



Detailed Conference Notes

[Conference presentations are available at this link](#)

[A short conference summary is located here, with photos included.](#)

Summary

The BC Community Forest Association (BCCFA) welcomed over 150 delegates to Mackenzie, BC. The 2024 Conference host, the McLeod Lake Mackenzie Community Forest (MLMCF), went above and beyond to create a meaningful and memorable event. The opportunity to gather in a rural location provided many unique experiences for attendees, with a homegrown feel that resulted in an event with a lot of heart.

One such unique experience was a daily bird banding tour in the early morning hours, during which delegates were treated to learning about bird anatomy, banding techniques, and the various studies at Mugaha Marsh. The MLMCF team brought ornithologist, Laura Tabbakh, all the way from Montreal just to participate in the event.

During a Day 1 round of introductions, we found that nearly 40% of those in attendance were first-time BCCFA conference goers! This rather boldly highlighted the importance of reaching into the far corners of the province to connect with local people in local places. The first day of



the conference featured a field tour of MLMCF's wildfire risk reduction treatment areas along Highway 39, the only access route to and from the community of Mackenzie. With four curated stops that highlighted different aspects of their work, MLMCF staff and consultants from Frontera Forest Solutions provided information on forest health, specialized harvesting equipment, monitoring sites and windthrow research. Following the field tour, delegates had the option to participate in a cultural hike with former BCCFA Director and Mackenzie local Tania Solonas, or a number of other recreational activities. The day concluded with a welcome reception at the beautiful Mackenzie Recreation Centre.

Day 2 commenced with a welcome from Doris Leclair, a Tse'khene Elder who joined us for the morning, as well as a recorded video and greeting from Minister Bruce Ralston, Minister Nathan Cullen and First Nations Forestry Council CEO, Lennard Joe.

Wednesday concluded with the BCCFA's annual banquet and silent auction. The funds raised go towards sponsoring students to attend future conferences, which we love seeing year after year at our events! The banquet featured live music from a local band and delicious local catering, and also included a presentation of the 2024 Robin Hood Memorial Award for Excellence in Community Forestry. Chinook Community Forest was selected as the recipient of this year's award, presented by Deputy Minister Rick Manwaring. Chinook Community Forest is a partnership of six First Nations and two municipalities: Lake Babine Nation, Wet'suweten Nation, Tsil kaz koh Nation, Cheslatta Carrier Nation, Nee Tahi Buhn Indian Band, Skin Tyee Nation, The Village of Burns Lake and The Regional District Bulkley Nechako. Taking a leading role in sustainable forest management and wildfire mitigation in the Burns Lake area, Chinook Community Forest has supported events and organizations with \$600,000 in donations during the past five years. Congratulations to the Chinook Community Forest team for their well-deserved acknowledgement!

The final day of the conference commenced with the 2024 AGM for BCCFA members. We are pleased to welcome Dan Macmaster (West Boundary CF) and Steve Lorimer (Qala:yit CF) back for another term, and Angela French (Creston CF) to her first term with the BCCFA Board of Directors. A special note of gratitude to Daniel Gratton, who retired from the board this year after serving 3 consecutive terms. Thank you also to Tania Solonas for her time as a Director.

Following the AGM, Regional Chief Terry Teegee provided a keynote speech, delivering messages of support for community forestry in BC and speaking to the interconnectedness of the work we all do in creating a more sustainable future.

Conference Lead Susan Mulkey (BCCFA) wrapped up the event by reminding delegates of the importance of the work we do together, and that the BCCFA is there to support all members.

We at the BCCFA extend our heartfelt gratitude to the delegates, sponsors, speakers, and exhibitors who joined us in Mackenzie for the 2024 Conference & AGM, with special thanks to our exceptional hosts at MLMCF. Each gathering renews our inspiration and appreciation for the remarkable and courageous work being done by community forests across the province.

Jennifer Gunter, Executive Director

Susan Mulkey, Senior Manager and Conference Coordinator

Carly Dow, Manager of Communication and Outreach

Table of Contents

Field Tour - Climate-Based Forest Management – Hwy 39 Plans and Results..... 5

Field Tour - Climate-Based Forest Management – Lessons and Monitoring 9

Field Tour -Windthrow 12

Field Tour - Forest Health 16

Field Tour - Equipment Demonstration..... 19

Conference Welcome 21

State of the Forest Sector 23

Safety and Community Forests..... 27

Managers Meeting..... 32

Community Forest Governance 34

Climate Change Adaptation: From Projections to Practice 39

Networking for Wildfire Preparedness, Recovery and Resiliency..... 43

First Nations Relations: History is the Context, Shared Decision-Making is the Future 53

Final Comments 57

Field Tour - Climate-Based Forest Management – Hwy 39 Plans and Results

“With a goal to promote and maintain wildfire resilient stands that can withstand future wildfire activity and lower fire threat along Hwy 39, how can MLMCF create healthy, self-sustaining forests that are resilient to a changing climate?”

June 11 Note taker – Chanelle Gauthier

Speakers

Dan Boulianne , RPF (General Manager, McLeod Lake Mackenzie Community Forest)

Nick Soverel RPF, MSc (Founder & Principal Forester, Frontera Forest Solutions, Inc.)

Session Summary

In this session Dan Boulianne and Nick Soverel described the fuel treatments along Hwy 39, the main egress route for the community of Mackenzie. Dan described the initial conditions of the stands, the variety of prescriptions across the treatment area and their mixed results. He highlighted the importance of detailed instructions and active communication with machine operators: “Results all come down to the operator in the seat.” Dan also noted the initial challenges of overlapping tenures in the main highway corridor, and the acquisition of 632 ha of land along the highway by the McLeod Lake Mackenzie Community Forest that will facilitate long-term management and continuity of treatments in a landscape-level approach.

As the signing forester of the original 2019 prescription, Nick described the principles that informed its development, and how the priorities and approach to fuel treatments have changed as they learn from treatment results and encounter different forest types (i.e. younger stands). Although the 2019 prescription was based on the best practices of the day, Nick noted that it was a “postage stamp” approach and that their priorities have shifted since the initial plan. He recommended proceeding with caution when using a shaded fuel break approach, as it may not be appropriate in many forest types (i.e. sub-boreal stands). Although the 2019 prescription served the initial priority of reducing fuel loading along Hwy 39 to protect potential evacuees from Mackenzie, Nick highlighted a shift toward developing long-term prescriptions with climate resilience in mind. Informed by post-treatment results since 2019, climate resilience planning along Hwy 39 will require long-term management of fuel-treated areas, and a shift toward pyrosilviculture. These will be informed by site series mapping along the corridor

to emphasize protection of moist sites, to reduce windthrow, and to address forest health concerns.

Notes

Dan Boulianne:

- Hwy 39 fuel treatments occurred over many years, beginning in 2019 – various prescriptions, approaches, and mixed results
- Site of 2021 fuel treatment near junction of Hwy 39 and Hwy 97
- Treated with feller-buncher and skidder
- Various challenges with entire project – “dog’s breakfast of conditions” – including challenging terrain, mountain pine beetle grey attack stands, overlapping tenure
- “Results [of the treatment] all come down to the operator in the seat.” (Dan Boulianne)
- Lessons learned: results are operator-dependent and success requires more than a simple pre-work. Detailed instructions to operators are key. (Success in this case is assessed based on levels of retention outlined in treatment prescription.)
- Project began with work in mature forests, now moving into plantation management, which comes with its own set of unique challenges (e.g. forest health – rusts)
- During expansion of MLMCF after the last timber supply review, MLMCF strategically added 632 ha of land along the Hwy 39 corridor to facilitate permitting for fuel treatments
- Monitoring will be key in the future
- More energy was put into project early on due to community safety concerns
- Now, with areas along Hwy 39 integrated into MLMCF tenure, moving toward setting long term management goals - *including monitoring
- Overall, pre-treatment conditions were a “dog’s breakfast” – many challenges with planning and forest health issues

Nick Soverel:

- Nick was the signing forester of the original Hwy 39 fuel treatment prescription in 2019
- 2019 prescription Included roughly 500 ha. Created with a small budget and short timeline. Objective to protect evacuees along main (effectively the only) evacuation

route from Mackenzie. Designed based on principles of shaded fuel break philosophy – with focus on lowered fuel state and width of treated area

- 2019 concepts were best at the time, but were more of the “postage stamp” approach to wildfire mitigation
- Today, they are moving toward a 50-year prescription with climate resilience in mind and emphasis on protecting moist sites (spruce-dominant)
- 630 ha acquired by MLMCF along Hwy 39 corridor to promote long term management of fuel-treated areas and to work toward **PYROSILVICULTURE**
- Using successes and failures, lessons learned since 2019, to feed into resiliency and work toward long term silvicultural goals (e.g. moist sites drying out and spruce death post-treatment due to heat dome)
- Aim to retain healthy trees (while reducing fire risk)
- Mapping all site series along Hwy 39 corridor to reduce tree mortality and to improve climate resilience
- 2019 treatments created with urgency to protect community in short period of time, now shifting planning approach – How to design long term treatments based on forest ecology?
- Key to long term treatments will be adaptable prescriptions and monitoring - Prescriptions must be adapted to site-level conditions as needed (e.g. windthrow concerns, forest health, varying moisture conditions)
- For planning in sub-boreal forests, proceed with the shaded fuel break philosophy (may be more relevant in southern BC and other forest types than for north/boreal)

Q&A

Q: What is your opinion of the viability of unfunded thinning operations? (Unrelated to fuel treatments)

A: (Dan Boulianne) In this case, all fibre was locally used (Conifex, local cogen plant), and none was commercially viable. At best, in thinning operations in the area, you might break even, but heavy loading of dead and down materials makes revenue generation difficult.

Q: Forest health - Any observed issues with spruce beetle, post-treatment?

A: (Dan) In certain areas, but not at large scale

(Nick) - Important to note that spruce beetle attack has not specifically been monitored. Have observed spruce- and balsam-shock and scorch on dry sites (particularly in areas thinned from above)

Q: Are there any clear plans/schedule for re-entry in treated areas?

A: (Nick) – Original prescription did not include explicit plans for re-entry, but including objectives for climate resilience in future prescriptions will include plans for re-entry. Future plans may also include earlier entries into young stands to increase windfirmness over time

Q: Is there a threshold for re-entry? (Level of fuel-loading post-treatment that would pose enough threat to spur re-entry)

A: (Dan) - Low-intensity re-entry has occurred on a regular basis to buck windthrow to the ground. Some newly acquired lands had been treated by previous tenure holder – the state of treatments in these areas must be assessed, re-entry may be required to adjust their conditions to meet MLMCF objectives

(Nick) – Areas that had been treated entirely by hand crews (no machines, thin from below), remaining trees almost entirely blown down (WRR areas closer to community that had been treated prior to becoming part of MLMCF). In this case, debris piles had been placed too close to standing trees – fire damage resulted in weakened stand and significant loss to windthrow

Q: Are these lands part of the THLB (timber harvesting landbase)? Is this a shift of objectives from timber to public safety? How has this shift affected AAC negotiations?

A: (Dan) – Last timber supply review set aside 5000 m³ for expansion of community forest

- Finding footprint for this expansion area was difficult
- Most of tenure expansion area was located in 2 unawarded woodlots, the remaining area (632 ha) was taken along Hwy 39 corridor to work to meet safety objectives
- This expansion gives the opportunity for long-term prescriptions, and helps meet community safety goals
- *MLMCF also communicating with major licensees along Hwy 39 corridor not to work too hard on meeting free-growing objectives → Plans to work with ministry to alter

requirements in these areas since meeting free growing stocking standards is not compatible with wildfire risk reduction objectives

Q: Have there been many challenges with public perception/push-back?

A: (Dan) – As residents of a mill town, Mackenzie locals are not particularly sensitive to visible operations, but they would like more effective retention along Hwy (less blowdown of retained stems)

- Mackenzie Wildfire Advisory Council was formed in 2018 (includes BC Wildfire Service) – helped to streamline communication with public about treatments, blowdown, emergency preparedness, etc.
- Transparency is key to having community support

Q: How was fibre removed? (Burned on site, milled, used elsewhere?)

A: (Dan) – Manually treated areas were piled and burned, mechanically treated areas were piled, ground, used mostly at Conifex (local cogen plant)

- You would need a sizeable program and enough value in fibre to justify removing fibre for timber or other use

Field Tour - Climate-Based Forest Management – Lessons and Monitoring

“With a goal to promote and maintain wildfire resilient stands that can withstand future wildfire activity and lower fire threat along Hwy 39, how can MLMCF create healthy, self-sustaining forests that are resilient to a changing climate?”

June 11 Note taker – Chanelle Gauthier

Speakers

Nicholas Soverel RPF, MSc (Founder & Principal Forester, Frontera Forest Solutions, Inc.)

Dan Boulianne, RPF (General Manager, McLeod Lake Mackenzie Community Forest)

Session Summary

In this session Nick Soverel highlighted the importance of monitoring in long-term adaptive forest management. He described monitoring work done by Frontera in Whistler, motivated by community concerns about fuel moisture conditions post-treatment. From his monitoring work in Whistler, Nick concluded that potential increase in fire risk from fuel drying post-treatment is likely offset by the significant reduction in fuel loading. This point was emphasized on site in Mackenzie, where excessive fuel loading was visible adjacent to the treated area.

Nick highlighted the importance of inventories and monitoring immediately after treatment to capture the differences between written prescriptions and executed treatments. He also provided recommendations for designing a monitoring program, including various options for data collection to support monitoring on a limited budget.

Dan emphasized the importance of asking the right questions in monitoring to accurately measure success. **“If your objectives are vague, your results will be vague.”**

Notes

Lessons and monitoring:

- Description of monitoring work done by Frontera in Whistler due to concerns that fuel treatments may increase the vulnerability of stands to warming and drying, thereby increasing fire risk
- Results in Whistler suggest that the potential increase in fire risk from warming and drying post-treatment are likely offset by significant reduction in fuels – point emphasized by comparing untreated area adjacent to treatment on site – adjacent stand had high fuel loading, lots of blowdown
- Monitoring is KEY – you can't rely on memory alone. Repeated measurements and documentation will allow for learning and feedback in management well into the future.

Nick's recommendations for monitoring:

- Have your questions in place and design your monitoring approach based on these questions to test assumptions of initial prescription. – How will you define success/failure? (Fuel-loading, retention density/health, site-level moisture/temperature, fuel moisture) How will you measure these? Create a sampling scheme to track those measures.
- Investigate the post-implementation effects! In practice, prescriptions are often not exactly followed – especially in areas where small, maneuverable machinery is difficult

to find/unavailable. It is therefore essential to determine the variation from the prescription immediately after treatment with good inventory of standing trees and site conditions, and consistent monitoring. You need to know your post treatment conditions, as they are on the ground, don't base your assumptions on the written prescription.

- Inventory your blowdown, post-treatment. Understand the impacts of wind on your treatments and use this information to adapt your plans and management of treatment sites.

Tech for data collection, repeat photography, and inventories on a limited budget:

- 360 degree camera to capture retention and fuel-loading (establish a GPS-tagged plot center for repeat photography and data collection)
- Tree inventories (plots)
- US Forest Service photo-load method for fuel-loading
- Potential for future AI able to detect fuel size classes from photos
- Drones
- Dryad System – detects relative humidity, fire, temperature – subscription-based system set up in grids on treatment site, can use Wi-Fi to record and relay information across site (remote measurements)
- Kestrel Drops – small devices to collect data on relative humidity and temperature, Bluetooth connection, roughly \$110 (remote measurements)
- Protimeter for measuring fuel moisture (measurements by hand)

Q&A

Q: Have you included soil moisture monitoring in your monitoring programs?

A: (Dan) No. No soil scientists on staff. Anecdotally, the impacts of treatments have been visible in terms of drought – especially on drier sites. It is therefore key to ask the right questions in monitoring, so you can appropriately measure your success. **“If your objectives are vague, your results will be vague.”**

Q: Does FESBC provide funding for long-term monitoring?

A: (Nick) Not right now. Frontera has partnered with other organizations (e.g. FP Innovations) to support monitoring programs.

Q: Based on the sense of urgency felt by many communities to “get to work” on fuel treatments, is the money spent on monitoring worth it? Or does it take away the focus from executing fuel treatments?

A: Relative to the amount spent on fuel treatments themselves, the cost of monitoring is minimal. There are many cost-effective and simple methods available, as demonstrated by Nick in this session. Using these methods, it is highly unlikely that monitoring programs will take away funds from treatment work.

It is **essential** to monitor treatments to inform adaptive management and long-term resilience and effectiveness of treatments. Moreover, monitoring and community support will likely be a major focus, moving forward with Forest Landscape Plans.

Field Tour -Windthrow

Corridor sites have been subject to a variety of windthrow events of different severities. Some fuel treatments seem to exacerbate the problem. What can be done to mitigate windthrow? Listen to some thoughts and observations from a provincial expert from UBC.

June 11 Note taker – Channele Gauthier

Speakers

Ken Byrne, RPF, PhD (Lecturer and Program Coordinator for Masters of Sustainable Forest Management at UBC)Session Summary

In this session Ken Byrne highlighted the importance of understanding wind conditions at a regional and site level, using various tools (historical data, wind roses, local observation). He encouraged attendees to “**think like the wind**” when assessing site-level wind conditions, considering the impacts of local topography on wind speed and direction. He showed how stands and trees are adapted to local wind conditions, and how anomalous wind events or altered stand conditions may increase the likelihood of windthrow.

Ken recommended determining your tolerance for windthrow **before** initiating treatments, based on the objectives for your treatment. You can then compare the likelihood of windthrow (based on the overall biophysical hazard of the site) with your tolerance and adjust your treatment accordingly. If your windthrow likelihood exceeds your tolerance, changes should be made to your prescription or approach. He also emphasized the need for monitoring in

adaptive, long-term management. In response to questions about reducing windthrow risk, Ken recommended opening gaps slowly over time, when possible. He also provided various guidelines for spacing and buffer width, based on previous research (specifics below, in “Notes” and “Q&A”).

Notes

- It is important to evaluate success of treatments based on the **initial objectives of the plan**. In this case, retention levels may be of interest – it is essential to assess windthrow risk
- Where is the wind coming from? It is critical to understand the regional and site-level wind conditions where you are - (understanding low and high pressure systems, surface winds, etc.)
- Wind risk is the result of **weather** interacting with **topography** – wind can increase in speed and change direction as it hits topography. In general, in BC, a south-facing wind edge will experience more windthrow than edges at other aspects.
- Trees will acclimatize to the general wind climate of the region. They will grow big roots to anchor and stabilize themselves against the **most common** wind direction. In Mackenzie, the most common wind direction is from the southeast.
- It is important to use various tools to assess the dominant wind conditions and the unique risk on your site:
 - Historical data
 - Wind roses
 - On site inspection of topography
- **“Think like the wind.”** Like any fluid, the wind will always take the path of least resistance. Think about how the wind will interact with topographic features in the area and on site to anticipate where you might get the most force or wind damage.
- **Wind anomalies?** Use historical data and wind roses to understand abnormal wind events that may pose great risk to unacclimatized trees. Since trees grow in response to most common wind direction, they may be highly vulnerable to winds in uncommon directions.
- **Hazard assessments**
 - Stand-level – think about the acclimation of the stand to the dominant wind direction
 - Tree-level – look at crown form and stem form. Trees with long crowns and high stem taper are likely open-grown, and therefore most acclimatized to the forces

of the wind. A long crown also results in a lower center of force on the tree from the wind, and a shorter lever arm. *Trees with short crowns in dense stands are least acclimatized to the forces of wind, and are therefore most susceptible to windthrow.

- **Windthrow triangle**

- **Topographic hazard + Stand hazard + Soil hazard = Overall biophysical hazard**
- Overall biophysical hazard relays the likelihood of wind damage to a particular stand
- Important to consider the impacts of your treatment on the windthrow triangle to understand the ways in which treatments may increase the likelihood of windthrow.

- **Treatment impacts on wind**

- Essential to consider how your treatment will change the wind conditions on site
- Creating large openings will cause wind to drop down to the surface level and move unimpeded, thereby increasing wind load on trees – [Increased **fetch**]
- Example: In 100 km/hr windstorm, trees in a dense stand may only experience ~35 km/hr winds. Opening up this stand (even thinning the stand) may increase the wind experienced by these unacclimatized trees to ~55 km/hr. This increased wind load on remaining trees may result in severe damage.
- **In general, it takes 3-5 years for a tree to acclimatize to a new wind environment** (e.g. openings caused by forest operations).

- **Likelihood vs. Risk**

- **Likelihood** relates to the overall biophysical hazard – the change that wind damage may occur in a particular stand
- **Risk** is determined by a forest manager or community and relates to the objectives for the treatment area. Identify potential consequences of windthrow, and determine your tolerance to these consequences. – **What levels of windthrow are acceptable? Which values are at risk?**
- If your **likelihood is greater than your tolerance**, adjust your treatment or plan for additional treatments (e.g. topping, crown pruning – these are best for mid-likelihood only and may be a waste if employed in high- or low-likelihood areas)
- Based on your tolerance, likelihood, and objectives, develop alternative treatments/plans. For example, planting at wide spacing in a cleared area can

help to **initiate** a windfirm stand from the beginning. – **“We can design a stand like we design a house.”**

- **“Monitoring is always the gap in management.”**
 - Especially true when it comes to windthrow. Need to make time for monitoring and compare observations to projections.
 - Create a database with information on: initial assessment, treatment, prediction, outcome, notes. This will promote learning and help to inform future foresters on your plans, approaches, and lessons learned.
 - Develop a knowledge base over time – iterative and adaptive monitoring and management
- Top- and spiral-pruning are options that generally only make sense for large trees in very public areas. These treatments are expensive and often a waste of money. They are only recommended for mid-likelihood stands (10-70% likelihood). (Trees likely to blowdown anyway in high-likelihood stands, and treatments likely to be overkill for low-likelihood stands).
- **“Think in terms of rotation, not in quarterly profits and election cycles.”**
 - Sometimes it may be better to start from scratch and grow a new stand that is resilient to windthrow and fire. This will require lots of public education and engagement to explain sacrificing short-term aesthetics for long-term safety and resilience.
- Observations from buffer strips around riparian zones have shown that 5 m buffers experience extremely high levels of windthrow (~40%), and 30-40 m buffers are optimal (<10% windthrow). Consider these numbers when planning a protection buffer for treatments – width should be 30-40 m to offer effective windthrow protection

Q&A

Q: As there is increased public request for more selective harvest and less clearcutting, how can we prevent blowdown?

A: This will depend on your objectives and your tolerance for windthrow. For example, areas planned for biodiversity objectives may have a higher tolerance for windthrow (downed trees may promote biodiversity objectives).

Depending on your objectives/conditions, you can open the stand slowly, over time. Gaps of 1 tree-length may not have huge impacts on increased wind loading. Gaps of 3 tree-lengths or greater will have significant impacts on wind loading.

Commercial thinning – Understand and anticipate how you are changing the porosity of the stand.

- Trail orientation will have impacts on wind behaviour – essential to consider the direction of your trails
- Impacts may be mitigated by leaving a strip of trees along a road before treatment starts (more windfirm), and then aligning trails **not** in the direction of the prevailing winds [avoid creating a wind tunnel]

Q: Are there any general results or data on windthrow impacts of thinning?

A: As you increase spacing, you increase wind loading on remaining trees. Femelschlag or expanding gap silviculture, can work for shade-tolerant species – start small with selective cutting, and gradually expand edges. Whenever you are creating new edges, open them up slowly.

Identify spacing targets that correspond with your windthrow likelihood and tolerance. Studies have shown that 12 to 15 m spacing increases windspeed by ~50%.

Keep instructions for operators concise – Think about what an operator can see from a cab, at night, in a snowstorm. Ideally 3 points:

1. Size of tree (dominance)
2. Spacing between stems
3. Trail spacing and design (orientation)

****Suggestion from Sam Coggins (Silvicon, Wetzin'kwa Community Forest) – Tips and tricks for using multiple approaches for managing for various objectives (thinning, patch cut, clearcut, etc.) – Youtube “Alternative Silviculture on Nisga’a Lands” –**

<https://www.youtube.com/watch?v=Lno0PSCIOsE>

Field Tour - Forest Health

“MLMCF is seeking to integrate fuel treatments with the best available information and practices around forest pathology and rusts. Some observations about the Mackenzie area will be presented and thoughts/plans to bring these disciplines together through monitoring.”

June 11 Note taker – Chanelle Gauthier

Speakers

Charles Friesen RPF, MA (Associate Forester, Frontera FS)

Jewel Yurkewich RPF, MSc (Provincial Forest Pathologist, Office of the Chief Forester, Forest Science, Planning and Practices Branch, Ministry of Forests)

Kelly Hrywkiw PhD (cand) (Regional Forest Pathologist, Omineca and Northeast Regions, Ministry of Forests)

Session Summary

In this session, Charles Friesen introduced the Hwy 39 fuel treatments, and the challenges of integrating forest health management into fuel treatment prescriptions. Forest pathologists Kelly Hrywkiw and Jewel Yurkewich introduced the 3 local rust species affecting stands in the region. They discussed historical best practices for rust management, as well as new approaches and recommendations for inclusion in fuel treatments. Recommendations for short-term management included enhanced operational guidelines for unique stand conditions and supporting species diversity of retained stems. Pre-and post-treatment monitoring is strongly recommended as a long-term management strategy. In addition to monitoring, Jewel emphasized that **“getting to know the forest earlier on will help you navigate later challenges.”** For practitioners in the region, Jewel recommended consulting the **Omineca Rust Strategy** (not available online, contact Kelly or Jewel for access).

Notes

Charles Friesen:

- McLeod Lake Mackenzie Community Forest fuel treatment along Hwy 39 was designed at a 400 m width on either side of the highway – intended to keep the highway open for evacuees and to slow down fire behaviour, creating a defensible space
- Certain forest health issues in the area, especially rusts
- Best practices for management of rusts suggest maintaining 2000-5000 stems/ha, which is contrary to the fuel reduction objectives (intended to REDUCE stem density on site). This presents a significant challenge – how to bring these two objectives together and manage for resilience to wildfire and rusts?
- Field visit site:
 - Poor and dry, Cladina (lichen) present, rocky, almost 100% lodgepole pine
 - Opportunity to use small harvest-forwarder (demonstrated during field visit) – some areas treated with entirely with machine, entirely manually, or a combination of the two

- Top priority is fuel reduction, while building a resilient, (ideally) self-maintaining stand
- Importance of working with knowledge keepers of McLeod Lake Indian Band, as well as other specialists (windthrow, forest health, etc.) to work toward a resilient stand

Kelly Hrywkiw:

- Rusts are obligate biotrophs, they require a living host and do best when their host is thriving
- Many different kinds of rusts – Commandra usually girdles trees, gall rusts for galls that can act as hinges and breakpoints on tree stems
- Goal of integrating forest health lens into fire treatments
- Short term strategies – including more operational guidelines
 - Including guidance to operators about different stand conditions
 - Target stem densities (increase stem density from the initial fuel management prescription)
 - Support and increase species diversity, where possible (especially deciduous species)
- Long term – implementing research trials (planned for Hwy 39 site, not yet in place)
 - Will allow for data to inform and support management decisions
 - Pre-treatment surveys
 - Several types of treatments
 - Re-survey and evaluate outcomes of treatments when original prescriptions are adjusted to manage for forest health
 - Pre- and post-treatment assessments need to include forest health data and fuel data

Jewel Yurkewich:

- Silviculture Working Group (was Rust Working Group) created a Best Practices document (2013), which was developed into the **Omineca Rust Strategy** [not available online, contact Jewel or Kelly for access]
- In the past, the recommended “best practices” were to increase density above 2000 stems/ha to counteract the effects of mortality from rusts. This is not always effective and was recommended with the goal of obtaining a free growing stand.
- Today, it is recommended to “work with what you have” – maximize tree species diversity and look for opportunities for small trials to test treatments on microsites.
- Working toward **full rotation forestry** – get in your stands early to understand and manage your forest health risks

- **“Getting to know the forest earlier on will help you navigate later challenges.”**

Q&A

Q: Will mature trees left after treatment be at risk of infection?

A: (Kelly) They can be. Any new and living tissues are susceptible to rust, but galls on (seemingly) dead branches can still lead to stem infection, since you cannot tell how deep the rust has penetrated into the branch/stem.

- **“Look up! Not just for overhead hazards”** – rust infection can occur above 3 m

Q: Is pruning an effective strategy, or will it increase the risk of infection?

A: Pruning can be an effective prevention strategy – wounds are **not** entry points for these particular rusts.

Field Tour - Equipment Demonstration

June 11 Note taker – Chanelle Gauthier

Speakers

Mac Anderson (Owner, A.M. Anderson Ventures Ltd. – Malwa 560C Combi demo)

Matt Bowen (Supervisor, McLeod Lake Mackenzie Community Forest)

Session Summary

In this session Mac Anderson described the operation and capabilities of the Malwa 560C Combi, and its applications for fuel treatments, commercial thinning, and other operations. He highlighted low ground pressure and narrow trail widths as the main benefits for using this machine in fuel treatments. Other benefits include fuel efficiency, and rapid conversion for forwarding capabilities. Mac emphasized the importance of promoting access and use of alternative machinery stating, **“We have a huge land base. We need to figure out how to access it, and if it’s a right fit.”**

Notes

Mac Anderson:

- Malwa 560C Combi demo
 - Commercial thinning, small trees
 - 8 m reach
 - Combi unit – can be converted to forwarder in 30 minutes
 - Can use grapple to pile debris, post-harvest
 - Low ground pressure – weighs roughly 20 000 lbs
 - Narrow trail width allows for higher retention (more stems/ha left after treatment)
 - Easy to handle logs on the ground with harvesting head (can process standing or fallen trees) – can also handle multiple (small) stems at once
 - Designed for logs up to 12 ft (but has handled up to 21 ft)
 - Bunk will hold 5 tons, can add another 5-ton trailer for a total capacity of 10 tons
 - Burns roughly 7 L/hr in fuel (vs. 70 L/hr for a large buncher and 24 L/hr for a larger harvester)
- Treatment for this site:
 - <16 ft pulp logs for Canfor
 - No use for tops – Conifex (local cogen plant) not interested
 - Small pieces and tops left for hand crew to buck, pile and burn
 - Debris piles will be reorganized after treatment and placed in openings to prevent scorching remaining stems
- Capabilities on this site:
 - 0.5 to 1 ha harvested in 8-hour shift
 - 4 days of harvesting = 1 day forwarding
 - Roughly 8 hours to pile 10 ha

Q&A

Q: How are small diameter logs chipped at mill?

A: Drum debarker is used to chip smaller diameter logs at the mill

Q: What other applications are there for the Malwa machine?

A: Commercial thinning, fire mitigation on private land, wildlife enhancement (improved ungulate forage while maintaining snow interception cover)

Q: What are the slope capabilities of the machine?

A: The Malwa manual indicates operability up to 35% slope, but the restrictions in practice are yet to be determined.

Q: Using this machine, what would it take for a thinning operation to break even (without funding)?

A: Roughly 60\$/m² to thin in smaller stands. To break even, you would need perfect stand conditions to hit minimums and generate enough fibre to cover the cost of operation. Examples of thinning operations include Canfor, Carrier, and West Fraser Quesnel.

Q: What is the maximum distance from the road for forwarding with the Malwa?

A: Usually up to 200 m, 400 m is too far

Q: How would the treatment differ for a commercial thinning operation?

A: The main difference for a CT operation would be creating an extra sort pile for sawlogs

Conference Welcome

June 12 Note taker – Chanelle Gauthier

Speakers

Susan Mulkey (Conference Coordinator, BCCFA Senior Manager)

Doris LeClair (McLeod Lake Indian Band)

Honourable Bruce Ralston (Minister of Forests)

Honourable Nathan Cullen (Minister of Water, Land and Resource Stewardship)

Jennifer Gunter (Executive Director, BCCFA)

Session summary

In this session, attendees were warmly welcomed to Mackenzie and to the conference by Susan Mulkey, Doris LeClair, and Jennifer Gunter. Pre-recorded messages from the Honourable Bruce Ralston and the Honourable Nathan Cullen were shared. Speakers noted the importance of community forests and continued collaboration as we face an uncertain future (ecologically,

economically, politically). Throughout the morning, an emphasis was made by many speakers to continue to relate, plan, discuss, and care for our forests in a good way.

Notes

- **Susan Mulkey** – “Keep your minds open, ask questions, be curious”
- **Doris Le Claire, Tse’Khene Nation (People of the Rocks, McLeod Lake Indian Band)** – Welcome and prayers that “discussions are had in a good way”.
- **Honourable Bruce Ralston** (pre-recorded message)
 - Stewardship of the BCCFA plays an important role in sustainable forest management and wildfire risk reduction
 - Highlighted the strategic partnerships between the BCCFA, BC Wildfire Service, and the Ministry of Forests
- **Honourable Nathan Cullen** (pre-recorded message)
 - Importance of forests to the people of British Columbia
 - **“Forests are a critical part of who we are”**
 - Increased pressure on forests due to climate change, wildfire, flooding – therefore our forest practices need to adapt and change
 - Examples of such change include the Old Growth Strategic Review, the forthcoming Biodiversity Framework (changing ways the province looks at ecosystems and biodiversity), 30 by 30, continued land use planning and partnerships
 - Hope for “modernized land use planning that sustains and supports communities”
 - Community forests provide an outstanding model for innovation and partnerships
 - “Pass things on to future generations in a good way”
- **Jennifer Gunter**
 - Yesterday’s field trip showed the “innovation and deep work that the McLeod Lake Mackenzie Community Forest is doing”
 - Welcome to new participants to BCCFA – surrounded by friends and colleagues
 - Introduction to BCCFA staff, working relationship with Tenures Branch, active partnerships with BC Wildfire Service

- 61 Operating Community Forests across BC, with different sizes, structures and approaches – Community forests as a strategy for commercial economic development and restoration of forest ecosystem diversity – creating more jobs per cubic meter, year after year
- With today’s shifts in industry and policy, it is clear that community forests are a positive way forward and a model of how things can be done

State of the Forest Sector

BC’s forestry sector is at a turning point. Harvest levels have declined, impacting everyone from communities to contractors. How do we enhance value creation and promote a bioeconomy that helps us reduce wildfire risk while prioritizing ecosystem health? First Nations’ involvement in all aspects of the sector is key.

June 12

Note Taker Sergio Alonso

Moderator Garnet Mireau (Forest Professionals of BC – Director of Practice)

Speakers

1. Pre-recorded video welcome from Lennard Joe (BC First Nations Forestry Council (FNFC) CEO)
2. Todd Chamberlain (Interior Logging Association (ILA)- General Manager)
3. Melissa Sanderson (Ministry of Forests – Assistant Deputy Minister)
4. Mike Hykaway (Ministry of Forests – Assistant Deputy Minister North Area)
5. Tiffany Butler-Hernandez (BC First Nations Forestry Council (FNFC) – Policy Manager)
6. George Brcko (Wells Gray CF – General Manager)

Melissa Sanderson: Forest Sector Transformation

- Melissa highlighted the ongoing transformation in the forest sector from high volume to high value. She leads provincial policy reform and implementation aimed at promoting sustainable and value-added forestry practices
- Melissa discussed the shift towards high-value forestry and the importance of policy reforms

- "We are moving from a focus on high volume to high value in our forestry practices"
- Details: Efforts include promoting further manufacturing investments, with \$180M dedicated to fostering innovation in the sector

Mike Hykaway: Forest Sector Transition in Northern BC

- Mike provided insights into the forest sector transition north of Quesnel, which covers two-thirds of the province and 21 community forests. The community forests have the support of the government but there are complexities of expanding tenure
- Mike highlighted the challenges and opportunities in the northern BC forest sector
- Details: Emphasized the need for better predictability in fiber supply and the importance of community forests in managing a significant portion of the AAC
- "The north holds the key to our forest sector's future with its vast resources and community forest initiatives."
- Closing remark: Community forests should self-promote and highlight their relevance and partnerships

Tiffany Butler-Hernandez: Increasing First Nations Participation

- Tiffany emphasized their goal of increasing First Nations participation in the forestry sector. She clarified that the FNFC supports rather than represents the nations, focusing on compiling information, working with the province in forest policy and increasing their capacity and readiness to increase nations participation in forestry
- Tiffany focused on First Nations' increasing involvement and the importance of capacity building.
- Addressed the support needed for First Nations to engage in value-added initiatives and the importance of understanding their values in forestry management
- **"First Nations bring invaluable perspectives and resources to the table, especially in our aging workforce"**
- Community forests have the social license to tell their story given the collaboration with First Nations and shared long-term vision and it's a great example for BC

Todd Chamberlain

- ILA membership are logging contractors, fiber haulers and equipment manufacturers all over the interior. Working with government and community forests. Long time supporter of community forestry. Alignment of values between the Interior Logging Association and community forests is strong

George Brcko

- Wells Grey CF is on its 3rd management plan, now taking First Nations principles and objectives into their plan, taking a different lens on the landscape by increasing riparian buffers and reducing cut levels. They have successfully engaged in activities like logging on recreation trails and planting trees with high school students and using biochar, demonstrating the positive impact of community involvement

Q&A:

Q: How can we bring investments to mills?

A:

- **Melissa:** The government is focusing on further manufacturing investments, looking different than in the past with “BC manufacturing jobs” program with \$180M in support for initiatives such as mass timber.
- **George:** Coordinated a recent local field tour focused on value-added with First Nation, BCTS, MoF and five community forests. As a result, they are creating a working group that can include log trading.
- **Mike:** Disappointed with the decision to suspend the CANFOR investment in Houston after all the work being done. So better predictability in fiber supply is crucial as many community forests sell wood to major licensees.

Q: What are the challenges for First Nations and CF?

A:

- **Tiffany:** Capacity issues are significant, but there is strong interest in value-added initiatives.
- **Both Mike and Tiffany:** Promote and celebrate successful relationships between multiple community forests and First Nations already happening.
- **George:** Wells Gray has a joint stewardship agreement for an area and they are working with FN and industry. It's important to talk about values before volume to understand important First Nations' perspectives.
- **Mike:** As the workforce is aging, FN youth are a source of employment for ILA members as they live in their communities and have the local knowledge.

Q: What are the challenges to maintaining a vibrant contractor base and workforce?

A:

- **Todd:** Declining AAC and losing members highlight the need for new ways to promote the industry and collaborate with educational programs in colleges, such as Nicola Valley Institute of technology (NVIT). Minister Mercier recently announced a \$5M in grants for purchasing innovative equipment, Melissa is working on making it public soon.
- **George:** Enabling contractors on winch-assist technology comes with challenges but is crucial for progress.

Q: How can BC address high operating costs and promote innovation?

A:

- **Mike:** Policies should not add unnecessary costs to jurisdictions.
- **Todd:** Utilizing logs effectively and collaborating on project, for example in Merritt a First Nation licensee with a funding opportunity is able to use sawmill residual into merchantable chips.
- **Melissa:** need to add value to the products, such as mass timber.

Q: What are the experiences with Forest Landscape Planning (FLP)?

A:

- **Mike:** Four pilot projects are underway, with community forests playing a significant role.
- **Tiffany:** More communication among nations and collaboration is needed, with each FLP taking a different approach.
- **Melissa:** CF are already accomplishing some of the goals that FLPs want to achieve
- **George:** Best management practices are being developed and documented.

Q: How can CF address the utilization challenge when it comes to fuel treatments in BC?

A:

Melissa: CF is a key partner in in WRR, funding FESBC with \$110 million this year to improve utilization and reduce waste, the government is open for ideas.

Q: How can the bioeconomy be supported?

A:

- **Melissa:** The bioeconomy team is seeking markets for the harvesting residuals.
- **Tiffany:** There are indigenous focused funding programs in BC, such as IBIO (Indigenous Forest Bioeconomy Program) and other federal investment programs.

Q: How restrictive is the softwood agreement with the US?

A:

- **Melissa:** It's a 40-year dispute and is very challenging as the US argues that Canada subsidizes its industry, making it a difficult issue to resolve.
- **Mike:** it's always part of the decisions we make but doesn't stop us from doing the right thing for people in BC
- **Tiffany:** as FN acquiring more tenure won't impact the situation

Q: How can community forests communicate their successes?

A:

- **All speakers agreed:** The Indicators Report is a great tool, along with personal portfolios to showcase achievements.

Safety and Community Forests

June 12 Note taker – Chanelle Gauthier

Speakers

Mike Crone (Nakusp and Area Community Forest) – Moderator

Erin McLeod (Senior technician, Nakusp and Area Community Forest)

Harley Wright (Chairperson, Lower North Thompson Community Forest Society)

Session Summary

In this session Erin McLeod provided recommendations for promoting safety among volunteers and visitors to the community forest. Erin's recommendations include safety waivers, orientation packages, and safety plans for volunteers, as well as maintenance and

documentation for all trails and roads within the community forest. She also recommends limiting forest operations during high-use periods (i.e. weekends), and maintaining funds for improvements to roads, trails, and infrastructure. Erin shared examples of safety measures taken at the Nakusp and Area Community Forest, highlighting the importance of open communication with all user groups.

Harley Wright emphasized the essential role of volunteers in community forestry, and the importance of ensuring volunteer safety. Harley shared the story of a tragic incident in 2023 related to the Lower North Thompson Community Forest Society that resulted in a fatality. He noted the lack of protection for volunteers under WCB, and the need for community forests to create volunteer-specific safety policies. He also shared strategies to reduce safety risk to volunteers.

Susan Mulkey noted that the BCCFA is member of a safety committee with Woodlots and the BC Forest Safety Council and can help with safety-related questions and concerns. She also highlighted various safety materials available on the BCCFA website (Resources → Safety).

Notes

Erin McLeod

- Community forests are accountable, as a form of site owner, for the safety of workers, volunteers, visitors, and creation within their tenures
- Due diligence is essential to improve safety within community forests, and to reduce close calls
- Recommendations for improving volunteer and visitor safety include:
 - Waivers for volunteers that clearly communicate risks involved with participation
 - Provide volunteers with orientation package and safety plan, and perform safety tailgate meetings and pre-trip safety checks (as you would with paid workers)
 - Ensure volunteers are notified about recommended personal protective equipment (PPE), and provide PPE, if possible
 - **Document all annual road and trail maintenance** to demonstrate due diligence
 - Consider taking responsibility for the management and maintaining records of all unauthorized trails to improve visitor safety – Community Forests are still liable for unauthorized trails, and these may confuse visitors, leading to unsafe situations
 - Maintain good, open communication with recreation clubs

- Reduce operations in high traffic times (i.e. weekends), and ensure worksites are left in safe condition before these times
- Maintain funds for maintenance and improvements to roads, trails, and infrastructure
- Examples from Nakusp and Area Community Forest (NACFOR)
 - NACFOR allows non-profit groups to use their log yard. They ensure all user groups receive proper orientation and are notified about safe work practices
 - NACFOR safety regulations for visitors and volunteers are based on WCB recommendations for workers
 - Field trips and school groups – ensure trails are maintained and **maintenance is documented** to demonstrate due diligence
 - Recreation – various authorized and unauthorized trails, multiple uses including hunting skiing, ATV use, firewood harvesting, hiking and biking – requires active community engagement and information on site, road and trail conditions. Erin suggests using social media, informative signage, and community information centres to provide this information to visitors
 - Firewood harvesting – NACFOR representatives inform firewood harvesters of permitting requirements and personal safety, when possible. Erin recommends including signage about firewood harvesting safety at the entrance to major road networks
 - ATV society trails – NACFOR collaborates with ATV society by providing lumber for trail-building, and ensuring appropriate signage is in place

Harley Wright

- Volunteers are incredibly highly valued at the Lower North Thompson Community Forest Society
- In general, there is much emphasis on and many guidelines for maintaining the safety of paid workers. There is not as much focus on maintaining the safety of volunteers.
- Harley shared the story of a tragic incident in 2023 related to the Lower North Thompson Community Forest Society that resulted in a fatality. He noted that WCB (the Workers Compensation Board) investigated, but determined the incident was outside their jurisdiction. This incident shows WCB's lack of experience with non-profit

organizations, and highlighted the importance of ensuring the safety of volunteers at all times.

- WCB focuses on workers, not volunteers. According to WCB, people receiving daily compensation over a specific period of time are considered workers. People receiving honorariums are considered volunteers, and are not covered under WCB.
- Harley recommended initiating safety policies specifically for volunteers, and to assess the safety of what volunteers are doing in your forests
- For example, at the Lower North Thompson Community Forest the local Lions Club delivers firewood to community members in need. To reduce the safety risk of this operation, the community forest provides the Lions Club with pre-cut firewood, eliminating the need for use of dangerous machinery by volunteers.
- When volunteers are required to use machinery, ensure that they are trained and that an authorized supervisor signs off on training. As with paid workers, supervisors should be present to point out safety risks and to supervise the use of machinery.
- To promote safety across the BCCFA community, Harley has offered to share the volunteer safety policy developed by the Lower North Thompson Community Forest Society. (Contact Harley Wright for access)
- Harley recommended checking your insurance policy for coverage for volunteers – most up-to-date policies include volunteer coverage

Susan Mulkey

- BCCFA is member of a safety committee with Woodlots and the BC Safety Council
- Susan offered to field questions and concerns about safety, to bring them to the safety committee
- Susan also highlighted safety materials available on the BCCFA website (Resources → Safety)

Q&A

Q: Are community forests still liable for authorized trails, or are they the responsibility of the ministry?

A: (Erin) The partnership agreement of each community forest will outline your specific liability. But effectively, yes. A community forest is responsible for all trails within their tenure.

(Harley) Even if authorized trails are under provincial jurisdiction, community forests need to **take responsibility**. Community safety goes beyond liability; we need to be responsible.

Q: How do you manage or monitor firewood harvesting in your community forests?

A: (Harley) We do not issue permits or formally allow firewood harvesting, but we discuss and educate users to promote safety, when possible.

(Erin) NACFOR allows firewood harvesting within the community forest. When firewood harvesters are seen on site, we have conversations with them about safe work practices. [Idea for signage about cutting safety at the start of forest roads.]

(Mike) In addition to volunteer safety, it is also essential to ensure the safety protocols of your contractors is up to date.

Q: Was mental health support provided to witnesses following the 2023 incident?

A: (Harley) The community forest society did not provide mental health services, and did not have access as a business would. Even through WCB, counselling and mental health supports are lacking.

(Mike) Recommendation to check your employer benefits package for mental health support.

Q: Do you have any experience or recommendations for dealing with conflicts with unhoused people taking shelter in community forests?

A: (Erin) Experience talking directly with (temporarily) unhoused people to communicate safety concerns. Notifying the local Natural Resource Officer and the RCMP.

Q: Due diligence and signage – does informative signage alleviate liability?

A: (Erin) On a single entry trail with a sign including safety information, once a person passes the sign, they assume safety risk.

Q: How do you handle a difference in safety tolerance between paid staff and volunteers?

A: (Mike) Reminder of the right to refuse unsafe work for paid workers.

(Erin) Your volunteer safety waiver should include a reminder of the responsibility to refuse unsafe work.

Q: Have you experienced closures of the community forest based on drought or wildfire risk?

A: (Harley) Not to his knowledge. The public is generally respectful of high-risk conditions and the community forest receives a high level of support for the public.

(Erin) NACFOR has not had any posted closures, but the community is highly respectful of high-risk conditions.

Managers Meeting

Discussion on old-growth, commercial thinning, and waste management in community forests.

Date: June 12

Note Taker: Sergio Alonso

Moderator: Randy Spyksma (BCCFA president and Logan Lake manager)

Topic 1: Old-Growth

Discussion on old-growth management, deferrals, and strategies for old-growth protection and resilience.

- **Protection and Deferrals:** Many CF have limited old-growth areas, and the existing ones are already reserved. Recruitment of old-growth is important for many. But static reserves aren't the solution. Old growth deferrals have been challenging for some community forests that are working to manage old forests for restoration and resilience. Concerns about size and age definitions of old-growth vary between the North and the Coast. In particular, changing from 140 to 120 years old stands have management impacts derived from political decisions. Chinook CF works with six First Nations where old-growth is crucial, but they are focusing on recruitment strategies over deferrals for better management.
- **Local Initiatives and Comprehensive Management:** For many CF, deferrals result in delays. Also, they work with local First Nations to define old-growth management because FLPs are not in place yet. Managing old-growth involves compartmentalizing, marking no-go areas, increasing riparian areas, and applying treatments to increase resistance without strictly adhering to old-growth definitions.
- **Stand Condition Focus:** Many argue that age and size definitions are insufficient and that management should focus on stand condition. OG action plan is vague on how to apply to small forest management areas as OG objectives need to be met at a landscape level.

Topic 2: Commercial Thinning

Exploration of different thinning practices, objectives, and challenges faced by community forests.

- **Concept of thinning:** as defined by the provincial thinning steering group "the removal of individual trees from a stand to maintain or improve the health of remaining trees by providing more space and resources to grow. The choice of trees to be removed will be based on the management objectives of the stand. Trees can be retained for wood production, habitat, resistance to disease, resistance to wildfire, maintenance of visual quality, or any other objectives. Stand and landscape-level objectives will define when a thinning treatment will be conducted. This includes thinning of even-aged stands, complex or multi-cohort stands, as well as other partial cutting interventions that do not have a regeneration objective."
- **Implementation:** In general, thinning is not widely implemented across CFs. In Wells Gray CF a 70ha thinning block in a mature stand with a riparian buffer was implemented. Other CFs have thinned primarily for wildfire risk reduction.
- **Equipment and mills:** There are challenges including lack of equipment in the vicinity of CF that is designed for thinning. Capacity is developing with more contractors. The SIP initiative (a program of the Bulkley Valley Research Centre) aims to share experiences and produce new resources for thinning guidance.

Waste

Review of waste management policies under the Forest Act and their impact on community forests.

- **Waste payment is mandatory:** Under the Forest Act, it is mandatory for community forests (CFs) to pay for post-harvest waste assessments. . The primary goal of this requirement is to ensure the utilization of fiber. Currently, market conditions are stable, but equipment and transportation costs have increased by over 30%, adding financial strain to CF operations. This requirement has led to a debate on the most effective system for waste assessment. In the Interior, CFs are in their second year of being required to implement the full waste measurement procedures. The BCCFA is actively engaged in discussions with Timber Pricing Branch regarding an alternative to the full survey methodology. The alternative would be for CFs to skip having to do surveys altogether, and simply pay a waste bill according to the average for their natural resource district. This was discussed during the 2023 BCCFA Conference as well. In a survey of attendees, some CFs prefer full surveys, while others would prefer to opt for paying the district average value, which varies depending on the district's rates.

- **The division between these two methods** stems from the different operational impacts they have on CFs. Larger tenures might favor full surveys as they can provide more accurate and tailored assessments, despite the higher costs and resource requirements. On the other hand, smaller tenures often struggle with the financial burden, potentially losing up to 10% of the value produced by the harvested volume of wood to cover survey costs. This financial strain can delay other operational activities such as biochar production and firewood processing, as waste surveys demand substantial time and resources, including finding qualified surveyors. The government seeks feedback from the BCCFA to update waste policy, aiming to balance the need for efficient waste utilization with the operational realities faced by CFs. This discussion is ongoing.

Community Forest Governance

“Susan Mulkey, the BCCFA’s Senior Manager and Governance Specialist, works with individual community forests on all aspects of governance, strategic planning, policy development and community engagement. In this session she will share what is required for a community forest organization to employ best practices in community forest governance and take questions from the session participants.”

June 12 Note taker – Chanelle Gauthier

Speakers

Susan Mulkey (BCCFA Senior Manager and Governance Specialist)

Session Summary

In this session, Susan Mulkey highlighted the unique opportunities and responsibilities for forest management under a community forest agreement. She described the significance of the management plan as a legally binding document, as the link between community, values, and the land base, and as the rationale for AAC determination. Susan recommended the limited partnership agreement as the most effective governance structure for community forests. Under the limited partnership agreement, the roles of shareholders, board members, and managers are clearly defined, and shareholders remain at arm’s length from daily operations. The BCCFA website includes a Shareholder Corporation Contract that extracts useful principles from the limited partnership agreement to assist community forests operating under different structures. The member’s only section of the BCCFA website includes a multitude of other

educational resources, templates, and recommendations. (Contact Susan Mulkey for access to the member's only section.)

Susan also discussed the responsibilities of board members, including the duty of loyalty and the duty of care. She emphasized the significance of consensus-based decision making and its role in promoting dialogue, curiosity, integrity, relationship building and trust. Susan highlighted the board of the BCCFA as an example of consensus-based decision-making building strength and trust within an organization.

Notes

- Governance is about agreeing on guidelines or rules on how we're going to work together. This allows us to move forward and conduct business more effectively and efficiently.
- Community forests are unique in the tenure system, as they have 8 stated goals and a duty to incorporate and manage for all 8 goals (including diversification, community involvement, safety, innovation, social and economic benefits, etc.)

Community Forest Management Plan

- Part of a license agreement, therefore everything in it is a **legal obligation**
- Must reflect what you intend to do on the community forest land base
- **Links community and values to the land base** – promoting accountability. It is a legal obligation to annually report to the community on goals in the management plan and the progress made on them
- **Provides rationale for the AAC** (annual allowable cut) determination for the community forest. – The formula for calculating AAC on other tenures is not feasible on community forest tenures due to smaller area and multiple objectives. A comprehensive management plan that integrates community values can provide rationale for developing a (lower) AAC that better reflects the land base and community interest.
- **Section 6.02**
 - Robin Hood advocated for this section to keep the “community” in community forests
 - Includes a requirement to identify a plan to **report out to the community, not just to shareholders**

- Susan recommends using the information in the BCCFA Indicators Report to report progress to the community
- ***Management plan template and companion document are available on the BCCFA website**
- **Goals and Objectives** – Define your language at the beginning of all formal documents, and use language consistently throughout

Limited Partnership Agreement

- There are many options for legal structures for community forests. In Susan’s experience, the best structure is found in the **limited partnership agreement**
- It is the structure that community forest organizations with a partnership between a First Nation and a local government
- **Risk** is carried by the general partner
- **Taxation** is based on the tax status of the partners – First Nations and local governments are both tax-exempt entities
- **Shareholders** – must stay at arm’s length from the day-to-day operations – “stay out of the kitchen” – appoint board of directors (can delegate this task) – perform **NO** management duties
- **Board of directors** – sets priorities, budget, and policy – hires manager
- **Management** – Execute and monitor day-to-day management activities, report to the board of directors, hire and manage staff
- **Governance Committees** – board members can form committees (e.g. finance, governance, etc.)
- **Management Committees** – can be formed that invite volunteers to provide input for management. Committees can include board members **in a different role** – in this case they provide input as committee members and volunteers, NOT as directors
- Based on the writings of Ron Trosper – the further arm’s length the governance is from the company or social enterprise, the more money you will make
- *Politicians and forest management operate on different time scales

Directors

- Significant responsibility
- Duty of loyalty
 - To work in the best interest of the community forest, not for individual citizens
 - Need to prove due diligence with appropriate documentation
 - “Must act honestly and in good faith” [legal requirement]

- Duty of care
 - Need to be informed

Consensus Decision Making

- General agreement of the group
- Susan notes her experience with the Quaker community, and their deep commitment for generating the spirit of the room
- Different levels of consensus – sometimes “consensus by exhaustion”
- Important to understand how consensus is different from voting and Robert’s Rules
- Promotes **dialogue** before even thinking about making a motion
- Promotes **curiosity**, the deconstruction of preconceptions and assumptions
- Allows for the **exploration of differences** in worldviews and knowledge systems
- **Trust-building**
- Promotes the responsibility of individuals to maintain trustworthiness and **integrity**
 - **Takes time**
 - Higher-level decisions made at the board level should be based on consensus
Sometimes operational decisions are made by the manager based on **input** from the board, but may not necessarily have consensus
 - Example – the Cheakamus Community Forest has a list of decisions that require consensus. Not all decisions are made in this way
 - Within the BCCFA itself, the consensus model has built strength, trust, and community

BCCFA Website

- New website coming this winter
- Includes many member’s only educational resources
- Many templates, supporting documents, and educational resources:
 - **Management plan template and companion document**
 - **Guidebooks** – Lessons learned so far, since 2004 – For example, “don’t wait until you have money to make a policy for distribution”
 - **Code of Conduct** for board members – template
 - Hiring a manager
 - Management, logging and trucking contracts
 - Recreation policies
 - Insurance
 - Spending limits for management
 - Investment strategies

- Lawyer recommendations
- The BCCFA is committed to promoting networking and information sharing to help community forests through challenges based on learning and experience over the course of the last two decades.
- ***Ask Susan for the password to the member’s only section***

Q&A

Q: Is there a penalty for not meeting the AAC?

A: BCCFA Indicators Report asked if community forests were able to meet their AAC, and to describe barriers to meeting the AAC. (For example, in Bella Coola community conflict prevented the community forest from harvesting their entire AAC.)

Susan has not heard of any penalty for community forests not reaching AAC. In contrast with volume-based tenures, where the Forest Act allows the government to permit other licensees to “get the volume out”; this has not been the case in community forests.

Q: Our community forest has experienced challenges with board members possibly violating the duty of loyalty (acting in self-interest instead of the best interest of the community forest). Are there policies in place that could protect the organization from self-interested board members?

A: (Garnet Mierau, FPBC) – The board of directors of the FPBC (Forest Professionals of BC) is formed on a merit-based appointment. Board members must swear and sign an oath upholding agreed-upon principles.

(Susan) – The BCCFA promotes and recommends that all board members sign a Directors Accountability Agreement – a policy to be followed by all board members. BCCFA website provides a template for this which includes a code of conduct. It is a proactive tool to promote appropriate behaviour from directors.

- Some community forest governance models provide a framework for removing directors, but this can be messy (especially in a small town). It is essential to look at the unique agreement of each community forest to understand what is possible in each case

Q: Group discussion on incorporation documents and corporate models – Whether councillors can sit on boards?

A: For a limited partnership, councillors are best to not sit on boards because shareholders must be at arm's length from day-to-day operations. This also separates politics from the management of the CFA.

Climate Change Adaptation: From Projections to Practice

June 12

Note taker: Rachel Pekelney

Speakers

Colin Mahony (Ministry of Forests), Erik Leslie (Harrop-Procter CF), Aurora Lavender (BCCFA, Wetzin'kwa CF), Moderator

Colin Mahony, PhD, RPF

New tools from his group:

- CCISS (Climate Change Informed Species Selection) Tool
- Climr Tool: download climate change visualization data across North America
- BC Climate Anomaly App: historical climate data

Climate overview:

- We are currently about 1.2-1.3 degrees C above pre-industrial levels
- CO2 concentrations of today were last seen ~2 million years ago
- We struggle to comprehend the pace and scale of this change
- Revolution in energy economics over past 10 years; renewable energy has never been cheaper
- Impacts of climate change are local
- The future is not yet written—we can do a lot to slow climate change
- 2023 was the warmest year on record in BC in terms of summer temperatures
- Unsure if a forest sector is possible under future climate predictions of 3.9 degrees C warming above baseline (this is where current policies are putting us, which is above the Paris Agreement goal)
- Adaptation at a local scale is key, but there are limitations to adaptation
- John Holdren: “We basically have three choices: mitigation, adaptation, and suffering. We will do some of all three. The question is what the mix will be.”
 - Suffering is the gap between mitigation and adaptation. People living close to the land bear the brunt of the suffering. Sometimes the distinction between

adaptation and suffering is hard to define (ie. staying inside to avoid wildfire smoke)

- Adaptation does not have to be painful or expensive: we already plant millions of trees per year, so we can simply adjust species mixtures to be more climate resilient at minimal additional cost

Overcoming barriers to adaptation:

- Barriers:
 - Failures of imagination: not connecting dots between scientific forecasts and impacts to communities and ecosystems
 - Solution: build storylines of the future
 - Tokenism
 - Solution: respond proportional to the risks
 - Technocracy: thinking we need an external expert or complicated analysis to tell us what to do about climate change
 - Solution: empower local decisions/knowledge. Local practitioners understand what is going on in their communities
 - Treating the symptoms
 - Solution: leadership on stabilization of the climate. Being clear that adaptation and resilience are not possible without the phase-out of fossil fuels

Adaptation: from projections to practice

- **Climate projections** feed into **storylines/scenarios**, which feed into **vulnerability assessments**. **Management plans** are made that are accountable to vulnerability assessments. **Policy** informs or guides (or hinders) management plans, which are then put into **practice**. **Implementation** of management plans are reviewed by **leadership**, which then feeds back into policy to inform better policy
- Movement from imagination to action

Key messages:

- The future is not written. Adaptation is made possible by the phaseout of fossil fuels
- Local knowledge and imagination are central in adapting to climate change in forest management

Erik Leslie, RPF

Harrop-Procter CF in southeastern BC

- 11,300 ha tenure
- Been a CF since 1999/2000
- Erik working there since 2004

- Community population of 600, everyone drinks out of the local creek

Is this forest resilient?

- Dense, uniform forest
- 2003 and 2017 wildfires in Harrop Creek watershed

Why this project?

- Adaptation pilot/case study
- Lots of talk, not enough action
- Disconnect between climate adaptation theory and management actions on the ground
- Need for real-world management examples; action is long overdue

Adaptation: generalities → specifics

- Promote resilience, enhance landscape diversity, partial cut dry sites, species and age targets, etc.
- Adaptation options: concept
 - Resistance: maintain relatively unchanged conditions overtime (construct fuel breaks, protect old forests and riparian areas, connectivity of reserves)
 - Resilience: accommodate some change
 - Transition: actively promote change
- Project overview:
 - Risk assessment: where?
 - Prioritizing areas for adaptation actions in next 20-40 years
 - Homes, water, biodiversity, and timber selected as top community values for assessing risk. Values were mapped and risk from fire/drought to these values were mapped
 - Risk identified as wildfire and drought
 - Water and timber values located in different areas of the land base. Biodiversity spread around
 - Probability of fire and drought: Actual Soil Moisture Regime (ASMR) mapped on the Community Forest. Used BC climate projections until 2085. Did not use provincial algorithm for likelihood of high severity fire
 - Adjusted fuel loads from Harrop-Procter's own LiDAR data.
 - ASMR limits: see current work of Future Forest Ecosystem Group
 - Averaged risks across one map (note: resolution is lost in this process)
 - Highest risk areas: untreated WUI (homes), headwaters with high fire likelihood (water), old forests on drier sites (biodiversity), cedar/hemlock on drier sites (timber)
 - Operations strategy: how?
 - Resilience strategy, diversify forest composition and structure, variable patch sizes and retention levels, develop through landscape planning.

Reduce density on dry sites. Prioritize based on drought likelihood. Partial cutting to promote drought tolerant species (commercial thinning, spacing). Promote through fuel treatments, prescribed fire

- Resistance strategy: reserve and protect old forest/caribou habitat/riparian areas/headwaters. Leave reserves alone but put fuel treatments around it. Resistance can be a high-risk strategy. Landscape fuel breaks (must be connected across the WUI)
- Transition strategy: for high timber risk stands, do proactive salvage and reset to a new trajectory. Cedar/hemlock stands can be converted to aspen/larch/fir/pine
- Transition can be same as restoration in some cases
- Carbon carrying capacity: where can we hold carbon? High-carbon storage areas should be prioritized to protect from wildfire and drought
- Management for carbon is key for climate change
- Harvest rates/AAC: how fast?
 - Revise timber supply assumptions
- What are the priority values and what is the landscape context? **key questions
 - Are desired future conditions compatible with current conditions?

Q&A

- **Looking forward 10 years, what climate risks are you concerned about, and how can we be more resilient than today?**
 - Heather from Whistler: in a transition forest, making planting decisions based on expected future climate
 - Different species respond differently, so it's important to know which sites are not expected to change much and which sites will change a lot
 - Management of new or elevated forest pest levels and species
 - Fuller understanding of the stressors that trees and ecosystems will experience
 - Wildfire and smoke
- **What ideas do you as community forest representatives have for climate adaptation, what are you currently doing, and what do you need to support climate adaptation in your community?**
 - Jen Gunter: question of how fast you adapt is a social question for the community

- Erik has been laying the groundwork for discussion of climate adaptation in his community—this is a community organization that needs community involvement. The difference between what they have harvested and what has been affected by disturbances in Harrop-Procter is enormous
- Randy: doing fuel treatments along the highway to lower wildfire risk but not replanting because the site will not be able to support higher density forest
- Fuel treatments can be both wildfire and drought resilience strategies
- Argument for more intense mechanical fuel reduction treatments: altering the trajectory of the stand and fuels, rather than low-intensity treatments that only address fuels. Altering stand trajectory improves resilience
- Erin Macleod: what’s your contingency plan for Douglas-fir beetle?
 - Fir is a good leave tree except for the beetle issues. Hard because it’s often one of the only good leave trees on site. Taking risk in leaving fir behind knowing that it’s possible we will have to do salvage in a few years. Erik doesn’t plant fir, just ponderosa pine and larch. Fir regenerates well on its own (in Harrop-Procter).

Networking for Wildfire Preparedness, Recovery and Resiliency

As the BCCFA and the BC Wildfire Service continue to build their partnership, the goal of this session was to build regional networks to support community forests in all Four Pillars of Emergency Management. Detailed notes from breakout sessions are being compiled separately.

June 12

Note taker: Rachel Pekelney

Speakers and Resource Persons

- Lori Daniels (Center for Wildfire Coexistence, UBC)
- Fons Raedschelders (BC Wildfire Service)
- Larry Price (First Nations Emergency Services Society)
- Carly Dow (BCCFA)
- Jennifer Gunter (BCCFA)

- Erik Leslie (Harrop-Procter CF)

Summary

Lori Daniels (facilitator)

Wildfires in BC 1919-2023

- Top 10 fires vs top 10 fire years
 - 2017, 2018, 2021, 2023 are record-breaking years—our new reality
 - Half of the top ten fires were in 2023
- Fire is having greater effects on our landscapes than ever before
- Extreme fire weather
- Firestorm 2003 is now an old benchmark
- Communities are expanding into fire-prone environments
 - Question of when, not if, fire will burn

Proactive Fuels Mitigation: Treatment Efficacy

- Untreated areas in dry belt forests: predicted 19% active crown fire
- Treated areas in dry belt forests: more likely to be surface fire
- Treatments reduce mortality, crown scorch, and ground scorch and soil impact

Pyrodiversity

- One size fits all approach does not work—fine-scale adjustments needed for each forest type when implementing fuel treatments

Larry Price (FNESS)

- Capacity building for First Nations, need for year-round employment
- Governance: participation of community forests
- Need to assemble an integrated spatial database
 - FNESS is working on this to cover the province and make it publicly available
 - Developing products and tools: future and current resilience maps for a management decision support system
- Fire model for severe wildfire in the southeast
 - Dr. Greg Greene, Forsite, Bob Gray, etc. working on this
 - Intended for landscape-level planning to support informed decision making
- Funding is easier to get if you are treating in the WUI
 - Area outside of the WUI needs treatment too but less funding is available
 - Integrated database to visualize values may help with getting funding for projects
 - Need to implement projects at scale and access all funding sources available

- Need to collaborate with industry if we want to achieve landscape resilience at scale

Fons Raedschelders (BC Wildfire Prescribed Fire Program)

Pain of action vs pain of regret (inaction)

Prescribed fire program in BC

- Industrial burning program which is small
- Cultural burning since time immemorial

We do not have forests resilient enough to manage wildfires of the present day

St. Mary's Fire: ran through a Rx from that spring done with Ktunaxa that reduced fire intensity (effective prescribed fire but did not save *all* homes)

Prescribed fire: hazard abatement, silviculture, cultural value, ecological health, etc

Burning with First Nations is a step toward reconciliation

Prescribed fire is both art and science

Burns happening right now in the province (close to Nelson)

Carly Dow (BCCFA)

BCCFA-BCWS Wildfire Resiliency Project

- Primary phase of the project has been focused on a needs assessment of community forests
- Methodology
 - Detailed interview questions to ask CFA managers/representatives
- What we heard
 - Funding: Long-term, flexible funding with minimal administrative burden is crucial. Fiscal deadline funding is problematic for WRR work.
 - On average, CFAs could treat 131 ha per year for the next 3-5 years (costs estimated at 0.5 million CAD per year per forest)
 - Planning and operations: CFAs would benefit from having funding to develop their own plans; 82% of CFAs have been conducting WRR work, 93% of CFAs are interested in climate adaptation plans
 - Barriers: capacity, funding deadlines and structures, administrative burden of developing prescriptions, burn window/venting restrictions, disconnect between policy work and work on the ground
 - Relationships and looking ahead: prescribed treatments were most successful when implemented and prescribed by CFAs rather than at the District level; most CFAs have good relationship with BCWS; all CFAs are interested in networking with other CFAs, BCWS experts

Jennifer Gunter (BCCFA)

BCCFA-BCWS Partnership

- Community Forest Indicator #13 Proactive Wildfire Management: CFAs are leaders in proactive management
- Partnership activities: Engagement Agreement 2019, Crown Land WRR Economic Recovery Initiative 2021-2024, Wildfire Resiliency and Cultural & Prescribed Fire Project 2023-2025, collaborating to build a Strategic Plan for the future of the Partnership
- Goal to create a long-term, durable partnership between BCCFA and BCWS

Potential activities

- Support planning in CFAs, support regional networks, online resources, partner on research and extension, support for burning

Discussion Topics for 6 Fire Centers Break out Groups (Cariboo + SE, Coastal, North West, Prince George, Kamloops,)

- Cultural and prescribed burning
- BCCFA networking supports/Partnership with BCWS
- Research priorities
- FNESS
- FESBC

Southeast + Cariboo Discussion

FESBC

- Crown agency, fills gap between what industry and government does
- Wildfire risk reduction program where anyone is free to apply, but there is a preference for CFAs because of community values and stewardship
- Receptive to creative/new ideas and new entities like smaller First Nations, etc.
- FESBC will sometimes fully fund projects; flexible and open funding options
- CFAs say process of getting funding from FES is simple
- FESBC wants biomass utilization to be maximized and will help fund non-profitable biomass utilization
- Move toward more machine treatment and less hand-treatment to accelerate extent of treated areas

BCCFA networking supports/Partnership with BCWS

- BCCFA wants to know what we should be spending time doing while developing relationship with BCWS
- One-day workshop per fire center to bring in BCWS people and experts to work on priorities of the region?
 - CFAs are keen on this!
- What should the BCCFA be doing with this partnership in general?
 - Policy advocacy? Relationship building? Technical support?
 - Cariboo Fire Center has tight knit regional relationships with Cariboo CFAs (same deal with the Southeast), so managers can just call up people in the Fire Centers (and vice versa). CFAs in these Fire Centers find it easy to directly communicate with BCWS people through personal relationships
 - Day-to-day operations: need to have personal relationship with Fire Zones for fire season
 - BCWS prevention staff can help with CFA projects
 - Who would you actually talk to at each Fire Center? Should be multiple people because often people are deployed all over the place
 - Public perception that fuel treatments are logging in disguise—BCWS can help with communications and outreach
 - Community Wildfire Roundtables with BCWS, tenure holders, District staff, community members, CFA, First Nations—everyone gets to meet each other and learn from each other, helps facilitate collaborations
 - CFAs have offered free fire hazard assessments, chipping for the community

Cultural and Prescribed Fire

- Cariboo and Southeast have two of the most robust Rx programs in the province—burn way more than other Centers
- Need to have bread and butter for your forest type (ie. for Northeast, burn cut blocks)
- Comfort in communities developed overtime
- Social license has flipped: people want prescribed fire
- Can tie wildfire risk reduction projects and blocks into larger landscape networks that make sense
- Big questions: how to we scale up and build capacity?
 - Training is experiential—the classroom is the field, learn by doing
- Cut block burning is cost recovery for BCWS
- Even if you aren't going to burn your block, you should keep the edges clean because those are suppression defense zones
- Cheapest burn Fons has seen in Southeast was \$900CAD/ha

- Drone ignitions provide ignition, LiDAR, heat mapping, video footage and cost \$400CAD/hr
- Capacity is the weak point
- Pick blocks strategically to string together landscape resilience
- CFAs ask for best practice manual/guide on harvesting/fuel treatments/Rx burn preparation
- Block burning stretches your window when you can burn

Research Priorities

- Research on wildfire risk reduction communicated in a simple and clear way is useful for convincing/educating the public of the efficacy and importance of treatment (research used for extension and outreach)
- Many CFAs are keen to have **monitoring plots** put in place
- Take advantage of existing cruise or threat plots and collect additional fuels information instead of starting from scratch; clearly mark plots to be able to revisit them
- What is the fire risk of chipped/masticated fuel beds? How does chipping affect plant recovery (ie. native bunch grasses, fire-adapted species)?
- UBCO is looking to build an experimental burn center
- How long do these treatments last?
 - In the Cariboo, Doug-fir are putting out incredible cone crops which reduces treatment longevity in some places
 - Regeneration dynamics in treated areas and wildfire areas AND persistence

FNESS

- Survey First Nations for key priorities to include in spatially explicit database
- Need to inform Incident Commanders of where to avoid putting fire guards to protect cultural resources
- How to include fine-scale resources of importance like huckleberry patches?
 - Resolution is as good as 10m resolution LiDAR
- FNESS has LiDAR from Canfor and provincial government
- How do you see CFAs integrating into larger landscape management?
 - Collaboration between other neighboring tenures; make same datasets available to everyone to be able to do similar management
- Kootenay Conservation Society has mapped out wildlife corridors to connect parks
- Training is provided with the spatially explicit database; simple interface. Some data is only available to each community and some is public
- What is the timeline for a larger roll-out of this spatially explicit database?
 - Demonstrating proof of concept in the southeast right now

- Some CFAs have their own LiDAR data that is better than what the province has**

Coastal

Cultural and prescribed burning

- Slash broadcast burning
- Opportunity for economic value
- Venting and smoke management

BCCFA networking supports/Partnership with BCWS

- BCCFA planning support with quarterly meetings particularly on climate adaptation
- Wildfire officer to sit on committee – Al Berry
- Go for coffee – 4 Pillars

Research priorities

- Urban parks, recreation, ignitions
- Smoke policies and public resistance
- Coastal/interior forests
- Mulch, chips (BC Hydro, etc.)
- Catastrophic fire prediction (Gulf islands, Whistler)
- Public education important in these high urban areas that are the most disconnected from the forest industry

FNESS

- Support FN and partners
- Structure and cross training
- Networking and liaison between – interagency
- How are you listening to and incorporating FN priorities and knowledge?

FESBC

- Allow community forests to lead their projects with their team
- Reduce funding silos

Northwest

Cultural and prescribed burning

- Need education, FireSmart and discipline
- Finding synergies between the legal obligation and the right thing for the landscape

- Build social license for smoke management

BCCFA networking supports/Partnership

- Funding for staffing support
- Prescription approval/involvement of BCWS in forest management decisions
- Liability
- Training/education for planning
- Sign off and approval process for burn plans
- Cost issues with prescribed burning
- Proactive/preharvest burn planning in layout phase
- Training/education for burning

Research priorities

- WRR treatment effectiveness monitoring
- Do WRR treatments create more resilient forests?
- Results analysis
- Fuel loading - tonnes per ha chipping/mulch increasing wildfire risk?
- Modelling for future conditions of WRR areas and maintenance cycles
- Utilizing MET stations for weather/site data collection and monitoring

FNESS

- On reserve funding province wide
- Database for collaborative planning access
- Ministry access? FMS
- Off reserve threats to reserve lands, support funding acquisition through other sources

FESBC

- Multi-year funding/long term funding
- Funding windows?

Prince George

Cultural and prescribed burning

- tradeoffs → suppression vs managed fire

Research priorities

- Importance of broadleaf, size of patches, mix of species.

- There is mixed opinion of what is required
- In NDT3, are shaded fuel breaks and partial cut treatments really appropriate or effective?

Issues

- Community forests are generally well roaded and close to base. They are also area based and very sensitive to fire losses. CFAs should be given an higher ranking for deciding triage
- What about zombie fires that are ignored all winter and then flare up in spring to cause huge costs and losses.

Kamloops

Participants in this group represented 6 Community Forests located within the Kamloops Fire Zone - Clinton, Logan Lake, McLure, Barriere, Chu Chua, Little Fort, Clearwater, Lumby, Splatsin, Midway, and Greenwood.

BCCFA Networking Support (fire triangle)

- there was a huge desire for regional workshops or "wildfire round tables" to be hosted by the BCCFA and feature partnering organizations such as BCWS, FESBC, Community Forests, Industry, First Nations, and Government. This would hopefully help with relationship building, communication, and data sharing.
- more communication/ sharing information about fuel treatments - prescriptions, costs, efficacy
- Discussions around the Simpcw Indigenous Initial Attack crew as a community resource

FESBC (wildfire in the mountains)

- desired projects will support multiple forest resource values and provide multiple benefits (e.g. fibre utilization, recreation, timber, biodiversity, WRR)
- discussions around how to design and implement cost-effective (\$/ha) fuel treatments. Seemed to be a consensus that mechanized treatments seem to be more cost-effective than hand treatments (in most fuel types) --> need for specialized / smaller equipment for select harvest
- FESBC has a 3-year rolling 20 million budget for funding projects

BCWS

- Kamloops Fire Zone is a BIG fire centre with a dispersed demographic including a mix of urban and rural communities
- includes wet and dry forests as well as grasslands (biodiversity hotspots)
- there has been a big demand in this fire zone for WRR projects, many of the zone's Community Forests (6) have overlap with the WUI of rural communities
- BCWS is interested in finding areas to practice prescribed burning so they can build experience and competence, this includes re-thinking block layout (rods, boundaries, and WTPs) that considers the use of prescribed burns post-harvest --> new BMP to be released, likely Fall 2024 to provide guidance to foresters.

General Issues

This was a big part of the group's discussions with issues being interwoven into a mind map. The top 3 were identified and included:

- Capacity (to do the work - e.g. hand treatment crews, specialized machinery)
- Funding (to create prescriptions, treat non- / low- priority areas or escape routes occurring OUTSIDE the WUI)
- post-harvest treatments to clean up residual surface fuels) and Insurance (fire insurance, capital losses, resource losses, liability associated with prescribed burns, fire suppression costs)

Current Research Needs

Lori Daniels, UBC Tree Rings Lab. Project looking at treatment efficacy using samples in treated and untreated areas that had results showing positive effects of fuel treatments (they work).

- Must consider ground, surface, and crown fuels
- current knowledge gaps around effect of fire belowground on soil organisms and soil carbon
- desire to know more about fuel loading/ fuel types, smoke emissions, carbon balances, and cost-effectiveness (given the Law of Diminishing Marginal Returns)BCCFA networking supports/Partnership with BCWS

Common threads across all regions:

- More money and more capacity
- Fuel treatment longevity?
- How to prepare for larger fires?

- Landscape-level resiliency
- Common information for collaborative planning—share knowledge
- Long-term funding is key

First Nations Relations: History is the Context, Shared Decision-Making is the Future

“This workshop will involve participants in the ongoing transformation of BC’s forest sector, emphasizing the recognition of Indigenous rights and title, and their integration into decision-making processes. Its objective is to provide a clear framework for enhancing collaboration with First Nation governments, organizations, and individuals in light of this context. The workshop aims to assist participants in adapting to the evolving forest management landscape, fostering constructive Indigenous-non-Indigenous relationships, and exploring effective approaches to engage First Nations in decision-making processes. The workshop will be delivered by Marieka Sax and Res (Andreas) Krebs with Resonant Strategic.”

June 13 Note taker – Chanelle Gauthier

Speakers

Marieka Sax, PhD (Resonant Strategic)

Andreas (Res) Krebs, PhD (Resonant Strategic)

Session Summary

In this session, Marieka Sax and Res Krebs guided participants through an activity illustrating the colonial violence of entering into relationships with people and the land in an extractive and authoritative way. They used this activity as a base for understanding the legacy and reproduction of these relationships we live with today. They emphasized that **“the Crown has no receipt for the land,”** and therefore has no legitimate authority over it, under colonial law. Marieka and Res then provided a brief history of the relationship between settlers and Indigenous people on Turtle Island. They discussed the policies, laws, and violence imposed by the federal and provincial governments, as well as the constant resistance and assertions of rights and sovereignty by Indigenous nations. They highlighted the influence of Tse’khene Chief Harry Chingee on the inclusion of Section 35 in the Canadian constitution. They noted some of the major court cases in BC that have helped to define the rights set out in Section 35, including the Calder case (1973), the Sparrow case (1990), the Delgamuukw case (1997), the Haida case (2004), the Tsilhqot’in case (2014), and the Yahey/Blueberry case (2021).

With these relationships and history in mind, a video was shared about best practices in relationship building, with perspectives from George Brcko (Wells Gray Community Forest), Tania Solonas (McLeod Lake Mackenzie Community Forest), and Heather Beresford (Cheakamus Community Forest). Following the video, Marieka and Res guided participants through an exercise in collaboration and problem solving. Participants discussed challenges faced in collaboration between Indigenous and non-Indigenous groups in the context of community forestry, and shared strategies for improving relationships, communication, and collaboration.

Notes

Susan Mulkey

- This year's workshop is intended as a meaningful continuation of the conversation started at last year's BCCFA conference workshop lead by Gwen Bridge and Lenny Joe

Marieka Sax and Andreas (Res) Krebs

- Activity: Place exercise to highlight the colonial legacy we have inherited and are working with – shift to working on creating new relationships in this context
 - Participants are encouraged to draw a picture of a place of personal importance
 - Volunteers are asked to show their drawings and to describe the places they drew as facilitators tear out pieces of the drawings that could be of value to them (infrastructure, access points, food and water sources)
 - Discussion about how it feels to have special places removed by outsiders, and about how people and institutions could gain the authority to destroy or take special places [link to Doctrine of Discovery]
 - This activity is intended as a very small window into the colonial violence of entering into relationships in an extractive and authoritative way
- 2024 Land Act Amendment was put forward and taken back by Minister Cullen
 - Intended to retroactively demonstrate Crown authority over BC lands
 - **“The Crown has no receipt” for the land, and therefore has no legitimate authority, under colonial law**
- Brief history of relationships between settlers and Indigenous people on Turtle Island
 - Initial relationships along east coast were of collaboration – exchange of Wampum
 - Relationships continued into the Seven Years War – war, survival, allegiances

- 1763 Royal Proclamation – recognized Aboriginal Title and stated that the Crown could only extinguish title with a formal treaty
- Numbered treaties, post-1812 – a way for Canada to “get the receipt” for stolen lands through treaties
- Chilcotin War of mid 1800s – Five Tsilhqot’in Chiefs were executed (murdered) for resistance against road-building and mining in their territory
- Throughout violent history of appropriation and extraction, there was constant resistance and statements of rights over land by Indigenous nations (e.g. Nisga’a resistance leaders)
- Potlatch and powwow ban – intended to undermine extensive political and legal systems, and to facilitated the implementation of the colonial form of government (Band Council system)
- In BC, First Nations were prohibited from participating the fisheries, as their extensive knowledge, technologies, and expertise gave them significant advantage over non-Indigenous fishers
- Indigenous people were also prohibited from hiring lawyers, or even from gathering in groups
- Shift in public perception with World War II – Indigenous soldiers became decorated veterans, fighting alongside Canadians – Faced with the atrocities of the time, Canada begins to recognize the importance of human rights, and attempts to extend these rights to Indigenous people
- 1960s to 1980s marked an era of First Nations renaissance and resistance
- White Paper (1969) proposed the elimination of Indian Status altogether
 - Harold Cardinal resisted this change with Citizens Plus (The Red Paper)
- 1973 – Calder Case – the first court case that acknowledged the existence of Aboriginal title – Frank Arthur Calder (Nisga’a) lost case, but precedent was set for Aboriginal Title – new approach of government to treaty negotiations
- **Chief Harry Chingee** (Tse’khene) credited with influencing Ian Waddell in the creation of Section 35 in the Canadian constitution – “We want a piece of the pie”
- **George Manuel** – brought Constitution Express to Ottawa (1980-1981) – “protesting the lack of Indigenous representation in the patriation of the Constitution” – bringing attention to Indigenous rights and influencing the inclusion of Section 35
- Major standoffs and conflicts throughout the 1990s – **Kanesatake, Ipperwash, Gustafsen Lake, etc.** – motivated by provincial and federal failures to abide by treaties, and the Crown’s tenuous claims to the land

- Bill Vanderzalm – 1990s, beginning of modern treaty process – BC begins to acknowledge Indigenous rights to land
 - Section 35 was left vague and has been gradually determined and filled in by court cases
 - Ronald Sparrow (Chief Musqueam) – Sparrow Case establishes the right to harvest
 - Delgamuukw case (Gitksan and Wet’suwet’en) – was lost, but set up a test for determining Aboriginal rights to land, and acknowledged the legitimacy of oral histories as evidence in court
 - 2004 Haida Case – established the duty to consult with First Nations, whether or not land claims have been proven in court – lead to the referral system
 - 2014 Tsilhqot’in Case – tested the process established in Delgamuukw – did not extinguish Crown title, but decision-making rights over the land stay with the Nation
 - Yahey/Blueberry Case – established that cumulative impacts on the land must be considered, even if referrals are done correctly
 - Bill 23 and the Forest Landscape Planning System – requirement of Chief Forester to consult and engage with First Nations
 - Section 7 of DRIPA – requires the participation of First Nations governing bodies in decision-making and recognizes the legitimacy of traditional decision-making systems beyond the colonial Band Council system
- BCCFA Video on best practices in relationship building – perspectives from George Brcko (Wells Gray Community Forest), Tania Solonas (McLeod Lake Mackenzie Community Forest), Heather Beresford (Cheakamus Community Forest)
 - George Brcko
 - Integrating Simpcw principles into Best Management Practices document – working group with Simpcw First Nation and Clearwater – Stewardship Principles Agreement
 - “Small tenures are more effective at working on the land together”
 - Understanding that building relationships takes time – not moving too fast on the land (as big licensees do), but take the time to communicate
 - Field visits – put your egos down and get out on the land together
 - Tania Solonas
 - First Nations have been practicing land stewardship since time immemorial, exciting to see traditional practices coming back into use and respect

- Reconciliation must be engaged with in a proactive and holistic way, and must include enforcement [for agreed-upon best practices for land stewardship]
 - Heather Beresford
 - Important not to flatten principles, or assume they align with other objectives [example from Cheakamus CF] – need **direct** input from local Nations
 - Building relationships with long term vision and goals in mind
 - Cheakamus Community Forest prepared to accept less revenue from logging to manage the land with a gentler hand
 - Transparency and communication – answer questions and inform people well ahead of plan creation or implementation
 - Lessons from Cheakamus CF – when all “stakeholders” brought to the table, First Nation asserting, “We are not stakeholders. We are governments, and we will speak to the government on that level.”
- Exercise: Participants write about a challenge they are facing in their community forest or professional role about collaboration or relationship building between Indigenous and non-Indigenous groups. Participants exchange “issues”, and work in groups to provide feedback, share experiences, and suggest new approaches for working together more effectively.
 - Volunteers share some strategies discussed in groups
 - Building strong relationships **without an agenda** as a way to work through problems, moving forward
 - The many challenges we are facing today (wildfire, climate change, etc.) may be seen as an opportunity to collaborate and build new relationships

Final Comments

Jennifer Gunter thanked everyone for their wonderful and generous contributions. Susan Mulkey reminds participants to build and rely upon relationships in challenging times, to use the network of community forests colleagues created through the BCCFA to help with support, and to remember that the “BCCFA has your back”.