

ON THE ROAD TO
SUSTAINABLE COMMUNITY FORESTRY:
A CASE STUDY OF THREE
BRITISH COLUMBIA FORESTRY-DEPENDENT TOWNS

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"What matters is the potency of a belief, the manner in which a conviction plays out in the day-to-day lives of a people, for in a very real sense this determines the ecological footprint of a culture, the impact any society has on its environment."

Wade Davis, The Wayfinders, p. 122

ABSTRACT

Extensive mill closures by industrial forestry companies in forestry-dependent towns in British Columbia, have, in many cases, resulted in effectively eliminating the local primary industry. Communities have lost the economic and social base that sustains families, the municipal tax base and the local retail market, and the local forest expertise has been forced to look elsewhere for work. Many communities around the world have developed viable community forestry frameworks and successful operations as a means of addressing sustainability, social and economic issues. While a number of community forestry supports are available in B.C., many communities continue to experience difficulties establishing viable forestry operations. This research will examine the broad-spectrum and site-specific challenges faced by three designated B.C. communities at different stages along the continuum toward successful operations, and will propose strategies aimed at overcoming the barriers to their success.

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A CASE STUDY OF THREE FOREST-DEPENDENT TOWNS

Dozens of small towns across British Columbia (B.C.) depend on the forest for their very existence, and so have inextricably linked their fate to that of the forest. In recent years, many of these towns have suffered severe economic downturns as industrial forestry employers, such as Canfor, Weyerhaeuser, TimberWest, and Pope and Talbot have closed the local mills and exported the raw logs for offshore manufacture (CBC News, 2008; Hamilton, 2008; Wu, 2009). These companies, which hold large lumber-cutting rights by way of forest tenures granted by the B.C. government, cite the market slump, the high Canadian dollar and low wood product prices as reasons for their actions (Ministry of Forests, 2008a). Closures in towns such as Mackenzie, Gold River, Youbou, Fort Nelson, and Squamish have left communities struggling to maintain their economic and social viability. For example, as of November 2008, mill closures by Canfor, Abitibi, and Pope and Talbot resulted in the layoff of 1,200 forestry workers in Mackenzie, a town with a population of 4,500 people (Pulp & Paper Canada, 2008). As of April 2009, Wu (2009) contends that more than 20,000 forestry jobs have been lost and 60 mills closed. Factor in the ripple effects on the local retail and housing markets, and the local tax base, and the impact becomes even more magnified. In the wake of the withdrawal of the industrial forest companies, these small towns are attempting to redefine their relationship with forests controlled by the B.C. government and degraded by the logging practices of big industry.

This thesis presents a case study of three B.C. towns seeking a more sustainable relationship with the forests that surround them. As leadership related to the development of sustainable forms of forestry now comes from within the community, it is critical to

understand how community members perceive their situation in the complex web of social, environmental economic, political and other factors within their control and outside of it. As each community is at a different point along the continuum towards sustainable community forestry (SCF), this case study will permit an understanding of the unique and collective strengths and challenges that now face each of them. The case study asks each community “What are the current perceptions of SCF, what are the current obstacles, and what are solutions needed to overcome those obstacles?” Linking these perceptions and experiences to examples of successful SCF operations in jurisdictions around the world will permit a sharing and deeper understanding of the future these communities face. Proposal of recommendations and solutions may also serve to continue and add to the dialogue in these and other B.C. communities now in the same situation.

Literature Review

From Globalization to Community

The transformation from a forestry model held tightly in the grip of government and transnational companies to one that embraces community control and empowerment governed by stewardship and ecology may, at first glance, seem a bit of a leap. There are, however, a number of events and factors that are serving to promote SCF as a viable alternative for forest communities.

In the face of rising opposition to the effects of globalization, the importance of the concept of community, and community control of local and natural resources is beginning to emerge (Sachs, 2008; Saul, 2005; 2008; Hawken, 2007). Sachs (2008, p. 39) writes that “Community-based management of forests, grasslands, water, fisheries, and other common-pool resources has proved to be enormously successful in many contexts and many societies.” Saul (2005) defines globalization as the “inevitable form of internationalism in which civilization is reformed from the perspective of economic leadership. The leadership is provided not by people, but by the innate force of economic at work; that is, the marketplace.” (p 19). While globalization resulted in a pantheon of international economic agreements, not once has it produced “a single binding agreement in the other areas of human intercourse – work conditions, taxation, child labour, health and so on.” (Saul, 2005, p. 25). This has not failed to escape the notice of individuals, social organizations and whole societies. As globalization forces began to disintegrate in the mid 1990s and as “the transnational technocracies have abandoned or half abandoned a whole series of areas that require too much attention to interest them,” (Saul, 2005, p. 276), a vacuum of power has been created. Saul contends that the non-government organizations (NGOs) may be too frail to step into the void, as their interests are too

varied and divided, and too splintered to command the respect of the lawmakers. He does allow there is room for “reformulated co-operatives,” presumably coalitions developed between NGOs to present a united front strong enough to evolve into mainstream and empirical organizations.

Hawken, on the other hand, contends that the vacuum has been filling over the course of the past few years, inhabited by a myriad of community-based organizations that has sprung up in defense of their own social and community values and interests, and continually evolving “with no manifesto or doctrine, or central authority to check with” (Hawken, 2007, p. 3). He calls this movement the “blessed unrest,” a bottom up grassroots movement that is humanitarian in nature, and taking place “in schoolrooms, farms, jungles, villages, companies, deserts, fisheries, slums – and yes, even fancy New York hotels.” (Hawken, 2007, p. 3). While some, like Saul, may view citizen-based organizations as too fragmented to hold power, Hawken believes that these “organisms are the most efficient social entities on earth, outstripping corporations and institutions manifold in how effectively they deploy resources.” and that they should be regarded as “the fundamental unit of social change.” (Hawken, 2007, p. 176).

Forest Allocations in British Columbia

For almost 150 years, B.C. has developed primarily as a consequence of the forest industry (Ministry of Forests and Range, 2006). Two thirds of B.C. are covered with forests and of this, 95 per cent is owned by the Province of B.C. on behalf of the public interest (Ministry of Forests and Range, 2006). About 25 per cent of B.C. communities depend on forestry as the primary source of income (Bullock and Hanna, 2008), many of them located in remote and rural areas of the province. The social and economic fabric of B.C. is inherently interwoven with the rise and fall of the forest industry. Forestry in B.C.

has always been a volatile and emotionally charged industry. Bullock and Hanna (2008) cite a number of reasons, among them the politics of the day, market insecurity, aboriginal land claims, the shifting of business models as industries come and go, and the regional and qualitative differences in local access to wood.

The B.C. government first established a timber license system in the mid 1880s (May, 2005) and as early as 1910, amid the subsequent high logging rate, foresters were warning that B.C.'s wood supply could soon become exhausted. A succession of government-induced logging controls and policies ensued, during which the government solidly tied itself to the interests of big business by granting the industrial forest companies the majority of the forest tenure and the Annual Allowable Cut (AAC). Tenures were historically tied to local milling requirements, known as appurtenancy, as a means of bringing jobs and stability to small communities (May, 2005), but in 1997, the removal of the clause from legislation freed the industrial forest companies from this obligation (Prudham and Penfold, 2005). Today, a handful of forest companies enjoy 80% of the AAC (Bullock and Hanna, 2008), and forest legislation and policies have been written within the context of annual business cycles and political office timeframes, ignoring the hundred year and more cycle of the forest.

In return, the public has benefited from forest revenues, with the funds largely directed to the health, education and social services budgets (Ministry of Forests and Range, 2009, p.19). Yet the conversion of this natural resource into corporate profits and public programs has come at a high cost to the forest lands, the forest-dependent communities, and ultimately, the public interest. The predominant forestry model is based on a corporate-driven philosophy to extract the maximum profit, with little or no care given to forest ecology or sustainability (Drengson & Taylor, 1997; May, 2005).

The practices of clear cutting the land, monoculture plantings and destruction of wildlife habitat are increasingly viewed as unsustainable forms of forestry by the public, environmentalists, small business and unions alike (Ambus, Davis-Case & Tyler, 2007; Drengson & Taylor, 1997; Roberts & Gautam, 2003; Thom, 1997). According to the Ministry of Forest and Range (MFR) State of British Columbia's Forests 2006 Report, as of 2000, 42% of all B.C.'s forests are 140 years and older, 14% are 250 years and older, and in the Coastal and the Interior Douglas Fir zones, only 3% of old growth forest remains. The report acknowledges that the accuracy of the old growth forest is uncertain as "current inventories for tree farm licenses and private lands are mostly not available to the government or the public." (p. 30). With the majority of high value old growth timber depleted, and availability increasingly limited to lesser valued second and third generation forests, forestry is no longer the profitable business it once was. The industrial forest companies are choosing to close the mills, send the raw logs for export, and purchase mills in other countries, such as the United States and Russia (Kimmet, 2008, April 28).

In the wake of their departure, B.C. communities are striving for local control of their forests (Kimmet, 2008, May 13), and some have chosen to pursue opportunities through a variety of sustainable community forest models. The challenges they face are many and daunting.

Definition of Sustainable Community Forestry

As the industrial forest companies continue to close down mills and lay off workers, a new model of forestry is emerging, that of sustainable community forestry (SCF). There are a variety of definitions and concepts attached to the term, which can be flavoured further by community values and the nature of the forest resource at hand

(Harrison and Suh, 2004; Aycock, 1999; Gunter, ed. 2004). In and of itself, SCF is no guarantee of any degree of sustainability. Typically, the concept is predicated on the notion that community control of a forest resource will result in a fuller, more comprehensive use of timber and non-timber values that can be sustained on an ongoing and dynamic basis through the principles of sustainability and widespread community and stakeholder participation (Bullock and Hanna, 2008; Aycock, 1999). The focus is on community participation and economic returns, with environmental sustainability almost an afterthought and dependent on the will of the community. According to Drengson and Taylor (1997), interpretations of sustainability run the gamut from “shallow” to “deep” ecology-based models. The “shallow or reform ecology” (p.25) stems from an anthropocentric and resource-based view that places human needs above those of a biodiverse forest, and involves the use of science (such as pesticides and fertilizers), counsels wise use of resources, and deplores resource depletion and pollution. The Forest Practices Code of B.C. is cited as an example as it advocates an environmental approach while permitting the use of clear cuts, monoculture plantings and an ongoing human “management” of the forest. “Deep” ecology refers to the model that places intrinsic value on nonhuman forms (such as a forest) that is independent of their value to humans, and that “humans have no right to reduce this richness and diversity except to satisfy vital human needs.” (p. 25). The Ecoforestry Institute of Canada (2010) offers a more middle-ground approach, that ecoforestry is the

“science of preserving fully intact forest ecosystems while providing for appropriate levels of commercial timber extraction. Ecoforestry is adaptable to the inclusion of ecological, cultural, heritage, scenic, recreational, wildlife and fisheries objectives within the value set identified for mitigation or maintenance.”

The B.C Community Forest Association (BCCFA) is a “network of rural community based organizations engaged in community forest management and those seeking to establish new community forests.” (BCCFA, 2010, About Us section). The BCCFA states its mission is to “promote and support the practice and expansion of sustainable community forest management in British Columbia.” (BCCFA, 2010, About Us section). To date, it represents more than 50 community forests around the province (Appendix 1), and so provides a central concept for use as a starting point of discussion. Since the inception of the BCCFA in March 2002, the BCCFA definition and context have had time to permeate the community forestry consciousness and provide a common understanding of what community forestry means. The BCCFA definition of sustainable community forestry currently represents a common understanding of the term “Sustainable Community Forestry” throughout the province:

“A community forest can be described as any forestry operation managed by a local government, community group, First Nation or community-held corporation for the benefit of the entire community. Community forestry involves the three pillars of sustainable development: social, ecological, and economic sustainability. At its core, community forestry is about local control over and enjoyment of the benefits offered by local forest resources.” (BCCFA, 2010, What is Community Forestry section).

The definition, taken in context with the philosophy expressed through the organization’s website and by numerous BCCFA members, appears to embrace the principles of ecology, particularly in the context of ensuring the forests are thriving and vibrant for generations to come (BCCFA, 2010, Community Forests Film). Due to the need to provide a common point of reference for the purposes of both this paper and the

survey conducted during the course of this case study, the BCCFA definition and context of sustainable community forestry has been used for the purposes of this project.

Community Forestry in British Columbia.

The notion of community forestry was first introduced in 1945 by the first Sloan Commission that recommended that forest management be allocated to the municipalities. The Mission Municipal Forest was the sole result, and despite the renewed call for more community participation by the second Sloan Commission in 1957, no further progress occurred (BCCFA, 2010, A Brief History of Community Forestry in B.C.). In 1976, the Pearse Commission again advocated for the inclusion of local governments as a means to integrate resource management into local demands. Three community forest-like organizations emerged, Revelstoke (one of this paper's case study towns), Kaslo and Creston, although the forest tenures granted were more industrial in nature.

In 1998, the B.C. government initiated a pilot program called Community Forestry Agreements (CFAs) as a means to provide access to Crown lands through small area-based tenures available to "local government, community group, or First Nation for the benefit of the entire community." (Ministry of Forests and Range, 2010, Community Forests). Designed to create diversity in the forests, the main goal was to provide "new options in recreation, wildlife and watershed management" while recognizing that "harvesting operations can also provide a source of revenue, supporting local priorities, while harvest rates and exact locations within the tenure can be set to meet locally determined objectives and interests." (Ministry of Forests and Range, 2010, Community Forests). As of April 2009, some 900,000 acres had been allocated to 33 active

community forest applicants, and another 18 communities were in the process of applying for the program (see Appendix 1).

Still in its infancy, this community forestry model is being advanced as a primary means of providing forest tenures to achieve community goals and priorities, while employing “sound principles of environmental stewardship that reflect a broad spectrum of values to address sustainability issues with regard to both timber-related and non-timber related products.” Considering the B.C. government’s Forest Revitalization Plan, released in 2003, cites B.C. as a world leader in forest sustainability (p.8) despite the widespread use of industrial forest practices, the standards of sustainable forestry practices expected from community forests seem minimal. Taken in the context of the range of ecological values previously discussed in this paper, the primary focus remains the needs of the community, with sustainability considerations a distant consideration, and the idea of a biodiverse forest failing any mention at all. However, the CFAs offer communities one of the few starting points to gain access to forest land, and is the only forest tenure to include the management of non-timber related products (Cathro, Mulkey and Bradley, 2007, p. 65). Most importantly, CFAs have the opportunity to define themselves and their relationship with the forest, and to employ their own interpretation of sustainable community forestry.

Notwithstanding the enthusiasm at the community level and the government support, researchers have identified a number of issues associated with this model of community forestry. CFAs struggle with a number of organizational, political and economic challenges present in both the developmental and operational stages (Meyers, Norris, Penny & Enfor Consultants Ltd., 2006; Ambus, Davis-Case & Tyler, 2007; Nelson, 2008). In 2006, Meyers et al submitted a review of the CFA program to the MFR

detailing 36 recommendations related to such issues as the need for better defined strategic objectives, (improved tenure structure; financial viability of specific sites) CFA characteristics (forest location; AAC volumes), and program administration (community support by the ministry; decision-making authority for determining the AAC). Ambus et al discuss the issues related to the arduous and expensive application process, the labyrinthine B.C. government legislative, regulatory and administrative system; the expense of stumpage fees and annual rents; and the pressure of high expectations on small organizations willing to take on a Community Forest Agreement. Nelson describes some of the operational challenges such as the poor forest land provided to CFAs and First Nations land claims.

According to Ambus, Davis-Case and Tyler (2007), despite the government intent outlined in the 2003 Forest Revitalization Plan to reallocate 20% of the volume-based tenures, only 2% of this reallocation would be distributed to Woodlot Licences and CFAs, and at the time of the study, only 1.5% of the total provincial AAC would be awarded to these small tenures (p.50). Yet, the process of applying for a CFA is not for the faint of heart. It involves a lengthy, difficult bureaucratic process, and one that Gunter (ed., 2004) estimates can take up to more than three years (p. 12) and cost as much as \$183,000 in initial set up costs (p. 52). Like their industrial forest counterparts who can more easily absorb economic and resource impacts due to their size, CFAs are subject to an array of provincial legislation, policy and procedures, and in addition, must allow public review of their Forest Stewardship Plans and consult with affected First Nations bands. Financial obligations involve annual rent and stumpage fees, although government has reduced the latter in recent years as a means of recognizing the small scale operations of the CFAs. In return, states Ambus et al, CFAs are expected to “reflect local goals and priorities,

manage for multiple forest values, generate benefits, spur economic diversifications, test innovative forest practices, as well as support local milling, manufacturing and value-added processing.” (p.47).

Initially 88 communities expressed interest in developing their community forestry projects. The impetus gave rise to the British Columbia Community Forest Association, whose primary mission is to “promote and support the practice and expansion of sustainable community forestry in British Columbia” (BCCFA, 2010). According to the BCCFA (see Appendix 1), as of September 2009, the number of communities that have been awarded CFAs remains small: 28 communities have been awarded Long-Term CFAs; and 24 have been invited to apply for Probationary CFAs. In light of the mill closures that have occurred over the past decade, and the growing need to develop sustainable forestry models, the small number of communities awarded a CFA over the past 10 years is of concern.

Examples of Community Forestry in Other Jurisdictions

There is much evidence that sustainable community forests can be viable (Drescher, 1997; Roberts & Gautam, 2003; Harrison & Suh, 2004, Holmgren et al. 2004; Eriksson, 2004; Tyler, Ambus, and Davis-Case, 2007), and “found to bring about social, environmental and economic benefits to local forestry communities as well as to urban communities living nearby.” (Roberts & Gautam, 2003). This is particularly true when the bottom line takes into account the long-term view of the value of a forest, and the eco-services provided by a functioning forest (Drescher, 1997).

Harrison and Suh (2004) present community forestry as a viable and more popular alternative to “social” forestry, the former characterized by local community involvement, small-scale operations motivated by multiple objectives, and in receipt of financial and

organizational support from both government and non-government sources, and the latter by its top down government impositions on a non-participatory community. The authors acknowledge that the development of community forestry is a process of evolution and conclude that “It is apparent that community forestry is widely adopted, and will continue to be a popular forestry model, driven by both social and environmental imperatives, and perhaps continuing to displace industrial forestry.” (p. 300).

Tyler et al (2007) conclude that, given the experience of local tenures in Sweden, Mexico and Nepal, sustainable forest management depends “on a substantial degree of local autonomy, if accompanied by technical support and oversight from governments, as well as training, extension, and services from voluntary associations of local tenure holders.” (p. 67). In Sweden, half the forest tenures are held by family enterprises and are handed down through the generations. To ensure a good balance of long-term sustainability and log supply, voluntary co-operatives and associations assist woodlot owners with education and training in operations (felling, silviculture, marketing) and manufacturing (co-operative pulp mills and sawmills). In Mexico, where 70-80 per cent of forest lands are owned by local and indigenous communities, 25 communities responsible for more than 500,000 hectares have received Forest Stewardship Council certification. Community forests in Nepal are managed democratically at the grass roots level, where participatory governance, shared capacities and knowledge have improved local forests. Harrison and Suh (2004) provide an overview of a number of community forestry studies conducted in both emerging and developed countries, including India, the Philippines, Indonesia, Nepal, Thailand Sweden, and the United States, all constructed under different paradigms. For example, in India, the Joint Forest Management (JFM) model is considered a “major landmark in the development of community forestry.” with

17 million hectares managed by 84,000 JFM organizations (p. 291). In the Philippines, the Community-Based Forestry Management model has placed that country among the world leaders in community forestry (p. 294).

Roberts and Gautam (2003) review seven case studies in Europe, Asia and North America, concluding that grassroots forestry initiatives are generally more resilient and successful than those that are government-led. They also found that local stewardship of the resource improved the health of the forest, and communities benefited economically and socially due to the employment, recreational and value-added products opportunities.

A prime B.C. example of deep ecological forestry is Mervyn Wilkinson's Wildwood, established in 1938, and considered the oldest eco-forest in west North America (The Land Conservancy, 2008). Wilkinson's intimate knowledge of his 136 acre forest encompassed tree species and age, light, seed trees, snags, animal use and ecosystem functions such as soil building and insects. He observed the Pileated Woodpeckers who would eat every last ant on a live tree, but who would harvest ants in a decaying log, always careful to leave enough for future meals. That knowledge combined with his selective logging methods (Rastogi in Drengson and Taylor, 2009) has resulted in impressive results that have drawn visitors and experts from all over the world to his forest. For the past 50 years, he has harvested in five year cycles, and after 10 cuts, he has removed more board feet than originally existed, and yet his forest retains the same volume as before (Loomis, in Drengson and Taylor, 1997). Wilkinson has never planted a tree, letting nature do the work for him.

Researchers are able to identify a variety of factors that lead to success or serve as barriers but there appears to be no single model of community forestry, and no sure path to success. Roberts and Gautam (2003) have concluded that the success or failure of a

community forest is site-specific to its unique character and intertwined with the overarching conditions of “legal reform, community consensus, equity, transparency and accountability.” (p.9).

Research Methodology

Research Methods

This thesis will use a case study methodology as described by Richard Yin (2003) to examine the site-specific situations of three B.C. forest towns each in a different stage along the path to sustainable community forestry.

Based on Yin's work (2003), an analytical multiple-case study with a survey component has been chosen to better understand the complex factors related to the social, economic and environmental development of sustainable community forestry in B.C. The analysis of three separate and diverse case studies allows for the synthesis of both unique and common experiences of the respondents. As community forestry has generally occurred and enjoyed greater success as a bottom up or grassroots level initiative (Hawken, 2005; McQueen, 2010; Roberts & Gautam, 2003), it is important to understand the belief systems and experiences presented by respondents, and how this collective experience may have impacted and resulted in the current situation. How does a collective of diverse experiences, for example, foresters, small business owners, citizen advocates, and special interest groups, come together in a cohesive manner and respond to the issues related to community forestry? How do they handle issues of local, provincial and organizational governance? What are the economic and social issues? Is sustainable community forestry an achievable and viable goal?

Community Selection

The communities selected are three B.C. towns that have historically depended on the forest for their existence, each currently representing a different stage in the journey toward sustainable community forestry. Youbou has remained a town without a mill since 2001 and lacks a forest, yet maintains a strong community advocacy for community

forestry (Youbou Timberless Society, 2010, Community Forests section). Mackenzie has been hit hard in recent year with the closure of all the local mills and massive worker layoffs, and in September 2009, received a Community Forest Agreement from the provincial government (Ministry of Forests and Range, 2009b). In 1993, Revelstoke established the Revelstoke Community Forest Corporation (RCFC), the oldest and most profitable community forest in B.C (RCFC, 2010).

Originally called Cottonwood, Youbou was established in 1907 as a forestry community on the north shore of Lake Cowichan on Vancouver Island (Youbou website at <http://youbou.ca/>). Once a thriving community of 1,400 residents, the mill closed in January 2001, at a loss of 220 jobs (Whitehead, 2003). This closure gave rise to an organization of former saw mill workers called the Youbou Timberless Society (YTS). The YTS website states the organization is working on a community forest initiative, yet nearly a decade later has yet to produce results. The society claims the lack of progress is directly related to the B.C. Liberals who are responsible for the lack of logs sufficient to sustain a community venture by allowing the export of raw logs.

Mackenzie is located in the northern reaches of B.C. has and in August 2008, suffered the loss of the last of its mills as Pope and Talbot, AbitibiBowater and then Canfor closed down their operations. A town of 4,700 citizens saw more than 1,200 forestry workers out of work (Pulp & Paper, 2008). In August 2009, the B.C. government granted the McLeod Lake/Mackenzie Community Forest Association a Community Forest Agreement, the first joint First Nations/Non First Nations venture in the province. This venture is in the initial stages of development, and has access to a wealth of forestry expertise within the community as well as access to forest lands.

Revelstoke, located in south eastern B.C., is home to the Revelstoke Community Forest Corporation, which represents one of the longest standing and successful community forests in the province. Established in 1993, RCFC presents an interesting example of community collaboration, being co-owned by the municipality and three local forest industry partners. Together, they operate Tree Farm Licence 56, and already in receipt of Sustainable Forestry Institute (SFI) certification, are also pursuing Forest Stewardship Council (FSC) certification (RCFC, 2005). RCFC has enjoyed a level of profitability over the years, and although it has been necessary to employ cost-cutting measures in these hard economic times, it continues to demonstrate a margin of profit and benefit to the community (RCFC, 2010).

Data Gathering Tools

This case study uses a formal survey (Yin, 2003, p. 91) consisting of a structured set of open-ended questions to elicit answers from a diverse group of residents in each community. It is understood survey responses are provided in the context of the respondents' personal experiences and perspectives, and are not necessarily a reflection of the actual reality of the situation, but would "only be considered one component of the overall assessment" (p. 91). Once the survey responses analysis was completed, follow-up questions were posed to community members to fill gaps in knowledge or provide further clarification. The use of academic studies, official documentation, news releases, essays, and news articles allow for further verification and perspective. In addition, a review of community forestry in other jurisdictions will provide a comparative perspective of factors indicative of success and failure. This triangulation of case study survey and follow-up questions, academic and other documentation, and comparative reviews (Yin, 2003, p. 97) provides a strong qualitative analysis of the viability of

sustainable community forestry in B.C. This analysis, in turn, produces a twofold result: the sharing of knowledge may provide a deeper understanding to communities developing their own SCF projects; and the proposal of a number of recommendations and solutions may assist communities in adapting best practices more quickly and with more refinement.

According to Yin (2003), this analytical case study is an appropriate methodology as the researcher requires no control over behavioural events, and it permits a focus on contemporary events (p.5). The original goal was to elicit a minimum of 10 responses per community: Youbou provided 13 responses, Mackenzie 10 and Revelstoke 8. Participation was invited through a central forestry-related organization, with the researcher inviting wide-spread participation through in-person, telephone, e-mail and survey instructions.. Participants often recommended other community members with a related interest or involvement, and in several instances, deliberately involved community members thought to hold opposing views.

In each community, this variety was achieved as evidenced by the participation of respondents with backgrounds: social (activists; newspaper writers; artisans, local citizens); economic (small business owners; Chamber of Commerce members); political (municipal councillors, Ministry of Forestry and Range, and other provincial government personnel); environmental (community forestry representatives; advocates, environmentalists); industrial and forestry (loggers; sawmill workers, professional foresters). Several people identified themselves as having more than one related interest, such as former sawmill worker and environmentalist.

The overarching questions asked in the survey are “What are the strengths and weaknesses experienced by community respondents in the development of local

sustainable community forestry models, and what are the lessons to be learned from their experiences and perspectives?” Using these questions as the foundation, a series of surveys was conducted in each community using a set of open-ended questions as a means to elicit the economic, social, environmental, political and other factors that promote, hinder or are required to further the SCF model (see Appendix 2) in the community. This format allowed the respondent the opportunity to provide answers in the fullness of his or her background and perspective without bias or preconceptions from the interviewer. Consistency of responses from multiple respondents further strengthens the accuracy of a particular perception.

At no time will answers be linked to an individual by name, ensuring complete anonymity and protection of privacy for all respondents. As the data has been collected from living human beings through an interview format, the principles, practices and procedures governing the Royal Roads Ethics policy are strictly followed.

Survey Results

Figure 1: Location of three B.C. towns

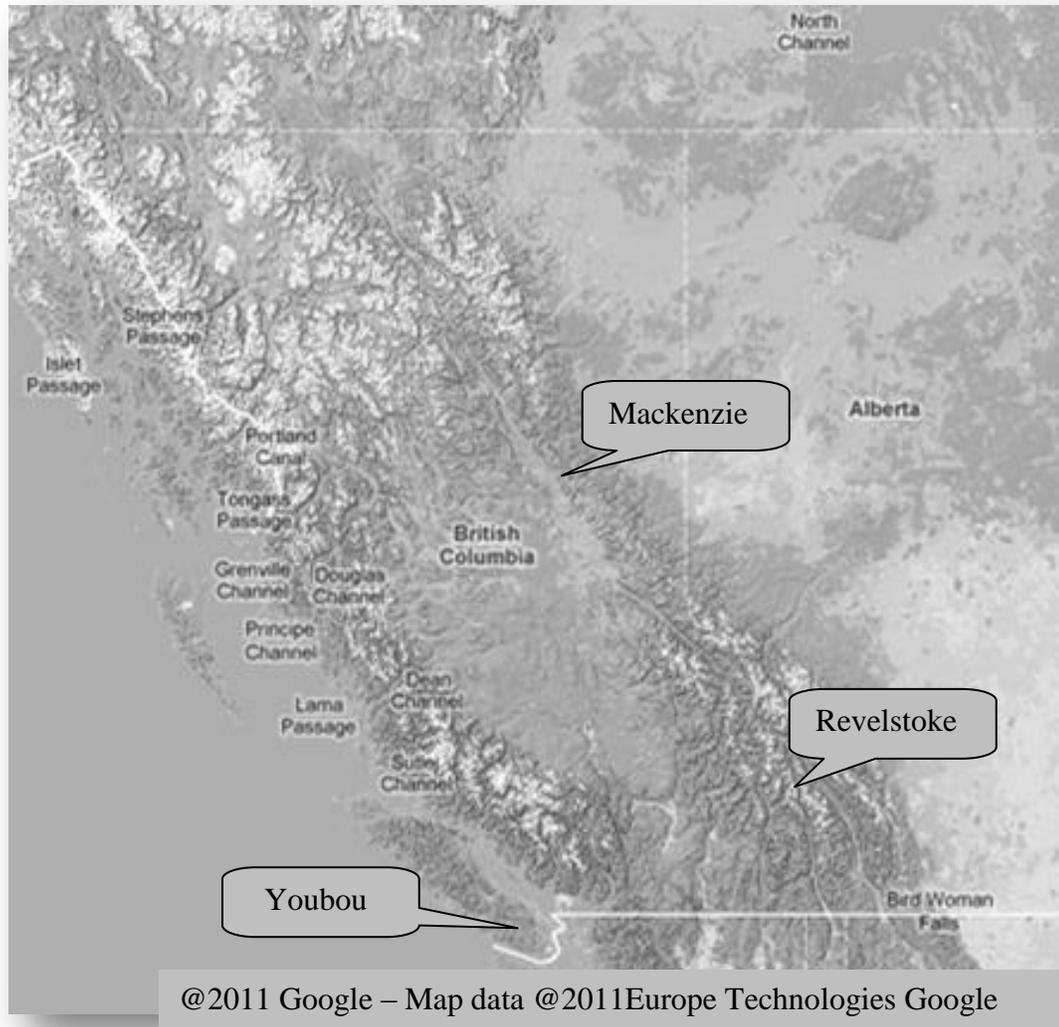


Table 1: Town Statistics

TOWN	POPULATION (2006 Census – BC Stats) ¹	FORESTRY ORGANIZATION	HECTARES	ANNUAL ALLOWABLE CUT(m ³)
Youbou	734	Youbou Timberless Society	NA	NA
Mackenzie	4,539	McLeod Lake/Mackenzie	24,664	30,000
Revelstoke	7,230	Revelstoke Community Forest Corporation	120,000	100,000

¹ BC Stats ref at http://www.bcstats.gov.bc.ca/data/cen06/profiles/detailed/ch_up.asp

Youbou

Figure 2: Youbou Synopsis

Population: 740 (BC Statistics, 2006 Census);

Location: north shore of Lake Cowichan on Vancouver Island.

Forest Management: primarily private forest lands, owned by TimberWest. Small fragmented sections of Crown land found on the east coast. One community forest co-operative located in the nearby town of Lake Cowichan.

Type of Forest: na

Significant Forest History: Established in 1907 as a mill town.

Forestry Organization Significant to this Study: Youbou Timberless Society, formed in protest when the mill was closed in January 2001. Now serves as an advocacy group to promote sustainable forestry

Rationale for Community Selection: closure of mill in 2001 and rise of the YTS as a strong advocate for sustainable community forestry

Survey Details: 13 responses 13 (9 male, 4 female). Occupations and interests include professional foresters, former sawmill workers, local citizens, municipal officials, community advocates and forestry co-op reps, former Chamber of Commerce member, newspaper reporter, environmentalists. Several respondents listed more than one occupation or interest.

Current Status of Sustainable Community Forestry: non-existent

Respondents' Belief in Sustainable Community Forestry: 7 yes; 5 no; 1 unsure

Youbou was selected as one of the three respondent towns due to its history as a former sawmill town, and the evolution of the Youbou Timberless Society, (established in December 2000) in its subsequent work towards developing public awareness and community forestry. Despite its track record as a profit-making enterprise (ref), TimberWest Forest Corporation closed the Youbou sawmill in January 2001, amid much controversy and anger from local citizens. Town residents watched as truckloads of raw logs bound for export removed the primary source of well-paying jobs in the community.

Figure 3: Logs heading out of Youbou after the Youbou mill closure



Used with permission Bonnie Hayward

Citizens tracked the number of log truckloads leaving in the community and estimate that in 2002, 100,000 full truckloads, equivalent to 3.7 million cubic metres were extracted from the surrounding forests. The Youbou Timberless Society contends “this could run 6 sawmills and employ almost 4000 people.” (YTS 2010).

Comprised of former sawmill workers and advocates of sustainable forestry, the YTS has evolved from a “confrontational group to a community based support group welcoming members of all stripes, from environmentalists to industry support workers.” (YTS website). Its self-appointed mandate now is to “educate the larger community to the wrongs being perpetrated on communities by multi-national corporations in the name of profit, and assist other communities with the benefit of our experience.” (YTS website). In addition to offering its members a medical and dental plan comparable to that of its forest industry counterparts, the society is working on a “local Community Forest initiative, planning to provide fiber for local resource based forestry operations.” (YTS website). It is this enduring spirit and determination that rendered the town a qualified candidate for this case study. It has yet to develop a viable sustainable community forestry operation, but it is a community strongly rooted in the forest industry,

with community residents committed to finding a way to restore a role in sustainable community forestry.

Youbou General Observations

During the course of the survey, I was able to observe several characteristics that made this community distinct from those of Mackenzie and Revelstoke. There remains a depth of anger and bitterness stemming from the closure of the Youbou sawmill in 2001. This culture shock was documented by Whitehead (2003) and Prudham and Penfold (2005), and those sentiments were also exhibited during the conduct of this survey in both in-person discussions and survey responses from residents directly impacted by the mill closure. The community welcomed the attention and the opportunity to take part in the survey, and there were several requests from survey participants for a post-survey community presentation as a means to continue positive progress in the community's search for its role in SCF.

Early in the study, it became apparent that the issue of forestry extends beyond the limits of the town of Youbou, and that any discussion of SCF has to include the Cowichan Valley area in general. Two community forests are operated nearby: the Cowichan Lake Community Forest Co-operative (CLCFC) is a 12,000 acre parcel of forest land owned and managed by the municipality; and the North Cowichan Municipal Forest (NCMF) operating on 5,000 hectares of land east of Youbou that reverted to the municipality for non-payment of taxes. The issue then becomes one of determining what, if any, role might be played by the town of Youbou.

*Youbou Survey Responses**Current Factors Contributing to SCF*

Positive social factors include a strong sense of community pride and a good connection to the land and resources. A skilled workforce exists, although people are aging or moving elsewhere. The CLCFC has provided funds to support community projects (the Forest Workers Memorial and a sports field for the local First Nations band) and education for school children. Positive economic factors relate to the CLCFC and include some local employment, access to local and various markets, \$250,000 annual benefit to the municipality, and the ability to provide materials for Crofton pulp mill. The possibility of local manufacturing developing on the site of the former Youbou mill is also raised. Positive environmental factors are few, with the mention of the forest lands being some of the most productive in all of Canada, and some respondents citing the sustainability factors of the community forest co-op.

When asked about local attitudes or assumptions that promote SCF, most respondents countered with negative replies. In the social context, SCF is seen as a right and is the preferred forestry concept within the community. While taxpayers have benefited from the forest co-op, there is a need for more community self-determination, control and input. There is a sense the community is at the mercy of external forces and the forest industry. For example, despite presentations from TimberWest, the industrial forest company that owns the majority of the surrounding forest land, there is a general mistrust of their promises to cooperate with the community, particularly with regard to those sections of lands being put up for sale. The community now consists of mostly retired or disabled residents, as the skilled workforce has left for work elsewhere. From an economic perspective, the export of raw logs and the closure of the profitable Youbou

mill still angers respondents. Forestry is no longer viewed as the dependable and well paying career it once was.

When asked about the current policies, programs and incentives that promote SCF, respondents spoke of the strong partnerships with the local First Nations as a means of accessing more fibre and with developers in a bid to secure land for manufacturing opportunities. Economically, the forest co-op is providing jobs and revenue during these difficult times, and forest legacy funds support public projects, and help the forestry business through hard times. Environmentally, a positive factor may be the decreased harvest level, and the recreational and educational opportunities afforded by the CLCFC. In a political context, the Ministry of Forest's Community Forest program is cited, although the ministry has refused to provide long term tenure to the co-op and there is no unallocated land available for community development for the town of Youbou. There are few political incentives or programs in place, except for the government legislation and municipal bylaws that currently protect the land base.

Respondents cited a number of organizations involved in forest related activities. The CLCFC itself comprises members from a broad spectrum of the community including the Steelworkers Union, Chamber of Commerce, the Town of Lake Cowichan, the Legion, Elks, and George Donnelly's Sawmill. Local advocacy groups include the Youbou Timberless Society, the BC Community Forest Association, the Sierra Club, and the Western Canada Wildlife Committee. Industrial forest companies include TimberWest and Hancock, both of which own large tracts of forest land as a result of the E & N land grant. Local industry includes George Donnelly's Sawmill and Cowichan Lake Lumber Ltd. First Nations are represented by the Dididaht Band Council from

Nitinat Lake and economic representatives include the Port Renfrew and the Cowichan Lake District Chambers of Commerce.

A number of external forces that promote SCF were cited. At the government level are the provincial government with its Community Forest programs, and the support of local governments. Socially, there is a growing public and local community awareness of the importance of SCF. Environmental advocates cited include the BC Community Forest Association and the YTS. Economic forces include the global markets that may result in the CLCFC logging a portion of its community forest to make up for a budget shortfall, the possibility of developing niche markets, and foreign-owned forest companies, such as TimberWest, responsible for the closure of the Youbou mill.

Factors that Hinder SCF

Respondents were very forthcoming in sharing their perspectives on factors that deter SCF development. Social factors included a community of high and low income, seasonal residents, decision-making far removed from community, lack of local leadership, waning of public interest in forestry and local resource management, and improved technology and machinery that mean fewer jobs. Negative economic factors included the loss of the profitable Youbou mill, and later the Clause 7 appurtenancy lawsuit that validated the government's right to permit the massive export of raw logs. Some respondents view community forest agreements (CFAs) as only a token gesture. Also cited was the bias towards timber-based revenue, the inability of the CLCFC to generate significant profits, the loss of good wages and health benefits packages now replaced by social assistance, the lack of forest lands available to the community, the current global economic downturn, the need for expensive machinery and equipment and

lack of business capital, the fact that non-timber products are not always viable, and the need for a business to find a niche to be viable.

Poor environmental factors included the belief that many surrounding forests are second growth and of poor quality, other lands are an environmental disaster due to poor forest practices by industrial forest companies, and the CLCGC's use of clearcutting, and other unsustainable management practices. There is a perspective that the value in the forest is not in timber, but in tourism and enjoyment in its natural state. Political obstacles include government policy that is considered controlled by large corporations, the lack of long-term planning, and an unwillingness to convert from volume to area based model, and to grant forest land to community ventures. Mentioned again was the removal of the appurtenancy clause (Clause 7), tying raw logs to local mills, for which YTS took the government to court and lost (*James v. British Columbia*, 2007). Corporate hindrances included corporate ownership of what should have been public lands, a willingness to dismember a profitable milling operation in favour of massive raw log exports, industry's ability to sell Tree Farm License lands for redevelopment and profit, and interests driven by profit maximization, and by foreign rather than local interests.

Local attitudes or assumptions that hinder SCF reflect long-term negative feelings about their current status as a forestry town, rather than a lack of faith in the SCF model. Seven respondents spoke of the general feelings of community disempowerment and bitterness in the community, with one respondent venturing the comment that some of the community may feel "forestry is a thing of the past and the future of the community lies in recreational land development and unsustainable suburban sprawl." Also included a widespread and a long-standing assumption that "forestry must be conducted by large corporate players using industrial methods," and ignorance about alternative forest

management models. One spoke of an “expectation that the forest industry will bounce back and continue to provide good paying jobs”, while three others contend that there are no negative local attitudes towards SCF. What little forest related activity exists, such as the local sawmill, is marginal. There remains a lack of awareness and appreciation for other forest-based values in terms of non-timber forest products and broad ecosystem services. Respondents cite a lack of leadership, waning public interest or awareness, little community input, and residual bitterness due to 2001 Youbou mill closure. The transient nature of the residents has resulted in difficulty in starting a community discussion, although there is hope the forest industry will be revived, despite lack of access to resources. Industrial forest companies have tied up all the resources and are viewed as intimidating, operating on old model of win-lose instead of building consensus. While there is a belief that local forestry can do better, there is the fear that a successful SCF may not produce high paying jobs.

Seven respondents cited the provincial government as responsible for a number of policies, programs and incentives that deter SCF. Among them is the inaccessibility to land, flaws in the current Community Forest Agreement program with regard to the volume requirement and timber bias, and the wisdom of allowing the Ministry of Forests to oversee the implementation of the CFA program. This relates to a tendency for short term and inconsistent political planning that depends on the government of the day, and typically focuses on immediate revenues, rather than long-term benefits for the community. Also mentioned was the lack of competition, business capital, logs available to the community and the capacity for secondary manufacturing. The loss of YTS Clause 7 court case is again cited. The refusal of the Ministry of Forests to allow the CLCFC to convert from a co-op to a community forest leads one respondent to believe the

motivation may lie in the belief that current lands held by industrial forest companies are considered more valuable for real estate than forestry. Another respondent stated:

“After watching the (forest) co-op for some time I would conclude there is a complete lack of policies, programs and incentives. I see colleagues going off to UBCM (Union of BC Municipalities) meetings like beggars with cap in hand to have 15 minute meetings with very busy politicians.”

Another respondent stated:

“There needs to be greater public oversight with respect to the management of private forest lands and land tenure redistribution. The public interest is not being served. Local communities, economies, and environment suffer when cavalier companies make unilateral resource management decisions and compliant government policies facilitate this status quo. The people on the ground, living in the watersheds, must be recognized as having the most at stake when it comes to resource stewardship.”

One respondent believed the current forest co-op is working well, stating:

“The program is working well with support from elected officials and our community. The only down side at present is poor economic conditions in the forestry industry with low prices for logs.”

Respondents cited a number of organizations that hinder SCF, including the provincial government with its forest policies, particularly the Liberal government that caters to international forest corporations, and in turn, those forestry corporations that act in the interests of foreign owners, rather than the local community. One respondent traced Catalyst Paper back to the parent company, Third Management Avenue, a New York City hedge/equity fund, declaring its sole interest in pulp mills is “sucking the blood out of them and leaving the carcass behind.” The unions were mentioned by three

respondents in reference to their actions during Clause 7 court case. Other organizations named were the Private Forest Landowners Association, the Truck Loggers Association, TimberWest Forest Corporation, Island Timberlands, Steel Workers Union, and the BC Professional Foresters. The old boys' club, right wing conservatives and the Fraser Institute were cited as being mainly interested in maintaining the status quo. The CLCFC was mentioned in the context of practices not considered sustainable. Also included was the uncertainty about local land use due to First Nations treaty status.

External influences that hinder the development of SCF include the provincial government that fails to consider or consult local communities in forestry opportunities, the corporatization of public resources, a poor forestry model resistant to changes to status quo, foreign-owned corporations driven by profit and permitted to benefit from what should be a public resource by selling forest land for real estate development, the inability of communities to compete with large scale operations, the North American Free Trade Agreement, the softwood lumber agreement, the high Canadian dollar, the poor global economy, and raw log exports. Liability issues around activities such as mushroom picking and bureaucratic red tape were factors viewed as discouraging value-added products.

Factors Required to Promote SCF

Respondents were asked about the factors needed to promote SCF in their town. In Youbou, the primary requirement is to acquire sustainable forest lands, and to manage them in an in-depth holistic and ecologically-sensitive manner. This involves replacing clear cutting with selective logging practices, considering alternate governance models and developing a community forest plan based on more than just an economic point of view. Recreational uses, sensitivity to fish-bearing streams, and refraining from the use

of chemical fertilizers were some of the practices mentioned. From a social perspective, community leadership is required, along with a partnership with the local First Nations, a strong sense of community, better public awareness and a more positive attitude about SCF models, such as Merv Wilkinson's Wildwood. There must be avenues for meaningful community input and commitment, and a respect for local knowledge and skills. Economically, a good business case must be developed to attract the venture capital that already exists in the area, and local and global markets must be regained through the production of quality and diversified local manufactured goods. Environmental marketing would help promote local goods such as furniture and other value-added goods produced by local workers from "stump to finished product."

Policies, programs or incentives needed to promote SCF include more government support on both local and provincial levels. One respondent stated:

"The success of community forests will, in turn, be a measure of the health, sustainability, and resilience of those communities in this climate-changing world. We need strategies and funding mechanisms that will redistribute lands to community control and will build diverse and resilient models that address the triple-bottom-line."

More government support is required for forestry workers in the form of school and wage programs, for instance, by adapting the Community Forest Workers Transition Fund to develop forestry jobs. The use of Employment Insurance program to attract workers and pay top up wages was also suggested, and was the use of taxation incentives on stumpage. Liability issues, such as those related to mushroom picking and other forest gathering activities need to be addressed, most likely by legislating against suing for personal injury. In terms of governance, there is a need to consider new models, perhaps setting up a community workshop to explore the possibilities. A variety of economic

measures are suggested, including the use of RRSPs for venture capital, the need to attract significant local investment as occurred in the Peace Energy Co-op, and tying investment to local jobs. Marketing strategies include using locally milled lumber for Vancouver Island construction, and selling local wood and lumber products at retail stores, tied to a ``buy local, buy quality`` marketing approach.

Respondents cite a wide range of organizations that need to be involved with developing a successful SCF, including local and provincial governments. Advocacy groups include the Youbou Timberless Society, local protesters who care about nature and their communities, and non-profit organizations such as the Dogwood Initiative. Economic organizations include FutureCorp Cowichan, a volunteer-driven organization that provides business consulting and loans to stimulate the local economy, the Chamber of Commerce, and the Economic Development Commission. Other groups include academics, First Nations, and former forestry workers. There is an opportunity to build on the work of the forest co-op, perhaps leading to the development of an Eco-Forest Trust, or other form of an ecological and egalitarian form of governance. One respondent warns against the development of a forest model that relies too heavily on private interests, as the community has already experienced private enterprise that fails to serve the public interest, citing it as a ``bitter and hard experience``.

When asked about other internal or external influences required to promote SCF, respondents provided an extensive list. Social influences include a clear vision that sets out a governance and management framework, a strong community passion, support and participation, holistic thinking, the ability to develop a social consciousness and examine values and preserve existing resources, and an evolution away from patriarchal and ``old boys club`` model. Economic influences include the ability to acquire funding for land

acquisition, incentives for sustainably produced products, and more diversification of manufacturing. Environmental influences are an integrated resource management, a move to eco-system management model, the development of a Fair Trade model for both timber and non-wood products, the application of Forest Practices Code to private lands, and the need to halt wasteful practices. On a political level, the provincial government should stop raw log exports, prevent forest lands from being sold for real estate development and stop paying mills to burn black liquor. Government subsidies should be redirected to developing SCF models, and promoting local lumber manufacturing. There must be a stronger role for local government to act as guardian of public lands, and to be involved in SCF on an operational and funding level. Above all, better land tenure, land ownership and forest management models need to be developed.

At the conclusion of the survey, many respondents took the opportunity to provide some final comments. Referring to the current state of B.C. forests, one respondent states “Our biggest problem is that we have only the guts and feathers left.” Another laments that the lack of community control has resulted in a proposed housing development of 2,000 units on the land once occupied by the Youbou mill. Two respondents felt that SCF is presently not well understood by the community and that an educated public would support SCF. One writes that

“community forests can be an effective means of harnessing the enthusiasm, commitment and knowledge of local peopleWith climate change there are associated opportunities [involving] bioenergy and carbon credits. Along with demographic changes, Peak Oil and smaller government, there will be a strong trend towards localization and an urgent need to build community capacity for sustainable resource management.”

Another respondent commented that while current models of community forestry have all the right words built into the plan, but there is little substance in practice. “SCF is the answer to the survival of forestry, but it has to be that economics is not the major driving force. With global warming, our rain forest is important to the world, but as forest, not logs.” Another contends, that while SCF is preferable to industrial logging, an SCF is such a low economic stimulus to the community, it is not likely to take place.

Youbou Analysis

Despite the wide range of responses, a number of common themes emerge from the survey. It is clear the respondents share a strong belief that SCF is a possibility within their community. Half contend that it already exists in either of the two community forests already established, while the other half contend that one or neither is operated in a sustainable manner. Many lament the unavailability of forest lands to the community, whether due to ownership by the industrial forest companies or the lack of political will. The fact that optimism persists despite the diverse backgrounds of the respondents, the grim historical events of the past decade, and the current economic market is a testament to an indomitable community spirit and sense of pride. There may be a difference in opinion as to the definition of SCF, but there is a common agreement that it is a viable alternative and even a requirement if the town is to regain any control over its destiny. Some respondents express bitterness and regret over the loss of their mill and subsequent Clause 7 court case, yet there is a willingness to move beyond these events into a new and sustainable future. This is most evident in the recent transformation of YTS from a confrontational society to one dedicated to increasing public awareness and advocacy, and even the pursuit of a “Community forest Initiative” (YTS website). While the

industrial forest companies have exported raw logs *en masse* to make enormous profits for shareholders and the provincial government, respondents recognize that industrial logging is a destructive practice that is neither sustainable nor capable of offering long-term benefits to the local citizens. Foreign-owned industrial companies are viewed with mistrust, due to both their logging practices and for selling the land for real estate development, although there is hope that a form of local manufacturing could be incorporated into the development of the lands for sale.

Respondents identified an overwhelming number of social, economic, environmental and political factors that stand between them and an SCF: inaccessibility of forest land; the successive provincial governments that have ignored the community in favour of the industrial forest companies; the power and scale of the industrial forest companies; lack of leadership; the need for more public awareness and education; a changing demographic that is increasingly disconnected to the forest. What they do have is a strong advocacy core, embodied in the form of the YTS, local citizens, forestry experts, academics, small business owners and non-profit organizations who have kept the debate going over the past ten years since the closure of the mill. There is also the matter of timing, with the growing public awareness of the importance of local self-reliance and the growing vacuum as the industrial forest companies close operations and look elsewhere for more profitable and less regulated ventures (Kimmitt, 2008, May). The survey responses are evocative of Hawken's (2005) notion of the growing grassroots movement willing to reject the power of the large foreign-owned transnational companies and take on the work at a local and sustainable level. It is interesting to note the following statement on the TimberWest Forest Corporation website:

“Approximately 54,000 hectares / 134,000 acres (17% of the land base) have been identified as having greater value as real estate properties and will progressively be made available for higher uses over the next ten to fifteen years. The Company is committed to managing these lands in a way that helps meet the changing needs of Vancouver Island communities.”

Youbou lies in the midst of TimberWest lands. Even if the community of Youbou is able to negotiate for these or other TimberWest forest lands, it is most likely to be composed of second or third generation growth and lacking in the profit margins available through old growth forest. Nonetheless, respondents acknowledge that a new forestry model is in order, and that social and environmental values as well as economic must be considered. There is some recognition that with the advent of climate change, forests are more valuable as forests rather than logs. Since the closure of the mill, Youbou has become a retirement and recreational town. Stewardship of the forests and local production of value-added products may serve to diversify and add to the social, economic and environmental fabric of this small community. It is clear the old model of industrial forestry is fading, and that the community of Youbou has sufficient spirit, pride and determination to pursue a local forestry solution. Whether they are able to pursue that dream will depend ultimately on the good graces of government and TimberWest.

Mackenzie

Figure 4: Mackenzie Synopsis

Population: 4,500 (BC Stats, 2006 Census); (1991 census: 6,200)

Location: northern B.C., 180 kilometres north of Prince George

Mackenzie Forest District: lies within the Northern Interior Forest Region and covers approximately 6.1 million hectares. Consists of Crown lands, granted primarily to large forest companies under Tree Farm Licenses.

Forest Management: Community Forest Agreement grant to McLeod Lake Mackenzie in September 2009 consists of 24,664 ha of which 10,762 is suitable for timber harvest, and another 3,500 ha are classified as deciduous (CFA respondent e-mail).

Type of Forest: sub-boreal forest, about 50% spruce, 35% lodgepole pine, 5% subalpine fir, 5% trembling aspen, and 5% paper birch, by volume. (CFA respondent e-mail).

Significant Forest History: 70 % of the town's tax base is dependent on the forest sector (District of Mackenzie, 2010). Massive layoffs of forestry workers and closure of mills in recent years.

Forestry Organization Significant to this Study: McLeod Lake Mackenzie Community Forest Association (MLMCFA).

Rationale for Community Selection: over the past decade, the region has suffered significant forestry layoffs and mill closures. A CFA was granted in September 2009.

Survey details: 10 respondents, including foresters, municipal officials, local citizens; provincial government official; Community Forest representatives; retired forestry teacher; woodlot owner; forestry consultant/contractor. 7 men; 3 women.

Current Status of Sustainable Community Forestry: the MLMCFA represents the first joint First Nation/Non First Nation community forest in the province; in initial stages of developing governance, strategic and operational plans, along with a Forest Stewardship Plan.

Belief in Sustainable Community Forestry: Yes

Named after Sir Alexander Mackenzie who travelled through the area in 1793 (Mackenzie and District Museum), Mackenzie has long relied on the forest for its existence and well-being. In recent years, the collapse of the big forest industry, coupled with the global recession has severely impacted the social and economic fabric of this small mill town. In a town that once had the highest household income per capita and accounted for 5% of

The forest industry accounts for 70% of Mackenzie's municipal tax revenue, and the community has been among the hardest hit in B.C. by the downturn in the forest industry. Mackenzie once had an operating pulp mill, paper mill and 2 sawmill complexes that directly employed 1,300 workers, but those mills have all closed in the last year and the community is facing economic crisis. When including the 300 logging and trucking jobs that have also been lost, over half of Mackenzie's workforce is now estimated to be unemployed. (District of Mackenzie, April 2009)

B.C.'s gross domestic product, the real estate prices have plummeted, and many former mill workers have had to look to Fort MacMurray and other locations for work while their families wait for prosperity to return to Mackenzie (Leiren-Young, 2009, p. 180).

Mackenzie General Observations

The researcher made contact with Mackenzie representatives in October 2009 to request community participation in the survey, just as the Community Forest Agreement (CFA) was finally signed creating the MacLeod Lake Mackenzie Community Forest Association (MLMCFA). The CFA is a joint partnership of the District of Mackenzie District (DM) and the MacLeod Land Indian Band (MLIB), and is the first of its kind in B.C. The MLIB, known as the Tse'Khene or People of the Rock, has a strong economic background, and has engaged in businesses such as the construction and oil and gas industry as a means of building their independence from government money (MLIB, 2010).

Survey responses were submitted from November to December 2009, so the MLMCFA is currently in the planning phase and there has been no time for the MLMCFA to implement its forest management plan. Responses are primarily based on perceptions and experiences that occurred in the events leading up to the signing of the CFA, with follow up questions related to subsequent events answered by the community representative.

Mackenzie Survey Responses

Current Factors Contributing to SCF

Survey respondents were unanimous in their belief of possibility of SCF in their community, as a result of the creation of the MLMCFA. Six years in the making, the CFA is a source of pride to survey respondents, and represents a highlight in the midst of the ongoing mill closures and forest worker layoffs of the past few years. The MLMCFA is in the process of engaging the community through the Public Advisory Group (PAG) and developing its Forest Stewardship Plan (FSP). Timber harvesting is expected to begin in fall 2010.

Among the current factors that promote SCF, respondents cite the support shown by the two local governments and the provincial government. The MLIB and the DM each contributed \$50,000 in start-up legal and consulting fees, and there is a great cooperation between the two organizations, particularly at the Director level. One respondent reports that “the DM has provided money and expertise via town manager/planner, secretary services, meeting rooms, while the MLIB has provided money, meeting rooms, and some forestry services.”

There is a strong community support and involvement, and the number of forestry professionals willing to share their knowledge has been a great asset. It is thought there is

a good understanding of the practices of forest sustainability in terms of harvest levels, but one respondent admits it is too soon to tell. Economic factors include a good workforce, a good wood supply for small scale and specialty businesses, an opportunity for development of small value-added businesses, and an anticipated increase in the demand for products. With regard to the forest, the CFA consists of an area well suited for small scale forestry, and contains mostly spruce and balsam fir, rather than pine. The community has already been harvesting a number of non-timber products, among them: jellies from kinnickiniky berries (a native ground cover forest plant), and other local berries, packaged in box of local wood (although now discontinued under the new commercial food processing rules); fiddleheads; Christmas wreaths; and a variety of plants used for food, salves, ointments, and the like. The harvest of fur-bearing animals is also cited, as there is a "long-established market that provides a major and supplemental source for many Canadians," and despite the environmentalists who dislike killing animals. Good recreational opportunities are also available.

There are a number of community attitudes that promote the CFA. Foremost is the strong community desire to control and benefit from the local resources. One respondent stated "We really hate to see loaded logging trucks heading south out of our communities." There is also an assumption that the CFA will create economic benefits in job creation and more money will be available to the town. While there may be more opportunities to provide timber and specialty products, there is also the fear that the CFA will simply be regarded as a source of cheap fibre by the local private companies.

Policies, programs and incentives that contribute to the success of this CFA include the funds provided by the local governments, the creation of the CFA program and the stumpage rate reduction for small tenures by the provincial government; the

strong commitment from Minister of Forests who also happens to be their Member of the Legislative Assembly (MLA), and government employees engaged in provincial CFA program.

The CFA depends on the involvement of a number of organizations and individuals. In addition to the seven-member volunteer Board of Directors are the elected officials and staff of both local governments and the MacLeod Lake Indian Band. As previously mentioned, professional foresters have been providing their expertise, along with local citizens who “want to get more out of our forests than simply producing dimensional lumber.” The Public Advisory Group is in the initial stages of development, and it is hoped this will provide a strong conduit between the CFA management and local citizens. Trappers, bird banders, consultants/contractors and woodlot owners are also reported as active contributors.

There are a number of external influences that have contributed to the promotion of SCF. The desertion by the multinational corporations that has generated a widespread public disappointment and an ensuing resentment among forestry workers has acted as a catalyst and motivator to gain more community control over the forests. Pressures also include the need to create more stable employment and the capacity to deliver more diversified fibre uses, such as pellets, bioenergy and pulp.

Factors that Hinder SCF

There are a number of social, economic and environmental factors that serve to hinder SCF. The social factors include a number of hardships on a small town: the community’s role as employees rather than entrepreneurs; the large emigration of skilled workers and residents as mills have closed that has rippled through the town resulting in fewer services and opportunities; and the loss of social fabric in a small town. Service

groups, kids and sports clubs, the golf course operations, and the local real estate market have all suffered, and it is more difficult to attract new workers and families to counter the losses. The economy is perhaps the biggest factor, with respondents citing a litany of issues: mill closures over the past two years have resulted in direct layoffs of 1,200 forestry workers in a town of 5,000, with the ripple effects still affecting the local service and retail markets; poor current global economic conditions; large timber undercuts that may be handed by government to another forest agency; the high Canadian dollar and low log prices; the need for SCF funding; forest activity that operating at a smaller profit margin than before; the loss to the municipal tax base; the competition with large tenure holders with large AACs; the difficulty in obtaining renewable forestry licenses; the poor American housing market; the dependence of SCF on a viable private forest industry. The Mountain Pine Beetle (MPB) epidemic has created a glut of saw logs, further depressing prices; the CFA will have difficulty making money in the near term, and logs and chips are being shipped outside the community resulting in further economic loss. The large tenure holders have large AACs, making it difficult for new industries to obtain forest licenses. Environmentally, the destruction of 30 year old and older pine stands has “drastically reduced the quality and volume of timber available in the short to medium term.”

Local attitudes that have negatively impacted the development of the CFA include speculation among residents that forestry, sustainable or not, will not recover in a one-industry town, the danger that the high expectations of the CFA to produce social, economic and environmental benefits will not be met in the short-term, and the previous levels of complacency and dependence on well-paying mill jobs. The long and slow CFA negotiation process may have dampened community enthusiasm to some degree.

Respondents also spoke of the attitudes of the industrial forest companies who do not welcome the competition of the CFA, however small that might be. Opposition was also encountered from various levels of the provincial government, despite its crucial role in developing and promoting the CFA program. Respondents report that while “the Ministry of Forests has been supportive at the upper management level, local staff have wasted our time and obstructed our progress in just about every way possible without directly disobeying management instructions.” In the five questions related to factors that do not promote SCF, a total of six respondents make nine references to either the Ministry of Forest obstructions or the long drawn out and complex bureaucratic process involved in obtaining the license. Respondents state that process resulted in the loss of economic opportunities for the CFA.

BC Timber Sales (BCTS) draws even greater criticism, with five respondents returning negative comments in eleven responses. BCTS is a government body, which, according to its website is an “independent organization within the Ministry of Forests” and tasked with “providing British Columbians with sustainable benefits from the commercial use of public forests.” It auctions off a good portion of the annual timber volume and also provides “forest planning, timber cruising, layout/engineering, road construction/maintenance and silviculture activities such as tree planting, surveys and stand treatments.” (BCTS, 2010). The issue appears to be one of competing interests, with BCTS demanding and receiving a settlement before the CFA was granted. One respondent describes the issue:

“BC Timber Sales (BCTS) was extremely uncooperative in our attempts to conclude the license agreement. They had done survey work (cruising, block and road layout) in one of the areas that was to become the community forest. They

wanted an outrageous amount of money for outdated cruise info. They were not willing to show us what we were buying and were uncooperative in every way.

We needed to reach an agreement with BCTS before the government was going to award us the License. After months of negotiations (2 years I think) we ended up giving them the right to harvest an area of the community forest in order to recover their costs. As a result we missed an economic opportunity.”

Respondents were asked about the policies, programs and incentives that hinder the development of SCF. In addition to the MoF and BCTS issues previously mentioned, respondents spoke to the provincial government custom of awarding most natural resources to large corporations; the cost of stumpage that is disproportionate for the area, (and the reason, reports one respondent, for the closure of the Canfor mills); the domination of the market and the access to wood by the industrial forest companies; and the certification difficulties encountered by a new operation. There is concern that “bureaucracy inherent to licenses like the CF may cause the management of the license to be uneconomic or may hinder license managers from fully implementing all sustainable forestry principals.” The limited wood volume available to the CFA also makes the economics of a viable operation difficult.

When asked about the organizations hindering the promotion of SCF, it was again the MoF, BCTS and the industrial forest companies most cited by respondents. One respondent mentioned BC Hydro and the Town District in relation to harvesting activities they were conducting within the district boundary. The respondent felt this work should fall under the umbrella of the CFA to the benefit the town of Mackenzie. International influences cited were the North American Free Trade Agreement, the softwood lumber

agreement, cost of stumpage required to satisfy that agreement, and global economic slowdown.

Factors Required to Promote SCF

Respondents were asked to describe the factors they believe are required to promote successful SCF in their town. Social factors include the need to be happy with less, the need for small operations to remain strong in face of corporate competitiveness, and the need for government, communities and First Nations to forge stronger relationships. One respondent believes that the community has learned to live with less during the tribulations of the past two years, but fears that sentiment, along with the sense of community, may evaporate if the economy revives.

Required economic factors are varied: the need for improved global climate for use of wood; better marketing; the development of regional entrepreneurs and a strong volunteer base to manage the CFA business plan; the harvest of local MPB wood to produce jobs, revenue and start the forest renewal process, greater diversity in the use of fibre and wood products; an increase in local market demand; economically priced lumber; and reduced administrative and operational costs.

Environmentally, there is a need to work within the constraints of the local environment, to harvest in a manner that produces social, economic and environmental benefits to the community, and the promotion of recreational uses of the forest. While respondents acknowledge it is too soon for the MLMCFA to apply for certification of their products due to the newness of the CFA, there is recognition that resources must be managed to high environmental standards and there must be an increase in the demand for SCF products.

Figure 5: A moose in the Mugaha Marsh sensitive area, typical forest edge habitat



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Policies, programs and incentives to promote SCF include an increase in public awareness of non-timber forest products, the forest fire hazard close to town and the need to reduce that hazard, and the provision of educational opportunities for local schools, ecological research, and training. Economically, a significant amount of fibre must be available for community businesses, and a log sort yard must be set up. More funding for the CFA is required, perhaps by diversifying the forest and producing more value-added products.

More favourable government policies could also improve matters, including an initiative making SCF a priority in all business areas; a long-term guarantee of reduced fixed stumpage rate, and support for expansion of access to forest lands. The current AAC is 30,000m³ or 1% of the Timber Supply Area, just a fraction of the cut allocated to the industrial forest companies. Expanded forest lands and a larger AAC will be required if significant social, economic and environmental benefits are to accrue to the community. The ongoing support from both local governments is also a valued component.

The CFA has partnered with a number of organizations in the pursuit of success. These include the College of New Caledonia and the Mackenzie Nature Observatory.

The CFA is currently in the process of developing the Public Advisory Group as an avenue of various public, recreational and environmental stakeholder input. It is also looking to develop relationships with forestry contractors, major forest licensees, woodlot owners and trapping, mining and oil and gas representatives. One respondent advocates the development of a “Community Forest Board or other formal group with terms of reference.” As the CF works towards safety and environmental certification, involvement with WorkSafe and certification groups will be important.

Other influences that would further support SCF include the need to examine the effects of globalization on the community with regard to the abuse of local resources “both environmental and human” and consider a shift in attitude to one more sensitive to the needs of people, ecosystems and local communities. With the movement towards SCF, there is a need to develop new and different skills, and to value local resources and build local demand. Economically, there must be an upswing in the forest industry, increased demand for wood and value-added products, and more access to funding. The working relationship between the ministries involved, communities and First Nations must improve, and members of the community must be involved to the greatest degree possible.

Respondents had an opportunity to provide further comments at the conclusion of the survey. The two respondents who replied focused primarily on the value-added products that can be harvested from the existing forest, for example, products made from less commonly used berries and plants, i.e. kinnickinicky, fiddleheads, the harvest of fur-bearing animals, and the production of log poles, house logs, and hardwood floors to make fuller use of mountain pine beetle-killed wood. The suggestion of developing a provincial marketing organization to promote value-added products was also made.

In an effort to follow up on the most recent activities of the CFA, the researcher posed further questions about the progress of the Forest Stewardship Plan (FSP).

Although the FSP has yet to be completed, a detailed response (Appendix 9) was received in its stead. The information demonstrates a CFA with intimate knowledge of the history and current state of allocated forest lands, and with an understanding of a variety of forest models that could be developed to meet community, wildlife, and ecosystem needs.

Mackenzie Analysis

This is a community that has been hard hit in recent years by the decline in industrial forestry. They are ready for community control and to learn how to benefit from the diversity of the forest. Much like their counterparts in Youbou, the respondents displayed a tremendous sense of community pride despite the economic and bureaucratic hardships encountered in recent years. Mackenzie is a town demoralized by the closure of all its large mills and the layoffs of thousands of workers, yet has mustered sufficient community support in not one, but two communities to begin the journey towards SCF. The partnership between the MacLeod Lake Indian Band and the town of Mackenzie is a source of great pride, as it is the first partnership of its kind in B.C. The joint venture forms a strong partnership and a common determination to find a new way to build a relationship between communities and with the forest. With the strong support of the community, interest groups, the two local governments and MoF executive, the CFA has navigated its way through economic and bureaucratic obstacles to reach its present state. Critics may contend that having the Minister of Forests as their MLA may have eased the process somewhat, but this is to take away from community members who endured years of negotiations before the CFA was signed. There is, however, a cautionary tale to carry

forward to other communities in pursuit of a CFA. Of particular note is the resistance from both BCTS and lower level MoF employees. As the surrounding forest lands are held by the Crown on behalf of the public interest, there is no choice in Mackenzie but to deal with government for land allocations. That a public body such as BCTS, tasked with generating revenue and therefore in competition with business of the CFA, is permitted such a large degree of influence in the CFA negotiations, can only be construed as a direct conflict of interest. One respondent contends BCTS has been granted the right to harvest within the MLMCFA tenure, which is cause for concern. As for the MoF employees who are mandated to carry out the directives of elected representatives, their resistance to a program endorsed and administered by the government body they serve is an issue requiring the attention of the ministry.

Despite such experiences, respondents indicate the MLMCFA is willing to move forward in their desire to manage the forest from a social, economic and environmental standpoint. There is a strong recognition of the need to involve the community and interest groups as fully as possible, yet there is some trepidation about the size of the allocation and the ability of the CFA to satisfy community expectations. It is acknowledged the era of plentiful and well-paying jobs is over, and the community must reevaluate its priorities and values, and learn to live within existing environmental constraints.

The composition of the forest itself is a positive factor, and the CFA appears to have a good knowledge of the harvestable resources, such as berries, plants and fur-bearing animals that can be developed by community entrepreneurs as value-added products. The CFA has weathered difficult times despite the poor economy and contrarian bureaucracy, and has constructed a solid foundation with the strong backing of

the communities and governments involved. As local, regional and global markets improve, and the forest plan is implemented, the CFA has every opportunity to create what could truly become an SCF.

Revelstoke

Figure 6: Revelstoke Synopsis

Population: 7,200

Location: south east British Columbia

Forest Management: The Revelstoke Community Forest Corporation (RCFC) is jointly owned by the City of Revelstoke and three industry partners, Downie Timber, Joe Kozek Sawmill and Cascade Cedar Products. It operates the 120,000-hectare Tree Farm Licence (TFL 56) north of Revelstoke, of which forested lands cover 59,000 hectares. RCFC is Sustainable Forest Initiative (SFI) certified.

Type of Forest: large stands of large cedar, hemlock, spruce and balsam, with minor volumes of Douglas fir and white pine. Some timber is very high quality, while much contains rot and decay and is suitable only for pulpwood. Accommodation has been made to preserve habitat for the threatened herd of mountain caribou.

Forest Organization Significant to this Study: the Revelstoke Community Forest Corporation (RCFC), established in 1993 as a means to diversify the local economy.

Rationale for Community Selection: the RCFC is considered one of the oldest and most profitable community forests in B.C.

Survey Details: 8 respondents: professional forester; RCFC board members, local citizen, municipal councillor, local business people; forestry consultant. 7 men; 1 woman.

Respondents' Belief in Sustainable Community Forestry: yes, as the RCFC is a sustainable community forest successfully operating since 1993.

Revelstoke General Observations

Established in 1993, RCFC is one of the oldest and most successful community forests, and is operated as a Tree Farm License conforming to provincial government standards, rather than as a Community Forest Agreement (Revelstoke, 2010). Half the logs are sold at cost to industry partners and the other half are sold to the local market. Even throughout the current global economic crisis, the RCFC has maintained a degree of profitability, obtained in part through temporarily reducing the harvest cut and the number of paid employees, as well as the level of community contributions. In addition to a

volunteer Board of Directors, the RCFC is operated by five staff, with the forestry work negotiated with local contractors. Like its counterparts in Youbou and Mackenzie, the tone of the submissions was one of community pride. In this instance, much of the pride was directed to the accomplishments of the RCFC due to its high level of community involvement and its status as a sustainably operated community forest. Unlike Youbou and Mackenzie, Revelstoke has a more diversified economy extending to tourism, mining, transportation (Aycock, 1999), although it too has suffered through forest booms and busts (p. 104). The RCFC was the community's strategic response to strengthen the forestry cycle.

However, RCFC's tenure is somewhat unique among the array of Tree Farm Licences in B.C. in that RCFC does not own, and is precluded from owning, a timber processing facility, severely limiting related employment and economic opportunities.

Revelstoke Survey Responses

Current Factors Contributing to SCF

According to the survey responses, the dominant social factors that promote the RCFC include strong ties to the community and special interest groups, an open door policy and a willingness to consider ideas put forward by community members. Positive economic factors include a continued, albeit smaller profitability margin despite hard economic times, a commitment to local employment, and the presence of the log yard. Environmental factors cited are numerous, among them sustainable harvest and maintenance practices, an integrated land base management plan, and a commitment to the protection of the declining caribou population. Governance factors revolve around the dedication of the local leadership and the staff of the RCFC. There are no positive factors attributed to big forest industry.

Factors that Hinder SCF

Economic factors dominated this data set, among them the current global financial crisis, the large volume of poor quality wood suitable only for pulp and thus lowering profits, higher operating costs than coastal operations, stumpage fees that ignore those operating costs, reduced housing construction and few buyers for wood products. One respondent felt that the costs of operating in a wetbelt area should be recognized by the ministry, and that “the interior wetbelt should have all the benefits that the Coastal industry enjoys.” One respondent framed the stumpage issue in another context, contending that more attention should be put into increasing the value of timber and wood products, as stumpage fees really have little effect on the overall bottom line. There was also concern that the caribou management plan would negatively impact profit levels, while another respondent spoke of the need to look beyond timber values to incorporate activities such as ecotourism. There were few negative social factors cited, specifically the ongoing need to balance the creation of wealth, taxes and wages with sustainability of the forest, and accommodation of changing demographics due to the construction of a new ski hill. Political factors present more of a challenge, with inflexible MFR policies (recognizing the influence of international agreements, such as the Softwood Lumber Agreement), log export rules (a commonality with both Youbou and Mackenzie) and the belief that the RCFC is too small to affect political change. Says one respondent,

“there is a 4 year cutting permit rule, you have 4 years to harvest the timber under CP or be billed for it anyway. This forces a small company to harvest timber when markets might dictate waiting for better conditions. We have argued for relief from this requirement but this change would negatively affect the SLA.

Specifically for Revelstoke there are cost recognition factors that we feel are not addressed within the MOF appraisal system that disadvantage our licence,”

Of particular interest is the local notion that the municipal government, a co-owner of the RCFC, should not be in business at all. Environmental factors include pressure tactics from NGOs and urban groups with no accountability to taxpayers, the 12% reduction in harvest to accommodate the caribou herds when other user groups (ie, recreational) have no such limitations, and those interest groups or members of the public who hold narrow views of the meaning of the term sustainability. No big industry factors were cited.

Factors Required to Promote SCF

Economic and governance factors dominated this set of survey responses. An increase in log prices and markets, and a more appropriate stumpage fee rate would certainly increase the RCFC’s profitability and ability to keep locals employed on year-round basis. There was also an emphasis placed on the need for compensation for the

Figure 7: The steep mountains of the Revelstoke Community Forest Corporation lands

harvest cut rate to herds as well as for the BCTS over the years. similar issues with certification also the process can be long currently has SFI acquire the more the gold standard of advocate for the need to certification processes.

*Used with permission
– Mike Copperthwaite*



accommodate the caribou 12,000 m³ cut accrued to Mackenzie had also noted BCTS. Environmental presented as an issue as and expensive. RCFC certification, and hopes to expensive FSC considered certification. Respondents streamline and consolidate

Governance issues speak to the need for flexibility in provincial government forestry policy and recognition of the needs and constraints of a small operation, an improved ability to react to markets, an improved stumpage rate and the need to balance values across the landscape and set objectives. Respondents also included the need for local and regional MFR personnel to co-operate, and the local government's current consideration of a Wood First policy for local construction. One respondent spoke of the need to include local forest industry in the formulation of forest strategy, and another advocated for the local forest industry to jointly champion SCF as a means to improve profitability and avoid takeover by the large multinationals.

In reviewing the responses, it became apparent that there were several gaps in the information presented that required more exploration, particularly the community's relationship with a First Nations band, the potential for considering a CFA instead of a

TFL model, and the capacity for RCFC's direct access to international markets, such as China, as a result of the provincial government's recent initiative (MFR press release).

A follow up inquiry to the RCFC regarding the absence of a First Nations presence elicited the response that there "are no active First Nation Groups in Revelstoke. Several bands have traditional use interests in the area and on TFL 56. We communicate regularly with a few of the bands but as you might imagine they concentrate their efforts closer to home." The RCFC was also asked if it might be advantageous for the organization to consider a move to a Community Forest Agreement, but it appears that the partnership with the three local industries may serve as a barrier, and the RCFC is still awaiting a response from the Ministry of Forests. Regarding the potential for accessing wood markets in countries such as China, the respondent wrote "Our business at RCFC is to supply unprocessed logs to local sawmills. There are many small mills that rely on us for their wood supply as they have no tenure and are considered "painful" to deal with by the larger integrated sawmill companies. So, China doesn't directly offer us any potential, however we certainly hope our customers can benefit and through them we will too."

Revelstoke Analysis

Revelstoke's RCFC presents an example of one of B.C.'s more profitable community forest operations. Positive contributors to that success clearly include community pride of ownership, a depth of community involvement, ongoing profitability, a two-way communication mechanism between the RCFC, the general public and stakeholder groups, and a strong commitment to sustainability principles. Like other forest communities, there are challenges posed by large scale external influences over which communities have little control, such as the current global economic crisis, and

policies embedded in international treaties such as NAFTA. MFR forest policies and stumpage fees also pose obstacles to a more successful operation.

According to survey responses and its own documentation (the 2008/09 RCFC Annual Report), the RCFC appears to have confined itself solely to the production of unprocessed logs, half of which are provided a cost to the three industry partners, and the rest sold through their log sort yard. The TFL Management Plan #3 (p. 6) states that the RCFC has been harvesting older forests as, “ The trees in these forests, although often partially decayed, have a higher proportion of wood that is fine-grained and clear than do second-growth forests.” The RCFC acknowledges this practice will affect the long-term availability of quality wood.

The RCFC appears to meet a variety of social, economic and environmental SCF goals. The community is afforded many avenues to provide input into the business. Economically, the corporation is in a positive profit position, with previous earnings covering the 2008/09 \$500,000 loss, the first annual loss recorded. To their credit, they have reduced timber harvesting for the time being until the economy improves, avoiding the temptation of simply cutting more logs to make up for the shortfall and mindful of the glut of logs already on the market. Local entrepreneurs, such as recreational businesses, heli-ski operators, trappers, hunters, and outfitter-guides have been permitted to benefit from the use of the forest. Environmentally, the RCFC has also been attentive to the needs of the endangered caribou population by preserving stands of old forest and biodiversity on their behalf and, according to the 2008/09 RCFC Annual Report, the AAC has been cut by 12,000 m³ during the next five year plan (p. 3), a sizable reduction from the original 100,000 m³, and one for which the RCFC is hoping for compensation. Conservation practices have also accommodated fish and stream considerations. In the

2009/09 RCFC Annual Report, Chairman Geoff Battersby credits the RCFC's ability to weather the economic storm due to the small-sized operators involved. There is no doubt the RCFC has added to the economic, environmental and social stability of the community in recent times.

That said, SCF advocates would take issue with the corporation's logging practices, which include the extensive use of clear cutting, aggressive brushing, and the planting of even-aged stands with one or two commercially viable species, as outlined in the TFL 56 Management Plan #3, (p. 45 – 47.) These are the very practices used by industrial forest companies that have now concluded in forest degradation and community decline. It would appear the RCFC is still “managing” the forest to a large degree, rather than letting the forest develop in a natural way, permitting the full diversity of plant, animal and insect life, and soil generation so vital to the forest cycle.

Like the MLMCFA, Revelstoke has its issues with BCTS. According to Proposed Management Plan #3, p. 6, BCTS has the right to harvest timber at a non-declining rate of 11,480m³ per year. Coupled with the forest lands dedicated to the caribou management plan, the 100,000 AAC originally allocated to RCFC declines by approximate 24,000m³ per year. In addition, RCFC continues to pay “all of the fixed costs of managing the TFL on a much smaller AAC that is further aggravated by the non-declining BCTS apportionment.” (p.6). There is no reason provided for the BCTS entitlement, but according to some survey respondents, it clearly is a source of frustration for the RCFC. Again, the presence of a revenue-generating government body operating at the expense of a private sector business appears to be an issue.

Conclusion

Community forestry in B.C. is still in its infancy, and there is much to celebrate and much to consider. Regardless of the forestry paradigm currently available to them, the vast majority of respondents from all three towns maintain a belief that sustainable community forestry can be and should be practiced in their communities. There is strong local support for community control of the forests, for public engagement and local stakeholder input, and for finding ways to keep logs, jobs and benefits within the community. Inherent among the responses for all three communities is the understanding that SCF forestry will most likely never equal the economic engine industrial forestry once was, and yet there is an acceptance of that understanding. Youbou and Mackenzie in particular have suffered through numerous forestry downturns, and in spite of the obstacles, sustainable forestry remains at the heart of their ongoing pursuit to redefine themselves. The RCFC has maintained a measure of economic success over its years of operation, even through the current economic downturn, and benefits and jobs have accrued directly to the community. This may be attributed in part to the local nature and small size of the operations and the partnership that has developed between the local government and small business.

Respondents have presented a unique grassroots perspective from which there is much to learn. Access to quality forest lands is a top priority for communities willing to take on forest stewardship, and governance of those tenures is of great concern. They worry that MFR policies around issues such as forest practices and stumpage fees are too inflexible to allow small operations to respond effectively to market demands and prices. While government has traditionally viewed forestry through the lens of the industrial forestry companies and as a substantial revenue generator for provincial coffers, the time

may have come to understand what forestry means to the communities of B.C. and the long-term benefits that can accrue by way of truly sustainable practices. While MFR executive promote the concept and implementation of community forestry, the obstacles encountered from lower level ministry staff and B.C. Timber Sales staff pose added burdens. Residents and local governments who voluntarily pool their talents, venture capital and time to pursue a CFA face a difficult administrative process in applying for a CFA. In the long term, CFAs may prove a viable revenue generator for government, but the excessive process and costs may serve as a deterrent to many individuals and communities. While start up costs for any business venture will be incurred, MFR may wish to consider a review of the process to render it less burdensome and costly, and in the case of BC Timber Sales, to remove real or perceived conflicts of interest.

Economically, sustainable community forestry can become viable operations, as demonstrated by a variety of international, domestic and provincial examples. According to the most recent Ministry of Small Business, Technology and Economic Development Service Plan, small business is the “economic engine of the provincial economy, accounting for 98 per cent of all businesses in B.C., and drives job creation, productivity and economic growth.” (p. 7). Both timber production and value-added product manufacture in lieu of closed mills and raw log exports can keep profits and benefits circulating throughout the community.

Respondents had a varied understanding of the term “sustainability” with some interpreting it as a deep ecological concept, while others understand it in the context of current government practice. Clearly, industrial forestry practices such as clear cutting and monoculture have resulted in forests of poor quality that lack diversity and the potential for greater value-added products. If industrial forest companies can be awarded

environmental certification (Appendix 13), then the term “sustainability” and the certification process itself become suspect, warranting further investigation.

As indicated by Harrison and Suh (2004), community forestry with its ecological, social and economic connotations has existed in many forms throughout the world and throughout history. In B.C., it is only in the last century that forests have been viewed primarily through a corporate lens as an economic resource to be extracted without regard to ecological or social benefit. Through the decades, the B.C. government, the primary steward of the forests on behalf of the public, has itself embraced this corporate view by allocating the majority of tenures to the forest corporations in return for large economic returns. While these returns have themselves been directed to health, education and social services programs, it is becoming clear this exchange of forest for public services has been short-sighted and unsustainable. In 2008-09, forestry revenues were approximately 50% of revenues usually generated, due in great part to the global economic downturn (MFR, 2009). Some of this may be eased by the government’s Wood First Initiative (MFR, 2010b), and by the growing public demand to buy local and sustainable products. Community forestry operations are uniquely situated to meet the demand for customized wood and non-timber products.

Viewed in the context of community forestry found in other jurisdictions, it appears many of the characteristics that define successful SCF operations can be found in the surveyed B.C. towns. Each identifies community participation as essential to the process, and mechanisms are in place to permit and encourage that dialogue. Forestry objectives include not only economic gain, but social and environmental values as well. Financial and organizational partnerships between local governments, and with private sector business have also taken place, and there is a strong grassroots impetus that is

taking the whole process along an evolutionary path. There is, however, much progress yet to be made.

At the heart of the matter are two primary issues: the very definition of SCF itself; and the need to evolve from an economic-centric model of forestry. The ability to balance social, economic and environmental factors is going to look different in every community according to the belief system of the community leaders and the nature of the forest allocated to them. At the core, however, there must be a common understanding that true SCF involves forest practices that will permit the forest to regain its natural biodiversity and perform those ecological functions we are now beginning to understand.

In the wake of extensive forest degradation and the climate change debate, the value of the forest in its entirety is beginning to take hold in the public consciousness. Although climate change received only a minimal mention in the survey responses, some of the future success of small forest-dependent communities may lie in their stewardship of the forests as carbon sinks. As the industrial forest companies continue to shut down mills and lay off workers, B.C.'s small towns may have no choice but to take on the role of forest stewards. Many of these communities have shown themselves willing to avail themselves of the singular opportunity afforded through the CFA program, despite the daunting challenges posed by government bureaucracy, scarce financial resources and dwindling forestry expertise. The degree to which communities are able to take on stewardship of the forest in a manner that is truly sustainable from a social, economic and ecological point of view rests in great part with the B.C provincial government. Regardless of the obstacles, it is clear that the will of the community is strong, and it is this strength that will ultimately redefine the relationship between forest, community, government and the citizens of British Columbia.

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Appendices

Appendix 1: Community Forests Status Report – September, 2009

Community Forests Status Report - September, 2009

CFA Issued	AAC (m3)	Area (Ha)	Date issued
Burns Lake Community Forest Corp.	86,000	84,886	2005-04-12
Eketémc First Nation	17,000	25,000	2006-03-31
Village of McBride	50,000	60,860	2007-02-28
Harcrop-Procter Community Co-op	2,603	10,860	2007-03-31
Likely Community Forest Corp.	12,231	14,000	2007-04-01
Chesatta First Nation	16,613	39,129	2007-10-01
Cherry Ridge Mngmt. Cmtee (Cherryville)	1,500	1,091	2009-01-01
Cheakamus Com For Ltd Part (Whistler)	20,000	30,284	2009-04-09
McLeod Lk Mackenzie Com. For. Ltd. Part	30,000	24,218	2009-09-01
Total	9	235,947	290,318
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	65,000	45,693	2004-08-27
Klunaxs Kinbasket	5,790	20,234	2004-10-01
Cowichan Tribes	10,000	1,786	2004-12-31
Sechart	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	79,688	2007-05-25
Terrace	30,000	9,500	2007-06-01
Wetzn'kwa (Smithers)	30,000	22,369	2007-07-01
Lower North Thompson	20,000	8,506	2007-08-01
Stiamon	28,000	9,340	2007-12-04
Stocan 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
Chunzooth 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
Enyyud (Alexis CK IB/ Iatta LK)	40,000	114,571	2009-03-01
Total	25	565,695	828,622
Invitations to apply	AAC(m3)		Date of invite
Barclay (Udquelet/Toquaht)	31,800		2004-09-16
Port Alberni	20,000		2004-10-15
Massett	25,000		2004-12-08
Heida	100,000		2005-11-25
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 / W Moberly FN	20,000		2006-05-03
Tumbler Ridge	20,000		2006-05-03
Xadip	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
Tanizui Timber (TFL 42)	150,000		2009-02-17
Pemberton	10,000		pending FN consultation
Squamish	10,000		pending FN consultation
Total	18	586,583	
Grand Total	52	1,368,215	918,940

Source: BCCFA, 2010, used with permission

Appendix 2: SCF Questionnaire

SUSTAINABLE COMMUNITY FORESTRY
A CASE STUDY OF THREE BRITISH COLUMBIA MILL TOWNS
PREAMBLE AND CONSENT FORM

My name is Kathy Code, and this research project, Sustainable Community Forestry – A Case Study of Three British Columbia Mill Towns, is part of the requirement for a Master’s Degree in the Environment and Management Program at Royal Roads University. My credentials with Royal Roads University can be established by telephoning Dr. Lenore Newman, Program Head of the Environment and Management Program at Royal Roads University. She can be reached at XXX XXX-XXXX or toll-free at X XXX XXX-XXXX.

The research will consist of this survey and is estimated to take one to two hours of your time to complete. The questions refer to the current viability of sustainable community forestry in your town, what is working, what’s not working, and what you believe is needed to promote successful sustainable community forestry in your town. In addition to submitting my final report to Royal Roads University in partial fulfillment for the Master’s Program in Environment and Management, I will also be sharing my research findings with study participants.

A copy of the final report will be housed at Royal Roads University and will be publicly accessible.

The information you provide will be summarized, in anonymous format, in the body of the final report. At no time will any specific comments be attributed to any individual unless your written agreement has been obtained beforehand. All documentation will be kept strictly confidential.

You are not compelled to participate in this research project. If you do choose to participate, you are free to withdraw at any time without prejudice, and related materials will be destroyed. Similarly, if you choose not to participate in this research project, this information will also be maintained in confidence.

Your completion of this survey will constitute your informed consent. Signed consent will be sought in the event audiotapes, photographs or other materials are to be used. To protect your anonymity, code numbers will be used to identify the responses you have provided to ensure your name does not appear on any documentation. All responses will be kept in a locked cabinet, and no researcher, other than myself, will have access to those responses. All records will be destroyed within five years of the published date of the study. Study results may be used again in possible future publications. Please be advised that if you choose to take part in a focus or discussion group, your anonymity will be lost.

Please sign here if you are willing to take part in this study:

Print Name:

Signature:

Date:

Preface

What is Sustainable Community Forestry (SCF)?

A community forest can be described as any forestry operation managed by a local government, community group, First Nation or community-held corporation for the benefit of the entire community. Community forestry involves the three pillars of sustainable development: social, ecological, and economic sustainability. At its core, community forestry is about local control over and enjoyment of the benefits offered by local forest resources. (as defined by the British Columbia Community Forestry Association).

Note: this definition is offered solely as a means of establishing a common understanding of the term "sustainable community forestry" and in no way implies BCCFA involvement in this case study. This case study is completely independent of BCCFA involvement.

Introduction

What town do you live in?

Do you believe this town can develop a sustainable community forestry practice?

What is your status in relation to forestry in your town (forester, local citizen, municipal official, etc)

What is the current status of SCF in your town?

Current SCF Status – What's Working Now

What are the currently successful (economic, social, environmental, etc) SCF factors?

What are the attitudes or assumptions in the local community that promote SCF?

What are the current policies, programs, incentives that promote SCF?

Who are the individuals and organizations currently involved and how?

What external influences contribute to the promotion of SCF?

Current SCF status – What's Not Working Now

What are the (economic, social, environmental, etc) SCF factors not working?

What, if any, are the local attitudes or assumptions hindering the development of SCF?

What, if any, are the policies, programs and incentives hindering the development of SCF?

Are there organisations or groups hindering the development of SCF? If so, what are they? Please describe the situation(s).

Are there external (for example, provincial, national or international) influences hindering the development of SCF? If so, what are they? Please describe the situation(s).

Looking to the Future – What is Needed

What are the environmental, economic and social conditions needed to promote SCF in your town?

What additional or different policies, programs or incentives are needed to promote SCF in your town?

What organizations are needed to promote SCF in your town, and in what role? (for example, public, private, non-profit, First Nations, etc)

What other internal or external conditions or influences are needed to promote SCF in your town?

Other Comments/Recommendations

Appendix 3: Youbou - Existing Factors Promoting SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL
General Observation: Most respondents replied from the context of the Cowichan Lake Community Forest Co-op.		
Good sense of community and awareness of forest history	Some local employment provided by forest co-op	The region is one of the most productive forestry areas in all of Canada.
Strong connection with land and resources	Proximity to local and various markets	Existence of the forest co-op
Local skilled workers employed by forest co-op	\$250,000 annual benefit to the municipality	Existence of the Community Forest Agreement program managed by the Ministry of Forests
Education of school children	The forestry co-op provides materials for Crofton pulp mill	Work underway to gain CFA status for the forest co-op.
Revenue generated by forest co-op is used to fund local community projects.	Opportunity for local manufacturing	Existence of advocacy groups such as the YTS, the B.C. Community Forests Association
Growing social awareness of the importance of community forestry controlled by local interests		
Strong partnerships with local stakeholders such as First Nations, academics, NGOs, YTS, professional associations		
During its operation, the Youbou mill had been a profitable operation		

Appendix 4: Youbou - Factors that Fail to Promote SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
Community of high and low income	Loss of a profitable mill, along with Clause 7, allowing massive export of raw logs	Many available forests are second growth and not high quality while other lands are an environmental disaster	Removal of appurtenancy clause, tying raw logs to local mills	Corporate ownership of what should have been public lands
Community of mostly retired and disabled resident; seasonal residents	Bias towards timber-based revenue	North Cowichan Community Forest is not managed on a sustainable basis, ie clearcut	Govt policy controlled by large corporations	Willingness to dismember a profitable milling operation in favour of massive raw log exports;
Decision-making far removed from community	Inability of local co-op forestry operation to generate significant profits	Value in the forest is not in timber, but in tourism and enjoyment in its natural state	Short term and inconsistent political planning with eye on immediate revenues, rather than long-term benefits for the community.	Ability to sell TFL lands for redevelopment
Lack of local leadership	Loss of good wages and health benefits packages, replaced by social assistance	Poor forestry practices by the industrial forest companies, ie clearcutting, fertilizing	Unwillingness to convert from volume to area based model.	Corporate interest in forest lands is to sell them
Waning of public interest re forestry and local resource management	Lack of good forest lands available to the community		Unwillingness to grant forest land to community ventures	Tendency of corporations to be driven by profit maximization, and by foreign rather than local interests
Improved technology and machinery means fewer jobs	Current global economic downturn		Community forest agreement program is flawed and is only a token gesture	Industrial forest companies can be intimidating, operating on old model of win-lose instead of building consensus
Little opportunity for community input, and.	Need for expensive machinery and equipment and lack of business capital		Provincial government forest policies	Unions are playing off against each other, and their involvement in the Clause 7 court case.
Residual bitterness due to 2001 mill closure	Non-timber products are not always viable		Uncertainty due to First Nations treaty status	Old boys club, right wing conservatives, Fraser Institute interested in maintaining status

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
				quo
	Need for a business to find a niche		Provincial govt that fails to consider or consult local communities in forestry opportunities.	Poor forestry model resistant to changes to status quo.
	Raw log exports			Foreign-owned corporations driven by profit and permitted to benefit from a public resource.
	A successful SCF may not produce high paying jobs			
	Free trade deals			
	Liability issues and bureaucratic red tape that could affect value added products			

Appendix 5: Youbou - Factors Required to Promote SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	GOVERNANCE
Local leadership, strong sense of community	Access to land tenures	Access to a sustainable and multi-purpose forest	Government support for community forests, and for forestry workers, via school and wage programs	Look at alternate SCF forestry models, ie, co-management
Respect for local knowledge and skills, and invite input from former forestry workers	Funding for land acquisition	Ability to manage forest holistically for all values	Address liability issues and legislate against suing. Use of Community Forest Workers Transition Funds to Development forestry jobs	Development of strong partnerships with local First Nations
Meaningful community input and community commitment	Development of buy local and buy quality attitude	Integrated resource management	Taxation incentives on stumpage	Community administration
Development of a positive attitude re forestry and skilled labour pool	Development of local manufacturing	Move to eco-system management	Use of EI program to attract workers and pay top up	Development of a clear vision that sets out governance and management framework and set up workshop to explore possibilities
Development of a strong partnership of community stakeholders, including YTS, local govt, Chamber of Commerce, Economic Development Commission, provincial government, Futurecorp Cowichan, NGOs,	Use of RRSPs for venture capital	Development of a Fair Trade model for both timber and non-wood products	Provincial government to stop raw log exports and selling of forest land for real estate development	Need for forward thinking and ability to build community capacity to withstand coming changes

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	GOVERNANCE
academics, protesters, First Nations, former forestry workers				
Development of a social consciousness and examine values and preserve existing resources;	Tie investment to local jobs	Application of forest practices code to private lands	Provincial government to stop paying mills to burn black liquor and promote local lumber manufacturing. Redirect subsidy money to SCF	Dispense with the patriarchal and old boys club model
Public education and involvement	More manufacturing diversification	Stop wasteful practices, and make efficient use of all harvested wood	Stronger role for local govt to act as guardian of public lands. And to be involved in SCF on an operational and funding level	Better land tenure, land ownership and forest management models
Need to take control of community destiny	Buy local, buy quality marketing approach	Need to reevaluate the purpose of the forest. Not just economics and logs, but recreation, carbon sink, etc.		
	Use locally milled lumber for Vancouver Island construction, and sell local wood and lumber products at retail stores	Need to regenerate forests for coming generations -- but is it too late?		
	Development of a good business case to attract venture capital	Need to understand and translate sustainability into actual practice		
	Opportunity to build on the work of the forest co-op			
	Regaining of markets			
	Consideration of liability and personal responsibility issues re private forest land			

Appendix 6: Mackenzie - Existing Factors Promoting SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
Pride in the development of strong partnership between MLIB and MD (first of its kind)	Start up funds from municipalities for legal and forestry consulting fees	Use of forest for value added products	Good support from the MLIB and MD municipalities who contributed start-up funds	
Initiatives designed to promote public participation and input	Good wood supply	Successful application for a CFA license	Networking between local MOFR staff and small companies re timber access	
Involvement of local forestry expertise	Promotion of small business and value-added products	Intent to develop an SCF and forest stewardship plan	Support from local governments with funds	
Community support	Anticipated increased in demand for products	Community desire to have a more productive forest	Provincial government reduction of stumpage rate for small tenures	
Strong community desire to use local resources	Expectations of economic benefit has increased interest in forestry	Diversified use of forest, ie recreation	Strong commitment from minister of forests (MLA) and government employees engaged in CF program	
Tenure control	Local private companies will view CF as source of cheap fibre	Existence of CF program	Opportunity to push for more incentives, programs, etc.	
Social benefit from more money staying in community	Job creation		Involvement of several ministries of the provincial government	
Strong community support for SCF and diverse use of the forest	Need for more stable employment		Having Minister of Forests as MLA	
Strong community and First Nations support;	Anticipated ability to deliver diversity in fibre uses and markets (ie bioenergy, pellet, pulp)		Federal government support re funding for fireproofing community	
Educational opportunities for			Provincial government invitation to the MLIB and the DM to make a joint	

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
school kids			application for a CFA	
Participation of a number of community stakeholders: volunteer corporate directors; local forestry expertise including foresters, trappers, bird banders, consultant/contractors and woodlot owners				
Public dissatisfaction with large forest companies				
Resentment of former mill workers as big industry closes down				
Need for control in shaping the destiny of the town and area				
Training				

Appendix 7: Mackenzie - Factors Failing to Promote SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
Role as employees rather than entrepreneurs	Current global economic conditions are poor	Destruction of 30 year old and older pine stands by the mountain pine beetle	BCTS whose mandate is to make money, and views community forestry as competition	Large tenure holders with large AACs
Large migration of skilled workers and residents as mills have closed resulting in fewer services and opportunities	Large undercuts	CF model: may not promote economic management or sustainable principles	BCTS staff who deliberately hindered the CFA negotiation process	Major forest licensees oppose community forestry
Loss of social fabric in a small town	Poor American housing market	Limited volume availability	BCTS demands for compensation for land included in CFA and outdated survey work done prior to the negotiation	Local major mills driven by self-interest and not to the benefit of the community
Lack of trust for retired foresters	Work is being shipped outside the community resulting in economic loss	Conflict between SCF and near to town zoning	Local Ministry of Forests staff who deliberately hindered the CFA negotiation process despite support from the MoF minister and senior executives	BC Hydro (power line clearing) and the Town District (fire breaks) are conducting harvesting activities independently. This work should fall under the SCF umbrella to benefit Mackenzie
Slow negotiation process for the CFA has dampened enthusiasm of many	MPB has created glut of sawlogs, which depresses prices		Slow negotiation process	
Speculation among residents that forestry in any shape will not recover in a one-industry town	Difficulty in making money in the near term		Long, expensive and complex process to obtain tenure and operational approvals	
Danger of great expectations of CF not being met in the short-term	The CFA is currently dependent on viable private forest industry, which is not the case at		Cost of stumpage is disproportionate for this area, even for larger operations like Canfor	

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
	the moment			
Previous levels of complacency and dependence on well-paying mill jobs	Difficulty in obtaining renewable forestry licences		Provincial government tendency of awarding most natural resources to large corporations	
Lack of control over local resources	Large tenure holders with large AACs			
	High Canadian dollar and low log prices			
	Need for SCF funding			
	Forest activity is operating at a smaller percentage than before			
	Loss to municipal tax base			
	2 year negotiation process with BCTS that resulted in loss of economic opportunity			
	Most companies prefer to be issued renewable forestry licences and most require large volumes (>400,000 cubic metres annually) which they prefer to control themselves, not with other groups			
	Softwood lumber agreement and required cost of stumpage			
	Global economic slowdown			

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
	No current wood market. Local sawmills are unlikely to purchase wood for a price that would benefit the town			
	Regional and larger scale trends favour large amalgamated operations			
	Softwood lumber agreement constrains marketing and increases the burden on small operations			

Appendix 8: Mackenzie - Factors Required to Promote SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
Need to be happy with less, and to examine social values with regard to greed and environmental constraints	Need for improved global climate for use of wood	Need to work within constraints of local environment	Better working relationships between ministries, First Nations and communities	More lumber and pulp facilities must restart to create a demand for SCF products
Need for government, communities and First Nations to forge stronger relationships	Better marketing program for wood products	Harvest in a manner that produces social, economic and environmental benefits to the community	Development of an initiative making SCF a priority in all business areas	Improvement in the forest industry
Value local resources and build local demand	Economically priced lumber and reduced admin and operational costs	Need to manage resource to high environmental standards	Long term guarantee of reduced fixed stumpage rate	Better working partnership between SCF interests and big forest industry
Need to promote the CFA now by conducting a visible and successful on the ground harvesting operation that produces economic, social and environmental benefits to the community	Greater diversity of fibre and wood uses	Increase demand for SCF products	Support for expansion of access to forest lands	Need for small operations to remain strong in the face of corporate competitiveness
A committed volunteer group that understands sustainability and can oversee the development of a management and business plan	Harvest of local MPB wood to produce jobs, revenue and start forest renewal process	Consideration of recreational potential of the forest	Continued support from the Mcleod Lake Indian Band and the District of Mackenzie will help promote SCF in the community	
Increase in public awareness re non-timber forest products as well continued liaison between CFA parties	Development of regional and local entrepreneurs	Diversification of community forest	Need for strong support from provincial and local government levels, WCB and certification groups	
Increase in awareness re forest fire hazard close to town	Cost-efficient bureaucracy and management affordable to a small scale operation like a CFA	Eventual safety and environmental certification	Dev of a provincial marketing org to promote value-added products, similar to Manitoba model	

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL	BIG INDUSTRY
Educational opportunities for local schools and ecological research	Sufficient cost recognition to manage the resource to a high environmental standard	General promotion of SCF		
Development of new and different skills through training programs	Increase in global and local market demands.	Selective harvesting to make full use of MPB wood, ie, production of log poles, house logs, and hardwood floors		
Ongoing partnerships with community stakeholders, ie University of New Caledonia, Mackenzie Nature Observatory, NGOs	Availability of a significant amount of fibre, on a renewable basis, to communities so this can be distributed to small businesses that require timber			
Development of a Community Forest Board and terms of reference	Log sort yard			
Public consultation: development of Public Advisory Group and input from a variety of interest groups, including trapping, mining, oil and gas	Availability of project funds re forest diversification, etc			
Recognition of results of globalization and abuse of local resources	Development of value-added wood products Made from less commonly used berries and plants, ie kinnickinicky, fiddleheads. Harvest of fur-bearing animals			
Value local resources and build local demand	Increased value of goods			

*Appendix 9: Recent Progress of the MLMCFA*Response to Follow Up Questions
(reproduced with author's permission)

The natural forest occurring on our CF area originated in 2 different ways. A portion, about 20% or so of the total area, is of the type that you probably assume, based on the questions you ask. In this case the forest is generally of uneven aged structure, that is, there are young trees and older trees and very old trees all growing together in close proximity and the other vegetation and plant derived structures (logs, soil, etc) have had centuries to develop into the current state. Most of this type of forest on our CF will not be harvested. The small portion that is harvested will be by single tree or group selection or clearcut in very small patches of 1 ha or less. The idea is to retain as much of the existing forest as needed to quickly recover the vegetation and structure that we have disturbed. Still, this differs from nature because we are physically removing trees that would naturally be left on site as dead standing or down logs, both of which contribute significantly to the structure and habitat value of the forest for both plants and animals. While appearing more natural in the short term, this approach, applied over 100 years or more will ultimately result in a substantially different forest than existed before we started. If we want it to stay the way it is, the only solution is to leave it alone - and even that is no guarantee of success.

The other 80% or so of our CF land base is forests that originated after forest fires within the last 150 years or so. The average fire frequency in this general area is about 60-80 years. In the past, a stand grows for 60-80 years, sometimes as little as 10-20 years, sometimes more than 100 years, but almost never more than 150 years, then is burned and the cycle starts over again. Most of these fires are of severe intensity and large size, 50 to several thousand hectares in extent for each fire. For example, one of our management blocks, Block 4, is about 9300 ha in size. About 7000 ha of that block consists of stands that originated after a single large fire about 120 years ago. There are some small, 10-200 ha, patches of older forest within the overall burn area that the fire skipped over or went around due to their wetter site, shadier location, or just random luck. Also some of the higher elevation fringes of Block 4 were not burned and contain mixed age old growth forest. If we wish to retain the general nature of this type of forest, which we do for most of the CF area where it occurs naturally, we must periodically start with bare ground, as after a severe forest fire. That is not completely possible under current rules or by current public opinion. The nearest we can come within the context of provincial law and popular opinion is to clearcut and plant a new crop of coniferous trees as soon as possible after logging. Harvested areas will on average be smaller than what naturally occurred and the site will not be burned. This will result, over time, in a somewhat more diverse and complex mix of other vegetation and a different mix of animal species as well. Fire origin stands are simple, with few species, and often extensively uniform in age and structure.

On Block 4, which is adjacent to the townsite of Mackenzie, we want to manage part of the area in a way that is not historically natural and is also not like the old growth forest. In the mainly drier area right around and to the west of the town, we want to create a forest that is less susceptible to the threat of catastrophic fire, one that will reduce the forest fire risk to the town over the long term. We hope to accomplish this by intensifying the short term harvest in stands which currently consist mostly of dead pine and replacing these once dense, high hazard stands with a combination of some mixed deciduous/coniferous stands which are more fire resistant and some more open park-like stands of pine, grass, and Douglas fir similar to some more southern interior types, which can be sustained by periodic prescribed fire that does not destroy the stand and does not threaten

the community with catastrophe. By this approach, we hope to lessen the threat of catastrophic forest fires to our community and adapt to the changing climate that is forecast for this region and also to maintain or increase the plant and animal diversity in the local area.

Our first 2 harvest blocks will be in this Block 4 area. The pure pine stands will be clearcut and in the mixed species stands we will probably leave most of the deciduous trees standing, although we have an ongoing discussion on this topic currently. If we cut down the aspen, we will actually have more aspen regeneration than if we leave the mature aspen alive and standing. That is just the nature of the species. We will then reforest the area with mixed species to reduce fire risk as described above. The lower vegetation in both blocks is a fairly simple mix of common, non-threatened species and will not be much different after reforestation, except for the addition of several pioneer species that are common locally on such disturbed sites.

Initially, the Ministry of Forests has set an AAC of 30,000 m³. We are expected to recalculate that ourselves within the first 5 years and propose a revised AAC based on our proposed management regime and any new inventory information we may have at the time. Also, due to the high level of recent pine mortality it is expected that, in the short term, we may be allowed to exceed the AAC in order to salvage dead pine volume that would otherwise be lost and to accelerate reforestation on those areas. And the cut control period is 5 years. In other words, we can harvest up to five years AAC in year one and then no more for the next 4 years (or any such combination that results in 150,000 m³ in the 5 year period). The AAC combined with the 5 year cut control period is both maximum and minimum, with a 5% over, 10% under allowance with no penalty. (At least, that is the traditional local interpretation.)

We hope to eventually (soon) pursue certification as a sustainable operation that practices good forestry. There are several certification programs, some much more stringent than others. To the best of my knowledge, they all require some harvesting and reforestation performance history which we don't have yet, so we can't even apply at this time.

As this response is getting rather long and involved, I haven't mentioned the animal side of forest diversity, but we are trying to deal with that as well, at least to the point of maintaining habitat for all the existing local species. This is a more complex business because generally animals are shorter lived and more mobile than plants.

Appendix 10: Revelstoke - Existing Factors Promoting SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL/ GOVERNANCE	BIG INDUSTRY
Annual report and financial info provided to general public	Good economic performance despite global downturn, but have curtailed logging operations for the time being	Forest practices board audit and several sustainability forestry initiative audits confirm sustainable practices	Adherence to provincial government forest legislation and policies	
Connect with interested groups and invite citizen input.	Committed to providing local employment, directly and indirectly	Membership with the Forest Engineering Research Institute of Canada	Voluntary participation in third party forest certification program	
Open door policy to accommodate citizen views and consideration of alternate ideas	Log yard	Looking at ways to reduce fuel consumption	Good support from local politicians and City management staff on RCFC Board.	
Welcomes input from environment groups		Sustainable reforestation methods include partial/patch cuts, single tree and small group trees, thinning	Mission statement and goals that staff adhere to	
Contributions to the community total over \$400,000 - scholarships, aquatic centre		Use of handbrushing instead of herbicides	Commitment to responsible forest land stewardship, integrated land use and public participation	
Accommodation of social demands		Drive to exceed provincial government environment standards re TFLs	Presence of local politicians and city management staff on RCFC Board	
Community pride in management of TFL 56		Innovative caribou habitat management plan	Excellent staff, dedicated RCFC chair	
Good balance between need to work and feed families and a mature resource stewardship obligation		Enhanced use of landbase that includes back country lodges, heli ski operations, mountain biking, snowmobiling		

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL/ GOVERNANCE	BIG INDUSTRY
Positive change in attitude towards forestry due to community ownership and economic benefits		Replacement of helicopter logging with long line contractor		
Good relations with all user groups.		Management for values other than just timber, including recreational		
Open honest approach		Mature resource stewardship understanding		
Little community understanding re CF, but what they do know is positive		Good relationship with environmental groups who are welcome to provide input		
		Protection of fish and wildlife		

Appendix 11: Revelstoke - Existing Factors that Hinder SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL/ GOVERNANCE	BIG INDUSTRY
Inability to support community causes to previous degree	Current global economic situation	Pressure tactics from NGOs and urban groups who do not have accountability	Lack of flexibility re MoFR policies, although they are often tied to softwood lumber agreement, ie stumpage issue	
Need to pay taxes and feed families	Higher operating costs despite poorer wood quality and financial benefits available on the coast	12% harvest cut due to determination to uphold environmental standards, ie accommodating caribou herds, even when user groups do not afford such consideration	Belief that RCFC is too small to affect change	
Change in demographics due to new ski hill in progress	Disproportionate cost of stumpage due to higher operating costs	Declining caribou population	Local opinion that government shouldn't be in business	
Need to pay taxes and generate wealth	Poor wood quality, large pulp component, but currently low log prices	Preservationists in agencies or public who have a very narrow view of sustainability	Cost recognition factors not addressed within the MoFR appraisal system	
Attempt to achieve goals that are unrealistic and developed in isolation	Few buyers for wood products	User groups who pay no attention or are not accountable for sustainability issues	Log export rules	
	Economic instability for contractors			
	Lack of ability to look at big picture and find other sustainable values to promote the economy, ie ecotourism			
	Obsession with stumpage rates, although it may not			

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL/ GOVERNANCE	BIG INDUSTRY
	hugely affect the bottom line			
	Need to focus more on getting more from the low-value timber			
	Caribou management plan could affect TFL			
	Reduced housing construction			

Appendix 12: Revelstoke - Factors Required to Promote SCF

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL/ GOVERNANCE	BIG INDUSTRY
Two way communication with the community re benefits of SCF and community values	Continued RCFC profitability	Ability to balance logging, employment, revenue, etc with feeding families	Government willingness to be flexible in policy affecting small operations	Inclusion of local industry to help formulate strategy
Local ownership and control of the land base, allowing long-term planning and sense of pride	Increase in log prices and markets		Government ability to identify, balance values across the entire landscape and set objectives	Need for forest sector to champion SCF cause, and assure profitability to avoid takeover by multi-nationals
Consultation and cooperation with RCFC board, local industry and the public to formulate strategy	Reimbursement for loss of cut due to caribou management		Increased government flexibility in forest policy to react to markets	
RCFC must understand community values and broaden scope beyond timber harvesting to include non-forest products	Replacement cut or return of 12,000 M3 cut accrued to BCTS over the years		Changes to stumpage policy	
Ongoing community support and consultation	FSC is considered the gold standard of environmental certification but is expensive for small operations. SFI should be considered good stewardship of the TFL		Municipal government consideration Wood First policy for local construction	
Identification and balancing of a wide range of values and business needs	Access to funding to conduct intensive silviculture		Need for co-operation with local and regional MoFR personnel	

SOCIAL	ECONOMIC	ENVIRONMENTAL	POLITICAL/ GOVERNANCE	BIG INDUSTRY
	Ability to provide work year round for local contractors		Compensation for land use decisions that impact local communities	
	More favourable stumpage rates			

Appendix 13: Environmental Certifications Awarded to Industrial Forest Companies

Forest Company	Sustainability and Environmental Certification Awarded
AbitibiBowater	<ul style="list-style-type: none"> • SMF certification with regard to Canadian Boreal Forests, • Canadian Standards Association • Sustainable Forest Institute certification, • several Forest Stewardship Council certifications in Nova Scotia, Quebec and Ontario.
Canfor	<ul style="list-style-type: none"> • Forest Management System • ISO 14001 standards • CSA SFM standards
TimberWest	<ul style="list-style-type: none"> • SFI SM certification, the first Canadian company to do so • ISO 14001
Western Forest Products:	<ul style="list-style-type: none"> • Sustainable Forest Management • ISO 14001 certification