of the forest to large urban populations presents increased recreation and tourism development potential. However, as a result of the specific location and history of the Katzie community forest area of intent, the establishment and management of a CFA is politically complicated, with multiple layers of government and numerous user groups interested in directing the fate of the forest. For other Nations in B.C. the unique locations, bio-physical, historical and political characteristics of their community forests will present unique opportunities and challenges. The key is to identify the specific advantages present in the community forest and arrange a tenure agreement and management plan to capitalize on those opportunities that will provide a competitive advantage in the market.

6.1.2 Challenges

Challenges to First Nations entering into a Community Forest Agreement will arise due to unique characteristics of each Nation, as well as due to the characteristics of the CFA program. All First Nations in British Columbia considering engaging in community forestry will be limited by the terms of their tenure agreements under the *Forest Act*. As demonstrated by existing community forest agreements such as that negotiated by Harrop-Procter, unique attributes can be negotiated into final CFA tenure agreements (Silva Foundation 1999; Pinkerton 2008). Recognizing potential challenges posed by the community forest agreement process will allow First Nations to identify how best to address and tackle looming challenges associated with securing, planning and managing their tenure.

6.1.2.1 Managing Community Expectations and Maintaining Support

The Katzie First Nation case study reveals a wide variety of community opinions concerning how forests in Katzie territory should be managed. Most notably, opinions regarding harvest of timber and non-timber resources vary enormously, with those for and against Katzie's involvement in timber harvesting strongly voicing their views.

To ensure forests are managed according to community values and for community benefit, forest management planners will have to work hard at the delicate process of respecting the views of community members while designing an effective and viable forest management plan. Meeting both the needs of the community and the expectations of community members for the CFA will require

a combination of outreach, information sharing, encouragement of community participation, and a decision making process that respects and incorporates community views. For those Nations in a similar position to Katzie, engaging in management of a forest that is used by a multitude of non-Aboriginal user groups, managing expectations, and maintaining support of all stakeholders beyond the borders of the First Nation adds an additional layer of complex challenges to the forest management system.

6.1.2.2 Considering Harvest Levels

The CFA program is founded in the same legislation and mindset as other area-based provincial forest tenures in B.C. that support industrial logging practices and a low-input, high-profit attitude towards timber harvesting (Tyler et al. 2007; Ambus 2008). Though the CFA program is an opportunity for forest communities searching for increased control and local benefits from nearby natural resources, community forest policy still restricts how a community can reap benefits from their forests. Results of this study show that managing a community for multiple values, focusing on ecosystem protection, cultural uses and human enjoyment of the forest are most important to Katzie. For Nations with similar goals and values, devising a management plan that will allow a lower AAC with longer harvest rotations, and provisions for using the forest for multiple purposes beyond timber extraction will require careful, well-supported planning to engage in effective negotiation with the B.C. government to come to a final tenure agreement. (Pinkerton 2008).

6.1.2.3 Economic Viability

A key issue in establishing harvest levels is consideration of the economic viability of any community forest. Start-up costs for establishing a community forest operation will be high due to requirements for management planning, investment in infrastructure and machinery, and training for employees (BCCFA and FORREX 2004). Further, due to the cyclical nature of resource markets, economic viability of timber extraction may vary through time.

Based on the results of the Katzie case study, the industrial style of logging in the community forest will be unacceptable to community members. Rather, a more labour intensive, low harvest model that supports multiple uses of the community forest will be expected. Further, the land base and AAC for the Katzie community forest will be small compared to many existing community forests. For First Nations facing similar community dynamics, managing the forest to reflect community values will mean a reduction in potential profits from the industrial model of forestry. Nations will need creative approaches to revenue generation in order to meet costs of supporting community forest operations while managing a forest for multiple values, especially in times of a depressed natural resource economy (Ambus 2008, personal communication Aug. 2009).

6.1.2.4 Community Capacity

Katzie Nation administration, similar to many B.C. Nation administrations, is faced with an enormous quantity of responsibilities governing both internal Nation matters and relationships and activities occurring throughout their traditional territory. Community forests are reporting, on average, employing

anywhere from 1 to 20 full time equivalent employees annually to support their operations. Operations supporting a lower AAC, such as the Harrop-Procter community forest, rely on a large number of volunteers to meet the needs of community forest management while decreasing costs (Ambus 2008). Further, given the complicated regulatory nature of administering a forest tenure, most communities rely heavily on the knowledge of managers that are well versed in the political and economic details of the B.C. forestry sector. Considering the experiences of established community forests, the Katzie Nation and other Nations facing similar limitations in time and capacity will need to carefully plan how they will create conditions where sufficient time, knowledge and capacity can be devoted to running a community forest without sacrificing the multitude of other services already addressed by First Nation administrators. For the Katzie Nation, located near to numerous outside resources that can be drawn upon for expertise, a limitation in capacity may be more simply overcome than for Nations that are geographically isolated. Nevertheless, Katzie will want to ensure outside expertise contracted to help with the community forest understands and can align their views with Katzie vision and priorities for the forest. For more isolated Nations unable to easily access the resources abundant in urban centres, securing capacity outside of their own communities may present a larger obstacle—but a detail worth considering during the business and management planning portions of their CFA agreement.

6.1.2.5 Management Structure

Creating an effective management structure to govern community forestry will be key to addressing previous listed challenges such as limited capacity, economic viability and community involvement. Results of Katzie interviews reveal Katzie support an inclusive approach to management, suggesting a committee, panel or board of directors consisting of a diversity of Katzie should guide decisions in consultation with Katzie and non-Katzie community members.

The composition, institutional structure and mandate of a CFA governance board is not stipulated through legislation, leaving communities to determine which management structure will best meet their needs. Existing First Nation community forests are either owned by the Nation's governing body and run by the Nation or by a contracted company, or are owned and operated by a Nation-owned development corporation (MNP 2006). Other options for community forest governance include cooperatives, partnerships and non-profit societies. Advantages and disadvantages occur for each management structure (see MNP 2006 section 4.2.1), with analysis suggesting no one structure is superior in all situations. Nevertheless, literature stresses that the chosen management system should maximize the opportunity for community involvement and "offer clear accountability to the community, have active and regular involvement from a broad range of stakeholders and be held legally liable for meeting all conditions of the tenure and laws that govern it" (MNP 2006: 45). For First Nations building their CFA management structure, choosing a structure that supports community involvement will be key. Nations need to develop an accountable, consistent,

well-educated, and dedicated leadership that remains sympathetic to the unique circumstances of Aboriginal community forestry and can effectively balance the competing requirements for a viable, yet socially responsible and community-based business venture.

6.2 Recommendations

From review of academic literature and a case study of the Katzie First Nation forest use and management priorities, I have identified opportunities and challenges for First Nations as they face engagement in the British Columbia Community Forest Agreement program. Table 6 summarizes the challenges described in section 6.2.2 and suggests how the challenges may be addressed through recommended actions. Following this table, I describe each recommendation in detail in sections 6.3.1 to 6.3.6.

Table 6: Summary of Challenges and Recommendations for First Nation CFA Planning

Challenges	**Recommendation to Help Address Challenges** (see sections 6.3.1 to 6.3.6 for further details)
Community Expectations and Support • Addressing a variety of opinions regarding harvest levels • Gaining and maintaining community interest and support in project • Effectively engaging non-First Nation forest users in management process	*Create a Vision and Communicate with Community* • Create an inclusive vision for the community forest • Communicate the vision systematically to community • Use vision as foundation for further development of goals, objectives, criteria and indicators to guide, monitor and evaluate community forestry policies and operations • Continuously communicate CFA decisions and encourage community member participation in decision processes • Continuously communicate discussion items with non-First Nation forest users
Harvest Levels • Negotiating agreement with provincial government that reflects community priorities • Planning harvesting according to community priorities of ecosystem protection, recreation and cultural uses	*Conduct Inventory, Pursue Land Use Planning, Complete Business and Management Planning* • Conduct inventory of timber, NTFPs and culturally significant species • Base CFA agreement and plan harvest according to studied community priorities and empirical inventory and land use studies • Complete careful business plan of forest operations, evaluating options for a variety of timber extraction scenarios and considering capacity of community • Consider opportunities for non-extractive revenue generation in business plan • Establish management structure that reflects diversity of community interests, considers capacity and expertise, and promotes community participation • Promote community member involvement through inventory and planning processes
Economic Viability • Operating a forest that meets community expectations and remains a viable economic initiative for the Nation	*Complete Business and Management Planning and Pursue Land Use Planning* • Conduct business and land use planning considering variable timber markets as well as potential for NTFPs, value added initiatives, recreation, tourism and carbon markets • Evaluate need, availability and cost of hiring outside expertise, training community members and ensuring ongoing community participation

Challenges	Recommendation to Help Address Challenges (see sections 6.3.1 to 6.3.6 for further details)
	• Establish management structure that can remain stable through political and administrative changes of the First Nation • Include individuals in management structure who have the time and capacity to operate a community forest
Community Capacity • Creating training and employment opportunities through community forest • Ensuring adequate capacity available to Nation to address challenges of community forestry	*Complete Business Planning and Use Additional Resources* • Include evaluation of existing and potential capacity within community for managing a community forest and consider options for hiring outside expertise and associated costs • Design management structure to represent community interests and ensure accountability to community • Use existing extension, government-based and academic resources to enhance capacity, access funding, and interact with existing CFAs

6.2.1 Create a Vision

Community participants in this study expressed a diversity of responses in regards to how they desire to see their forests managed into the future—a phenomenon surely not unique to the Katzie Nation. In order to manage community member expectations and ensure community forest plans and management strategies comply with community goals, I suggest creation of a vision at the outset of the planning process is essential. Vision creation should be a process that includes as many community members and opinions as possible through public participation processes. Vision creation for the community forest could also be a part of larger land use planning processes occurring in communities. However, the resulting vision must be sufficiently specific to guide future forestry decisions. Once a vision is created and agreed upon, the

overarching direction it provides can guide creation of increasingly specific goals, objectives, criteria, indicators, strategies and policies essential to the community forest planning process (BCCFA and FORREX 2004; Sherry et al. 2005). Generation of a vision and associated objectives and criteria also provide a standard by which the community can measure and monitor success of their community forest venture, giving forest managers a strategy for evaluating and communicating the progress of the community forest initiative to community members (Sherry et al. 2005)

I further recommend that after the vision is generated, strong efforts should be made to communicate and distribute the vision to all community members, inviting feedback and allowing for revisions if necessary. Interviewees for this study clearly expressed that they needed to be informed and included in the initial planning phases of the CFA to ensure appropriate groundwork is laid by the community to guide future decisions. Though potentially time and effort-intensive, investing adequately in initial consultations for vision creation will allow for more efficient decisions by forest managers in the future, as decisions made in accordance with the community-approved vision should largely be in accordance with community values. Furthermore, adequate communication of the vision will help Nation administrators manage community expectations and maintain community support by ensuring all community members are well educated in regards to the goals and opportunities presented by the community forest.

6.2.2 Communicate with the Community

Following from the recommendation for vision creation, ongoing communication with Nation members will be essential for maintaining community support, managing member expectations, and generating community interest in the activities of the community forest (BCCFA and FORREX 2004). Given that many of the reported goals for the community forest involve education, capacity building and cultural activities, garnering and maintaining community interest in forest activities will be beneficial. Interview results for the Katzie Nation suggest that achieving high levels of community participation in information and planning sessions for past initiatives proved difficult. Therefore, generating creative avenues for information dissemination and feedback may be necessary. For some communities such as Katzie, this may be as simple as ensuring regular community forest updates are included in the Nation newsletter, holding open community forest administrative meetings to provide opportunities for those who wish to be involved, and making sure that access to the community forest remains easy and convenient for community members wishing to visit. Further efforts could be made to arrange community visits to the proposed community forest area of intent, involving community members in inventory, land use planning and management planning processes, and engaging youth in the community forest initiative through educational and school-based activities. Taking the time and generating the resources for proper community involvement have long lasting effects that will help develop and maintain momentum needed for CFA implementation and operation.

6.2.3 Conduct Inventory

Interview results indicate that, due to a physical disconnection and increasing isolation of Katzie communities from forested lands in their traditional territory, few Nation members know what plant and animal resources are available in the community forest. They therefore expressed uncertainty that the Nation can make sound management decisions. I recommend that for those Nations who may hold similar concerns and find themselves largely unfamiliar with the terrain and resources of the proposed community forest, a complete inventory of the forest should be undertaken before forest management plans are initiated. Though timber cruising is not required for CFA applications, completion of a timber and NTFP inventory will provide a baseline of information from which management decisions can be made and implications measured. An inventory will also be essential to inform long-term land use planning suggested in section 6.3.4. For communities particularly interested in exploring options for revenue generation from non-timber resources, an inventory of marketable items will be necessary to feed into both land-use and business planning. As non-timber options are investigated, ecological considerations such as growth rate and maximum sustainable harvest of NTFPs will have to be considered. Inventory should also include cataloguing of culturally and spiritually important plants that can inform a number of future community forest activities and endeavours. Similarly, inventory of culturally significant trees located within the community forest can contribute to planning for cultural and educational events in the forest, and planned extraction of timbers destined for cultural use.

Conducting an inventory can further be used to generate interest and participation in the initial phases of the community forest. Community members should be involved in all aspects of the inventory process, as conventional processes for timber estimations may not be in accordance with community standards. Additionally, inventories of culturally significant species, locations and non-timber forest products can involve community experts, incorporate an educational component, and generate excitement for the possibilities of a community forest.

6.2.4 Pursue Land Use and Harvest Planning

A significant component of negotiating and planning a CFA will require long term land use decisions. Given that study results show a tendency for Katzie Nation members to support a more conservative, ecologically-centred approach to timber harvest, land use planning and harvest targets will be essential to planning, negotiating and managing a successful CFA (BCCFA and FORREX 2004; Hanuse et al. 2008). For Katzie, several general ideas for land use planning emerged during interviews. The first suggested that to meet expectations of community members and requirements of non-Katzie forest user groups, planners may want to consider dividing the community forest area into different land use zones to manage for multiple priorities. Alternatively, Katzie may want to manage the whole area holistically, but use more restrictive criteria to determine which portions of the forest can sustain harvesting than those used typically by industrial forest managers. Alternate options for management may be pertinent to other First Nations depending on biophysical, political and social

characteristics of the forest. For similarly-minded Nations to Katzie who would like to operate at a lower-volume of timber extraction than what may be typically practiced by industrial tenure holders, determination of an appropriate AAC for the community forest will require an in-depth land use and timber supply planning process. I recommend that this planning occur before an AAC for the community forest is negotiated and agreed upon, to ensure areas identified through planning as unsuitable for harvest are deleted from the eligible timber land base before timber analyses are completed. Based on literature regarding the negotiations for a low AAC in the Harrop-Procter community forest, community forest planners should empirically and systematically document their planning process to ensure that all negotiating parties understand the reasoning behind the AAC estimations, and to ensure that the expected AAC is achievable for forest operators (Silva Foundation 1999, Pinkerton 2008).

Further land use planning considerations should include long-term planning for non-extractive opportunities such as recreation, tourism, cultural and educational opportunities. For areas such as Blue Mountain and Douglas Provincial Forests that already support a high concentration of recreational trails, land use planning will have to be carefully conducted to allow for sound management of recreational use of the forest. Such planning will likely have to involve a large number of user groups. As such, ensuring adequate time and resources is devoted to the land use planning portion of CFA development will be crucial to ensure the groundwork is laid for collaborative recreation management throughout the CFA's lifecycle. Further, considering the emphasis of Katzie

members on the importance of cultural use and education in a forest setting, creating a land use plan that can accommodate ongoing development of cultural and educational programs will help contribute to the long-term sustainability of a community-supported CFA.

Though land use planning will create direction for the forestry initiative, plans should also be developed with enough flexibility for future modifications to reflect changing community values and market realities. Planners may want to explicitly adopt an adaptive management approach for the forest when facing uncertainty in planning decisions (Stankey et al. 2005). No matter the approach, proper land use planning, combined with business planning and community involvement will form the foundation of a successful First Nation community forest venture. Land use and harvest planning may be a lengthy and iterative exercise for developing community forests, but once again, laying groundwork for a successful community forest operation will require a period of intense effort initially that will create dividends throughout the lifecycle of the project.

6.2.5 Complete Business and Management Planning

In conjunction with land use and harvest planning, business planning is essential (Hanuse et al. 2008). For communities such as Katzie who value a lower harvest, higher-input type of forestry, and who will be operating from a small forest land-base, planners may want to carefully consider the economics of their approach before committing to the community, and the province, how they will manage the forest. Considering the variability and uncertainty of timber prices, conservative business planning that seriously considers community

vision, results of forest inventories and outcomes of the land use and harvest planning processes ought to be conducted. Investigations into the market potential for NTFPs, value-added wood processing, and non-extractive opportunities such as recreation, tourism and carbon markets should also be included. Remaining competitive with industrial timber companies that are producing dimension lumber and other high-volume commodities is unlikely if community forest operations adhere to First Nation community values. Therefore, careful planning for value-added opportunities, niche-marketing, and generating revenue from non-extraction will be key to First Nation community forest viability.

Business planning should also include an honest evaluation of the time and capacity commitment necessary to successfully manage a community forest and train Nation members to fill necessary employment posts. Designation of a community forest manager with sufficient time and resources to navigate the technical, political and economic aspects of community forestry will increase chances of success (Hanuse et al. 2008). Securing services of a Registered Professional Forester (RPF) will also be necessary to complete aspects of forestry operations, and employment of seasoned forestry professionals will help new CFAs navigate the complexities of forestry operations, marketing and regulatory requirements (BCCFA and FORREX 2004). For Nations with little forestry experience, negotiating with the province and investigating other funding opportunities to develop training and capacity within the community as a part of the CFA agreement may be pertinent.

Further, establishing a management structure that can support the goals of the CFA will be necessary. For First Nations, a key decision will be whether to include Nation administration in forestry operations, or to establish a corporate or cooperative agency to operate the community forest. Though operating the forest under the administration structure of the Nation may provide taxation benefits and encourage indirect community participation in decision making through elections processes, asking administrators to add yet another responsibility to their daily responsibilities may result in slow development and implementation of a CFA tenure. Further, the non-corporate structure will limit the opportunities for the CFA to access outside funding and loans, while the lack of separation between business and politics may cause controversy within the community (MNP 2006). Conversely, establishing a corporation to govern a CFA will separate CFA operations from the political processes of Nations, but will result in a corporate taxation structure and will not expressly guarantee community member involvement in decision making without deliberate development of a public participation mechanism (MNP 2006). Other options for governance that may be appropriate, but are not reportedly used by First Nations to date, include establishing a cooperative to encourage public participation, or running the forest as a non-profit society for taxation relief and to ensure a direct community voice in decisions. Either may work to serve one Nation's purposes yet not meet the needs of another. Overall, management choices should ensure a diversity of interests are represented, community participation and support is required, and

those governing the forest have the time and expertise to guide decision-making on behalf of the community.

Overall, the options for business planning and administration of a community forest offers flexibility for a community to meet their needs through their business plan, but also challenges CFA planners to develop a management structure and business organization that will produce benefits for the Nation. For First Nations, ensuring a community forest can be properly planned and managed without further over-extending First Nations administrative staff will contribute to the success of the venture. Furthermore, careful planning will be needed to ensure the governance and business structure are accountable to community members while also meeting the requirements of the CFA agreement with the province. Committing adequate time and thought to generate a unique business plan that will reflect community values and remain viable in the face of challenging economic conditions for community forestry will be essential for First Nations attempting to meet multiple community forest objectives.

6.2.6 Use Additional Support and Resources

With the community forest program growing in British Columbia, resources are continually becoming available to communities applying for, and running community forest operations. Additionally, given the young nature of the program, a large amount of research is currently being conducted with existing community forests. Specifically, Nations who are contemplating or undergoing applications for a community forest may want to consider joining the British Columbia Community Forest Association (BCCFA) which advocates for CFA

tenure holders, publishes materials to help in the CFA application process, and hosts an annual conference (BCCFA 2009). Nations may also want to make efforts to engage further with the First Nations Forestry Program in B.C. (FNFP), contact the Aboriginal Forest Industries Council (AFIC), use published resources from the Ministry of Forests and Range (MOFR 2009a), explore materials from outreach organizations such as FORREX, as well as contact existing community forests that are willing to share experiences. During the application phase, planners may want to review management plans from already established community forests, some of which are available online. Finally, Simon Fraser University, the University of British Columbia and the University of Northern British Columbia all have faculty and students engaged in community forest research. Nations may want to maintain contact with the local universities to have access to upcoming publications.

6.3 Recommendations for CFA Policy

Investigating the CFA program from a First Nations' perspective has revealed a number of complexities for successful Aboriginal involvement in British Columbia community forestry. Results of this project suggest First Nations will be challenged to develop agreements under CFA regulations that meet both provincial and community expectations. Specifically, for Nations such as Katzie, maintaining a harvest level suitable to members while extracting sufficient timber to satisfy the provincial government may be challenging. In addition to Nations considering recommendations in section 6.2 to address these challenges, CFA policy makers and administrators can help reconcile provincial and Aboriginal

community forest goals through altering CFA policy and modifying their approach to engaging with Aboriginal CFA applicants.

Though this project was not designed to be a policy analysis, my examination of opportunities and challenges of the CFA program has allowed me to consider how CFA policy makers could better facilitate First Nation success in community forestry. I offer several ideas below to add to the ongoing discussion occurring within academic and professional circles addressing how to better engage First Nations in forestry initiatives.

1. Collaboratively Determine Harvest Levels

Results of this project suggest determining an AAC for an Aboriginal community forest may be one of the most important and controversial aspects of CFA agreements. The AAC must be large enough to ensure economic viability of the forest and to meet provincial goals for harvesting Crown timber, but must also reflect community values and maintain community member support. For First Nations, meeting community expectations may mean keeping harvest levels relatively low as compared to industrial tenures. I suggest that in lieu of inviting communities to apply for a community forest with a pre-determined AAC and leaving the community to negotiate a change in harvest levels if desired, as is currently undertaken for CFA agreements, determination of the AAC should be a collaborative process between the applicant First Nation and the Ministry of Forests and Range. I also suggest determination of the AAC should occur concurrently with the community processes of identifying community priorities and conducting a thorough inventory of the proposed community forest area.

Including results of inventories and discussions with community members will ensure the AAC is grounded in reality and considers economic, ecological, cultural and spiritual aspects of forest management. A collaborative approach to planning will allow each party to understand the reasoning behind stated desires, presumably leading to increased flexibility regarding CFA characteristics on the part of all parties involved in negotiating agreement. A collaborative approach will also allow each party to draw on the expertise of the other, ideally developing a better-educated and more suitable final CFA agreement that meets both parties' needs.

2. Facilitate Economic Viability

One of the largest challenges for community forests that choose to adopt a non-industrial harvest model is ensuring economic viability. First Nations who prefer conservation over commercial extraction will be particularly challenged to develop creative approaches to maintain a profitable community forest. Such Nations may be especially interested in the economic possibilities involving non-timber forest products (NTFPs) and value-added wood products. To develop a supportive environment for economic gain from value-added and NTFPs, I recommend provincial CFA administrators consider:

- Generating legislation to regulate NTFP harvest on tenured lands so that rights to NTFP harvest by First Nation participants in CFAs provides advantage and ability to manage and control NTFP resources over the long term.

- Better coordinating CFA tenure granting process with other ministries and processes for gaining rights to govern recreation and tourism

within Crown lands. For example, including provincial regulators of recreation areas in community forest discussions and negotiations will allow First Nations to generate concrete plans for recreational development within their CFA business and harvest plans.

- Including financial and technical support for development of community–based value-added initiatives in CFA agreements. With increased support, applicants will be able to engage in value-added activities earlier in their tenure timelines by decreasing their economic risk and thus allowing tenure holders to access more diverse markets.

3. Contribute to Capacity Building and Training

One of the largest barriers for small communities entering the CFA program is their potential lack of trained and qualified forest managers and operators within their community. Conversely, one of the main goals of participant communities will be to provide employment and economic opportunities for their members through participation in the CFA program. This problem may be particularly acute for First Nations such as Katzie who do not have a strong historical connection to forestry, but who are striving to diversify their economic initiatives through entering into the forestry domain. To help First Nations meet community goals through the CFA program and develop qualified forestry professionals in British Columbia, CFA administrators may want to consider explicitly including capacity support and training initiatives within CFA agreements. Capacity and training support should not be limited to the initial stages of CFA development, but should be an integral part of community forestry throughout the lifetime of the project.

4. Emphasize Strong Working Relationships and Allow for Extend Timelines

Results of this and related First Nations forestry studies emphasize the importance for First Nations to develop trusting working relationships and the necessity to consider the opinions of all community members in decision-making. I suggest that for First Nations who have limited capacity, who desire strong community participation in forestry planning and decision-making, and who highly value building strong working relationships, development of a CFA tenure may require an extended timeline and additional effort as compared to non-Aboriginal communities. Additional time will have to be devoted by the applicant Nation and MOFR staff engaged in the CFA approval process to collaboratively generate a CFA plan that meets the needs of both parties. Investing increased time will allow both parties to facilitate trusting and durable personal relationships, and will allow planners to ensure they are considering and meeting the priorities of their community members. An extended timeline will also provide increased space for inclusion of other responsible ministries in negotiations to facilitate the development of non-timber enterprises as part of the community's strategies for meeting economic goals within their forest. Given the lifespan of CFAs, investing in a strong and functional relationship at the outset of the project will be worth the additional investment of time and energy by ensuring an effective and durable relationship between community forest actors over the long term.

5. Coordinate with Other Ongoing First Nations Forestry Initiatives

First Nation interest in resource management continues to grow, and this project is occurring simultaneously with other initiatives for improving First Nation involvement in forestry. For example, the BCCFA is currently engaged in

addressing the question of effectively engaging First Nations in the CFA program through dialogue sessions with the First Nation Forestry Council and extension services such as FORREX (BCCFA 2009c). Further, since completion of this study, a new bill has been passed in the British Columbia legislature to establish a First Nations-specific tenure system in British Columbia called the “First Nations Woodland Licence” (MOFR 2010). Such a First Nations-specific tenure option has long been called for by forest policy experts (Curran and M’Gonigle 1999; Clogg 2007). Ministry of Forests and Range Staff involved with community forestry should be aware of, and work in conjunction with authorities developing or administering a new tenure, provincial and federal agencies addressing First Nations forestry, and with other agencies working with First Nations for improved land management. Combining processes will streamline resources while also ensuring both the First Nations and CFA administrators are well informed of the options and resources available for generating the most effective Aboriginal forest tenure.

6.4 Conclusions

Engaging in a community-based case study of the Katzie First Nation’s forest management priorities has revealed a number of complexities for the Nation to consider as they pursue a community forest agreement program. Ethnographies, archived and contemporary interviews all suggest Katzie support a holistic, eco-centric approach to managing the resources of their traditional territory. Concurrently, the Katzie community also sees opportunities for economic and community development associated with a community forest

program. Considering the opportunities and challenges presented through the British Columbia Community Forest Agreement program, Katzie, and other Nations contemplating community forestry in British Columbia, will be required to navigate unique circumstances in order to develop a viable community forest operation.

Before engagement in the CFA program, Nations need to critically assess their community goals. Identifying the priorities of First Nation community members for the use and management of their forested lands, such as was done for this project, may be the first step for many Nations to identify if, and how, a CFA may work for their members. Identifying community priorities will ensure subsequent forestry decisions are rooted in community values and vision for traditional territory. A study of community priorities will also allow the community to critically assess whether choosing to pursue a community forest will allow the Nation to meet its goals, and will help the province understand the Nation's aspirations as they negotiate a CFA agreement.

For Nations sharing Katzie's desire to act as ecological and cultural stewards of their traditional lands, the CFA program may be an excellent opportunity to gain management control of portions of territory beyond the confines of their reserves. A CFA allows a Nation to manage the tenured area for multiple values, increase community involvement in resource management decisions, and support community development through increasing capacity, revenue, and diversity of Nations' economies. However, given the restrictions of a CFA and the complexities of First Nations' projects, challenges such as

meeting expectations of community members, maintaining community support, and establishing sufficient capacity to develop a viable operation that will generate community development opportunities will all pose formidable challenges. Through a thoughtful visioning exercise, careful business and land use planning, and continual involvement of community members, Nations may be able to develop unique community forestry approaches that meet the expectations of their members and fulfil the stipulations of a community forest tenure agreement. Proactive and collaborative negotiation with the province for community forest licenses will further help Nations to create a CFA agreement that will foster successful forestry operations that meet the Nations' needs.

Provincial administrators of the CFA program can also modify their approach to engaging First Nations in the CFA program to generate final agreements that are better suited to Aboriginal community goals. Collaboratively engaging in the planning process with First Nations, offering technical support and training opportunities, and facilitating developing of NTFP and value-added enterprises will help set the groundwork for Aboriginal CFAs that will better meet community expectations. Allowing sufficient time to generate agreements based on strong community and technical research and engaging with other agencies that include First Nations forestry in their mandates will also allow for development of a CFA that better meets provincial and community aspirations.

Though improving the approach of both applicant Nations and provincial actors may generate strong Aboriginal community forests, in some cases, Nations may conclude that the CFA program will not meet their community

priorities and will choose to pursue alternative processes to gain management control of forested lands. Some Nations may wish to focus on treaty negotiations to meet their forest management objectives, others may want to pursue co-management agreements with existing forest management agencies, while others may see opportunities in other forms of tenure such as a new First Nations Woodland Licence. Nevertheless, for many Nations, careful engagement in British Columbia's CFA program may currently be the most viable option for gaining benefits from the local forestry sector, though Nations may choose to concurrently add their support to the growing discourse calling for tenure option that explicitly recognizes Aboriginal Rights and Title (Curran and M'Gonigle 1999; Clogg 2007).

For Katzie, the opportunity for forest management is exciting to administration and community members alike. Taking a well planned approach that addresses the challenges identified in this study may help the Nation realize their goal of establishing a community forest at Blue Mountain and Douglas Provincial Forests. With support of the province, Katzie can achieve their goal of establishing a forest that meets the priorities of their community, considers the needs of non-Katzie users groups, and meets provincial expectations. Such a process will help Katzie achieve their goal of becoming forestry leaders among to Aboriginal and non-Aboriginal communities alike.

6.5 Areas for Future Research

The Community Forest Agreement program is a recent development considering the long history of forestry in B.C., and is equally novel considering

the slow development of community forestry initiatives nationally (Pagdee et al. 2006). Equally, First Nation engagement in the program is unique. Currently, resources and research related to Aboriginal community forestry are limited. As Aboriginal participation continues to grow in B.C. forestry initiatives, opportunities for research and learning continue to expand. As such, I see opportunities for future research locally and on a larger scale, both theoretically and practically, for the continued improvement of knowledge regarding successful community based and Aboriginal forest management systems.

Following this preliminary research with the Katzie Nation, research opportunities exist to follow the Katzie experience of applying for, planning and managing a community forest. A longitudinal story of the progress of the Katzie Nation would further illuminate opportunities and challenges inherent in Aboriginal participation in the CFA program. To enhance resources and research available for Aboriginal participants in community forestry, formal analyses and compilation of current Aboriginal CFA tenure holder experiences would be highly useful. Throughout my work, I have repeatedly asked: Are Aboriginal CFAs currently operating meeting their community goals? Are they meeting economic expectations? How are other First Nations addressing a heterogeneity of opinions regarding levels of harvest among community members? How are First Nations incorporating spiritual elements into their forest management regimes? To further enhance the analysis of community forest management, community-based management practices and Aboriginal forestry, an on-the-ground assessment of how Aboriginal and non-Aboriginal CFA tenures differ would also

be enlightening. What can each learn from the other? Following such logic, and considering literature calling for a comprehensive re-mapping of the tenure system in British Columbia (Curran and M'Gonigle 1999; Clogg 2007) and introduction of the new First Nations Woodland Licence (MOFR 2010), research investigating whether the Community Forest Agreement program is sufficient to provide a reasonable tenure option to Aboriginal communities would be pertinent.

On an operational level, more stringent investigations into the economic and community development potential associated with harvesting of non-timber forest products would be valuable to First Nations considering the viability of a low-harvest community forest model. Analysis for the potential development of tourism, recreation and carbon credits could all figure prominently in an Aboriginal community forest plan if such projects could prove viable and valuable to Nations.

Beyond individual community forest planning and management opportunities, research analyzing the community forest agreement program as a model for community-based management could be theoretically valuable. Such research may help other provinces and Nations considering forestry-management challenges to learn and build on the CFA model developed in British Columbia. Examining the potential success of the CFA program in Aboriginal communities in B.C. could also contribute to the ongoing international discussions analyzing theories of common-pool resource management, the roles of indigenous and local approaches in developing effective resource management regimes, and the role of forest management in community

development, empowerment and reconciliation. Considering the global scale, research investigating how programs such as the community forest program in British Columbia contribute to building community resilience in the face of challenges such as climate change could be pertinent, especially for marginalized communities or areas expected to witness large climate change impacts.

The Community Forest Agreement program in British Columbia is a unique approach to forest management that continues to evolve, and continues to be watched by local and international scholars alike. However, a number of challenges exist as communities consider participation in the program, and long-term viability of community forests cannot yet be confirmed. Future research, analysis, and generation of resources for administrators and participants in the community forest program will be essential for continual improvement. For First Nations, the CFA program has the potential to offer unprecedented access and control of forest resources, but Aboriginal community forestry planning and management must be both careful and creative in order to ensure First Nations can meet their community development and stewardship goals. Continuous analysis of First Nations participation in the CFA program will be particularly pertinent to foster Aboriginal community forestry success in the long-term.

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APPENDICES

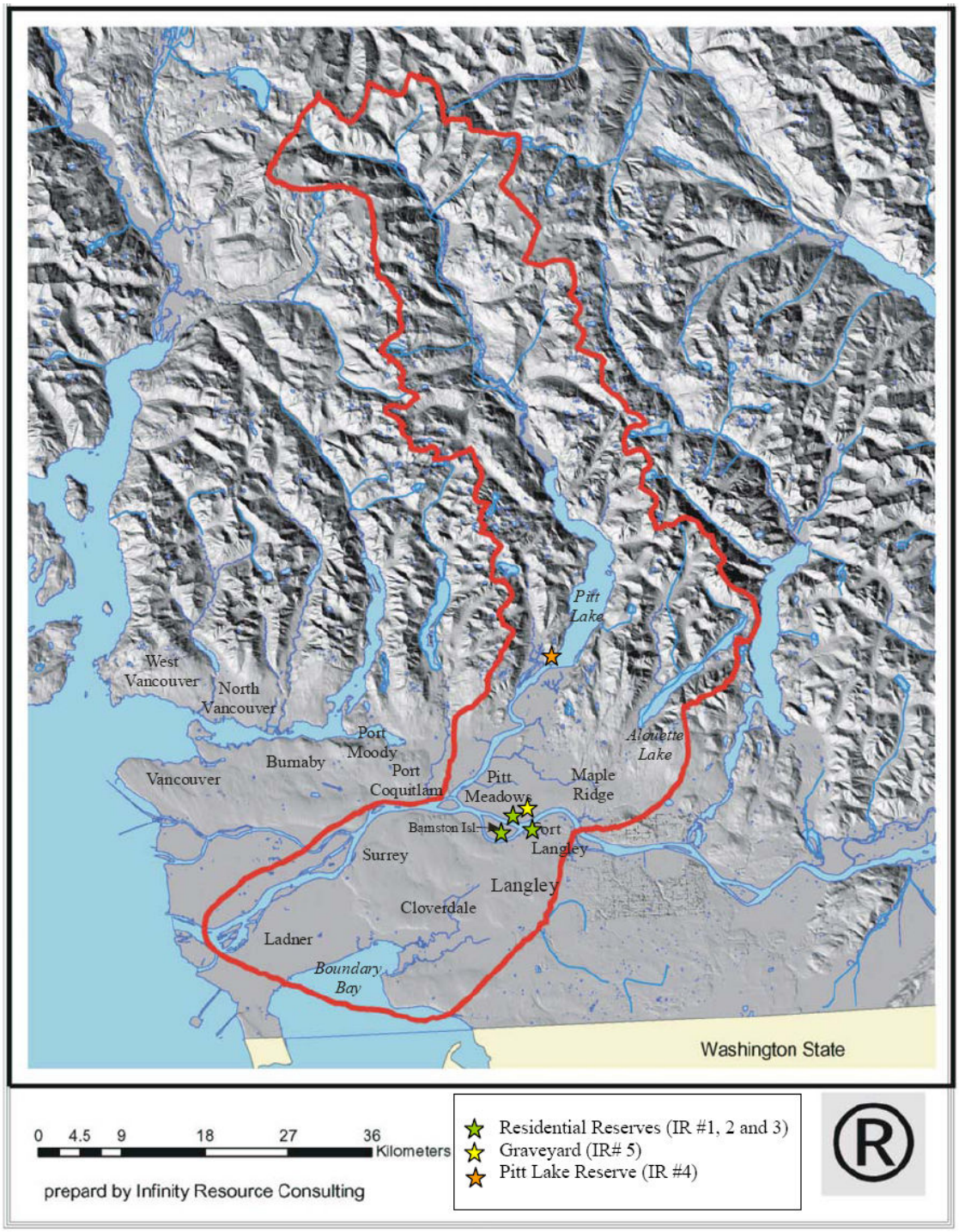
Appendix 1: Active Community Forests as of November 2009

CFA Issued		AAC (m3)	Area (Ha)	Date issued
Burns Lake Community Forest Corp.		86,000	84,886	2005-04-12
Esketemc First Nation		17,000	25,000	2006-03-31
Village of McBride		50,000	60,860	2007-02-28
Harrop-Procter Community Co-op		2,603	10,860	2007-03-31
Likely Community Forest Corp.		12,231	14,000	2007-04-01
Cheslatta First Nation		16,613	39,129	2007-10-01
Cheakamus Com For Ltd Part (Whistler)		20,000	30,284	2009-04-09
Total	7	204,447	265,019	

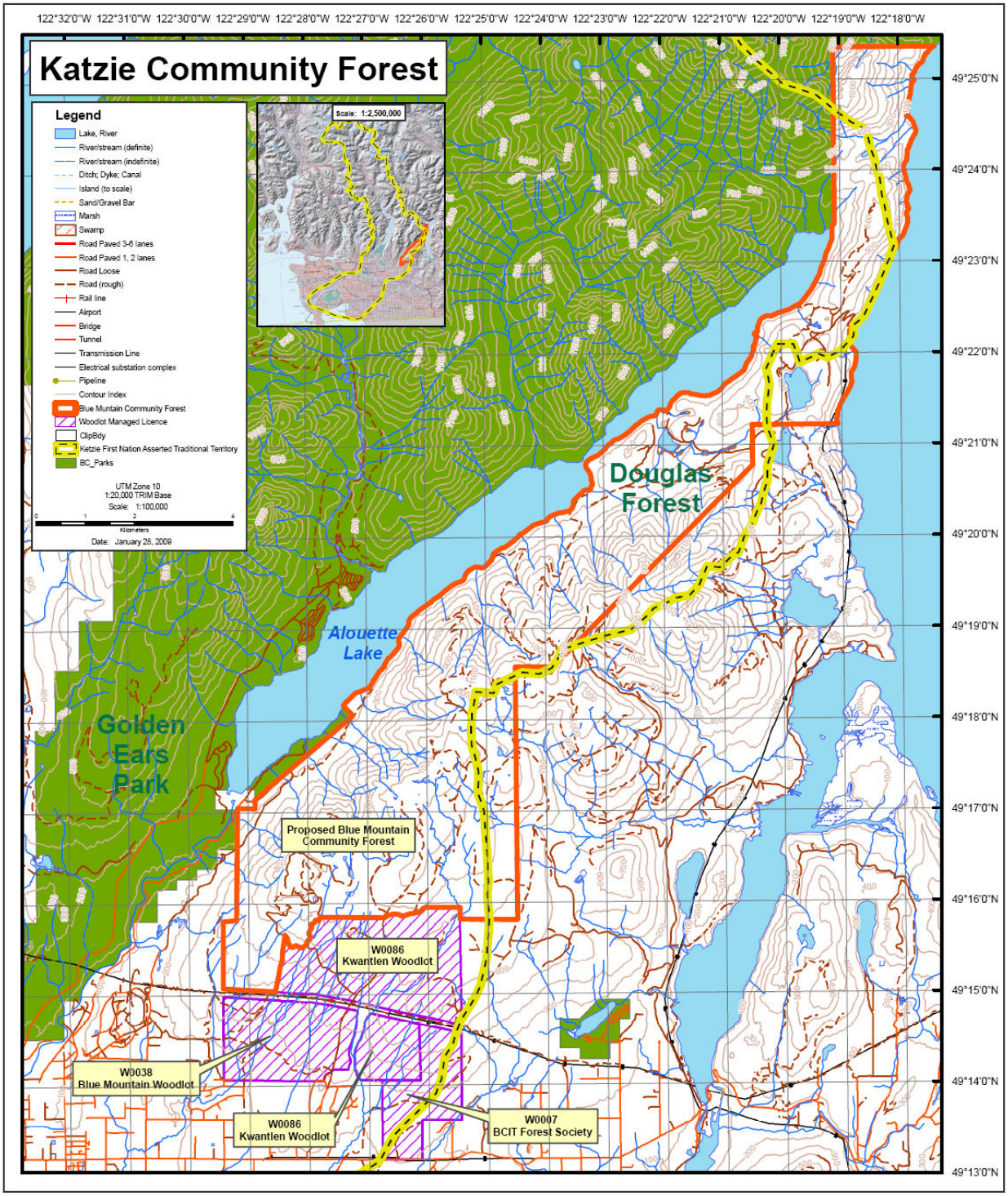
PCFA Issued		AAC (m3)	Area (Ha)	Date issued
Dist. of Fort St. James		23,895	15,131	2001-03-07
Bamfield Huu-ay-aht CFS		1,000	418	2001-09-20
WestBank First Nation		55,000	45,693	2004-08-27
Ktunaxa Kinbasket		5,790	20,234	2004-10-01
Cowichan Tribes		10,000	1,786	2004-12-31
Sechelt		20,000	10,790	2006-05-31
Wells Gray		20,000	13,154	2006-07-03
Powell River		25,000	7,109	2006-08-18
Prince George		12,000	5,443	2006-11-01
Nuxalk First Nation		20,000	48,614	2006-12-07
Bella Coola		30,000	79,888	2007-05-25
Terrace		30,000	9,500	2007-06-01
Wetzin'kwa (Smithers)		30,000	22,369	2007-07-01
Lower North Thompson		20,000	8,506	2007-08-01
Sliammon		28,000	9,340	2007-12-04
Slocan Integral Forestry Cooperative		20,000	15,852	2007-12-11
Valemont		40,000	70,182	2007-12-28
Logan Lake		20,000	16,662	2007-12-28
Dungate Com For Ltd Prt (Houston)		20,000	14,210	2008-02-15
Nakusp and Area Community Forest Inc		20,000	9,150	2008-03-01
Kaslo & District Community Forest Society		25,000	32,510	2008-04-01
Creston		15,000	17,639	2008-11-03
Chunzoolh Forest Products Ltd (Lheidli T'enneh)		15,000	13,067	2009-01-01
Lower Similkameen Community Forest Ltd		20,000	26,804	2009-02-01
Eniyud (Alexis CK IB/Tatla LK)		40,000	114,571	2009-03-01
Total	25	565,685	628,622	

Invitations to apply		AAC(m3)		Date of invite
Barclay (Ucluelet/Toquaht)		31,600		2004-09-16
Port Alberni		20,000		2004-10-15
Massett		25,000		2004-12-08
Haida		120,000		2005-11-25
Mackenzie/Mcleod Lk IB		30,000		2005-12-09
Cascades Lower Canyon CF Corp (Hope)		34,300	22,279	2006-03-23
100 Mile House		20,000		2006-04-04
Kimberley		20,000		2006-04-04
Chetwynd		20,000		2006-05-03
Tumbler Ridge		20,000		2006-05-03
Xaxlip		25,683		2006-12-01
Dunster		15,000		2007-03-01
Princeton		20,000		2007-05-31
Williams Lake		20,000		2007-07-11
Wells		5,000		2007-11-19
Lumby/Okanagan IB		20,000		2008-03-05
Cherryville		1,500		2008-03-10
Tanizul Timber (TFL 42)		150,000		2009-02-17
Pemberton		10,000		pending FN consultation
Squamish		10,000		pending FN consultation
	20	618,083		
Grand Total	52	1,388,215	893,641	

Appendix 2: Katzie Traditional Territory and Reserves



Appendix 3: Katzie Community Forest Area of Intent



Appendix 4: Questionnaire and Survey Instrument

June/July 2009

Interview Questions
Katzie Community Forest Interviews

All questions listed below should be asked during one interview, though emphasis on questions can be adapted according to the interviewee's own experience, expertise and interests and follow-up questions can be asked depending on responses.

1. **Introduction/Forest Uses Questions**
   a. If you had a forest right out your back door, and it was very easy to access, what activities would you do there?
   Potential follow-up questions: Who would you visit the forest with? Do you currently do any of these activities in the nearby forests (in Katzie territory—*show map*)? What is your favourite forest area to visit and why?

   b. Can you tell me how important it is for you and your family to visit the forest?
   Potential follow-up questions: Would you like your children to be able to visit the forest? Why or why not?

   c. Have you ever visited the area proposed for the community forest? *(Indicate the area of intent on the map).*If so, what did (or do) you do there when you go?

2. **General Forest Management Priorities**
   a. From what you know about, or have seen of the forests nearby, do you have any concerns about how the forests are currently being used or managed?
   Potential follow-up questions: When you visit the forest, what would you ideally like to see? How do you think the forest could be used or managed in a better way?

   b. There are multiple forest values and priorities a forest can be managed for. I have a list of some of these forest values that Katzie might be interested in prioritizing for the community forest and for any forest on Katzie traditional territory. I am going to ask you to rank how important each priority is to you. For each priority, I am going to ask you how important you think it is, on a scale of one to five (*give survey sheet to help with visualizing the choices*). Choosing "one" means that this priority is not important at all to you. Choosing "five" means that it is extremely important. Choosing "three" means that you do not have an opinion either way. Feel free to give me reasons for your choice or provide any extra comments. There are fifteen choices I'm going to ask you about.
   How important is it to you that the forests in Katzie territory are managed for:
      i. Clean Water
      ii. Places for wildlife to live
      iii. Protection for areas with ancient trees
      iv. Protection of areas historically used by Katzie
      v. Protection of areas for hunting and fishing
      vi. Protection of areas for spiritual and ceremonial practices by Katzie
      vii. Access to medicinal plants
      viii. Access to plants for food gathering
      ix. Access to places for recreation (camping, walking, hiking, biking, etc.)
      x. Harvest of trees to sell

xi. Harvest of plants, bushes, berries, mushrooms, etc. to sell
xii. Tourism business development
xiii. Education and training programs for Katzie community members
xiv. Creation of jobs for Katzie community members
xv. Katzie authority over management of the land
xvi. Other priorities?

c. What do you think should be the *three* most important priorities for a Katzie community forest?

3. Managing with Multiple Stakeholders and Decision Making

If the Katzie Community Forest application is approved, Katzie will have management authority over Blue Mountain and Douglas Provincial Forests, but the area will still be considered crown/public land. This means that Katzie will not have the authority to restrict access to anyone wishing to visit the forest, though Katzie may be able to participate in visitor planning and management activities. The forests are currently used for many recreational activities including hiking, mountain biking, motor biking, horseback riding, etc. Given this information, consider the following questions.

a. How would you like to see the Katzie Community Forest shared between Katzie and non-Katzie forest users?

b. How do you think areas of spiritual significance should be treated if non-Katzie people will be visiting the forest?

c. Who do you think should be responsible for decisions regarding management of the Katzie community forest?

d. How would you like to be involved in decisions regarding community forest management?

e. If the Katzie Community Forest Agreement is approved, what do you think would be the first thing you would be interested in doing in the forest?

4. **Do you have any additional comments/suggestions/thoughts regarding creation of a community forest within Katzie Traditional Territory?**

5. **Do you have any recommendations of other people we should interview on this topic?**

6. **Do you have any questions for me?**

Katzie First Nation Community Forest Interviews
Forest Management Priorities Survey

For each question below, circle the number to the right that best fits your opinion on the importance of the issue. Use the scale below to guide your decision.

1	2	3	4	5
Not important at all	Somewhat unimportant	No opinion either way	Somewhat important	Extremely Important

How important is it to you that the forests in Katzie territory are managed for:	Scale				
Clean water	1	2	3	4	5
Places for wildlife to live	1	2	3	4	5
Protection for areas with ancient trees	1	2	3	4	5
Protection of areas historically used by Katzie	1	2	3	4	5
Protection of areas for hunting and fishing	1	2	3	4	5
Protection of areas for spiritual and ceremonial practices by Katzie	1	2	3	4	5
Access to medicinal plants	1	2	3	4	5
Access to plants for food gathering	1	2	3	4	5
Access to places for recreation (camping, walking, hiking, biking, etc.)	1	2	3	4	5
Harvest of trees to cut and sell	1	2	3	4	5
Harvest of plants, bushes, berries, mushrooms, etc. to harvest and sell	1	2	3	4	5
Tourism business development	1	2	3	4	5
Education and training programs for Katzie community members	1	2	3	4	5
Creation of jobs for Katzie community members	1	2	3	4	5
Katzie authority over management of the land	1	2	3	4	5
Other priorities?	1	2	3	4	5

June 2009

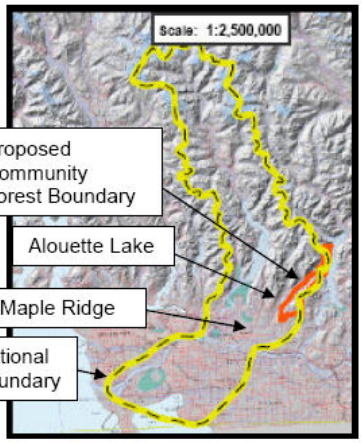
Appendix 5: Information Sheet for Interviewees

INTRODUCTORY INFORMATION

Proposed Katzie Community Forest

June 2009

Katzie are applying for a Community Forest in Blue Mountain and Douglas Forests



The Forest:

- Katzie are applying to manage forestry operations in an area of provincial forest
- The proposed Katzie community forest is approximately 5000 hectares, located east of Alouette Lake
- The forest will remain accessible to the public
- Katzie will have management authority over harvesting of timber and non-timber forest products (mushrooms, berries, etc), and will contribute to planning for recreation and tourism
- A community forest can provide job opportunities, revenue to the Nation and educational/training opportunities

Currently:

- Katzie are submitting an application for the Community Forest to the B.C. provincial government
- Community interviews are being carried out in June and July, 2009 to help identify Katzie forest management priorities

For more information, contact:

Gail Florence, Councilor, KFN.
Phone: 604-465-8961

Debbie Miller, Treaty Office, KFN
Phone: 604-465-8961

Anna Usborne
Project Assistant, Student, Simon Fraser University.
Phone: 604-465-8961
(working in GIS office)

Appendix 6: Newsletter Insert Reporting Project Results to Katzie Nation

KATZIE FORESTRY

KATZIE FOREST INTERVIEW RESULTS

Sept. 2009

Stay tuned to the Katzie newsletter for upcoming Katzie forestry information!

For more information on this study and other Katzie forestry projects, contact:

Gail Florence, Councilor, KFN. Phone: 604-465-8961

Debbie Miller, Treaty Office, KFN Phone: 604-465-8961

Anna Usborne Project Assistant, Student, Simon Fraser University. Phone: 604-465-8961 (working in GIS office)

Thank you to those who participated in a forestry interview in July, 2009. This page highlights results from your interviews.

In total, we interviewed twelve Katzie members including administration, elders, cultural leaders and youth to gather a range of opinions regarding the future of forests in Katzie territory.

Summary of Results

FOREST USES: Katzie mainly visit forests for recreation, education, cultural and spiritual practices and camping. Katzie most often visit forests with their family, but would like to visit forested areas more often and believe easier access would increase Katzie visits to nearby forests.

FOREST MANAGEMENT: Katzie are concerned that the forest ecosystems are being damaged through clear-cutting and development.

The top priorities for Katzie forest management include: protecting water quality and wildlife habitat, accessing areas for hunting, fishing, and spiritual practices, and using the forest for education and training.

Though still recognized as important, fewer Katzie feel that harvesting from the forest for economic development is a priority.

SHARING THE FOREST: Katzie support collaboratively managing forests in Katzie territory with outside interest groups, but would like to hold final decision-making authority. Katzie want some forest areas zoned for exclusive Katzie use.

DECISION MAKING: Katzie would like a diverse committee of Katzie members to make forest management decisions. The committee should work cooperatively with non-Katzie governments and forest user groups.

Where Do The Results Go?

- Interview tapes, typed transcripts, and details of interview results are stored in the Katzie Treaty Office
- A final project report has been submitted to Katzie administration
- Anonymous project results will inform:
    - Katzie Treaty negotiations
    - Katzie consultations for land-use decisions
    - Katzie Community Forest application
    - Masters research project at Simon Fraser University

Appendix 7: Table of Survey Results

Table 7: Survey Responses Reflecting Forest Management Priorities of Katzie First Nation Interviewees

Forest Management Priority	Average Importance (/5)	Standard Deviation	Percentage of Respondents choosing 4 or 5
Water Quality	5.00	0.00	100.00
Hunting and Fishing	5.00	0.00	100.00
Education and Training	4.75	0.62	91.67
Wildlife Habitat	4.71	0.45	91.67
Historical Resources	4.67	0.65	91.67
Katzie Employment	4.63	0.48	100.00
Spiritual/Ceremonial Areas	4.54	0.78	83.33
Katzie Authority	4.50	0.80	83.33
Medicinal Plants	4.38	0.77	83.33
Old Growth	4.33	0.89	83.33
Recreation	4.33	1.23	83.33
Tourism	4.25	0.89	83.33
Food Plants	4.21	1.03	75.00
Harvest of Non Timber Forest	3.54	1.37	66.67
Harvest of Timber for Economic	3.42	1.56	58.33