



Prioritizing Community-Based Tenures for Wildfire Mitigation & Rural Development

A Proposal for Community Forest Program Expansion

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Executive Summary

Communities across BC see the critical need to plan for wildfire and reduce the risk to residents. But their ability to act is limited when the forests that require fuel treatment are on public land, outside of the jurisdiction of local governments. Community-based tenures: community forest agreements and First Nations woodlands licences, are the only licensees with a mandate to do this work. These tenures are held by communities and managed for their benefit.

The BC Community Forest Association (BCCFA) proposes an expansion in the number and size of community-based tenures around rural and Indigenous communities to help achieve wildfire protection and promote rural development. While the BCCFA has joined with other forest sector groups in recommending a review of the legal and regulatory frameworks to prioritize community fire protection in Wildland Urban Interfaces, we contend that the regulatory stick is never as effective as empowering people who have a genuine interest in getting the job done. The leadership that many community forest agreement (CFA) holders have shown to reduce hazardous fuels, and their current participation in programs such as Forest Enhancement Society of BC are a clear demonstration of their motivation and commitment.

This paper provides the rationale for increasing number and size of community-based tenures, along with preliminary information about the costs and implications. Two case studies, Logan Lake and Quesnel, were chosen to help inform the discussion. Forest Analysis and Inventory Branch provided a cursory analysis of these two examples in Section 3. Forest Tenures Branch, in Section 4, contributed information - in broad strokes, about the potential cost and implications of reapportioning AAC to community-based tenures. But as outline later in Section 5, the potential upfront costs described are only one side of the ledger. A full cost/benefit analysis is required to gain a complete understanding of the impacts.

Given this, the BCCFA recommends the Government of British Columbia take the following actions:

1. Issue 6 new or expanded community forests in the next 3 years. We recommend that the Ministry of Forests, Lands Natural Resource Operations and Rural Development, in collaboration with the BCCFA, determine locations where optimum conditions exist for new and expanded community forests to further advance wildfire mitigation activities and coordinated suppression near communities. These conditions must include sufficient area and AAC to enable the long-term economic viability of the tenures.
2. Undertake a cost/benefit analysis of community forest program expansion in collaboration with the BCCFA to gain better understanding of the full scope of outcomes and benefits that rural communities and the province could expect from a broader expansion of the community forest program.
3. Include a plan to scale up community-based tenures in the BC Rural Development Strategy, articulating an intention to make these tenures available in the long-term to all communities that can demonstrate capacity and commitment to the Provincial Goals of the community forest program.
4. Increase the financial support for community forests to invest in wildfire hazard reduction while ensuring the wildfire mitigation funding programs are nominal in bureaucracy.

1 Community Forest Program Expansion

The BCCFA proposes an expansion in the number and size of community-based tenures around rural and Indigenous communities to help achieve wildfire protection and promote rural development. We recommend that the BC Government reimagine the public land surrounding communities and utilize the tenure instruments available to achieve multiple goals. Climate change adaptation and community wildfire protection must be top priority in these areas. Community forest agreements, First Nations woodlands licences and woodlot licenses are the most appropriate mechanism to meet urgent priorities of community protection and rural development. While the BCCFA's purpose is to promote community forestry, and that is the focus of this paper, we see the benefit of an integrated mosaic that includes all community-based, area-based tenures.

To estimate the scope of this reform, we have chosen a 10 km zone for discussion purposes. This is a critical zone for community protection as confirmed by many communities and forest professionals that experienced wildfires last summer. Often referred to as the "front country", this zone also encompasses areas around communities where other critical social values and ecosystem services intersect, including community and domestic watersheds, sites of cultural significance, and recreational areas. Further, this zone is of prime importance to Indigenous and rural communities as they invest in economic development to become more self-reliant and sustainable.

With extensive experience in fire ecology and wildland/urban interface planning, Bruce Blackwell (M.Sc., RPF, R.P.Bio) suggests that the boundaries of this zone be variable based on the risk, community size, fire behaviour and location within the province. Further, we suggest that each new or expanded community forest be developed according to the established principles of the program, with priority given to communities where:

- First Nations partnerships and/or support exist
- The threat of wildfire is high
- Local capacity is strong
- Implementation can be expedited
- Sufficient area and AAC can be allocated to enable economic viability

The information provided here is not meant to suggest rigid boundaries for community-based tenures, but to serve as a starting place for discussion. The 10km zone around communities is where we need to look at doing something different.

1.1 Context: Wildfire Hazard in BC

The reasons to increase the number and size of community-based tenures are numerous. But with the fire season of 2017 front of mind and predictions of hot, dry conditions moving forward, the need to address wildfire hazard is urgent. This connection was made by Co-chairs George Abbott and Chief Maureen Chapman in the BC Flood and Wildfire Review. Their recently published report and findings "Addressing the New Normal: 21st Century Disaster Management in British Columbia"¹, recommend that the provincial

¹ BC Flood and Wildfire Review. April 30, 2018. "Addressing the New Normal: 21st Century Disaster Management in British Columbia". Report and findings of the BC Flood and Wildfire Review: an independent review examining the 2017 flood and wildfire season. British Columbia.

government: “Encourage the establishment of area-based tenures adjacent to Indigenous reserves and non-Indigenous communities, where not already established as community forests, woodlots, tree farm licences or First Nation woodland licences. This recommendation encourages and expansion in the number of community forest tenures adjacent to communities.”² They recommend that government make this “strategic shift” in land stewardship to increase our capacity to mitigate wildfire.

The BC Flood and Wildfire Review report describes how the “BC wildfires of 2017 emitted an estimated 190 million tonnes of greenhouse gases into the atmosphere – almost triple BC’s annual carbon footprint.”³ The authors explain that “Solutions will be neither easy nor inexpensive, but in the absence of substantial new investment we can expect that the costs of wildfire suppression, and losses to citizens and the provincial economy, will continue to grow.”⁴

- The estimated cost of fighting wildfires in 2017 was \$568 million. “This figure does not begin to address the associated costs of lost tourism, economic disruptions or the social costs”⁵
- The Government of BC estimates that there are 685,000 hectares of forest at high risk, and 970,000 hectares at moderate risk of sending embers into communities during a wildfire.⁶

The authors report that only 10% of the hectares identified as moderate to high-risk have been treated. The estimated cost of treating all remaining areas is \$6.7 billion. A core question the Government of British Columbia faces concerning community safety then is, “How can wildland urban interface areas be treated more quickly and at lower cost on a per hectare basis?”⁷ The report states that the expansion of the community forest program is among the components of new more successful approach.



Fuel treatment in the Westbank First Nation Community Forest. Photo: Dave Gill

² BC Flood and Wildfire Review. 2018. P 95

³ Ibid. p 9

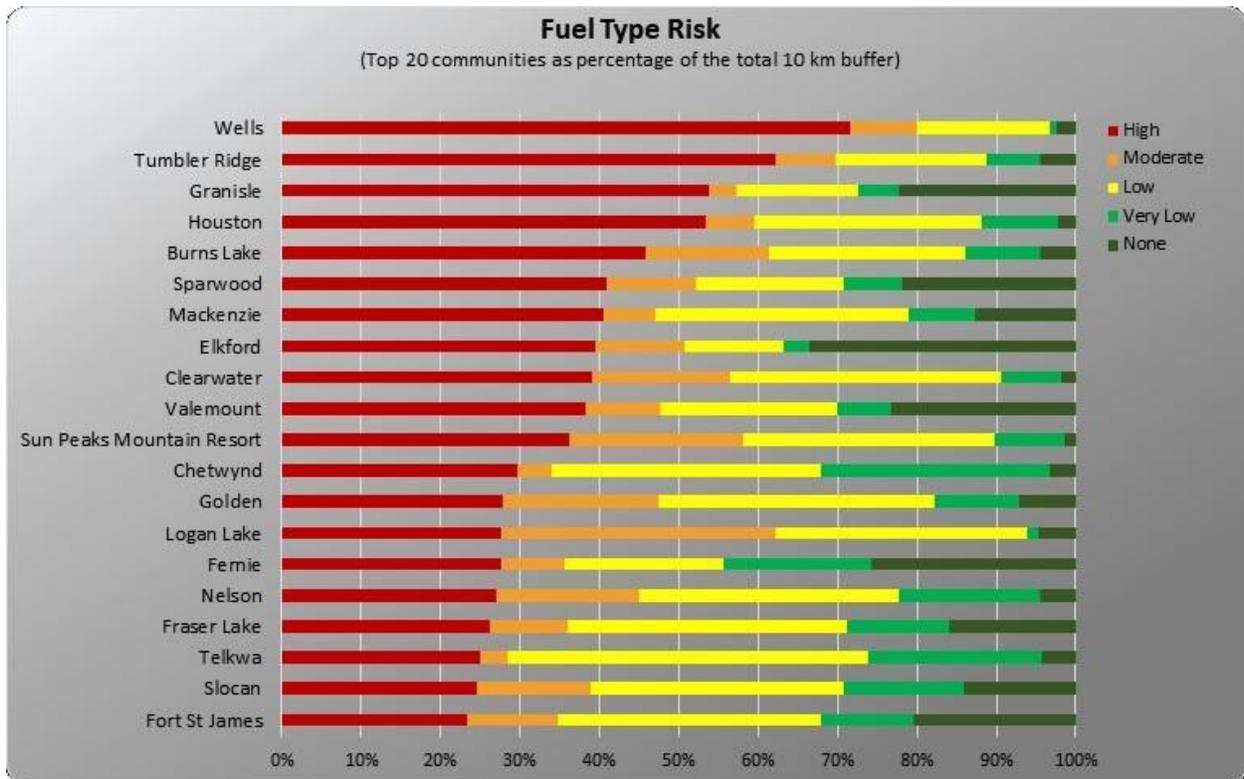
⁴ Ibid. p 10

⁵ Ibid. p 12

⁶ Ibid. p 29

⁷ Ibid. p 8

The BC Wildfire Service as well as fire ecologists have worked to identify provincial fire risk. This data will be helpful in prioritizing locations for new community-based tenures. For example, the following graph developed by BA Blackwell & Associates shows communities with high fuel type risks within a 10 km buffer.



Source: BA Blackwell & Associates 2018

1.2 Why the Community Forest Agreement? Background and Rationale

1.2.1 History and Status of the Community Forest Agreement Tenure

The CFA is an area-based licence that provides the exclusive right to harvest timber within the CFA area, and the right to manage botanical forest products. Licences are long-term, 25 years, replaceable every 10. Since the development of the community forest agreement (CFA) tenure in 1998, BC has issued 57 CFAs with another 6 formally in the application process (See Status Sheet Attached). These licences are held by a variety of community-based legal entities, including Limited Partnerships, Societies, Co-Ops, First Nations Bands and local governments. Collectively, over 90 Indigenous and rural communities are involved in community forestry in BC.

The CFA tenure was developed to give local communities the opportunity to manage local forests for the benefit of those communities, in a manner consistent with locally defined objectives and values. CFAs are governed by the Forest Act and the Forest and Range Practices Act, and all other applicable statutes and regulations.

As described on the MFLNRORD website:

“Harvesting operations provide a source of revenue for supporting local priorities and community initiatives...Community forests support opportunities in areas such as recreation, wildlife and watershed management for communities and contribute to a more diversified forest economy.”⁸

The CFA tenure is unique in the province for several reasons:

- The ownership of the tenure is exclusively local, and the organization that holds the licence must represent the local community. Profits do not leave the community to benefit distant shareholders.
- There is a comprehensive application process that includes the requirement to demonstrate local community engagement and support.
- The Licence Document and Management Plan must:
 - contain the broad social, economic and resource management goals proposed for the CFA
 - identify the linkage between the CFA goals and the provincial CFA Program goals (below), and
 - include a plan for annual reporting out to the community.

The Provincial Government’s Goals for the community forest program further set the tenure apart. The Goals are to:

1. Provide long-term opportunities for achieving a range of community objectives, values and priorities.
2. Diversify the use of and benefits derived from the community forest agreement area.
3. Provide social and economic benefits to British Columbia.
4. Undertake community forestry consistent with sound principles of environmental stewardship that reflect a broad spectrum of values.
5. Promote community involvement and participation.
6. Promote communication and strengthen relationships between aboriginal and non-aboriginal communities and persons.
7. Foster innovation.
8. Advocate forest worker safety

1.2.2 Proactive Management of Wildfire Hazard

Many community forests have been leaders in the proactive management of wildfire hazards. They are uniquely incented to make investments in the forest resource for long-term sustainability. A community with a long-term, area-based tenure must live with the consequences of their decisions, and conversely, is motivated to invest for future benefit. For the same reason, CFA holders are managing for a range of objectives including:

- wildfire mitigation & community protection
- climate change mitigation and adaption
- enhanced forest stewardship and incremental silviculture
- conservation of culturally significant areas and values.

⁸ <https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures/timber-harvesting-rights/community-forest-agreements>

The Community Forest Indicators Survey collects data every year on the benefits community forests are creating for their communities and the province. The proactive management of wildfire hazard is a key metric. So far 70% of respondents have collaborated with their local government on Strategic Wildfire Prevention Initiative projects. Twenty-two community forests applied for Forest Enhancement Society BC funds in the last intake alone.

This year's survey results show that community forests treated an average of 71 hectares and spent \$16,700 of their own funds to reduce wildfire risk in the reporting year. To date, the reporting community forests have collectively treated 3,522 hectares and invested over \$1.8 million for wildfire mitigation. They managed an additional \$6.5 million from outside sources. With enabling policy decisions, much more can be done.

We recommend that the BC Government continue to support community forest agreement holders to invest in activities such as wildfire hazard reduction, rehabilitation, intensive silviculture, and economic diversification by providing support through provincial programs such as Forest Enhancement Society BC.

1.2.3 First Nations Reconciliation

The expansion of the community forest program has great potential to lead to more partnerships between Indigenous and non-Indigenous communities. The community forest tenure has already resulted in many such partnerships – half of the operating community forests are held by First Nations or a partnership between an Indigenous and non-Indigenous community. The potential for positive outcomes is great.

In addition to community forests where First Nations are owners or partners, many community forest organizations include First Nations representation on their boards. In many cases, First Nations are engaged in cooperative planning, share profits, have MOUs and employment contracts, and work with community forest organizations in capacity building activities like training an education.

1.2.4 Rural Development

Community forests are a tangible way to promote rural development. By conferring forest and land management rights to rural and Indigenous communities, the BC Government can help to foster self-reliance, and meet its commitment to rural and Indigenous communities to build their capacity to be more resilient.

The Southern Beetle Action Coalition published an Economic Impact Study of community forests in 2017.⁹ The authors document the struggles many forest-dependent rural communities face, including declining forest sector employment resulting from technological change in both harvesting and manufacturing and a significant number of sawmill closures. Many smaller rural communities have seen significant declines in the size of their labour forces, number of sawmills and industrial property tax revenues.

⁹ Southern Interior Beetle Action Coalition. 2017. COMMUNITY FORESTS – COMMUNITY BENEFITS: The Economic Contributions of Community Forests to Rural BC Communities
<https://www.bcruralcentre.org/wp-content/uploads/2017/06/SIBAC-Community-Forests-Community-Benefits-Final-Report-1.pdf>

Against this backdrop of diminishing local benefits from the traditional forest sector – community forests are playing a critical role in providing significant local benefits from the forests surrounding rural communities.¹⁰

The study shows how community forests are providing local payroll & contracting opportunities; creating employment, and reinvesting profits back into their rural communities

Community forests across the province have a track record of using local staff and contractors in their operations. In smaller rural forest dependent communities, this payroll and contracting expenditures can be a very important and significant contribution to the local economy.¹¹

The vast majority of operating expenditures made by community forests are expended in the local region with a very significant local economic impact. Over and above this, community forests have also provided very significant dividends and donations from operating profits to their community owners and members.in 2013 alone the total dividends and donations paid by the 23 participating community forests reached almost \$5 million. Since 2003, just the 23 community forests participating in this study had collectively invested a total of \$17.3 million of community forests’ profits back into their communities to the end of 2013. This trend of reinvesting profits has continued.¹²

The BCCFA’s 2017/2018 survey results show that the total funds donated to community projects by the participating community forests in the reporting year alone exceeded \$12 million. The SIBAC report goes on to describe how important these funds are to rural communities:

For small forest dependent rural communities these dividends and donations from a Community Forest are extremely important. These small communities often have very limited financial resources from a small residential and business tax base. The dividends and donations from their Community forests are often also vitally important in providing the community-based funding component that is typically required in order to access external funding programs. In other situations, simply having a CF organization can add significant rural community capacity to be able to take advantage of other externally funded opportunities such as training programs.¹³

The 2017/2018 Community Forest Indicators Survey tracked the number of jobs community forests create.

	Forestry, logging and support	Trail building, firefighting, research etc.	Milling	All activities**
Total FTE/1000 m ³	0.39	0.026	0.64	1.056
Average FTE	15.27	.86	23.90	40.03
Total FTE*	565.14	32	884.14	1,481.28

¹⁰ Ibid. p 6

¹¹ Ibid. p 6

¹² Ibid. p 8

¹³ Ibid. p 9

On average, community forests created 0.39 full time jobs/1000 m³ in forestry, logging and support services, compared to the industry average of 0.24 jobs/1000 m³. In the reporting year, community forests created 63% more jobs than the average.

Indirect and Induced Employment

Randy Sunderman of Peak Solutions Consulting Inc explains the added benefits of indirect and induced jobs:

In addition to the direct employment created by Community Forest activity, the spending generated by the Community Forests also creates indirect and induced spending and employment each year in the local areas and throughout the province.

“Indirect” refers to the additional spending and jobs created by the direct activities of the Community Forest. Meanwhile, “induced” refers to spending of households in the economy as a result of direct and indirect effects from an economic activity. The induced effects arise when employees; who are working for the Community Forest and at suppliers that may provide goods and services in operation of the Community Forest, spend their new income.

At the provincial level, the direct Community Forest employment of 1,481 FTEs would create an additional estimated 2,000 indirect and induced FTEs across the province. Much of this indirect and induced activity would take place in the rural areas where the Community Forests are based. It would also create spending in the larger regional centres in the province and in the Lower Mainland.¹⁴

1.2.5 Social Licence

The concept of social licence in community forestry originates with the tenure itself. As described above, CFA licences are managed by the community, for the community. This sets them apart in the forest sector. Further to this, CFA holders have demonstrated that they are going above and beyond tenure requirements to build local relationships and cultivate social license for their operations. They are thinking differently about engagement with their Indigenous and non-Indigenous neighbours and recognize that the stewardship role they have for their long-term, area-based tenures is not just a relationship with the land, but also with the people who call it home

As a result, we see that many any community forests have a greater ability to operate in socially constrained areas adjacent to communities. This includes harvesting and conducting fuel treatments in areas that major licensees and BCTS have been challenged to access due to local opposition.

1.2.6 Independent Log Sales

The creation of new and expanded community forests in BC need not be viewed as in conflict with the interests of major licensees. Community forests supply wood on the open market to major industry, and to small and medium sized mills and value-added manufacturers. By increasing the size of the community forest program, the BC Government can facilitate the growth of a diverse forest products manufacturing sector. Community forests are independent log sellers. They sell the full spectrum of species and logs

¹⁴ Randy Sunderman. Peak Solutions Consulting Inc. May 2018

available on their land base on the open market to a range of customers. By delinking the woodlands from the major manufacturers each log can find its best market and end use, capturing more value for the wood.

Consistent with the previous 3 years of survey results and the BCCFA research conducted for BC's Working Roundtable in Forestry in 2009, this year's results show that 80% of the volume sold by community forests went to large sawmills, while about 20% went to small and medium-sized facilities, value added manufacturers, mills that use low quality fibre and other uses. It is notable that while a total of 50,208 m³ was sold to value added mills, with a milling coefficient of 1.257, this relatively small volume created 63.2 FTEs.

2 Methodology – 10 km WUI analysis

To inform the discussion about increasing community-based tenures around Indigenous and rural communities, we have chosen a 10 km zone for discussion purposes. This area is critical for community protection and is also where many community values overlap. Our preliminary analysis calculated the total number of hectares that would be included this expanded WUI zone. To set the parameters for the analysis, we needed to find a definition of "community" that is inclusive and makes sense in the context of community forestry and wildfire management. Fire Protection Districts were chosen because they include rural areas across the province where local residents have organized and committed to paying for fire protection services.

The analysis area is the land within BC Fire Protection Districts that is also within the Provincial Strategic Threat Analysis (PSTA) 2km WUI buffer, plus an 8 km buffer. There are 13.6 million hectares in this 10km WUI buffer; 6.7 million hectares reside in Timber Supply Areas which would constitute locations for possible expansion of community-based tenures. Currently, community forest agreements operate on 5.7% of that area (they account for 1.8% of the landbase provincially). Attached we have provided a map of the analysis area on a provincial scale with an accompanying table showing the distribution of tenures and land ownership in that zone. This is the same map the BCCFA shared earlier this year.

3 Case Studies

The following information is based on information from Forest Analysis and Inventory Branch (FAIB):

Two communities were selected to analyze how much timber supply area (TSA) a 10 km buffer (2km PSTA + 8km) will require for landing a potential CFA opportunity, and to determine if a sufficient amount of Crown land exists around the communities to make a logical fuel management buffer. FAIB conducted a rough AAC analysis on TSA buffer areas surrounding both Quesnel and Logan Lake (See attached maps). For quick analysis, the approach assumed that timber supply is consistent across the timber harvesting land base. While not true in practice, and often the land base adjacent to communities is constrained, the analysis provides some numbers to initiate discussion and refinement. The initial examination area, while ample to support volume requirements of area-based tenures, could be refined to an area under the current 10km strategic size.

The FAIB analysis and analysis area maps are attached. The highlights are as follows:

	THLB Removed from TSA (ha)	Initial Estimated AAC Impact on Timber Supply (m ³ /yr)*
Logan lake	49,115	125,851
Quesnel	36,118	93,170

* The BCCFA suggests that the estimated AAC Impacts on Timber Supply are likely overestimated because this analysis does not account for the disproportionately high level of constraints on timber supply in the analysis area (e.g. domestic & community watersheds etc.).

This analysis of new and expanded CFAs around Quesnel and Logan Lake, respectively, highlights the following:

- *A 10km WUI buffer although desirable from a fuel management perspective may be too large due to the timber supply impacts. While the size and AAC of CFAs varies greatly across the province, for comparison, the average is 35,000 m³. This would require a 5.5 km buffer in the Quesnel and Logan Lake case studies.*
- *For Quesnel a majority of the land around the community is private land and therefore limits the opportunity to allow a CFA to manage fuels adjacent to the community.*
- *For Logan Lake there is an abundance of Crown land adjacent to the community, which could make expansion of the existing CFA valuable from a fire management perspective.*

As described below, all potential community forests will need to be evaluated based on a number of variables. Further, each community that is identified to be at a high risk of wildfire will need to be evaluated to determine if creating a new or expanding CFA will help to support the province's fuel management objectives given the complexity of land ownership, and productive capacity of the land in addition to the many other factors discussed elsewhere in this report.

4 Potential Challenges and Implications

The following section provides an analysis from Forest Tenure Branch (FTB) regarding potential tenuring implications:

Annual Allowable Cut and Costs to the Province

Implementing this concept will require a significant re-apportionment of annual allowable cut. Since the allowable cut is allocated in almost all areas of the province, in the absence of a significant change to the Market Pricing System, sourcing volume would require legislation and the payment of compensation to affected tenure holders. Depending on the location in the province compensation for annual allowable cut ranges from \$100 to \$150/cubic meter plus another 15% to compensate licensees for lost investments in infrastructure (i.e. roads

and bridges). Based on this information, the cost to government to expand or create a new community forest with an allowable annual cut of 35,000m³/year would be approximately \$5 million.

There would also be a reduction in stumpage payable to government since community forests are on reduced table rates. A simplified, cursory analysis shows that using the current average stumpage rates, a 35,000 m³/yr. CFA converted to table rates could equate to a loss of provincial revenue of approximately \$225,000 annually on the Coast, and \$400,000 annually in the Interior, or roughly 2 million dollars per year based on the initial plan to create or expand six CFAs.

More in depth analysis is required, however, as each case is different. For example, several existing community forests that operate in the forests directly adjacent to communities can often access timber, due to their social licence and ability to incorporate community values in their management, that was off limits to other licensees.

Purchasing AAC will require a new Act that would require certain replaceable licence holders to provide AAC back to government, compensation provisions (for AAC and licensee infrastructure not paid for by the Crown). In addition, significant engagement with communities and First Nations would be required on the AAC reallocation and land base management changes, and negotiation with affected licensees on the operating area reallocation. From past experience (i.e. the forestry reallocation initiative) this work required FLNRORD staff resources and time to implement.

First Nations

An important consideration is that if government, through an allowable cut purchase acquired volume from tenure holders, First Nations would be strongly recommending that the allowable cut be allocated to them as a form of accommodation and for economic development. It would therefore be imperative that any community forest expansion be developed and supported by First Nations and have opportunities for First Nations ownership and management.

Licensees

Reallocating AAC from existing licensees will be challenging and will be met with opposition, especially in areas of the province where AACs are falling. Major licensees rely on their tenured allowable cut to provide them with a certainty of fibre supply for their timber processing facilities.

However, as described above, community forests are independent log sellers. In the latest Community Forest Indicators Survey (see below), 80% of community forest logs went to large sawmills in the last reporting year.

5 Key Considerations When Establishing New or Expanding Existing CFAs

The Community Tenures Regulation defines eligible applicants and establishes criteria used to evaluate applications. These criteria include a description of how the proposal aligns with the provincial Community Forest Agreement Program Goals¹⁵ and the demonstration of community engagement and support. These criteria would continue to be vital to success, along with:

- A large enough CFA area with an adequate stock of merchantable timber in balanced age class distribution to sustain the community forest over the long-term.

5.1 Evaluating the Costs and Benefits

To fully evaluate the costs and benefits of this proposal, we must consider more than the cost of the tenure. The following variables will be important in order to gain a full understanding of the implications:

- Cost of tenure reapportionment
- Cost of fuel treatments
- Avoided cost of wildfire suppression & evacuation
- Benefits of community forest agreements

The benefits that CFAs bring to their communities and the province must be weighed. These include the profound value of First Nations reconciliation where meaningful partnerships are established, as well as the benefits measured in the Community Forest Indicators Survey. These are summarized in the section that follows.

5.1.1 Community Forest Indicators Survey Results

Working with the Ministry of Forests, Lands and Natural Resource Operations, independent advisors and community forest practitioners, the BCCFA developed a system to measure and track the benefits of community forests in BC. Eighteen indicators measure the tangible benefits that community forests bring to their communities and to the province. These can be applied regardless of the organizational structure of a community forest or the location and ecosystem characteristics of the land base.

In 2017/2018, 41 community forests participated in the survey, providing data from their last reporting year specific to their operations. This sample represents 93% of the operating community forests in the BCCFA. Most are small rural communities, Indigenous and non-Indigenous, with an average population of 3,363. Sixty-six percent of respondents represent communities of under 3,000 people and 39% percent represent communities under 1,000. The community forest organizations operate relatively small forest tenures, with an average Allowable Annual Cut (AAC) of 38,867 m³. Despite their small size, the interplay of the results reported on the 18 indicators tells the story of how important community forests are to their communities and the province

Community Forest Indicators Survey Results: Highlights

Economic Benefits

- Community forests create local jobs. On average, community forests created 0.39 full time jobs/1000 m³ in forestry, logging and support services, compared to the industry average of 0.24 jobs/1000 m³. In the reporting year, community forests created 63% more jobs than the average.

¹⁵ <https://www.for.gov.bc.ca/hth/timber-tenures/community/goals.htm>

When activities such as trail building, firefighting and scientific study are included, the employment coefficient goes up to 0.42 jobs/1000m³.

- Community forests boost local economic activity. They contributed an average of \$1.3 million to their local economies, most of which have populations of 3,000 people or less.
- Community forests support local priorities by sharing their profits. They contributed an average of \$359,000 cash and in-kind to local projects. They used their profits to leverage, on average, another \$169,800 for community projects.
- Community forests are investing in the future economic return of the forest through intensive silviculture. The combined investment in the reporting year was \$2.1 million, 53% of which came from their own funds. They treated a total of 2,600 hectares. On average, they spent \$79,000 of their own funds on intensive silviculture, with an additional \$71,000 from outside sources, and treated over 214 hectares each.

Social Benefits

- Recreation is a key benefit. Community forests invested an average of \$25,500 in the reporting year. They built or maintained, on average, 18 km of trail. In total, respondents built or maintained 282 km of trail in the reporting period.
- Community forests support education. Sixty-six percent of respondents invested funds and/or time in education, collectively spending \$176,000 and 1,770 hours.
- Community forests are working to protect residents from the threat of wildfire. In the reporting year, they treated an average of 71 hectares and spent \$17,000 of their own funds to reduce wildfire risk. To date, the reporting community forests have collectively treated 3,522 hectares and invested over \$1.8 million for wildfire mitigation. They managed an additional \$6.5 million from outside sources.
- 70% of respondents have collaborated with their local government on Strategic Wildfire Prevention Initiative projects.

Cultural Benefits

- In BC, nearly half of the operating community forests are held by First Nations or a partnership between an Indigenous and non-Indigenous community. Sixty percent of survey respondents are CFs that are held by First Nations or in partnership with a First Nation. Forty-six percent have First Nations representation on their board of directors.

Environmental Benefits

- Community forests operate in challenging areas around communities. Thirty percent of the land base of the reporting community forests is deemed sensitive.
- Thirty six percent of community forests made investments in forest stewardship, incremental to legal requirements, averaging a \$124,000 investment and treating 625 ha each.

6 Recommendations & Next steps

Recommendation #1: Identify 6 new or expanded community forests. Issue licences by 2021.

We recommend that MFLNRORD, in collaboration with the BCCFA, determine locations where optimum conditions exist for new and expanded community forests to further advance wildfire mitigation activities and suppression near communities. Key considerations would include: First Nations partnerships and/or support; high & extreme fire threat locations; local capacity; provincial land; ease of implementation; and sufficient area and AAC to enable economic viability. In order to achieve gains for community wildfire protection while setting up economically viable and sustainable community forests, the size of these, both in area and AAC, would need to be determined on a case by case basis.

Recommendation #2: Undertake cost/benefit analysis of community forest program expansion.

To gain better understanding of the full scope of outcomes and benefits that rural communities and the province could expect from a broader expansion of the community forest program, a cost/benefit analysis must be completed in collaboration with the BCCFA.

Recommendation #3: Include a plan to scale up community-based tenures in the BC Rural Development Strategy.

The new Rural Development Strategy should state government's intention to increase the number and size of community-based tenures. The strategy can articulate an intention to make these tenures available in the long-term to all communities that can demonstrate capacity and commitment to Provincial Goals of the community forest program. Focusing on the land directly adjacent to these communities, the Province can make the tenures a core strategy for rural development and to reduce the risk of wildfire to communities.

Recommendation #4: Increase the financial support for community forests to invest in wildfire hazard reduction while ensuring the wildfire mitigation funding programs are nominal in bureaucracy.

Community-based tenures need to be financially viable businesses. Financial support to invest in wildfire hazard reduction by making funding directly available to tenure holders, as is currently the case with FESBC, is very important given the scale of the problem and the need for immediate action. The BCCFA will continue to work with MFLNRORD and FESBC to make the investment of provincial government funds as efficient and effective as possible. We will also continue to engage in efforts to make the utilization of residual fibre economically viable/commercial.

7 Conclusion

Communities have said for many years that they want to be more engaged in the forest sector, and the BCCFA is optimistic that Government of British Columbia is listening. While jobs and local economic develop are fundamental to what communities are looking for, no less important is wildfire mitigation and the protection of local assets and community values.

Community-based tenures, notably community forest agreements and First Nations woodlands licences, are uniquely positioned to serve as leaders in the coordination and management of wildland urban interface areas. Community forests have the mandate, the ability, and the interest to manage the threat of wildfire to create more resilient communities and forests.

Community forests are motivated to address community wildfire protection, create sustainable local jobs, and help government achieve its broad objectives. By providing increased rights and responsibilities to manage adjacent forests, the province can empower communities to become true partners in modern, collaborative, and sustainable land management.

The BC Community Forest Association represents over 90 rural and Indigenous communities across our province. We share a vision of a network of diverse community forest initiatives, where local people practice ecologically responsible forest management in perpetuity, fostering and supporting healthy and vibrant rural communities and economies.

8 List of Attached Maps and Files

- Logan Lake and Quesnel Case Study Maps
- FAIB Case Study Analysis
- Provincial Overview Map and Preliminary Analysis (Previously submitted)
- Issued and Invited Community Forests as of May 20 2018

9 APPENDIX: Excerpts from Community Forest Indicators Survey

Community Forest Indicators Survey 2017/2018

The following contains excerpts of stories told by Community Forest Managers in their responses to the Community Forest Indicators Survey

The Lower North Thompson Community Forest Society (LNTCFS)

We continue to make efforts to increase, diversify, and leverage our revenue and employment opportunities through participation in various funding programs (JCP, LBI, FESBC, CSJ, UBC, SIDIT, RD), through the purchase of a 12.5-acre parcel of industrial land, and through our expansion into milling with the purchase of a small sawmill and wheel loader. The land provides a location for our current milling but also future economic development activities. The milling operation provides new revenue to the LNTCFS by adding value to low quality logs while increasing utilization of fibre from our tenure and others.

Our Job Creation Projects provide local employment, revenue to the LNTCFS, and community benefits through trail creation and recreation site improvements. We value and support post-secondary students working towards careers in natural resource management by providing valuable training and work experience through our summer students programs. Since 2014 we have hosted a total of 10 students and will be hiring an additional 2 students for the summer of 2018.

As part of our 2017 Job Creation Program (JCP), LNTCFS partnered with Simcpw First Nation to develop and expand their mountain bike trail network which is a part of the Simcpw First Nation McBride to Barriere Mountain Bike Recreation & Tourism Initiative. 44% of Job Creation Partnership participants were First Nations over the term of this report. The JCP provided equipment, labor and wages for a 4-person trail building crew while Simcpw First Nation provided a two-person crew and training through a professional mountain bike trail building workshop for all participants. LNTCFS also donated lumber and a kiosk built through our previous Milling and Carpentry JCP. The Simcpw Nation Trails have since been added to the Trail Forks app which provides a georeferenced guide through the trails. Simcpw now has a total of 9.2km of completed trails with a diverse range of skill levels and more to come soon.

<https://www.facebook.com/simpcwmountainbiking/> <http://www.simpcw.com/simpcw-mtn-bike-trails.htm>

The 2017 JCP partnered with Simcpw First Nation to conduct fuel reduction treatments in and around the reserve area. They also expanded their mountain bike trail network as part of the Simcpw First Nation McBride to Barriere Mountain Bike Recreation & Tourism Initiative. Community Grants from the LNTCFS to the Simcpw community include: \$5,000 to Simcpw Youth Program, \$10,000 to Chu Chua Volunteer Fire Department and \$4,500 to Simcpw for WET Certified Technician training.

Cash Contributions: Barriere Splash Pad \$150,000; Community Grants \$128,984; Dixon Lake Dock (materials purchase) \$7,906; Scholarships/Bursaries \$22,000; \$530,888 invested into land & equipment purchases as means to drive economic development and diversify our revenue stream.

As a not-for-profit society, we have ability to access outside funding for our communities and take on additional projects/roles beyond the management of the CFA. These roles and projects continue to evolve and would not be possible without the existence and financial support of the CFA tenure.

Examples include our Job Creation Programs, participation in the Canada Summer Jobs Program, and involvement in the LBI/FFT/FESBC and Rural Dividend programs. We are also using the CFA profits and tenure to leverage and create economic development in the valley in projects like the recent land purchase and establishment of a small milling and value-added operation.

Logan Lake Community Forest (LLCF)

The Logan Lake Community Forest continues to exemplify the core values of the BCCFA, through community leadership, providing local and social economic opportunity, and demonstrating innovation and passion for community forestry. Although we are involved with many innovative forest management initiatives, the story that we would like to share goes back to the very birth of our tenure - Wildfire Management. Back in the early 2000's the mountain pine beetle ravaged all of the pine forests surrounding our community. We all mourned the loss and our landscape was forever changed. Then the 2003 Firestorm hit our region and it did not take long to realize that we had a time bomb on our own doorstep...drastic measures needed to be taken immediately. This event was the catalyst for Logan Lake to apply for a community forest. At the time, it was the only tenure mechanism available to handle large volumes of timber. We were granted one of the first community forest tenures in BC as a probationary licence so that we could address the dead standing pine (fuel) in our backyard.

We rolled up our sleeves and got to work. In the first year we removed 180ha of dead pine with a fairly industrial approach - we logged. Next, we brought in a qualified professional to assess the wildfire threat within and around Logan Lake. Standards at the time were slightly different than today but essentially, we were addressing our wildland urban interface area.

Throughout this time, Logan Lake Community Forest hired local high school kids through our Youth FireSmart Team program (formally known as SuperKEY). This continues to be a strategically funded annual program by the Community Forest and is a collaboration between the District of Logan Lake, the Logan Lake Wellness, Health & Youth Society (Logan Lake WHY), and the Logan Lake Community Forest. The teenagers do manual labour with hand tools for spacing, pruning and piling woody debris. It's hot, sweaty work...and they love it! They are also supported by the Community Forest Manager with lessons in the field such as tree and plant identification (scientific names included), wildfire behaviour, biodiversity discussions and whatever they have on their minds.

In 2013, Logan Lake was recognized nationally as Canada's very first FireSmart Community through the Partners in Protection program with FireSmart Canada, having successfully implemented FireSmart activities for 10 consecutive years. We're now entering our 15th year and intend to keep on going. Of course, none of our FireSmart achievements would have been possible without the ongoing support of the Union of BC Municipalities and the SWPI Program. It may not be the easiest program to work within, however, we've been fortunate to have had the right people at the right time managing our program.

In 2014, the Community Wildfire Protection Plan (CWPP) was updated, initiating another round of treatments focused on the first 500m outside of the community boundary. Annually this represents about \$250,000 of project work spread out amongst the local contracting community and First Nations.

Does all this paperwork, sweat and hard work pay off? Well we don't just believe it...we know it. In July, 2017 we experienced a human-caused fire just south of town. Thankfully it fell within an area we had treated two years prior. The fire never grew larger than half a hectare. The scorched trunks of the trees

told the story. With no ladder fuels or dense understory to climb up into the canopy, the flames only crept along the tinder dry grass, licking and charring the Douglas-fir, never getting too hot or too fast to do any significant damage. Local municipal fire crews were quick to respond, gaining safe access to the head of the fire and dousing the until provincial wildfire crews arrived to take over. The very next week our neighbours in Ashcroft were less fortunate and the Elephant Hill fire erupted, setting the stage for the worst fire season British Columbia has ever experienced. The Merritt Herald and CBC News both ran stories of the high school kids and their efforts.

We have much to be grateful for and we know that we cannot rest. This is why the Logan Lake Community Forest is also leading the way in British Columbia with landscape level strategic planning for wildfire. In 2017, we were successful in our proposal to the Forest Enhancement Society of BC to pilot a Wildfire Risk Management Plan covering our tenure area. We believe that this planning process will pave the way for other communities in the province.

In 2017, the LLCF received funding from FESBC to complete a Wildfire Risk Management Plan (WRMP). The WRMP is a landscape level planning process in which we are modelling after ISO 31000 Risk Management Standards that have been adopted by the Wildfire Management Branch in Alberta. For the past 4 years, Forsite has been developing and delivering these services in Alberta. This represents a "pilot" for British Columbia and we anticipate that it will be used in other parts of BC in the future. The purpose of the WRMP is to address wildfire risk at a landscape level in and around the Logan Lake Community Forest. The plan will provide identification, analysis, and evaluation of wildfire related threats and opportunities across the plan area. Key management strategies will be identified based on risk assessment, with a focus on values at risk. The planning team would meet throughout the WRMP process to evaluate strategic direction and identify stakeholder interests. It is our vision that subsequent management strategies (such as prescriptions and treatments) will be generated from this process, with subsequent applications to the Forest Enhancement Society for implementation.

I think it is safe to say that there are many ways to mitigate the threat of forest fires to any community, but from the perspective of Logan Lake, the silver bullet has to be leadership. Our Mayor and Councillors have changed but the commitment to public safety has never wavered. Our Fire Chief has been a real champion of the cause. And of course, our citizens are to be commended for their understanding and for owning their part of the equation, many of whom have completed FireSmart treatments on their own lands.

The District of Logan Lake invites residents and visitors to "Discover our Nature". A key to this community draw is the enjoyment of forests and lands surrounding the community. Off-Highway Vehicle (OHV) use (motorcycles, quads, side by sides, snowmobiles) is significant in the lands surrounding Logan Lake with great opportunity to expand the region as an even greater OHV trail destination. The Logan Lake Community Forest in partnership with the District of Logan Lake was successful in securing BC Rural Dividend Funds. LLCF put up \$20,000 seed money and received \$100,000. We are working closely with Recreation Sites and Trails BC and the Logan Lake ATV Club. The proposed project will establish, upgrade or enhance a series of OHV trail routes near the town of Logan Lake. Work will involve a range of activities that are based on the current status of the trail, and will bring these routes up to a standard to support more significant OHV use and expand and enhance the OHV experience. Work will involve trail establishment, trail upgrade, stream crossing replacement or establishment, and a range of other trail expansion work. The trail works will be based on an OHV Trail System Plan developed in 2013 by Recreation Sites and Trails BC (Kamloops) in collaboration with the ATV Association of BC and the District of Logan Lake. In addition, the trail work will be integrated (connected) with the Rim Trail loop that is also being enhanced by the Kamloops ATV Club, also supported by the 2018 OHV Trail System Plan.

The LLCF refers all development activities to 23 First Nation groups. Under new management in 2015, the LLCF took a new approach and invited First Nations to go in the field on 100% of the proposed cut blocks and/ or FireSmart treatment areas requiring mechanical treatment. Through this intensive level of engagement, deeper relationships have been formed and better understanding of each other's values and interests achieved. The LLCF has paid for all their activities that support cutting permit development and include activities such as: archaeological impact assessments, cultural heritage resource assessment, and report writing.

The Burns Lake Community Forest Corp (BLCF)

In 1999, Minister David Zirnelt selected the Burns Lake Community Forest (BLCF) application as one of the first community forest pilots to test the then-new form of tenure. The BLCF is among the largest community forests in the province. Between 2003 and 2008, the mountain pine beetle (MPB) killed nearly 50% of the mature timber on the agreement area. A large, unavoidable salvage program ensued, which is expected to end soon.

In 2015, the BLCF board of directors recognized that the wind-down of the salvage program represented an opportunity to proactively apply the very best area-based management ethos and practices to mitigate the impacts of the MPB epidemic on the environmental, social and economic interests of the communities that live near, and benefit from, the BLCF. With an investment of approximately \$1 million, the BLCF is nearing completion of its Mountain Pine Beetle Mitigation Plan.

With this broad project in mind, Burns Lake Community Forest embarked on a vision to be the top performing community forest in the province. Our plan is to exemplify this achievement in 3 ways: Complete a Mountain Pine Beetle Mitigation Project to move BLCF beyond the beetle salvage mode; Complete an operational and financial analysis to assess long-term sustainability and viability of the K1A licence; Attain Forest Stewardship Council (FSC) certification to show that:

- a) BLCF puts United Nations Declaration of Indigenous Rights (UNDRIP) at the forefront of forest management
- b) BLCF manages the K1A licence to the highest environmental stewardship standards recognized internationally
- c) BLCF can maintain opportunities for fiber utilization with a sustainable economic opportunity

I am excited to report that BLCF has completed the Operational and Financial Analysis, as well as attained FSC certification as of November 2017. The last measure of our success hinges on the successful integration of the Mountain Pine Beetle Mitigation project components into the legal bound management plan document. I will spend a few minutes highlighting the following that has been completed to date to bring this project to fruition:

- Attained and implemented utilization of state of the art technologies such as LiDAR, and Drone Ariel Reconnaissance to make sound social, environmental, and economic decisions;
- Used tools to gather better quality data for measurement and analysis;
- Completed extensive ecosystem analysis and evaluations to ensure that we are measuring and managing the forest to the highest environmental standards;
- Examined High Conservation Value Forest analysis, First Nations Values, and Ecological values in detail: Old Growth Management Areas (OGMAs); Landscape Connectivity Corridors (LCMs); Visual Quality Objective (VQOs); Government Action regulations (GAR) (ie: goshawks, goats, moose etc.);

First Nation Cultural Values; Increased Effective Riparian retention (as per FSC requirements); Range of Natural Variation Analysis to ensure long-term recruitment and retention of age class distribution from young and old forest is managed to the environmental requirements of the biodiversity criteria for this region; Timber Supply Analysis with a seven-generation output to show long-term sustainable harvest levels; Completed a Moose Mitigation and Marten Habitat Assessment Project to examine operational activities;

- Assessed roads and structures to support a strategic plan for road deactivation and maintenance of road our networks. An Access Management Project and a Stream Assessment Project are in progress that also support our moose mitigation efforts.

BLCF is the social and economic fabric for all the non-for-profit volunteer organizations that make our community a better place to live. Our policies ensure that more than 70-75% of profits are re-distributed back into the community. Our donation policy re-distribution budget is based on a 10% of gross profits calculation. The remainder is distribution to shareholders and our 3 First Nation partners, often between 20-25% for each (split equally between 3 parties)

FSC put forth key objectives for community engagement. These community engagement meetings and session have helped created open and transparent communication between community members and community forest. We have received lots of positive feedback about our engagement efforts and process. We collect annually on survey monkey our progress to gauge public input.

The Creston Community Forest (CCF)

The Creston Community Forest manages a long-term Community Forest Agreement, whereby all its obligations are up to date and in good standing. This year, CCF made great strides in fostering its recreation, fuel mitigation and forest education goals for the community and surrounding area. To date, four hiking trails have been established within the community forest's management area. These include the Lady Slipper, the Thompson Rim, the Thompson Rotary and the Thompson Pack trails. Given the natural beauty of the Creston Valley, CCF decided to explore other recreational opportunities outside its management area, leading to a partnership with the Town of Creston. CCF identified the need for a hiking trail that is close to the town for the benefit of both locals and tourists.

An issue with the Town of Creston is that much of the area surrounding it is private land, making it hard to access the forest around it and hard to promote it. CCF identified a portion of land owned by the municipality that joins to CCF's tenured land and presented a proposal for a recreation trail and town council was onboard. CCF did field work to identify key viewpoints and mark out a trail route. Construction is slated to start spring 2018, which will include the installation of a kiosk and picnic tables. CCF will be contributing the majority of the funds for this project. This trail is a much-needed asset for the Creston Valley, as it will provide connectivity for the locals, as well as help stimulate the economy by encouraging tourists to stay longer in the Valley.

CCF recently began treatment of a Wildland Urban Interface fuel reduction project within its area. The area being treated is 20 hectares in size and abuts the private land of over 20 residents. It has a very dense understory and is heavily timbered and is also characterized by a network of hiking/horseback trails used by local residents. CCF is removing the dense understory and thinning the over story, ensuring the trails stay intact during the process, and in some instances opening trails that have been blocked by blowdown.

This project is being funded solely by CCF. CCF has identified many other areas in our tenure needing treatment and is creating a plan for prioritizing and treating these areas.

Along with this project, CCF continues to reach out to the public to provide information about FireSmart principles and encourage private landowners to 'FireSmart' their property. CCF uses local media such as magazines, newspaper and radio, as well as attending events such as the local farmers' market and trade shows to raise awareness and distribute informative brochures, such as the FireSmart Homeowner's Manual. CCF also recently updated the Community Wildfire Protection Plan for the Town of Creston, which identifies areas needing treatment for wildfire threat reduction and provides guidance for treatment options and emergency preparedness.

Another important mandate for CCF is forest education. CCF continues to provide forest education to the community in the form of field trips. Each year CCF hosts a field trip during National Forest Week, teaching over a hundred elementary school students the importance of the local forests and ecosystems. Students move through various stations teaching them about tree identification, biodiversity and wildland firefighting. CCF is also the National Forest Week BC Coalition Regional Coordinator for the Creston-West Boundary area. CCF also hosts field trips in the spring where high school and elementary school students get the opportunity to plant trees and learn about the surrounding forests and ecosystems. CCF hires post-secondary students during the summer months and ensures that they are exposed to a wide variety of forestry related tasks, helping them gain invaluable experience and develop skills, thus strengthening their future employability.

Fort St James Community Forest (FSJ)

FSJ Comfor provides access, mapping services and sponsorship to the snowmobile club, the dogsled racing club, cross country ski trails and Murry Ridge Recreational area.

FSJ Community Forest Continues to provide timber to independent and regional operators, in an industry landscape dominated by large license holders and super mills.

Barkley Community Forest Corporation (BCFC)

The Barkley Community Forest Corporation (BCFC) has been two decades in the making. It arose from the ashes of the infamous war in the woods pitting loggers against environmentalists. The CF represents an incredible liaison of the Municipality of Ucluelet and the Toquaht Nation, who have worked through many frustrating years, and are now able to see the fruits of their labours in a successful operation, demonstrating to the nay-sayers the reality that the logging industry is a sustainable industry. The BCFC is new - this has been its first year of operation, yet we have been able to generate over \$1.5 million dollars for our two partners for community improvements. It is a fabulous opportunity to celebrate.