

BC

Forest PROFESSIONAL

FALL 2025

How **Cumulative Effects** Information
Supports Forest Stewardship

Creating a New **Harvesting** Workforce

The **Women of Wetzin'kwa**
Community Forest

Updated **Fire Hazard Assessment**
and Abatement Guidance

SIPex: A Gateway to
Innovative Silviculture in BC



Sounds of Sustainability

A Story of Endangered Native-grown South American
Mahogany vs Plantation-grown Fijian Mahogany

RENEW YOUR REGISTRATION

by November 30, 2025

The *Professional Governance Act* (PGA) and Forest Professionals British Columbia Bylaw 5 require all registrants to complete registration renewal requirements by November 30, 2025.

If you fail to meet the November 30 deadline, your registration will be suspended on December 1. If you are a practising RPF or RFT, suspension of your registration means you are no longer legally allowed to practise professional forestry and your registration status with Forest Professionals BC (FPBC) will be listed as “suspended – failure to renew” in the online directory of forest professionals.

Easily and Quickly Renew Online

To renew your registration, go to fpbc.in1touch.org.

Enter your username; unless you have changed your username during a previous renewal period, it will be the email address you identified as your preferred method of contact and where you receive emails from FPBC.

Enter your password. If you have forgotten your password, you can reset it using the Forgot Password link underneath the log-in box.

If you have changed employers and have a different preferred email address, please contact the registration department at admissions@fpbc.ca.

Steps to Renew Your Registration

All steps listed below must be completed.

Step 1: Review your contact info

Ensure your contact information (email and mailing address) is correct. If you changed employers in the past year, be sure to update your employer information. Employer information is required under the PGA and is displayed in the public registry of forest professionals.

Step 2: Complete your competence declaration

The competence declaration is mandatory for all registrants, except those who are retired registrants or trainees (ASFIT, FIT, ASTFT, TFT, TNRP).

Step 3: Identify your practice areas

Practising registrants must list their professional practice areas. This information is required under the PGA and is displayed on the public registry of forest professionals.

Step 4: Submit your indictable offence declaration

All registrants are required to disclose if they have been convicted of an indictable offence.

Step 5: Pay your fees

Your registration will not be renewed unless all of the above steps are completed and all applicable and outstanding fees paid. Note: if your employer pays your fees on your behalf, it is still your responsibility to ensure your fees are paid by the November 30 deadline.



Continuing Professional Development Requirements

All practising RPF and RFT registrants are required to undertake and report to FPBC 30 hours of continuing professional development (CPD) each year. If you have not reported 30 hours of CPD, you will be assessed a late fee on December 1, as per Bylaw 10-2. If late fees and CPD reporting requirements are not rectified within seven calendar days, the Registrar may take further action that affects your practising status.

Do Not Let Your Registration Lapse

If you are planning to retire or leave the profession of forestry, you must apply to FPBC to change your registration category to “Retired” or “Resigned.” Letting your registration lapse by failing to renew or change your registration category means you are not leaving the profession in good standing and your registration will be cancelled.

To change your registration category, log into the registrant portal at fpbc.in1touch.org and select the “Change of Category” tab in the top line navigation.

Contents

FALL 2025

BC FOREST PROFESSIONAL



On August 20, 2006, a wildfire ignited approximately 15 kilometres west of Woss on Vancouver Island, in coastal backcountry old-growth slash. Photo credit: BC Wildfire Services

Cover Story

- 16** Sounds of Sustainability
By Michael Hall

Opinion

- 8** Reflections on a Decade in Professional Regulation
By Casey Macaulay, MA, RPF

Features

- 10** Using Cumulative Effects Information to Support Forest Stewardship
By Darcie Fodor, RPF; Doug Lewis, RPF; and Felice Griffiths, MRM
- 13** Creating a New Harvesting Workforce to Achieve BC's Forestry Resiliency Aspiration
By Erin Robinson, MA and Florian Bergoin, MSc, RPBio, RPF

Profiles

- 20** The Women of Wetzin'kwa Community Forest
By Katelyn Metanczuk, ASFIT; Carla Hutchings; Kelsey Hance, RFT; Natasha Lebiadowski, TFT; and Jaya Freeman, ASTFT

Professional Interest

- 24** A Donation Deep-rooted in BC Forestry
By Michael Hall

Practice Resources

- 26** Updated Fire Hazard Assessment and Abatement Guidance in BC: What You Need to Know
By Ryan Hall, RFT
- 28** Meet the SIPex: Your Gateway to Innovative Silviculture in BC
By Alana Clason, PhD and Gillian Chow-Fraser, MSc

Columns

- 6** BOARD CHAIR'S REPORT | What is the Regulators' Role in Professional Identity Formation
By Kerri Simmons, RPF
- 7** CEO'S REPORT | Modern Professional Regulation Needs Technology, and that Comes with a Cost
By Christine Gelowitz, RPF
- 29** THE LEGAL PERSPECTIVE | Compliance and Enforcement Investigations and Limitation Periods
By Jeff Waatainen, LLB

Departments

- 5** FPBC News
- 30** In Memoriam

SUPPORT THE
FOREST PROFESSIONALS
OF TOMORROW

Donate to
ForesTrust
Today

ForesTrust funds scholarships for students enrolled in post-secondary forestry programs across BC.

ForesTrust
fpbc.ca/forestrust

Forest Professionals BC 2026 Forestry Conference

Sheraton Wall Centre
Vancouver

February 4-6, 2026

fpbcconference.ca

BC Forest PROFESSIONAL

BC Forest Professional is published four times per year by Forest Professionals British Columbia.

The opinions expressed in *BC Forest Professional* are those of the article or letter author(s) and do not necessarily represent those of FPBC, board, or staff.

MANAGING EDITOR • DEAN PELKEY

EDITOR • CHERYL WADDELL

EDITORIAL ADVISORY PANEL

VICTORIA DIEDERICH, MSc, RPF; CHRIS HOLLSTEDT, RPF(RET); MICHAEL HUEBERT, RPF; CLAIRE HUXTABLE, RPF; MADELYN MACDONALD, RPF; HEATHER POULSON, MForSc, RPF

DESIGN AND PRODUCTION • MASSYN DESIGN

PRINTING AND DISTRIBUTION • MET FINE PRINTERS

ADVERTISING SALES MANAGER • CHERYL WADDELL

602-1281 W. Georgia St, Vancouver, BC V6E 3J7

Tel: 604.639.8103 • Email: editor@fpbc.ca

ISSN:1715-9164

PUBLICATIONS MAIL AGREEMENT NO: 40020895

Return undeliverable Canadian addresses to:

FPBC Circulation Department

602-1281 W. Georgia St, Vancouver, BC V6E 3J7

Email: editor@fpbc.ca Website: fpbc.ca



**Forest
Professionals
BRITISH COLUMBIA**

BOARD CHAIR • KERRI SIMMONS, RPF

BOARD VICE-CHAIR • DAVE CLARKE, RPF

PAST BOARD CHAIR • KELLY KITSCH, RFT

GOVERNMENT-APPOINTED BOARD MEMBERS

ALISON DEMPSEY, LLB/JD, LL.M, PHD; MARGARET LANTHIER, BA, B.ED, CIM;
IAN MILES, MBA, C.DIR.; DAVID MOREL

BOARD MEMBERS

DEREK BURDIKIN, RPF; JULIET GOVEIA, RPF; MOLLY HUDSON, RPF,
RPBIO; JOE KENNY, RPF, P.ENG; JANICE MATHERS, RPF

CHIEF EXECUTIVE OFFICER • CHRISTINE GELOWITZ, RPF

DIRECTOR OF FINANCE AND ADMINISTRATION • AGAJENDO, CPA, CMA

DIRECTOR OF PRACTICE • TARA BERGESON, MSc, RPF

DIRECTOR OF COMMUNICATIONS • DEAN PELKEY

DEPUTY DIRECTOR, REGISTRATION • CHI CEJALVO, RD

DEPUTY DIRECTOR, COMPLIANCE • CHARLOTTE MELLSTROM, RPF

BC Forest Professional is the professional magazine of Forest Professionals British Columbia (FPBC). Editorial submissions, comments, letters to the editor, articles, and photos should be sent to the editor, address above.

Reprinting and copying of *BC Forest Professional* articles is encouraged. Please include a credit to both the author and *BC Forest Professional*.

Forest Professionals British Columbia recognizes that our business and the work of our registrants occurs on lands that Indigenous People have occupied and been responsible for since time immemorial.

We are committed to supporting reconciliation through inclusion, awareness, and providing ongoing education and training opportunities to our registrants on the culture, history, and rights of Indigenous People.

Save the Date: FPBC 2026 Forestry Conference and Annual General Meeting, February 4-6

The Forest Professionals BC forestry conference and AGM is scheduled for Vancouver, February 4-6, 2026, at the Sheraton Wall Centre. Be sure to save this date in your calendar.

As has become our standard, the 2026 conference will be a hybrid event with both in-person attendance and virtual participation available. A volunteer group of forest professionals, chaired by Nick Reinhardt, RPF, is busy creating a program that will challenge and engage forest professionals from across BC.

Some of the proposed topics include: overlapping legal and ethical expectations; use of practice guidance documentation in your practice; an update from the BC Government's Professional Forestry Advisory Council; beetles and fungi and how they team up to wreak havoc in the forest; single-stem harvesting in BC and the operational realities and policy constraints; results of the BC Timber Sales Review; the pathway to stabilizing the timber harvesting landbase, and more.

The conference will also feature a field tour to view and discuss the mitigation work done in Stanley Park following a Looper Moth infestation (additional fee for the tour) as well as our annual Recognition Banquet and the Inductee's Luncheon.

Program and registration details are available at fpbcconference.ca. Keep an eye on *The Increment* and fpbc.ca for more updates.

Be Cyber-Secure

With registration renewal on the horizon, Forest Professional BC reminds everyone that financial transactions between registrants and FPBC are processed through our new safe and secure registrant portal at fpbc.in1touch.org.

Forest Professionals BC will not send you emails requesting personal information or demanding immediate payment of invoices. All our reminders around registration renewal will direct you to our safe and secure registrant portal.

The unfortunate reality is that cybercrime continues to grow at an alarming rate and has evolved into a sophisticated and widespread industry. The frequency of cyber incidents is increasing, and staying informed is more critical than ever.

Quick checks before you click on an unknown link:

- Pause on urgency. Real organizations don't force snap decisions. Take 60 seconds to think.
- Hover over the link, don't click. Preview links and attachments. If the URL looks off, delete it.
- Verify out-of-band. Call or message the person using a known number — not the one in the email.
- Check the sender domain. Personal Gmail or misspelled domains for "official" notices are a no.

If you have questions about a suspicious email that purports to be from Forest Professionals BC, contact the registration or communications departments at admissions@fpbc.ca or communications@fpbc.ca.

You can also message Forest Professionals BC departments directly through our new secure contact centre in the registrant portal. Log in at fpbc.in1touch.org and click on the Contact FPBC tab in the top navigation.

Reminder: Record Your Continuing Professional Development Hours

Remember to record your continuing professional development (CPD) hours in advance of the November 30 deadline.

You can find CPD opportunities under professional development on the FPBC website and more under practice resources, including *BC Forest Professional* magazine and *The Increment*.

Note, some CPD opportunities are fee-based, such as certain webinars and e-courses, to recover the costs of producing them. FPBC also offers free webinars, e-courses, and other learning options that total more than the 30 hours required each year under the *Professional Governance Act* (PGA).

Log in to the registrant portal to record your CPD hours in the reporting tool.

Online Access Extended for 2025 FPBC Forestry Conference Sessions

If you participated in the 2025 FPBC conference, either in-person in Victoria or virtually, we've extended access to recordings of all sessions until November 30.

All conference sessions, including the annual general meeting, total 24 hours of the required 30 hours of continuing professional development (CPD) for the year.

If you didn't participate in the conference, you can purchase access to all recordings for \$200.

To access conference session recordings, login to the PheedLoop platform with the same credentials used to participate in the conference. To purchase access to the recordings, go to fpbc.ca/conference.

New Features Available in the Forest Professionals BC Registrant Portal

Check out the new resource library in the registrant portal.

The resource library is where you can find documents for change of sponsor, competence audits, professional development plans, and work history forms, as well as other resources.

As well, under affinity programs, find FPBC-branded items, a link to professional liability insurance, and access to discounted group rates on home and tenant insurance. Board minutes are also available in the library, as is information on stamps, seals, and certificates.

Click on the resource library link in the main or side menus in the portal to access the resources.

Log in at fpbc.in1touch.org.

What is the Regulators' Role in Professional Identity Formation

Recently, I read an article shared with me by Forest

Professionals British Columbia CEO Christine Gelowitz, RPF. The article, *Regulators' Role in Professional Identity Formation* by Anastasia-Maria Hountalas, examines the ways in which professional regulators can proactively influence and support registrants' development of professional identity formation (PIF) to safeguard the public interest and promote ethical standards.

The article inspired the subject matter for this edition of my column. I believe it's important registrants understand FPBC's regulatory role and its effect on individual PIF, as this influence is not always clear. After reading the Hountalas article, I reflected on my own motivations for joining the profession and how my journey and career, like many other forest professionals, has evolved and matured towards improved ethical practice and increased confidence.

Professional identity refers to the way individuals perceive themselves within their professional roles. For many forest professionals — based on numerous discussions with colleagues — the

development of this identity often begins prior to entering college or university and evolves throughout their careers. The formation of professional identity is a complex, transformative process involving the internalization of a profession's core knowledge, skills, values, and beliefs, enabling individuals to think, act, and feel as members of their professional community. It typically encompasses a dedication to service, as well as the adoption of professional conduct in interactions with clients, peers, and others. This identity extends beyond understanding professional responsibilities; it involves embracing the values and behaviours inherent to the profession. A well-defined professional identity serves as an internal compass, guiding forest professionals in making ethical choices, fostering resilience, and building confidence.

A professional identity is also significantly shaped throughout one's training, influenced by the guidance of role models and mentors as well as the accumulation of personal experiences and lessons learned over time. Early in one's career, there may only be a broad understanding of the specific responsibilities associated with the role. However, as new challenges are encountered, expertise is developed, and various situations are navigated, one's conception of their professional self becomes increasingly sophisticated and nuanced.

Understanding the Regulator's Multifaceted Role

Professional regulators fulfill multiple roles, including those of public protector, standard setter, the compliance officer and many more. While these titles acknowledge various aspects of their responsibilities, they do not fully convey the complexity inherent in regulatory work. Hountalas' article suggests that regulators should also consider themselves as facilitators of professional identity formation, strategically employing PIF to encourage

registrants towards ethical and competent practice, thereby ensuring protection of the public interest.

As a regulatory body, FPBC is able to implement PIF in several significant ways: notably, the start of accepting new trainees and registrants into the organization, through the education and accreditation processes, through the development of core competency standards and practice guidelines for all registrants, and also the delivery of diverse learning opportunities. FPBC has supported PIF through these initiatives, whether intentionally or not.

For new trainees and new registrants, offering professional guidance at the outset of their careers, FPBC can, and has, supported the development of a positive professional identity. From my perspective, FPBC plays a role in guiding and developing the professional identity of its registrants. The FPBC registration team provides educational interactions with new trainees which highlight opportunities to improve a trainee's standards of professional behaviour and help build good character as a registrant entering our profession. As well, as registrants, we have all received mentorship during our articling period under the supervision of a sponsoring RPF or RFT. It is essential that mentors and sponsors consistently demonstrate constructive professional performance for the benefit of those they guide. I have frequently reflected on my interactions with my sponsor and the knowledge I gained from him, as well as the impact his professionalism had on my learning and growth.

The FPBC practice team and the compliance team, from my perspective, have substantial roles in guiding and developing the professional identity of registrants. From the important work the audit program performs to the complaint process through the investigations and discipline process. The findings that translate to learnings can repair identity post-discipline to ensure ethical practice upon return.

Finally, the excellent work FPBC communications team does engaging with registrants about their accountabilities, including practice guidance, webinars, articles in *BC Forest Professional*, and news items in *The Increment* — all aid in developing positive professional identity.

I think about the importance of the entire FPBC registrant base supporting each other whether through mentorship, consulting each other for professional guidance, implementing communities of practice, having peer interactions and peer reviews. These reflective practices, peer interactions, and self-assessments foster identity and help registrants see themselves as ethical, inclusive, and resilient professionals.

By adopting a PIF lens, regulators can better understand how their actions shape the internal compass of registrants. A strong professional identity reduces the need for reactive regulation and enhances public protection. Ultimately, fostering professional identity is not just an educational concern — it is a regulatory imperative. ❖



Modern Professional Regulation Needs Technology—that Comes with a Cost

Last month, I wrote about the effects of the *Professional Governance Act* (PGA) on Forest Professionals BC (FPBC), and how those changes have impacted every registrant. One of the biggest challenges I noted was the financial cost of moving to — and now operating under — the PGA, particularly when it comes to technology.

In late August, FPBC launched a new online platform for people applying to become trainees on the path to an RPF or RFT designation. Built on the in1touch system, this marks the final step in our multi-year project to upgrade and replace our entire registrant database and the many functions it supports

This was no small undertaking. It took more than two years and countless hours from FPBC staff and developers to design, test, and implement the system. While all modules are now active, like any IT system, we will continue to refine processes and provide ongoing support.

The result is a modern, secure, and reliable system that positions us well for the future. Today, registrants can complete nearly every task related to their professional registration in one safe online environment.

The result is a modern, secure, and reliable system that positions us well for the future. Today, registrants can complete nearly every task related to their professional registration in one safe online environment.

What's new in the system?

- Registrant portal to renew your registration, which most of you first experienced last year.
- CPD tracking tool launched in February, which gives you a clear picture of both the hours you've earned and the hours still required.
- Applications for change of category including retirement, Leave of Absence (LOA), or resignations are now securely processed through the portal.
- Resource library, added in May, houses board minutes, information on stamps and seals, documents related to competence audits, professional development plans, articling guidelines, work history forms, and more. Under "Affinity Programs," you'll also find FPBC-branded items, a link to professional liability insurance, and access to discounted home and tenant insurance.
- Complaint system, a new secure process launched this summer for both the public and registrants.
- Contact Centre allows registrants to send questions directly to FPBC departments or submit change requests securely. You'll find it under the "Contact FPBC" tab in the portal's top navigation.
- Registration applications — the newest addition, bringing trainee and applicant processes fully online and integrated with the registrant management system.

Why this matters

Technology may not be the most exciting item in our budget, but it is essential. A modern regulator cannot function without:

- secure databases for registrants, complaints, and CPD tracking;
- privacy and cybersecurity protections for sensitive personal and investigative information;
- a searchable, accurate, public registry of professionals; and
- reliable systems for renewals, payments, and the ability to notify employers and the public about limits or conditions on practice.

These are not optional. They are essential parts of public protection and professional accountability, and some are legally required under the PGA.

The cost of modernization

Projects of this scale come with significant costs. The licence fee increases registrants have seen in recent years helped cover part of this investment. While no one welcomes fee increases, the investments and staff effort in building a new registrant management system was necessary to ensure FPBC can meet its legal duties, protect registrants' information and deliver services efficiently. This upgrade was long overdue — the organization's first system (iMIS) was nearly twenty years old; it was outdated and unable to keep pace with the needs of a modern regulator.

We also invested in an upgrade to our learning platform to improve and expand access to professional learning and development for both trainees and practising registrants. This year, 14 free e-courses were made available to registrants through the FPBC website. Our webinar offerings also increased this year, though some carried a modest fee to help recover delivery costs. Recordings from the 2025 FPBC forestry conference remain available to those who purchased them, and others can still purchase access.

The bigger picture

Professional regulation isn't abstract — it's a living system with legal duties, real risks, and real costs.

Forests are complex, public values are diverse, and mistakes can have lasting consequences. The public doesn't expect perfection from professionals in caring for forests, but it does expect competence, honesty, and a system that responds when those are missing.

That system comes with a cost. Covering it through professional fees isn't a penalty — it's part of the social licence to practice, and an investment in the profession's credibility and the future of BC's forests. Our province is recognized around the world for leadership in forest management, and that reputation exists because of you — registrants who uphold high standards in service of the public. Together, by strengthening a modern and accountable profession, we ensure BC's forests remain a legacy we can all be proud of. ✖



Reflections on a Decade

This was supposed to be an article on unlawful practice and Forest Professionals BC's future goals for enforcing the practice of professional forestry. Instead, I thought I would use the space to reflect on what I've observed in my role over the past decade as I wrap up my time as registrar and director of act compliance. It's been a privilege to serve the profession at a pivotal time of change and to have a hand in keeping professional forestry aligned with the ever-shifting public interest.

I was born in a forestry town in northern BC, and my dad was an RPF and woodlands manager. In the 1970s, he faced a personal crisis of ethics in his work, which eventually led him into a different career. When I began my forestry studies, I was immediately shocked by the difference between forestry in the classroom and forestry in the bush. I loved working outside and developing technical skills. At the same time, I was forced to internalize the contradictions in many of our industrial practices and policies. To practise forestry in BC is to exist in the middle of things we love and systems we know are problematic.

As the governance experts always remind our board, forest professionals are inherently in a conflict of interest when working to regulate our own profession. At the same time, we are the only people with knowledge of our practice to ensure we are governing the appropriate

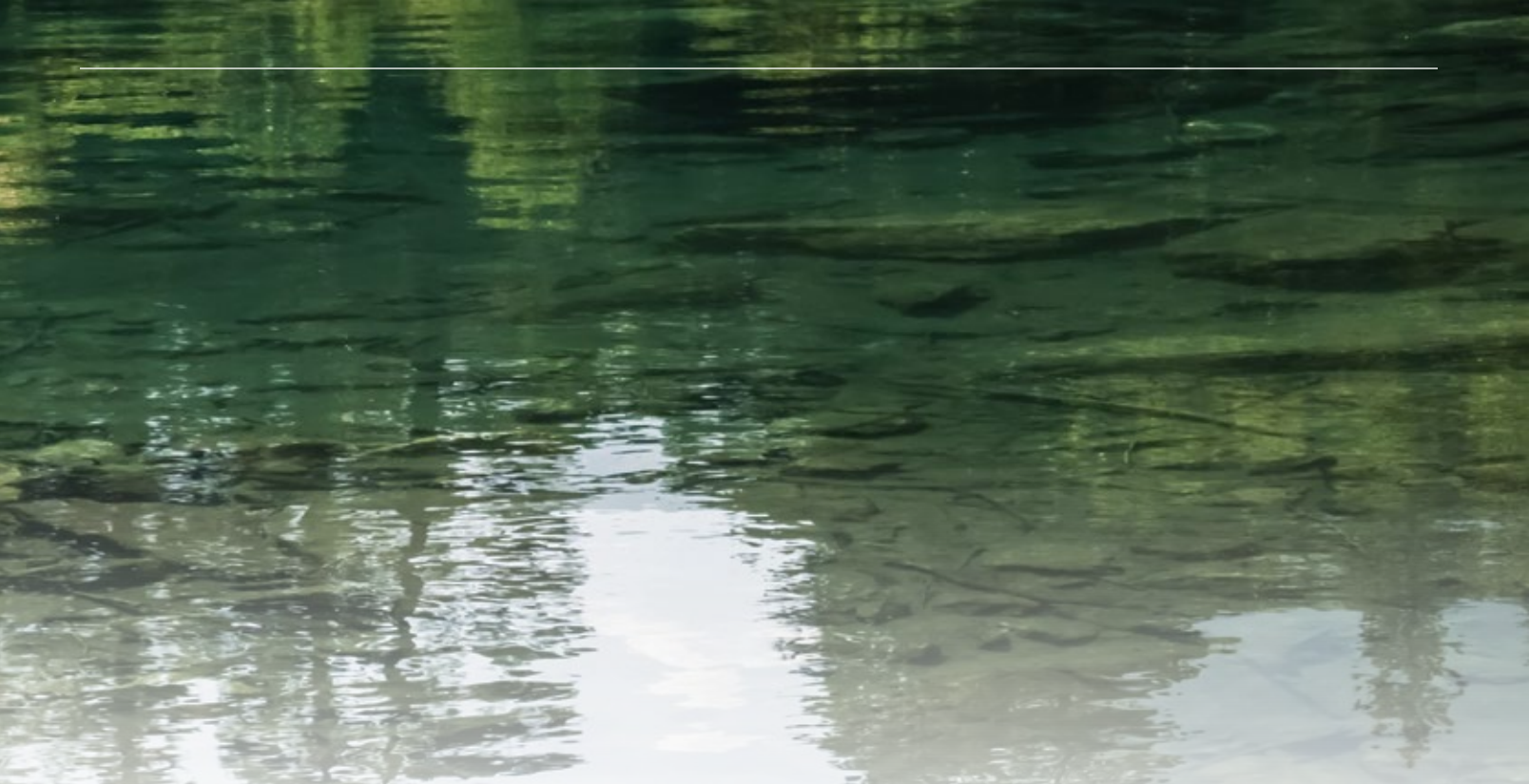
aspects of the practice to the right depth. I've always said we should acknowledge the tension in our work, between the pressing (and largely short-term) demands of our employers, and the ethical requirements in our Code. That middle ground is the space that the public entrusts us to navigate with integrity and independence.

Forest professionals, working with Indigenous Peoples, are the glue that connects the needs of the land, with the demands of the economy and employers. There is no "winning" and "losing" in this model; there is only the outcome of how well we manage the tension. This is not theoretical; we don't have a great collective track record at managing the broader range of values outside of timber. And yet, our training has always included knowledge of those values, including how to better incorporate them. We have the foundation; we just don't have control of the larger system of policies. And occasionally, we need a reminder of why we are doing this and what is at stake. Other times, we find ourselves in the crosshairs of a dispute that relates to factors beyond our control.

I have seen the good, the bad, and the ugly in this profession. Most navigate their practice with competence and healthy professional reflection, while some choose to navigate with bravado and entitlement. To the latter I say, the forest isn't 'yours'; we are just temporary stewards. Our kids and grandkids get to decide how well we navigated our decisions. And the executives you report to won't remember or reward the compromises you made to appease them. Regulation exists and subsequently expands to match the lowest common denominator amongst us. If no one drove in excess of the speed limit, there would be no need for highway patrol. Yet in contrast to some legacy actors in the profession, I've been so encouraged by the younger generation

Casey is the general manager of the Wells Gray Community Forest in Clearwater, BC. He was Forest Professionals BC's registrar and director of act compliance from 2014 to August 2025. Casey has a technical diploma in forestry, an undergraduate degree in forest management, and a master's degree in conflict analysis.





in Professional Regulation

of forest professionals who tackle the complexity of forest management with curiosity rather than resentment.

Approximately half of the complaints lodged against registrants arise from disgruntled public. Of the 150-200 discipline cases I've overseen when I was registrar and director of act compliance with Forest Professionals BC (and hundreds more discussions that didn't proceed to a complaint), many complainants attempt to connect their perception of negative outcomes on the land with a failure of professional ethics. But the professionals are often actors in the broader system of laws, regulations, and practices set by the landowner and employer. Certainly, professionals make mistakes, and we have a process for applying corrective action. However, it is very challenging to indict a professional who has met the plethora of requirements on the land, only to argue that the outcome of their efforts fell short of their professional obligations for proper stewardship or diligence. In short, leveraging the interpretation of individual ethics to mitigate shortcomings in the larger policy framework is not a great way forward. But it is an indicator we should pay attention to. If the larger system of policies and practices does not meet the expectations of communities that rely on the healthy functioning of forest ecosystems, then the professionals (and the regulator) end up carrying a disproportionate burden. Combined with the increasing number of things the province requires FPBC to measure and uphold as a regulating body, this is a significant contributor to rising fees for professionals.

This is why I'm concerned that forest policy and practices lag behind the interests of the public, the health of ecosystems, and the needs of a sustainable forest economy. This puts inordinate pressure on the professionals working to meet the standards and expectations that encompass responsible forest management. Remember,

it is large-scale conflict and even civil disobedience that has influenced forest policy the most in this province. Advocacy efforts are great, but they rarely influence the most significant shortfalls in policy with respect to our social licence to operate.

At the same time, resource professionals form the line that contributes to a higher standard of stewardship on the land. The use of professional foresters and forest technologists is not optional in BC, yet some employers need to be reminded of this. Hiring needs to address both the competence and the authority required to undertake regulated activities. Undermining this formula just sets us all back and creates unneeded conflict in the system.

Finally, we need to do a better job looking after one another. The forest sector is hard on people. It has a legacy of grinding down contractors and foresters alike. Why is there a shortage of skilled workers? In part, because we did not foster safe and inclusive spaces for them to work, where they can exercise their ethical practice without being marginalized or pushed out. Professional forestry can be an incredibly rewarding career pathway, but we need to remember that people are not widgets, and professionals who know the land are critical to the long-term success of operations. Indigenous communities have been telling us this from the beginning. Fortunately, recruitment and retention efforts have improved dramatically in the past decade, and workers are in a better position to assert their needs as independent practitioners.

So in an era of climate change, shifting values, and reconciling past activities, forest professionals are in a unique position to bridge the needs of different parts of the system, spanning the boundaries of different communities and interests. We need to embrace that mantle, be assertive and still do a lot of listening. ☒

Using Cumulative Effects Information to Support Forest Stewardship

Managing for cumulative effects (CE) is a foundational aspect

of responsible resource stewardship.¹ It involves taking a holistic view of the landscape to understand the impacts of our actions on the land base and the values we, as society, care about. While the term “cumulative effects” may appear relatively new in the public discourse, the principles behind managing CE are not new.² Management of CE is rooted in the long-standing practices of forest stewardship and integrated resource management planning that guide professional practice.³ Forest professionals play a critical role in this work. By integrating CE information into planning and operational decisions, we help forested landscapes continue to provide the values we care about into the future.

Pressures on the land base continue to evolve (e.g. climate change, wildfire resilience, non-forest sector expansion), as do societal expectations around how forests should be managed.^{4,5} While many of the legal objectives that direct forest management today come from the *Forest and Range Practices Act* and legal orders established in the early 2000s, new strategies need to be developed and applied to resource management. Planning processes like forest landscape planning (FLP)^{6,7} can provide a structured approach for considering CE assessments by enabling the discussion and developing a range of strategies to address gaps between current conditions and desired outcomes (see *Case Study 1*). While planning processes are underway, decisions on resource use continue to be made. Although the options for managing CE in a single operational decision may be more limited, CE assessments provide important context to incorporate mitigations at the site-level to help maintain values (see *Case Study 2*).

How to Use Cumulative Effects Information

Whether CE information is supporting planning initiatives or operational decisions, the approach remains the same. The following steps outline how forest professionals can effectively incorporate CE information into their work:

1. Gather data and relevant information

- Access all provincial CE assessment data through the BC Data Catalogue⁸ and the Cumulative Effects Framework (CEF) website⁹.
- Review CE data limitations and assessment assumptions to understand the context and relevance.
- Define an area of interest by examining broader spatial extents (i.e. landscapes or watersheds) to avoid missing potentially significant trends.
- Gather other information specific to your activity and the landscape that is not captured in the CE assessment.

2. Identify current conditions and factors driving risk

- Review CE assessment data to understand the current condition of the value.
- Compile indicator information for the area of interest, noting areas of moderate and high risk and any general patterns or trends.
- Interpret assessment results by identifying key drivers of risk or factors that may be mitigating risk.

3. Understand the landscape context

- Use professional expertise and judgment to interpret results within the broader landscape context.
- Consider legal and societal objectives set for the value.

4. Determine and monitor management responses

- Consider CE assessment results in relation to your activity.
- Use CEF guidance materials⁸ and professional expertise (supported by best practices, professional guidance, etc.) to identify appropriate management actions.
- Monitor the effectiveness of management actions over time and adjust as needed to ensure continued alignment with desired outcomes.

Remember: There is no single approach for managing CE. Effective responses will vary depending on the location, the values of concern, and the nature of the activities involved.

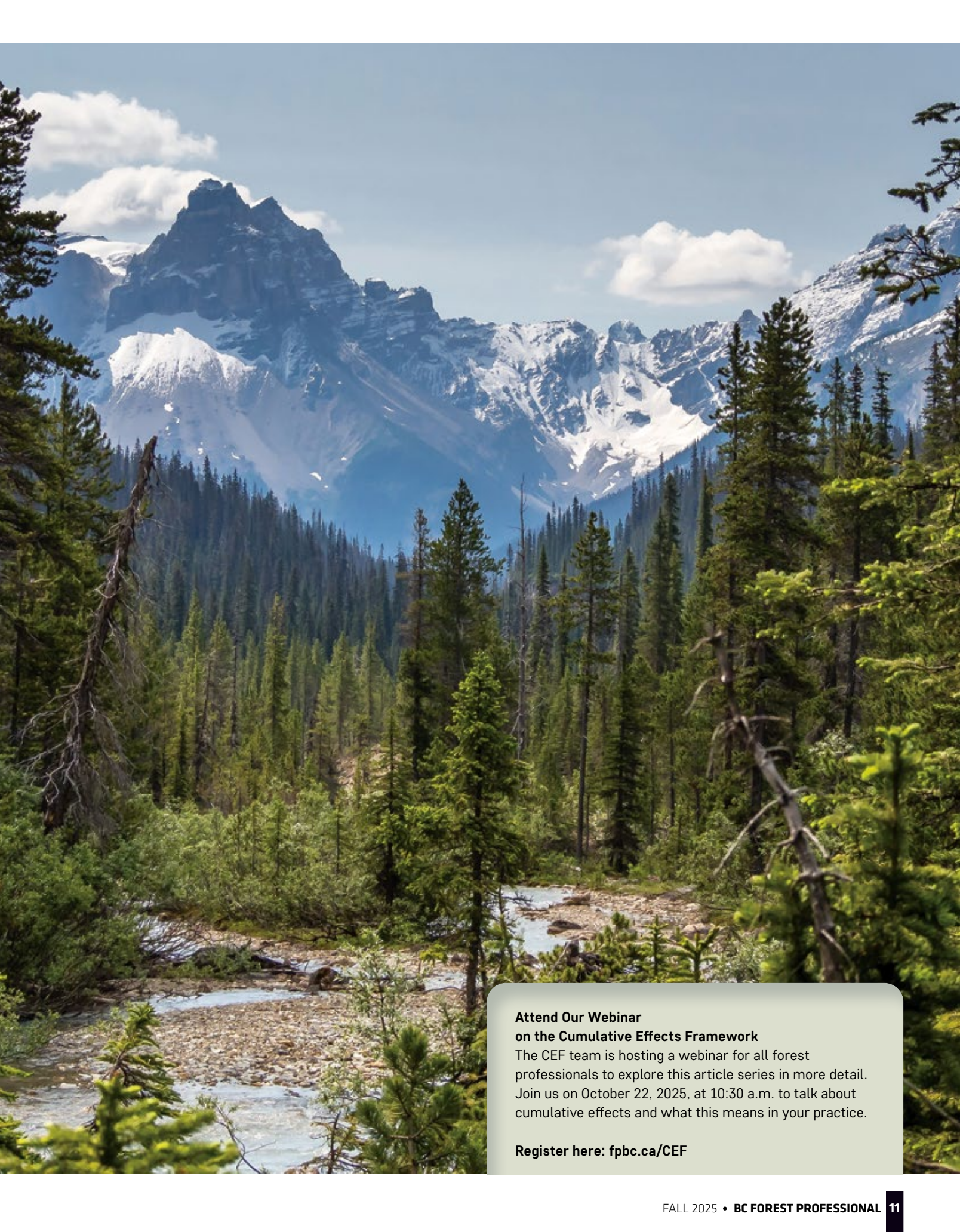
The following case studies are based on real forest landscape planning and operational planning scenarios and provide examples of how CE information can effectively be used in these contexts.

Case Study 1

A FLP in the Interior of BC is being developed with a primary focus on maintaining mature and old forests as a key biodiversity element.

1. An existing CEF assessment for forest biodiversity for the planning area was reviewed with other information to understand biodiversity risk and factors driving risk. The assessment revealed much of the area was in a high risk condition for biodiversity due to the combined effects of beetles, wildfires, and harvesting.
2. The group recommended a moderate or low risk condition for biodiversity. This involves setting targets to maintain and/or recruit mature and old forests to be within the range of natural variability. The group considered this desired future condition good for biodiversity, ecosystem health, wildlife, water, and timber.

Concludes on page 12



**Attend Our Webinar
on the Cumulative Effects Framework**

The CEF team is hosting a webinar for all forest professionals to explore this article series in more detail. Join us on October 22, 2025, at 10:30 a.m. to talk about cumulative effects and what this means in your practice.

Register here: fpbc.ca/CEF

Continued from page 11

3. Recognizing targets could not be fully achieved within the 10-year plan horizon, forest harvesting is desired and necessary to support landscape wildfire resiliency, and climate change projections may make it more difficult to maintain mature and old forest on the landscape, alternative strategies were required to set the landscape condition on a trajectory to achieve the desired future condition. The group presented options:

- Align spatial reserves into wildfire refugia areas as mature and old forests have a higher likelihood of persisting there under future climate-driven droughts and wildfires.
- Aggregate harvesting to reduce fragmentation and create landscape-level fuel breaks that align with topographic and/or fuel types that provide natural wildfire refugia.
- Shift some harvesting into mid-seral forests to retain mature and old forests in the short-term and break up the large cohort of mid-aged forests created post-beetle.

The FLP planning table used these recommendations, alongside recommendations from other working groups, to complete a spatial timber supply impact assessment, allowing for a balanced evaluation of trade-offs and benefits across multiple values.

Case Study 2

A forest licensee submitted a cutting permit (CP) application to a coastal forest district which included harvesting of mature and old forest.

1. District staff requested the licensee incorporate the CE assessment for forest biodiversity into the CP application given ongoing First Nations and public concerns.



Darcie Fodor, RPF, MSFM, is an assessment coordinator and policy analyst with the Cumulative Effects Framework. Darcie develops reports and decision-support materials related to old growth forest and forest biodiversity management. She has worked across the province on strategic land use planning and community-based forest stewardship initiatives.



Doug Lewis, RPF, is a landscape ecologist and forest biodiversity value lead with the Cumulative Effects Framework. He has 25 years of experience working with industry and government and focuses on evaluating the effects of forest harvesting and natural disturbances on multiple forest values.



Felice Griffiths, BSc, MRM, is the policy and guidance team lead with the Cumulative Effects Framework. She has 20 years of experience working in resource management for the provincial government in areas of wildlife management, environmental assessment, and cumulative effects assessment and management.

2. The licensee accessed the CEF data and guidance materials to understand assessment results. The assessment indicated a very high risk to forest biodiversity, reflecting a landscape dominated by early seral forests with less mature and old seral forests than would be expected to occur naturally.
3. While there is a long history of forest harvesting in this landscape, much of the CP was within second growth stands. Given the CE assessment results, the licensee revised their CP application with the following modifications:
 - Avoid harvest of mature and old forests — except where necessary for access — and protect specific habitat types.
 - Increase stand level retention, with retention areas anchored on riparian features.
 - Design irregular block shapes to follow natural topography, maintain important stand attributes, and promote windfirm boundaries.

The revised CP application was resubmitted with supporting documentation outlining how CE information was considered and addressed. Although the assessment identified the area as high risk to forest biodiversity, it did not automatically preclude the activity. The use of CE information allowed for a proactive response from the licensee to identified risks.

Conclusion

These case studies illustrate that forest professionals can play an important role in cumulative effects management. As a member of a self-regulating profession, we are entrusted with responsibilities that extend beyond meeting the minimum legal requirements to ensure our forests are sustainably managed¹⁰. Just as we can integrate new and emerging climate science into our practice, we can also consider current knowledge and data related to cumulative effects¹¹. By proactively incorporating cumulative effects information into our work, forest professionals can strengthen public trust and demonstrate leadership in sustainable resource management. 🌲

REFERENCES

1. CEF Interim Policy for the Natural Resource Sector (2016), www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/cumulative-effects/cef-interimpolicy-oct_14_-2_2016_signed.pdf
2. Canadian Council of Ministers of the Environment (2014) Canada-wide Definitions and Principles for Cumulative Effects. <https://ccme.ca/en/resources#>
3. Association of BC Forest Professionals, Code of Ethical and Professional Conduct: Guidelines for Interpretation (2021), <https://www.fpbcc.ca/wp-content/uploads/2025/08/2021-03-09-ABCFP-Interpretive-Guide-Code-Ethical-Professional-Conduct-2.pdf>
4. A New Future for Old Forests: A Strategic Review of How British Columbia Manages for Old Forests Within its Ancient Ecosystems (2020), <https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/stewardship/old-growth-forests/strategic-review-20200430.pdf>
5. Forest Practices Board Special Investigation: Help or Hinder? Aligning Forestry Practices with Wildfire Risk Reduction (2025), <https://www.bcfpb.ca/wp-content/uploads/2025/06/SIR56-Help-or-Hinder.pdf>
6. Ministry of Forests, Forest Landscape Plans (2025), <https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-landscape-plans>
7. Ministry of Forests, Forest Landscape Plans FAQ, https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/forest-landscape-plans/flp_faq.pdf
8. BC Data Catalogue, <https://catalogue.data.gov.bc.ca/>
9. CEF website, [gov.bc.ca/cumulativeeffectsframework](https://www2.gov.bc.ca/cumulativeeffectsframework)
10. Ministry of Forests and Range and Ministry of Environment (2006), https://www2.gov.bc.ca/assets/gov/environment/natural-resource-policy-legislation/legislation-regulation/frpa-pac-looking_outside_the_legislation.pdf
11. Forest Stewardship Plans and District Manager Letters of Expectation, www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-stewardship-plans

Creating a New Harvesting Workforce to Achieve BC's Forestry Resiliency Aspirations



Forwarder loading cut-to-length logs to transport from forest to roadside.
Photo credit: Quentin Stefani, TFT, Integrated Operations Group.

After the unprecedented wildfires of 2017, Quesnel City Council became deeply concerned that the forests Quesnel's economy depended upon were being devastated by one catastrophic event after another. Council's concern was that the landscape level disturbances being experienced in the region would continue unless an alternative approach to forest management was implemented as soon as possible. Since a proactive and innovative forest health response was lacking by the Government of BC, the council initiated a process to explore options to secure the future of the region's forests

and the city's forest manufacturing facilities and jobs. They called the process the Quesnel Future of Forestry Think tank (QFFTT).

The initial premise of the QFFTT was simple: the provincial scope of BC's attempts at finding solutions to the forest sector's woes wasn't working. The province's forest ecosystems and forest economies are too diverse for province-wide solutions, therefore the scope of any innovation had to be local and the scope of the conversation at the local level had to be facilitated, open-minded, and focused. Open-ended questions had to be asked so as not to devolve the conversation into the same old arguments that have stymied innovation in the past (e.g. how do we keep our mills open?). The think tank conversations also had to be focused to avoid falling into the abyss of trying to deal with the entire suite of issues besetting the industry throughout BC.

The first QFFTT was convened in May 2018 and representatives from local First Nations, the provincial government, local government, academia, and industry participated in a series of structured conversations. Three questions guided these conversations:

1. How can we restore ecological resiliency and adaptability to the forest landscape in the Quesnel Forest District?
2. How can we re-invent the Quesnel manufacturing sector to evolve it to take advantage of whatever fibre opportunities will be available from restored forests in the region?
3. What human resource development and training will be needed to ensure the workforce is transitioned to support innovative forest management practices and innovation in the manufacturing sector?

Erin Robinson is the forestry initiatives manager at the City of Quesnel. She obtained her BA in cultural anthropology and an interdisciplinary MA in natural resource management and anthropology, focusing on community forestry for her thesis. Erin's current work focus is cross-cultural collaboration in the areas of landscape level restoration, wildfire risk reduction, and emergency management.

Florian Bergoin, MSc, RPBio, RPF, is the natural resources manager for the Nazko First Nation and director for the Three Rivers Community Forest. Born and raised in the Alps, he grew up surrounded by farmland and nature — an environment that sparked his interest in forestry. In his current role, he advocates for community values in a rapidly evolving legislative and political environment.

Continues on page 14



Drone image showing the forwarder's ability to move through thinned forest. Photo credit: Quentin Stefani, TFT, Integrated Operations Group.

Continued from page 13

One of the key conclusions of the initial think tank was that achieving ecological resiliency and adaptability would require a comprehensive landscape level approach to planning as well as newer, more innovative forest management practices to achieve that plan. The conversation on the forest resiliency question positioned Quesnel to become one of the first provincial FLP pilots and the FLP table now updates the QFTTT participants at its biennial meetings. Subsequent to that first think tank, the City of Quesnel in partnership with Three Rivers Community Forest (an LLP consisting of the Nazko, Lhtako Dene, and ʔEsdilagh First Nations) also advanced a number of studies into alternate manufacturing opportunities for Quesnel. The alternatives now being explored in depth include small scale mass timber ventures and the possibility of Quesnel being host to a cluster of biomass-based businesses that could utilize bush waste to create petro-chemical substitute products.

The initial QFTTT participants also strongly agreed that changing harvesting practices and manufacturing processes would require a significant training intervention to create the workforce needed to support this level of rapid innovation. During this conversation on workforce development, Dr. Dominik Roeser, associate dean, Research Forests and Community Outreach at the University of British Columbia (UBC), pointed out that BC was going to need an innovative approach to forest management requiring different harvesting and fibre collection equipment. He noted this would create a significant challenge to BC's existing harvesting workforce. He also spoke about how climate change and associated large-scale disturbances, changes in the public's and government's aspirations for BC's forest ecosystems (e.g. biodiversity, old growth management, habitat protection), more diverse tenures (e.g. First Nations and community area-based tenures), and dramatic reductions in the allowable annual cut would all drive BC's forest sector to utilize alternate silviculture systems and interventions requiring smaller scale operations and different equipment. Dr. Roeser also noted

that the operators of the new harvesting equipment would need to be educated in forest science and innovative silviculture systems, as they would be required to make discrete forest management decisions as they were extracting fibre from the forest.

One of the key action items of the first QFTTT was to take on this challenge of designing an innovative harvesting machine operator training program to address this emergent human resource need. Initial attempts to design a made-in-BC program were hindered by funding issues, COVID-19, multiple provincial elections, and benchmarking against the comprehensive training programs offered in Europe. Therefore, despite a lot of work on this initial action item, little progress was made or reported out at the second and third QFTTT's, respectively held in September 2019 and May 2023.

In 2024, funding assistance gave new life to the project. This funding was provided by Three Rivers Community Forest and Foresight Canada. Thanks to this funding, the City of Quesnel Forestry Innovation Centre was able to contract the team who developed the New Brunswick Community College's (NBCC) Harvesting Operator Training Program. The team, consisting of members from High Performance Logging, the Canadian Woodlands Forum, Forest Liaison Inc., and New Brunswick Community College, worked with BC's harvesting contracting community and licensees in the Quesnel area to create a proposal for a made-in-BC operator training program. The proposed program would educate new operators in forest science and silviculture systems while training them how to use single-grip harvesters, forwarders, and other highly technical equipment needed for commercial thinning and strategic, forest resiliency focused stand treatments. The program would also include on-the-job training for existing operators to advance their skills and increase both the effectiveness of their forest management decisions and the efficiency of their machine operations.



Tracks can be removed from the machine for less soil disturbance in certain conditions or driving long distances.

Photo credit: Liam Parfitt, Freya Logging Inc.



Tracks on the forwarder wheels make for better traction on steep and/or soft ground and decrease soil compaction by driving on processed material. Photo credit: Liam Parfitt, Freya Logging Inc.

After validating their draft program with a group of 20 harvesting contractors operating in the Cariboo and Prince George regions, the program development team presented their proposal to participants at the May 2025 QFFTT. Both the harvesting contractors and the think tank participants fully endorsed the proposed program and emphasized the need to get the operator training program up and running as soon as possible. As one participant pointed out:

"BC will never achieve its forest resiliency objectives if we do not change our harvesting practices and, currently, we don't have the skilled workforce needed for harvesting contractors to risk making the investments in the European-style harvesting equipment that we need to see deployed here in BC."

The presentation delivered to the 2025 QFFTT proposes a three-year training initiative comprised of a Forestry Equipment Operator Training (FEOT) program and an Advanced Mechanized Operator Training (AMOT) program. The ultimate objective of these programs is to build innovative harvesting workforce capacity, with an initial focus on commercial thinning — a key tool to improving stand health, fibre quality, wildfire resilience, and biodiversity.

The proposed FEOT program would recruit and train entry-level operators through classroom instruction, simulators, hands-on fieldwork, and on-the-job coaching. The AMOT program is designed to support experienced operators and contractors in building new skills, particularly in commercial thinning, business practices, and operational efficiency.

UBC's Alex Fraser Research Forest has offered to act as the host venue for the initial training pilot, which we aim to offer in the spring of 2026. The hope is that after a successful pilot the provincial government will see both the need and the value of this program and provide the necessary resources to support regular program delivery starting in the fall 2026. The program has been designed to be mobile so it can be delivered anywhere

in the province where there is a need and a host licensee who can provide the classroom space and harvesting area in which trainees can operate. The simulator lab, which is a crucial part of this training program, would be mobile and available for both training program delivery and to take to various locations to support continued on-the-job-training, either as a follow-up to the FEOT program or an enhancement to the AMOT program.

The current preference is to offer the training program using an industry or professional certification and the potential for FPBC to play a role in the accreditation of this program is being explored. Forest Professionals BC's interest in the program stems from both the forest science and silviculture systems content and the practical application of that knowledge directly to harvesting practices in BC. Having a professional designation for these operators would add a level of rigour to the training program and give potential employers a high degree of confidence in the integrity of the training outcomes.

Quesnel City Council and Three Rivers Community Forest, in collaboration with their Quesnel Forestry Futures Think Tank (QFFTT) partners from industry, academia, and all orders of government, firmly believe that innovative forest harvesting practices are essential for building ecological resilience across the landbase. This transition is also critical to break the cycle in the large-scale disturbances that led Quesnel City Council to launch the think tank process in 2017. The implementation of a new, innovative harvesting operator training program in British Columbia represents a key step toward modernizing the province's forest industry. The Quesnel Forestry Innovation Centre is actively engaged in discussions with both the Minister of Forests and the chief forester to advance the proposal and secure funding for its immediate implementation. The involvement of Forest Professionals BC in accrediting this program could play a pivotal role in accelerating its rollout and ensuring its continued success. ❌

Sounds of Sustainability

Professor Phil Evans, PhD, stands off to the side of a lecture hall in the Forest Sciences Centre on UBC's Point Grey campus, hands folded behind his back, listening with his Forestry 210 class as PhD candidate Joseph Doh Wook Kim riffs on an electric guitar made from plantation-grown, big-leaf Fijian mahogany.

Rich, mellow tones pour from a Mesa Engineering amp atop a thigh-high table in the wood-paneled lecture hall as Kim improvises with another student playing a guitar made from endangered old-growth South American mahogany.

The impromptu performance¹ this past spring was part of a listening test to detect any differences in sound and a lesson in sustainability developed by Evans, the BC Leadership Chair in Advanced Forest Products Manufacturing Technology in the Department of Wood Science.

The lesson draws in part from the study *Distinguishing Native and Plantation-Grown Mahogany (Swietenia macrophylla) Timber Using Chromatography and High-Resolution Quadrupole Time-of-Flight Mass Spectrometry*², authored by Kim and Evans, as well as Pamela Brunswick, PhD, and Dayue Shang, PhD.

According to their research, some guitars made from native mahogany and favoured by renowned guitarists for their sound, stability, and flex can sell for up to US \$1 million at auction. However, due to overexploitation, some native species — also used to make flooring and furniture — have been listed by the Convention on

International Trade in Endangered Species of Wild Fauna and Flora (CITES)³ as “in danger of extinction without strict regulation.”

Plantation-grown Fijian mahogany is also used in guitar manufacturing. Evans believes the study

is the first detailed evaluation of the plantation wood's acoustic properties and can help expand its use.

Michael Hall is the senior online communications specialist with Forest Professionals BC and is a former journalist and editor.

A chemical test developed through the study can verify the origins of the wood used to make the guitars, which could deter sale of endangered native-grown South American mahogany and help reduce pressure on threatened forests.

Guitar manufacturers could aid in the latter without sacrificing quality, as listening tests demonstrated. And with more than a million electric guitars sold globally each year, Evans says the potential effect is massive.

“It's been a long but worthwhile study,” adds Evans — one that fuses his background in forestry and wood science, prompted by a chance meeting between teacher and student.

Forestry Resonates

Evans' initial interest in forestry stems from his involvement in environmental issues during his teenage years, sparked by reading *Silent Spring* by Rachel Carson and *Only One Earth* by Barbara Ward and René Dubois. The books advocated for more sustainable, science-based approaches to pest control and global environmental management. The '70s oil shock also made an impression on him.

“It showed that there was, quite clearly, a finite limit on natural resources on the planet.”

Evans, whose father was in the military, moved around a lot as a child, spending time in England, Germany, and Cyprus. By the time he was 10 years old, he had attended 12 schools. At 11, he was sent to a boarding school, Woolverstone Hall, near Suffolk, which offered an education matching that of a private school to students from working-class or military families.

“It's doubtful I would have been able to succeed academically if I hadn't gone to that school and I would have probably pursued a career in the army, as my father wanted me to,” Evans says.

Instead, he found forestry.

“It seemed to me that forestry was a profession which was sustainable and could offer a rewarding career with opportunities to be outside of offices and close to nature.”





PHOTOS, FROM LEFT TO RIGHT: *Joseph Kim with the native mahogany guitar; a close-up of the back of the plantation mahogany guitar; and a close-up of the back of the native mahogany guitar.* All Photos: Ally Penders, UBC Faculty of Forestry.

Evans was keen to pursue a degree but was also drawn to the technical aspects of wood science, particularly wood identification. He earned an honours degree from the Department of Forestry and Wood Science at Bangor University in Wales, followed by a PhD. Afterward, he spent a short period of time in Scotland's Abertay University working on the preservation of power poles made from Sitka spruce — the dominant wood species in UK forestry.

Evans then joined the Department of Forestry at Australian National University, the country's leading centre for forestry education.

For 17 years, he taught courses in wood technology to forestry students. During that time, he was exposed to conversations among colleagues about all aspects of forestry, including the polarizing debate between native and plantation logging.

"In the 1990s, forestry became a dirty word in Australia because of its association with native forest logging," Evans says.

Student recruitment into forestry dropped dramatically around then. Compounding the problem, each of the territories provided fewer scholarships for forestry students.

With the writing on the wall for his department, Evans accepted a position as director of the Centre for Advanced Wood Processing at UBC in 2001 and moved his young family to Canada.

Wood Detective

While at Australian National, Evans also taught wood anatomy. There were few wood anatomists in Australia or Canada and Evans would, from time to time, receive timber samples to identify from various organizations, from museums and art galleries to the federal police and the Bureau of Air Safety Investigation.

"I would get more substantial inquiries from wood processing organizations that wanted me to tell them if the timber they were receiving was the right species," Evans says. "So, I developed a research interest in wood identification and in separating wood species that were difficult to identify."

While he left that specialty behind Down Under — UBC had its

own identification expert — in 2015, Evans joined a study with the U.S. Wildlife Crime Laboratory on the chemical detection of closely related species belonging to the family *Araucariaceae*⁴. The area of wood identification had flourished since his last involvement.

"Now we have many advanced chemical technologies for separating different wood species," Evans says. "But we still have an issue that there is demand for woods which are now scarce and placed on the CITES list."

Evans learned of the ongoing demand for mahogany in the guitar industry. "I decided to develop a program to see whether we could use plantation-grown mahogany — of which, fortunately, there's an abundance in Fiji — and determine whether it was suitable for, or as good as, native South American mahogany for manufacturing electric guitars."

The Student

Evans doesn't play guitar but there was a promising undergrad in his fourth-year industrial wood finishing class — where students learn how to finish furniture with lacquers, dyes, and stains — who had his own guitar manufacturing company and played in a heavy metal band.

That student was Kim, who plays in the band UltraRisk and wanted to complete a graduate degree.

"It would have been unsatisfactory, from my point of view, just to simply do a study where we looked at the physical properties of the two woods and then some of the acoustic properties and extrapolated that into whether one would be as suitable as the other," says Evans.

The important test, after all the machining and coating steps, would be: what do the guitars sound like?

"The critical step, which I think makes the work a valuable study, is the final chapter of his PhD, where we actually made full-sized electric guitars and compared their musical properties across multiple audiences — professional musicians, students at UBC, and many others," Evans says of Kim.

Continues on page 18



The native mahogany guitar.

Photo credit: Ally Penders, UBC
Faculty of Forestry.



The plantation mahogany guitar.

Photo credit: Ally Penders, UBC
Faculty of Forestry.

Continued from page 17

But first they needed to find the wood to make the guitars. The wood detective started sleuthing.

"It was relatively easy to get small wood samples to examine the anatomical, chemical, and physical properties of the species because we have a large wood collection at UBC," Evans says.

He found multiple samples of native mahogany (*Swietenia*) from South America in the school's xylarium (a collection of authenticated wood specimens).

"It was also easy for me to get hold of plantation Fijian mahogany because it's widely available on the Australian market. You can just go to a timber supply store."

Evans flew to Australia, where he still maintains a home and retains an honorary professorship in the Department of Material Physics at his former university, to get plantation wood samples of *Swietenia macrophylla*.

It was more of a challenge finding native mahogany pieces large enough to craft the solid neck and body of a guitar. After COVID-19 travel restrictions were lifted, Evans flew to the UK and used his contacts to locate samples. He ended up finding a dusty timber merchant who had an old supply of the native wood.

Finding Symmetry

To do the study, Evans and Kim needed to construct two identical guitars.

Kim is a luthier who hand-builds electric guitars.

"But that wasn't good enough for us because there could be some subtle variations in the dimensions and shapes of the guitars," Evans says. "We used the equipment that we have at the Centre for Advanced Wood Processing and developed computer programs to precisely control the milling of the various components of the guitars."

Kim, with help from a technician at the centre, developed the computer programs. They went through several different proto-

types and gradually refined the programs so that they were able to produce twin guitars.^{5,6}

The guitars were finished late last year. Kim then worked with professional musicians and played the guitars sequentially, listening for any differences in sound.

"The guitar made from plantation-grown *S. macrophylla* had a brighter tonal character, with pronounced low and high frequencies to produce a V-shaped frequency response," Kim writes in his doctoral thesis, *Suitability of plantation-grown Fijian mahogany for the manufacture of electric guitars*.

"In contrast, the guitar made from native-grown *S. macrophylla*, produced a smoother, more rounded tone with fewer excessive frequency peaks, which are similar to descriptors like 'balanced' and 'thicker.'"

Kim prefers that one for playing jazz.

"This finding highlights the practical implications of these tonal nuances. It suggests that even subtle differences can influence a musician's choice based on genre-specific tonal requirements."

Kim developed additional listening tests, both blind and live. The guitars were played for various audiences, including students in Forestry 210 — a core forest biology course taken by all UBC forestry undergrads. Students were surveyed about what they heard.

In his 40 years of teaching, Evans says, no lecture he has given has generated as much positive feedback as the guitar performance.

"It was a hit."

From the Heartwood

To distinguish between the mahogany samples, Evans took them to the Environment and Climate Change Canada laboratory in North Vancouver and tested a chemical method for distinguishing plantation-grown mahogany from native wood.



FROM LEFT TO RIGHT: **Joseph Kim plays the guitar made from plantation mahogany; Phil Evans, PhD, with the plantation mahogany guitar.**

All Photos: Ally Penders, UBC Faculty of Forestry.

According to the research, multiple heartwood specimens of both wood types were extracted and profiled using gas and liquid chromatography in tandem with high-resolution quadrupole time-of-flight mass spectrometry.

"It's related to the techniques that are used in airports where fingers are swabbed to determine whether you've been handling chemicals. The heartwood contains thousands of chemicals — low molecular weight chemicals — and they provide a unique chemical fingerprint for different wood species," Evans says.

The chemical composition of wood is influenced by cambial age and geographical factors. "The mass spectrometer produces a map of mass-to-charge ratios, and using those and advanced machine learning techniques you can separate very closely related wood species and even species grown in different parts of the world."

The research concluded that screening of heartwood extractives using high-resolution mass spectrometry offers an effective way of identifying and separating plantation-grown Fijian *Swietenia macrophylla* from wood grown in native forests.

The Outro

The study is now finished, and Evans is going through the final draft of Kim's thesis.

"We've done all of the musical tests," Evans says. "We really focused on whether there was a difference between the two guitars, whether the musicians could detect differences, whether they liked one guitar over the other. And we really only picked up subtle differences in the sounds of the guitars; none of them were statistically significant."

The only real preference was visual; people liked the darker natural colour used on the native wood guitar.

"People have made electric guitars from Fijian mahogany,

but I think we've demonstrated pretty comprehensively and scientifically that the plantation mahogany resource in Fiji is a very good option for people who want a mahogany guitar and are concerned about sustainability," Evans says.

The certainty test developed with Environment Canada to detect the differences could be widely used to determine sources of imported wood, he adds.

"We know that it's possible to identify the two woods. And if anyone was bringing guitars in that were made from mahogany that weren't permitted, then the technique could be used in a court of law."

The findings could also potentially mean a greater return on investment for mahogany plantation owners in Fiji, he suggests, as well as encouraging other countries in the South Pacific to establish high-value plantation operations.

In the end, the study examines a topic woven throughout Evans' career, and one that will retain his interest in retirement next year, when he plans to return to Australia.

"It's time for me to do a couple of things that I've always wanted to do. One is to live a much more low-key and sustainable life." ❌

REFERENCES AND LINKS

1. "Can the sustainable mahogany replace old growth mahogany as a core material for electric guitars?" www.youtube.com/watch?v=KA8EX-upBI
2. Kim, J., Brunswick, P., Shang, D., & Evans, P. (2023). Distinguishing Native and Plantation-Grown Mahogany (*Swietenia macrophylla*) Timber Using Chromatography and High-Resolution Quadrupole Time-of-Flight Mass Spectrometry. *Wood and Fibre Science*, Vol. 55, No.1 (2023). Online at: <https://wfs.swst.org/index.php/wfs/article/view/3214>
3. Convention on International Trade in Endangered Species of Wild Fauna and Flora, <https://cites.org/eng/disc/text.php>
4. Evans, P., Mundo, I., Wiemann, M., Chavarria, G., McClure, P., Voin, D., Espinoza, E., Identification of selected CITES-protected Araucariaceae using DART TOFMS. May 2017. BRILL. https://brill.com/view/journals/iawa/38/2/article-p266_8.xml
5. Guitar Body Building Part 2, <https://www.youtube.com/watch?v=q1qAEqumHog>
6. JK Guitar Neck Rough Cut, <https://www.youtube.com/watch?v=JWmJdwY7Htw>



The Women of Wetzin'kwa Community Forest

If you step into the Silvicon Services office in the northwestern town of Smithers, BC, you will see a skilled and dynamic team dedicated to managing Wetzin'kwa Community Forest — most of whom are women.

How we work together speaks to the evolving diversity within forestry — it's not about numbers, but the perspectives, skills, and collaboration that make us an effective team. More than anything, we appreciate the environment we've created. It's one that allows us to problem-solve and support one another in managing all aspects of forest stewardship.

An increase in women in forest management is not exclusive to the Wetzin'kwa team, with the sector seeing a notable shift towards women entering the field, particularly amongst trainee registrants. The 2024 Forest Professionals British Columbia Annual Report¹ notes that women make up 42 per cent of current trainees, which is a significant shift from the overall total of women in the profession at approximately 25 per cent. While men still make up a larger percentage of registered professionals, these numbers highlight a growing trend of women stepping into leadership roles, shaping the future of forestry, and contributing to the diversity of perspectives within the sector.

Why We're Here

Each team member at Wetzin'kwa brings a unique background and skillset that makes the community forest successful, with expertise and experience across a range of backgrounds and disciplines. We were all drawn to the natural resource field for different, yet equally meaningful reasons. Some of us were excited by the chance to work outdoors and get our hands dirty, while others were attracted to the technical aspects of the job. Working with the community forest provides daily opportunities to learn new things and broaden our skillsets, while also providing tangible benefits and opportunities to the local community.



Natasha Lebiadowski, TFT

Since joining the Silvicon team in 2016, I've worked mostly in timber development and operations including harvest planning and supervision, block and road development, and road maintenance. I shifted from entry-level roles to leading more complex projects and exploring innovative silviculture practices. The work keeps evolving, and I love that. No day is the same.

Some of the things I've learned are to always advocate for yourself for safety. There are too many stories of people pushing through injuries (darn forester knees) against tight deadlines and high expectations. Realizing that some days the cards aren't there and to be easy on yourself. Lastly, quality of life is always improved if there's a field dog.

Working with this team has taught me that dad jokes are always appreciated. I do what I can to support others by keeping things light and I try to explain the "why" behind things. If you understand why something works a certain way, you're more likely to remember it.

One of my favourite memories is from my first year, riding on the back of a sled and looking up to see a lynx perched in a tree, staring right at me as we went by. My worst day? Probably doing coastal silviculture in thick hemlock where you couldn't see the rock cliffs underneath. My best day? Still to come.

The community forest matters to me because we're not stuck doing things the traditional way. With Sam as GM, we're always encouraged to explore the weird and wonderful. It gives us the freedom to try new approaches.



Jaya Freeman, ASTFT

I was drawn to forestry because I love working outdoors and wanted to be part of a sector that plays such a big role in Canada's economy. Over the past seven years, my experience has evolved a lot, from starting my education in Manitoba and working on silviculture, PSPs, forest health, and urban forestry. From there, moving to BC where I touched on timber development before focusing more deeply on silviculture, GIS, and RESULTS (Reporting Silviculture Updates and Land Status Tracking System). I've also spent time working in forestry software, which now complements my work managing silviculture GIS and reporting, as well as overseeing reforestation and compliance efforts for the Wetzin'kwa Community Forest.

What I enjoy most about working with the community forest is the opportunity to be involved from start to finish — creating field maps, completing surveys, writing reports, and entering data in RESULTS. I also appreciate the broader focus here on ecological, cultural, recreational, and economic values, which gives us more flexibility to try new approaches and manage the land with a long-term, community-centered mindset. I've learned a lot from this team, especially the importance of recognizing each person's strengths to help things run smoothly. I take pride in the problem-solving and project management skills I've developed and enjoy mentoring new staff in the field. My most memorable days have been both the sunny ones on freshly planted blocks with no bugs, and the days of digging up trees covered in snow in cruise plots while moving extremely slow through the wet and cold bush. At the end of the day, it's incredibly rewarding to contribute to forestry practices that give back to the land and the people who live here.

Continues on page 22



Kelsey Hance, RFT

Forestry felt like a natural fit for me as it was a way to stay active, be outdoors, and feel connected to nature. I started as a summer student in timber, with a background in environmental studies. I found myself doing more silviculture work, and eventually I transitioned into it full-time. I also stepped into the role of health and safety coordinator, which has become a big part of my work. I've since completed additional training and became a Registered Forest Technologist. It's been a cool progression going from not knowing much about forestry to making a career out of it.

In my day-to-day, I manage the health and safety program for Wetzin'kwa Community Forest. That includes everything from internal SAFE audits and policy development to training new hires and providing field guidance. I also supervise silviculture surveys during the summer and spend the winters planning for the next season.

One thing I'm especially proud of is my ability to maintain a positive mindset, even when things get hectic. The most memorable days for me are the ones when everything goes a little sideways. The freezing cold days, steep hikes, when you get the quad stuck, a bear encounter, or things just don't go smoothly. Those days aren't always easy, but they're the ones we laugh about later.

What I enjoy most about working with the community forest is seeing the incredible variety of projects the team has completed over the years — timber development, silviculture, planting huckleberries, installing bat boxes, creating ski trails, and installing new signs. It's rewarding to see that impact on the landscape.

On a personal level, the community forest matters to me because I spend most of my weekends out there biking, camping, skiing, or hiking. It's awesome knowing the places I love to explore are being well managed.



Carla Hutchings

I've always been drawn to nature and the outdoors so working for a forestry consultant seemed like a good fit. I am originally from Alberta, with an agricultural background. I studied natural resources at the Northern Alberta Institute of Technology (NAIT) in Edmonton, with a focus on ecology and biology. I began work at NAIT as a laboratory technician while studying GIS. Later, I was given a job at the Alberta Biodiversity Monitoring Institute (ABMI), which focused on creating a province-wide human footprint dataset and analysis. When I moved to BC a few years later, I worked for BC Timber Sales as a GIS analyst. After BC Timber Sales, I moved on to Silvicon; and I've been here for three years.

Maps are my forte, but I also work on data management and field crew support. To me, mapping revealed the complexity of the sector and how it is a conglomeration of forestry, ecology, and many other things. We consider wildlife and birds, fish and streams, topology and urbanization, alongside trees. To me that meant I was in the right place.

There are so many hands that go into making forestry what it is and is unquestionably a group effort. Being a part of the Wetzin'kwa Community Forest team makes me feel vital and important to the community around me and those who rely on me to do a good job. I draw experience from a diverse natural resource education and employment in ecology, fisheries, land reclamation, and biology. All of this set me up to fit seamlessly into a group of great women doing exceptional work. I'm proud to be part of a company that very much feels like family, in a town where there is no limit to what you can do, with a culture of adventure that is yearned for.



Katelyn Metanczuk, ASFIT

My career before forestry involved working in the outdoors and educating others on the importance of our natural ecosystems and fostering their own stewardship of it. I wanted to enter into the world of forestry for the opportunity to bring that mentality into resource management. Forestry is evolving, and adaptation is critical. I bring what I've learned from my previous work into this space and hope to contribute innovative solutions to the problems we're facing now and the ones we'll face in the future.

I started in timber development when I first joined Silvicon, and since then my role has evolved. Now, I coordinate stewardship initiatives for the community forest and also lead wildfire risk reduction work. I enjoy being in a role that allows me to engage with the community while still learning on the technical side. I think I've landed in a position that's a great mix of both.

What I love most about working with the community forest is the business model behind it. It is so encouraging to see the hard work that is put into planning and execution of timber harvest put back into the community in tangible ways. I get to see the process grow from the desk to the field to the community, whether through grants or other meaningful benefits. The money isn't being sent elsewhere where the locals don't see the benefit; instead, it's being utilized right here in the Bulkley Valley.

Conclusion

Forestry is evolving, and the women of Wetzin'kwa Community Forest are a reflection of that change. With more women entering the field, the future of the forest sector will benefit from these new perspectives. Whether they're deep in the woods marking out a harvest block or organizing a community event, each team member plays an important role in shaping the future of the forest. Their ability to not only manage the forest, but support community connections in the Bulkley Valley is what will ensure the forest remains resilient and accessible for future generations. ✖

REFERENCE

1. 2024 Forest Professionals British Columbia Annual Report; www.fpbc.ca/about-fpbc/governance/annual-reports/

A Donation Deep-rooted in BC Forestry

One by one, Gerry Burch thumbed through lists of phone numbers and dialed fellow alumni, forestry graduates, and others connected to the forestry profession, seeking donations for ForesTrust. He had done the same years earlier for UBC Faculty of Forestry.

At the time, ForesTrust — the registered charity of Forest Professionals British Columbia (FPBC) — was still maturing and Burch thought it was a worthwhile endeavor.

Now, at 102 years old, he's still investing in the future of the profession.

Burch, RPF(Ret) — born in Cranbrook in August 1923 — moved to a retirement home in Vancouver this year and donated \$10,000 to ForesTrust. The donation mirrors one made last year by his late son-in-law, Bill Dumont¹, a former FPBC Board chair who passed away in January 2023. Both were instrumental in the formation of ForesTrust.

"I had been compiling a list for my will of organizations that I would like to donate to and, naturally, ForesTrust was one of many," says Burch, also a former FPBC Board chair and one of the most dedicated and distinguished foresters in BC, if not the oldest.

Burch, a war veteran, spent his entire 41-year career in forestry with British Columbia Forest Products Ltd. (now Catalyst Paper), retiring as vice-president of forestry in 1988.

Along the way, he served as president of Forest Professionals BC and the Canadian Institute of Forestry (CIF). He was honoured as a *Distinguished Forest Professional* by FPBC and received the Canadian Forestry Achievement and Tree of Life awards from CIF. Burch also authored four books, including an autobiography titled *Still Counting the Rings*.

He remains connected to the UBC Faculty of Forestry, having established scholarships and led fundraising efforts. He also inspired the Gerry Burch Forestry Scholarship², which honours outstanding undergraduates poised to lead and innovate in the profession.

Burch wants others to leave their mark in forestry.

Forest Ranger

As a child, he wanted to be a forest ranger like his dad. "I had come from a small town in eastern BC. My dad was a part-time ranger with

the forest service and all I wanted to be was a forest ranger," says Burch. "Naturally, I was impressed with the Model T Ford trucks supplied to the temporary rangers hired by the forest branch in the fire season."

Burch later spent three years as a Lieutenant on a Corvette in the Royal Canadian Navy during

Michael Hall is the senior online communications specialist with Forest Professionals BC and is a former journalist and editor.

Roy Burch and another forest ranger carry a stove up a steep slope after a mule bucked it off and ran back down the mountain. At the time the image was taken, forest rangers watched from cabins at high vantage points for forest fires. Contributed by Brenda Burch.



the Second World War. "When I was discharged, they asked me what I intended to do with the discharged monies, and all that I could think of was to go back to school and become a forester."

The only schooling available then was a five-year program through the engineering faculty at UBC. Most program graduates were employed by government, he adds.

Burch graduated from UBC as a forest engineer in 1948, with six others in his class. He was offered a job as a timber cruiser with a new company and spent the next decade doing field work and living in a tent. "I was among a small number of younger engineers, many war vets, who were happy for the education." But, he says, "no silviculture forestry was practised in BC."

According to historical records, the first draft bill putting BC's foresters on the same professional footing as engineers was circulated in 1945. *The British Columbia Foresters Act* was given Royal Assent in the BC Legislature on April 3, 1947.

By 1951, the Faculty of Forestry was formed at UBC. Students would graduate as foresters. To encourage more students to study forestry — so industry would hire forestry graduates over engineers — Burch volunteered to help the faculty seek donations to support scholarships to the new program.

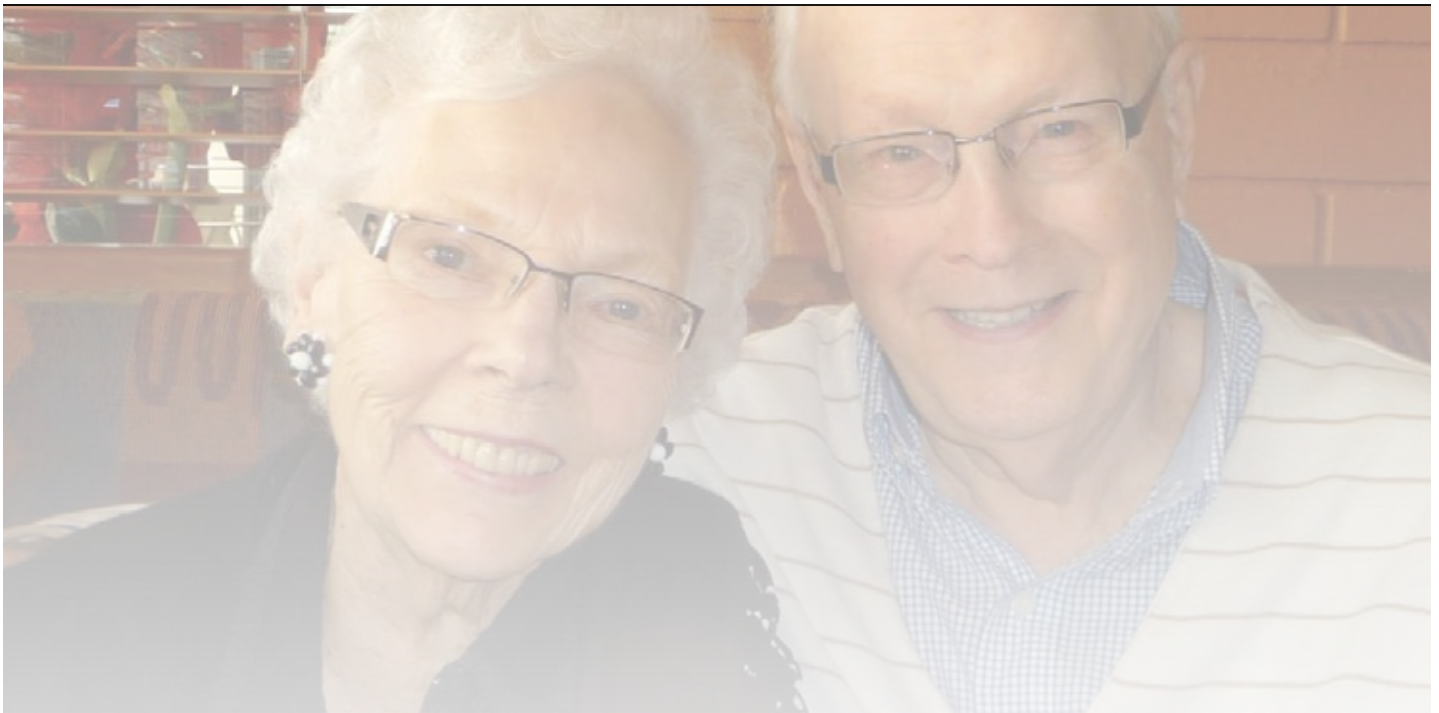
'It's Gerry Burch Calling'

Faculty scholarships were meant to help attract students to the forestry program. With more graduates, more research could be conducted; silviculture could be practised.

Burch called former classmates and forestry grads, and small donations started to trickle in.

"One must recall that there were very few forestry grads in the province, and they were scattered from Sooke to Fort Nelson. The only donations made to the UBC forestry department up to that time were by the very few corporations, and not for field or silvicultural projects, but for industrial plant problems," he says.





Gerry and Jean Burch in 2013.

Contributed by Brenda Burch.

"We, as field foresters, were faced with small field trials and setting policies that required some research trials, and the only organizations doing this type of research were UBC or the small research branch of the BC Forest Service. It was felt that the only answer was to stimulate donations from the increased number of graduating foresters after the war and, because they were scattered all over the province, that the only effective way of reaching them was by telephone, and by a classmate."

Burch eventually became vice-chair of the Faculty of Forestry alumni fundraising committee.

ForesTrust was founded on December 1, 1984, to provide funding for scholarships and bursaries for forestry students enrolled in accredited forestry programs, as well as support activities focused on educating the public about how forests are cared for and managed in BC.

When Van Scoffield joined what is now Forest Professionals BC as executive director in the 1990s, he established a finance subcommittee for ForesTrust and asked Burch to serve on it.

Burch again reached out to foresters to ask for donations.

"Dad worked long and hard connecting with the forest industry to have them donate to the Faculty of Forestry, and then ForesTrust," says his daughter, Brenda Burch, who was married to Dumont for more than 20 years.

Her father's calls didn't always result in a donation, but she thinks hearing from a person, as opposed to just receiving a message, helped secure donations and grow ForesTrust.

"I think that having dad call had more importance," she says.

'In Forests We Trust'

ForesTrust blossomed after a silent auction was organized.

Dumont, former chief forester at Western Forest Products and the 1992 Distinguished Forest Professional, is credited with taking over the silent auction sale at the organization's annual general meeting. He helped organize obtaining items for the auction and



Gerry Burch, RPF(Ret), receiving an UBC Achievement Award for Volunteer Leadership in 2018.

Photo credit: Edward Chang (vsaranphoto.com).

arranged the bidding process.

"My role was, as a member of the finance committee, was only the annual approval of prize monies being allocated to the various forestry schools in BC," Burch says. "Over time, with savings from the successful silent auction, ForesTrust flourished, and was well on its way to becoming an excellent

fundraising agent for scholarships and bursaries."

ForesTrust now provides funding for scholarships and bursaries for forestry students enrolled in accredited forestry programs at nine post-secondary institutions across BC. It raised close to \$15,000 and funded 15 scholarships and awards last year.

Burch hopes his donation will be used to provide support to needy forestry students in the many BC schools.

"Ever since I started the gift program at UBC, I have donated \$1,000 per year to their program on a scholarship basis. To me, it is a small amount, but I have been amazed at the response letters from recipients on what it means to them. So I carry on, to the limit that I can spare, both for UBC and for ForesTrust," he says.

"If a forestry graduate is thankful for the opportunity of receiving a world-class education in forestry, and being able to select not only location, but the specific field of choice in such an important industry, a small donation is worthy," adds Burch, the oldest BC forester still alive. ❄️

LINKS

1. BC Forest Professional, Fall 2024, www.fpbcc.ca/portfolio-items/fall-2024/
2. Gerry Burch Forestry Scholarship, Faculty of Forestry, University of British Columbia and alumniUBC, give.ubc.ca/projects/gerry-burch-forestry-scholarship/

UPDATED FIRE HAZARD ASSESSMENT AND ABATEMENT GUIDANCE IN BC:

What You Need to Know

The Government of British Columbia is stepping up its

efforts to manage wildfire risk. Recent fire hazard assessment and abatement (FHAA) guidance updates reflect updated policy, clarify industry responsibilities, and enhance support for practising professionals. At the forefront of these updates are key objectives to strengthen professional capacity to understand legislated requirements, complete accurate fire hazard assessments, and prescribe effective abatement treatments. These efforts also support the re-integration of fire management into broader forest management practices.

Roadmap 2024–2027: A Strategic Overhaul

In mid-2024, the BC Wildfire Service (BCWS) released the Fire Hazard Assessment & Abatement Roadmap 2024–2027¹, which outlines the systematic plan to review and strengthen BC's FHAA framework. The roadmap identifies widespread inconsistencies in how forest operators conduct fire hazard assessments.

The concerns regarding inconsistencies are echoed in the Forest Practices Board's recent special investigation report, *Help or Hinder? Aligning Forestry Practices with Wildfire Risk Reduction*², which further highlights recurring areas of non-compliance with the *Wildfire Act*. Common issues identified include:

- assessments not being completed;
- assessments failing to adequately evaluate risk; and
- assessments not being completed on time.

To address these challenges, the roadmap emphasizes:

- enhanced education and training;
- greater industry and stakeholder engagement;
- improved tools to support decision-making; and
- stronger integration of fire behaviour considerations into operational planning.

One major action item of the roadmap includes revisiting and updating the *2012 Guide to Fuel Hazard Assessment and Abatement*.

Ryan Hall, RFT, is a wildfire prevention officer with the BC Wildfire Service, working in Provincial Operations - Fuel Management, where he specializes in fire hazard assessment and abatement.

Looking back: Lessons from the 2012 Guide

Developed in response to periodic review of the *Wildfire Act*'s results-based formula, fuel accumulation from mountain pine beetle salvage and the 2008 Forest Practices Board special investigation into FHAA³, the 2012 guide was designed collaboratively by BCWS and the Canadian Forest Service. It was created as a:

- decision-support tool for trained professionals;
- baseline method in the absence of alternative strategies; and
- reinforcement of Forest Professionals BC's regulatory oversight of professional practice.

The original rationale considered three main factors:

- fuel load weighting;
- risk of fire escape; and
- threats to values.

However, despite its foundational role, the 2012 guide was often criticized for lacking clarity and ease of use — particularly for professionals seeking practical, site-specific application.

Why Understanding Limitations Matters

- **Site-specific application:** Guidance documents are designed for broad use but may not fully capture unique local conditions (e.g. local climates, fuel types, topography). Professionals must interpret and adapt guidance to fit real-world scenarios.
- **Avoiding overreliance:** Rigidly applying guidance without critical thinking can lead to gaps in mitigation. Recognizing limitations encourages professional judgment, monitoring, and local knowledge integration.
- **Regulatory and legal clarity:** Guidance is not law. Misapplying it may result in non-compliance with the *Wildfire Act* or *Wildfire Regulation*. Understanding what the 2012 guide does and doesn't cover is essential.



PHOTO ON LEFT: *On August 20, 2006, a wildfire ignited approximately 15 kilometres west of Woss on Vancouver Island, in coastal backcountry old-growth slash. The fire was caused by industrial activity during a period of high to extreme fire danger. The site had been felled and bucked, with yarding just underway when the fire broke out. Challenging topography and heavy fuel conditions hindered fire response access. Substantial fuel loading eliminated the option of retardant drops within the cut block, as dense slash prevented the retardant from reaching the forest floor. Fire response efforts focused on catching the fire in the surrounding intact forest. The extreme fire intensity was a direct consequence of unmanaged fuel accumulation.* Photo credit: BC Wildfire Service.

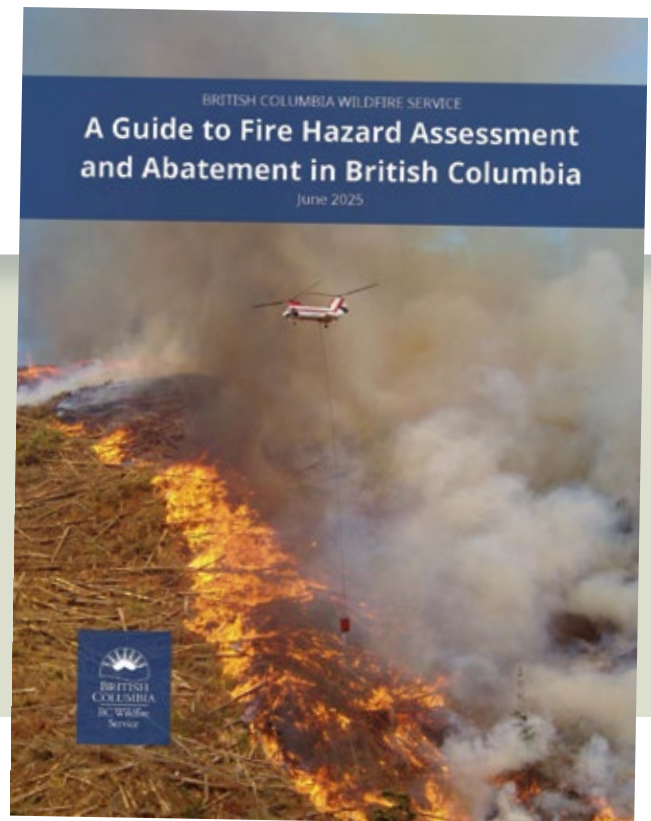
Why is Fire Hazard Assessment and Abatement Important?

Fire hazard assessment and abatement is a legislative requirement and a frontline strategy for cultivating landscape resilience and mitigating cumulative wildfire risk. Effective strategies manage the buildup of combustible material, mitigating potential fire behaviour and severity and increasing firefighter effectiveness.

Attend Our Webinar on Fire Hazard Assessment and Abatement

The BC Wildfire Service team is leading a webinar for all forest professionals to explore the 2025 guide in more detail on November 19, 2025, at 1:00 p.m.

Register here: fpbc.ca/FHAA



Escalating Risks Demand Stronger Tools

Since the release of the 2012 guide, BC has experienced multiple severe wildfire seasons. Many wildfires have exhibited aggressive behaviour, often overwhelming suppression efforts — especially in recently harvested areas. These incidents highlight the urgent need to re-examine how fire hazard is assessed and managed on the landbase.

The 2025 Guide

Tools fail if they aren't practical or user-friendly. The updated 2025 guide, *A Guide to Fire Hazard Assessment and Abatement in British Columbia*⁴, builds on the original principles of the 2012 guide, but delivers greater clarity, usability, and alignment with on-the-ground realities. It retains the risk-based approach while providing more explicit strategies and improved support tools.

What's New in the 2025 Update?

- Greater emphasis on the role of professional discretion and responsibility.
- Clearer articulation of how to interpret and apply this guidance.
- Stronger connections between assessment observations and real fire behavior outcomes (e.g. suppression success).
- Detailed process for using the Default Hazard Assessment and Abatement Strategy.
- Updated risk classification methods.
- New, digital, user-friendly field assessment forms.

These updates aim to make the 2025 guide a practical and reliable tool for professionals working in diverse forest environments.

Looking Ahead

The 2025 guide is a living document. BC Wildfire Service is committed to providing periodic updates that reflect the latest science, legislation, professional feedback, and evolving landscape conditions.

Professionals are encouraged to actively engage with the 2025 guide, apply it with care and critical thinking, and contribute to ongoing improvements. Continued research, adaptive management, and user feedback are vital to refining these tools over time. ❌

IMPORTANT LINKS

1. *Fire Hazard Assessment & Abatement Roadmap 2024 - 2027*. BC Wildfire Service, Fuel Management Provincial Operations. www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/wildfire-status/prevention/fire-fuel-management/hazard-assessment-abatement/fhaa_roadmap_final_2024.pdf
2. *Help or Hinder? Aligning Forestry Practices with Wildfire Risk Reduction*. Forest Practices Board. 2025. www.bcfpb.ca/release-publications/releases/help-or-hinder/
3. *Fire Hazard Assessment and Abatement*. Forest Practices Board. 2008. www.bcfpb.ca/wp-content/uploads/2008/12/SIR24-Fire-Hazard-Assessment-and-Abatement.pdf
4. *A Guide to Fire Hazard Assessment and Abatement in British Columbia*. BC Wildfire Service. 2025. www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/wildfire-status/prevention/fire-fuel-management/hazard-assessment-abatement/bcws_hazard_assessment_abatement_guide_aug2025.pdf

Meet the SIPex:

Your Gateway to Innovative Silviculture in BC

Seeing the Forests and the Trees

Across British Columbia, there are multiple (and sometimes competing) values that communities rely on and that forest practitioners are increasingly expected to balance. An emerging focus in forestry is on “innovative silviculture,” using diverse silvicultural tools to manage forests as complex adaptive systems through time and space. The complexity of modern forest stewardship creates a need for quick and easy access to knowledge that can help practitioners make nimble and informed management decisions. However, a recent survey found that nearly 65 per cent of forest practitioners could not easily find the information they needed to do innovative silviculture¹.

Given the expansive amount of information that exists in various locations and forms across decades of practice, forest practitioners are challenged to find information and knowledge that is trustworthy, practical, and relevant. It might feel as though forest practitioners sit in a vast ocean of information — without many tools to confidently navigate the waves.

The Silviculture Innovation Program (SIP) heard this challenge loud and clear from practitioners: what was needed was an easy-to-use knowledge hub that could support practitioners in their implementation of innovative silviculture².

What is the SIPex?

The SIP is very proud to release the “SIP exchange” or “SIPex,” a user-friendly information portal dedicated to improving access to knowledge and resources for practitioners on innovative silviculture in BC. The SIPex seeks to reduce access barriers to knowledge by connecting users with resources and information, people, and communities, as well as training and education opportunities through our open-access website. We hope to support forest practitioners to grow their knowledge, enabling decision-making and implementation of innovative practices and approaches to manage for multiple values. At its core, we are guided by six principles to ensure the SIPex is 1) driven by forest practitioners; 2) respectful of multiple forms of knowledge; 3) adaptable and open to change; 4) transparent and accountable to forest practitioners; 5) durable; and 6) openly accessible.

What Can the SIPex Do?

The main functions of the SIPex can be split into four pillars: 1) an information repository, 2) a deep dive into featured topics, 3) a community directory, and 4) a catalogue of skill development resources.

The first function, an information repository, collects and collates knowledge, such as best management practices, case studies, syntheses, meta-analyses, management prescriptions, monitoring

methods and tools, risk reduction plans, templates, extension notes, webinars, technical reports, and scientific literature. The database is searchable and designed to make finding and accessing resources easy and applicable.

The second function, the Featured Topics, provides a synthesis of knowledge on particular topics that are most relevant to forest practitioners, designed with the understanding that no two learners engage with information in exactly the same way. It provides an opportunity to quickly dive into in-depth reports, learn through interactive tools, or incrementally narrow your focus to build your knowledge base.

The third function, a community directory, reflects the aspects of forest stewardship that are collaborative, relational, and experiential. Use the directory to search for a Community of Practice that might provide peer-to-peer learning opportunities or avenues for knowledge sharing. Or use the experts directory to search and contact someone with expertise in your area of focus to get the one-on-one feedback and expansive discussion that can help solve your problem.

And, finally, explore the fourth function, a catalogue of skill development resources, to discover educational resources and training opportunities on various aspects of innovative silviculture.

How Can the SIPex Help You?

Our goal is that forest practitioners that use the SIPex will be able to access the knowledge and/or the knowledge holders needed to help make decisions to innovate the ways in which values are managed, practices are implemented, and approaches are created.

The naming of the SIP Exchange reflects its true purpose as a “knowledge exchange,” meaning it allows for people to both receive and contribute valuable knowledge for the betterment of their community. While there are many ways to receive knowledge through the SIPex, there are also many ways to give back: contribute new resources, add yourself as an expert in the expert directory, and request new Featured Topics.

Start Exploring the SIPex Today

The SIPex was built with, and for, forest practitioners, and its success will grow with the knowledge, experience, and curiosity of its users. Whether you are looking for practical tools, connecting with peers, or exploring new approaches to silviculture, the SIPex is here to make that journey easier and more rewarding. For further support, check out the Help Page for video tutorials and how-to’s to enhance your experience of the SIPex.

Explore the SIPex today and discover how forest practitioners can continue to grow together to steward BC’s forests.

Start exploring at www.sipexchangebc.com. ✖

REFERENCES

1. Silviculture Innovation Program. 2025. How communities of practice can support innovative silviculture in British Columbia. Bulkley Valley Research Centre. <https://sip.bvcentre.ca/wp-content/uploads/2025/02/SIP-Survey-WhatWeHeard-Feb2025.pdf>
2. Silviculture Innovation Program. 2024. Knowledge Summit: What we heard report. Bulkley Valley Research Centre. Available from <https://sip.bvcentre.ca/wp-content/uploads/2024/04/SIP-Summit-WhatWeHeard-Final-HiRes.pdf>

Dr. Alana Clason, PhD, and Gillian Chow-Fraser, MSc, work for the Silviculture Innovation Program (SIP) based out of the Bulkley Valley Research Centre in Smithers, BC. The SIP mission is to improve the knowledge of innovative silviculture through research and extension. The authors have backgrounds in knowledge exchange and forest ecology.

Compliance and Enforcement Investigations and Limitation Periods

Until recently, the compliance and enforcement (C&E) regimes under both the *Forest and Range Practices Act* (FRPA) and the *Wildfire Act* provided that the authority of the minister's delegated decision maker (DDM) to impose an administrative remedy on account of regulatory noncompliance expired with a limitation period. The FRPA C&E regime did not limit the time available for the DDM to make a contravention determination, just the time available to impose an administrative penalty on account of a contravention determination. The DDM had three years to impose an administrative penalty for a contravention of legislation subject to the FRPA C&E regime measured from the date the facts related to the contravention came to the knowledge of a ministry official (commonly referred to as the "discovery date"). Under the *Wildfire Act's* C&E regime, the DDM had three years from the discovery date to make a contravention determination (and could only impose an administrative remedy if there was a contravention determination).

One problem under both regimes was that ministry C&E investigations would often consume the lion's share of time available under the three-year limitation period before the DDM was presented with a report and recommendations for contravention determinations and corresponding administrative remedies. The person subject to the C&E investigation would then receive a notice of opportunity to be heard (OTBH) that would require the person to respond to the allegations (and the often extensive and technical supporting documentation) on short notice just to allow the DDM to make a determination regarding alleged contraventions and proposed administrative remedies within the short time that remained in the limitation period. In other words, the ministry's C&E investigations would often take the vast majority of time available within the limitation period and, by virtue of the need for a decision within what precious little time would often remain in the limitation period, the accused was often left with an unfair OTBH given there was so little time to prepare a response.

To address this systemic pressure for OTBHs on short notice (and the resulting unfairness) changes were recently made to the limitation

periods applicable to the administrative C&E proceedings under both FRPA and the *Wildfire Act*. The changes relate to what action is required within the limitation period. Under FRPA the minister was previously required to impose an administrative penalty; under the *Wildfire Act*, the minister was previously required to make a contravention determination. Now, in each case, the minister merely has to provide a notice of an OTBH to satisfy the requirements of the limitation period. So long as a notice of OTBH is provided within three years of the discovery date, the minister has no further statutory time limitation to make a contravention determination or impose administrative remedies.

This change is potentially an improvement. Statutory time limitations on the exercise of governmental regulatory authority are for the benefit of those subject to government authority; however, when time limitations instead unfairly limit the regulated person's time to respond to the allegations made against the person the time limitation does not benefit the regulated person. Now there is no longer an arbitrary, often short-fuse, deadline that the DDM can use as a pre-text to require a person subject to a C&E investigation to prepare a response within an unreasonably short amount of time. Now, the DDM need only provide notice of an OTBH within three years of the discovery date — there is no statutory limitation period applicable to the amount of time the DDM may subsequently take to make a contravention determination or impose administrative remedies.

Still, the bigger problem in the first place is that C&E investigations often drag on to consume most of the time available in the limitation period. Timely collection of evidence is often critical to a person's ability to respond to allegations made in a C&E investigation. When a regulated person is not even aware that it will have to respond to allegations until potentially years after the fact once a notice of OTBH is issued, the person's ability to collect evidence is often impaired. An initial, much shorter, time limitation period whereby the Ministry is required to issue a "notice of investigation" to a person suspected of regulatory non-compliance and that provides some minimal particulars about the incident at issue would at least put the regulated party on notice to start its own investigation of the incident. ❌

Jeff Waatainen has served as an adjunct professor of law at UBC, practised law in the forest sector for over 25 years, and works with the Forestry Law Practice Group of DLA Piper (Canada) LLP's Vancouver offices. This column is in the nature of general commentary only, and is not in the nature of legal advice or opinion.



It is very important to many registrants to receive word of the passing of a colleague. Obituary submission guidelines and due dates can be found at fpbc.ca/contribute. Forest Professionals British Columbia sends condolences to the family and friends of the following persons:

Photo courtesy of Ken Day, RPF and Cheryl Power, RPF.



Photo courtesy of Ken Day, RPF and Cheryl Power, RPF.



Photo courtesy of Ken Day, RPF and Cheryl Power, RPF.



Peter R.W. Sanders, BScF, MF, RPF(Ret) #1035

December 26, 1933 - June 15, 2025

Peter was born in Reigate, Surrey, England. During WWII, he was evacuated several times while completing his initial schooling. Later, he studied forestry at the Forest of Dean in England. In 1969, Peter decided to further his forestry studies and moved with his family to Canada.

UBC, Faculty of Forestry, 1970 - 1974

Peter very much enjoyed his time at UBC's Faculty of Forestry while completing his BSF degree. He always maintained that all the people at the faculty were outstanding in their generosity, care, and magnanimity. Surprisingly, he also took me under his wings, which probably taxed his patience greatly.

Malcolm Knapp Research Forest, 1974 - 1999

After receiving his RPF registration, Peter's main professional life was centered on the Malcolm Knapp Research Forest. He was free to pursue his silviculture interests and was greatly supported and tutored by Director Jack Walters, RPF. Jack and Peter jointly developed the Silviculture 101 course and tried various new methods of reforestation, including aerial seeding (one of many outstanding projects). He obtained his MF degree during this period and became a founding member of the Federation of BC Woodlot Associations.

Over the years, Peter and I travelled quite extensively in Europe and met up with a number of forestry colleagues who had participated in the Northern Mixedwood '89 Federal Forestry Symposium in Fort St. John, BC. We greatly appreciated their expert advice on locally specific mixedwood management and their great hospitality.

Life as a Farmer in BC's Cariboo Country, 2000 - 2025

Peter retired from his forestry career in 1999 and started a farm in the 100 Mile House area with his wife Joan. They completely revamped the place by themselves and over the next 25 years they lived as farmers.

Peter was also very much involved in the northern mixedwood forest management on a private woodlot, north of Fort St. John. His sage advice on the overall woodlot management turned into a 30-year commitment.

The above is a short summary of the many accomplishments in Peter's life. He was a tireless worker, a dedicated representative of the forestry profession, and a truly remarkable and selfless friend.

Submitted by Hans Scholz, RPF(Ret).

SPOTLIGHT: Practice Guidance



1

Foundations of Professional Forestry

This document focuses on the public interest duty and the four foundations of professional practice that are integral to every registrant's work as a forest professional in BC:

- *Competence*
- *Conduct*
- *Independence*
- *Accountability*

fpbc.ca/foundations

2

Guidelines – Wildland Fire and Fuel Management

These joint guidelines (*BC Wildfire Service*) for wildland fire and fuel management outline the roles and responsibilities of forest professionals, as well as government jurisdictions, and practices for reducing wildfire risks in BC.

fpbc.ca/wildland-fire-fuel

3

Professional Quality Rationales

This document offers guidance to forest professionals on the preparation of professional quality rationales that are consistent with the standards in Schedule A of Bylaw 9, which sets out the FPBC *Code of Ethical and Professional Conduct*.

fpbc.ca/pro-quality-rationales

4

Professional Service in the Forest Sector: Forest Roads

These joint professional practice guidelines (*Engineers & Geoscientists of BC*) are for professional services related to the design, construction, maintenance, and deactivation of forest roads in BC, incorporating updated standards and considerations for climate change.

fpbc.ca/forest-roads





Protect Your Career, Business, and Future

Access insurance and liability coverages custom designed for FPBC members. Safeguard yourself against lawsuits, disciplinary investigations, and more.

Ensure You're Protected

Contact **Jordan Fellner** for preferred rates and exclusive coverage including defense against allegations of misconduct.



Jordan Fellner

Vice President, Account Executive

T: 604-269-1888 | 1-800-606-9969

E: jordan.fellner@hubinternational.com

HUB International Insurance Brokers

hubprofessional.com

