

FUEL MANAGEMENT PROVINCIAL OPERATIONS

Fire Hazard Assessment & Abatement Roadmap

2024 - 2027

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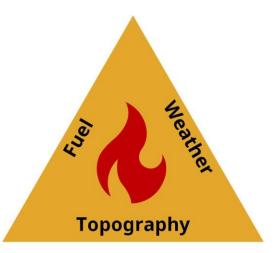
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Introduction

From a wildfire management perspective, fuel is the only part of the wildfire behaviour triangle that can be purposefully managed.

Appropriate fuel management can modify potential fire behaviour and its effects, which have significant implications for fire suppression and management success.

Fire hazard assessments and abatement are crucial to reduce the potential threat of wildfires. According to the <u>Wildfire Act</u>, individuals who perform industrial or prescribed activities are required to assess and abate



The wildfire behaviour triangle

fire hazards as necessary. Provincial legislation, in its intent, ensures that fire hazards are identified, and fuel hazards are abated promptly to prevent them from increasing the potential fire behavior and suppression effort associated with a fire start.

Protecting the wildland-urban interface (WUI) is essential to prevent undue fire damage to communities, buildings, critical infrastructure, and other significant values. Although it is widely recognized that implementing fire hazard assessment and abatement (FHAA) principles in the WUI and around critical infrastructure is vital to protect human life and property, it is increasingly important to apply FHAA principles beyond the WUI and over the wider land base to increase the wildfire resistance of these values and enhance the resilience of forests and other areas susceptible to wildfires.

British Columbia's landscape is undergoing physical and socio-economic changes, necessitating the modernization of forest practices. *Forest and Range Amendment Act* (Bill 21) and *Forest Statutes Amendment Act* (Bill 23) processes, including and Forest Landscape Planning pilots, are underway to address these changing physical and social realities, influence positive future outcomes, and create a more resilient forest landscape to meet the future needs of all people in British Columbia.

This document is written from the perspective of BCWS staff. Contextual elements leading into the Roadmap priorities are based on internal BCWS interviews and experience. Links to legislation, BC Forest Practices Board (FPB) and Forest Appeals Commission (FAC) reports and other published documents are provided for reference.



Brief History of Fire Hazard Assessment and Abatement In British Columbia

British Columbia's fire hazard assessment and abatement history is commonly associated with the forest industry, and to a lesser degree, other industrial activities.

Regulation and practice to mitigate fire risks associated with these activities have been implemented to varying degrees. Prior to the <u>1990s</u>, alongside developing science on fire's role in ecosystem maintenance and function, broadcast burning was a widely adopted tool for reducing fire risks associated with harvesting and industrial activities. It was viewed as the operational counterpart to clearcuts. Often, broadcast fires were left to self-extinguish. When these fires threatened values, control actions were taken. Over time, due to growing concerns over smoke and WUI fire impacts, government regulations have progressively sought to control and address the use of open fire and alternatives to abate fuel hazards on the land base.

Legislative changes have caused mixed impacts to FHAA practice. The bullets below briefly describe the legislative history and changes to fire hazard assessment and abatement in BC.

The Forest Act of 1912 provided that logging operators may be required to construct fire-lines around and cut down dead trees and stubs within their 'cut-over areas'. However, no obligation to assess or burn slash was included. Additionally, the Act included provisions for the 'proper' disposal of the debris resulting from rights-of-way projects.

1938: Amendments to the Forest Act institutionalized prescribed fire for hazard abatement in BC, requiring that 'a hazard created (as considered by the 'Forest Service') must be abated'. This law was directed at operations occurring in the Vancouver Forest District (B.C Coast and Vancouver Island). The amendments also empowered the 'minister' to cancel or suspend permits and restrict activities on account of 'hazardous fire conditions'.

1967: Amendments to the Forest Act extended slash disposal obligations to the entire province. At the same time, the 'Forest Service' was empowered to 'instruct' licensees to burn slash for hazard abatement.

The Forest Act of 1979 replaced the 'much-amended' Forest Act of 1912 and 'enunciated' the rights and obligations forest managers. 'Regional or district mangers' and 'forest officers' (as authorized by the prior) were empowered to issue and rescind burning permits and restrict activities during 'hazardous fire conditions'. These officials were also empowered to 'serve notice' and order a 'person to dispose of slash by burning or other means'. The Act did not include requirements for a hazard assessment.

The Forest Practices Code of 1994 and associated Forest Fire Prevention and Suppression Regulation required a more proactive and prescriptive approach to fuel management. In addition to permitting officials to order abatement – persons engaged in 'timber harvesting' must complete (and submit – when requested) fire hazard assessments; and persons engaged in 'timber harvesting' or 'industrial activity' must abate the fire hazard.

The Wildfire Act of 2004 and associated regulation adopted a results and professional reliance framework. While some prescriptive fire hazard assessment and abatement obligations were included, they are difficult to enforce given the professional reliance foundation of the regulation and enforcement capacity deficits in government.

Current State: Fire Hazard Assessments

Fire hazard assessments are a statutory requirement in British Columbia. Currently, many fire hazard assessments in BC only consider minimal criteria. Minimal criteria lead to ineffective fire hazard assessments, which contribute to incomplete or inadequate fire hazard abatement.

Fuel loading (hazard) is often the most comprehensively assessed, while risk (chances of a fire starting and spreading) and values (property, infrastructure, etc.) receive less robust consideration. These themes are exemplified in Forest Appeals Commission DECISION NO. 2017-WFA-003(a).

Forest licensees across BC use many different hazard assessment forms and processes to meet statutory obligations (FPB <u>Special</u> <u>Investigation of Fire Hazard Assessment and</u> <u>Abatement and Interim Report</u>). Some licensees adopt a single, 'one size fits all' assessment covering their entire tenure. Others complete individual assessments for each cut block. The comprehensiveness of fire hazard assessments is varied.

Under the Professional Reliance model, assessment processes may meet the 'letter' of the law while failing to address broader <u>due</u> <u>diligence requirements</u>. Specifically, requirements tied to registered professionals working within their 'scope' of expertise. Forest Professionals BC (FPBC) published <u>guidelines</u> related to this issue. This schism in the results-



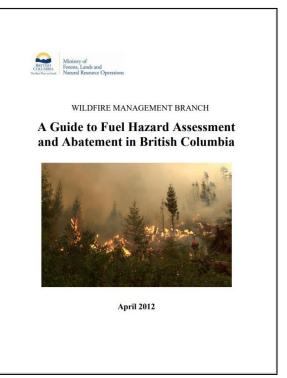
based framework may be contributing to adverse fuel loading conditions: creating wildfire control difficulties and increasing fire spread rates, when unintended (and intended) ignition occurs.



Better education and engagement are required to build fire hazard assessment expertise. In the past, BC Wildfire has developed guidance and tools to assist licensees, consultants, and other

professionals conducting assessments. One such tool is <u>'A guide to fuel hazard assessment and abatement</u> <u>in B.C'</u> ('The Guide') which was published in April 2012.

This guide includes a Defined Hazard Assessment and Abatement Strategy (DHAAS) that meets the requirements of Section 7 of the Wildfire Act. The DHAAS is quite effective when followed and is used by government officials and staff who complete fire hazard assessments. Moreover, it has been accepted by the Forest Appeals Commission (FAC) on FHAA related matters. However, since The Guide was published in 2012, it needs updates to better clarify the included process and broader FHAA requirements in BC.



The Guide's implementation difficulty is a barrier to external use. Feedback from non-governmental

sources highlights the significant challenge that The Guide poses to users, who are often required to review associated literature to gain a working knowledge of the DHAAS. This lack of external understanding and support underscores education and engagement needs while emphasizing concerns regarding the scope of practice for professionals.



Current State: Fire Hazard Abatement

Fire hazard abatement is also a statutory requirement in British Columbia.

Currently, one of the common methods used for abating fuel hazards is pile and burn or <u>category 3 open fire</u>. Burning under category 3 is regulated from both a fire safety perspective (*Wildfire Act* and *Regulation*) and an air quality perspective (*Open Burning and Smoke Control Regulation* (OBSCR)).



Over the last 30 years category 3 burning has become more difficult to carry out effectively and efficiently. A leading reason is diminishing burning expertise. Combined with liability concerns, this lack of experience can lead licensees and other practitioners to exercise risk aversion, which leads to missed abatement windows.

The OBSCR was updated in 2019 to place limits on the exposure of the public to smoke emissions from slash piles throughout the province. The current open burning rules of the OBSCR require burners to follow <u>location specific ventilation conditions</u>, setbacks from neighboring buildings, keep records and give notifications as specified. The OBSCR is more prescriptive if burning closer to neighbouring buildings, or for multi-day burns in populated centers identified as <u>high smoke sensitivity zones</u>, requiring professionals to follow <u>Best</u> <u>Management Practices (BMPs)</u> for debris pile construction and only burn seasoned vegetative



debris to limit smoke production¹.

Although there may be specific rules for certain situations, many individuals lack a comprehensive understanding of the OBSCRs legislative framework, leading to misconceptions and missed opportunities for open burning.

Utilization efficiencies are helping to reduce overall burning volumes, but substantial amounts of fuel hazards are still being

¹ The general requirements are less restrictive as is burning in <u>Medium</u> or <u>Low Smoke sensitivity zones</u>.





created and piled for abatement. Due to a lack of resources, government staff, such as Compliance and Enforcement and BC Wildfire Service, may not be able to ensure that all fuel hazards have been abated to satisfactory levels, especially in remote areas of the province.

This can result in the construction of piles that are not abated, which can contribute to the spread of wildfires and make them more difficult to control. Climate change factors, such as carbon sequestration and accounting, can further complicate the situation and, if prioritized incorrectly, may contribute to fuel loads on the landscape.

Reports Related to Fire Hazard Assessment and Abatement in B.C.

Wildfire hazard assessment and abatement - Province of British Columbia (gov.bc.ca)

BC Forest Practices Board:

Fire Hazard Assessment and Abatement - FPB/SIR/24

Wildfire Act Determinations - FPB/SIR/54

Fire Hazard Abatement and the Shovel Lake Wildfire - Complaint Investigation - FBC/ICR/221

BC Forest Appeals Commission:

Decision NO. 2017-WFA-003(a)

Decision NO. 2012-WFA-001(a)

Future State

Looking forward, effective FHAA will play a critical role in supporting government mandates aimed at protecting public safety and infrastructure.

At the same time, it will help increase wildfire operational efficacy by applying principles and methods that contribute to landscape resiliency. However, it's important to acknowledge that modernizing land and forestry management in BC presents emerging realities that need to be addressed, including:

- Climate change
- Land use pressure
- Fibre utilization, carbon accounting and sequestration
- Harvesting practices and timber pricing
- Forest health, stocking standards and species conversion
- Liability concerns regarding the use of resource open fire
- Costing concerns when considering open fire alternatives
- Media pressure
- Public and institutional concerns related to open fire safety and air quality impacts.

Competing objectives are emerging because of these complexities and will have a significant impact moving forward. The related science and potential outcomes regarding these emerging landscape realities are complex and nuanced. To achieve government's objectives, there will be a need for prioritization and balance. This will require different agencies within the government to work together to develop complementary policies and legislation.



Major investments may be necessary to strike

these balances and provide examples of how adjustments will be navigated moving forward. Leadership at the Minister and Deputy Minister level may be necessary to set priorities within this competing objective environment and provide direction for work that collectively meets provincial mandates.

Building an effective provincial FHAA program that incorporates legislation, policy, process, engagement, education, and guidance will strongly contribute to broader landscape resiliency.



Reports Related to Competing Objectives and Dynamic Dispositions:

Clean BC Roadmap 2030

Climate Preparedness and Adaptation Strategy: Actions for 2022-2025

BC Flood and Wildfire Review

Residual Fibre Utilization Policy - Province of British Columbia

Forest Carbon Information Notes - Module 5: Utilization and Residue Burning

Modernizing Forest Policy in British Columbia

Forest Landscape Planning Bulletin - FLNORD

FACTSHEET: Reforestation in B.C. | BC Gov News





Roadmap Priorities

The priorities identified in this Roadmap outline opportunities to address FHAArelated issues by establishing strategies, timelines, and outcomes to achieve themed objectives.

Some items in this document cannot be resolved solely by the Fuel Management Section or BC Wildfire Service (BCWS). Therefore, collaboration and teamwork will play a crucial role in the success of this Roadmap. Although BCWS staff will serve as subject matter experts in technical fire hazard assessment and abatement, relying on other provincial ministries, organizations, and departments of the Ministry of Forests (FOR) will be necessary for broader and more balanced successes.

This is a living document, and while not all objectives will be immediately solvable, they may serve as problem statements for government leadership.

Vision

• To be a leader in fire hazard assessment and abatement management creating a healthier and more wildfire resilient province

Mission

- To lead and support initiatives that meet identified objectives within the BC Wildfire Service.
- To provide subject matter expertise and leadership when working with other departments and agencies within government to collaboratively meet identified objectives that are supported by executives.
- To provide the support and guidance to First Nations, government, industry, and consultants that effectively reduces wildfire risk, while increasing wildfire resiliency, through standardized and practical FHAA practice(s) and program(s).

Priority Themes

Fire Hazard Assessment and Abatement priorities are divided into five core themes. Themes are divided into objectives with strategies, timelines, and outcomes.

- 1. **Legislation and Policy:** Contribute, collaborate, and support legislative amendments and policy changes that create an environment that encourages actions leading to effective assessment and abatement practice.
- 2. **Compliance and Enforcement:** Identify and support business opportunities and technology that increase compliance and enforcement.
- 3. **Guidance:** Update existing guidance documents and develop new, best management practices that facilitate an advancement in practice.
- 4. **Equipment and Technology:** Promote tools, technology and research that enhance effective practice.
- 5. **Education and Engagement:** Develop curriculum that improves professional practice and engagement strategies that inform government and the forest industry on their obligations and safety requirements.

Timelines

Items identified in the Roadmap are assigned a stage, fuels management lead, and estimated completion date. Stages are defined as follows:

- **Early scoping:** Initiation Item is defined on a broad level.
- **Advanced scoping:** Initiation Item is being researched and assessed for risk and feasibility.
- **Building:** Planning Item is being developed and prepared for deployment.
- **Implementing:** Execution Item is being deployed, tracked, and monitored for progress and improvement.
- **Closing:** Completion Item is evaluated for successes and failures.



Legislation and Policy

Objective 1.1

Strategy: Support and contribute to the *Forest Statutes Amendment Act* (Bill 23), *Forest and Range Practices Act* (FRPA), and Forest Landscape Planning (FLP) Task Teams regarding requirement changes for harvesting activities in the WUI and across broader landscapes.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Work with the BCWS Risk and Planning department to align these changes with the <i>Wildfire Act</i> and <i>Regulation</i> and incorporate them into new, updated guidance and policy.	Advanced scoping	Wildfire Prevention Officer (WPO) FHAA	Ongoing

- Prescribed, enforceable metrics for FHAA in the WUI and increased government oversight and tracking on the broader land base relates to compliance objective 2
- A common fuel management standard for forest practitioners in the WUI
- Increased direction in guidance and policy documents relates to guidance objective 3
- Increased consistency and effectiveness in FHAA practice



Strategy: Work internally (with FOR: pricing and tenures, Office of the Chief Forester (OCF), BCWS), and Externally (Ministry of Environment Climate Change (MOECC)) to explore other regulatory options and policy options (i.e. timber pricing re: Rx fire costs/abatement costs, forest residue and waste policy, and OBSCR) that reduce fuel hazard on the land base and mitigate risk.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Work with BCWS Cultural and Prescribed Fire (C&Rx) and Risk and Planning Departments to assess the appraisal manuals for amendments that support reduced billing for fuel reduction burning as a silviculture treatment.	Advanced scoping	Superintendent (Supt.) Fuel Management, OCF Land and Resource Specialist (WPO Fuel Management)	2025/2026
Continue engaging with MOECC regarding the OBSCR and policy development under 'substituted requirements for open burning' (Part 4 29(1)) to allow for more flexibility when burning to complete Wildfire Risk Reduction (WRR) work linked to public safety. Investigate opportunities/ implications for 'High Smoke Sensitivity' zones outside of the WUI. Note: may require minister-to-minister discussions to provide clarity and priority to staff.	Early scoping	Supt. Fuel Management, WPO FHAA	Ongoing
Review the impacts of the current timber pricing and waste and residue policies on FHAA practices.	Early scoping	WPO FHAA, OCF Land & Resource Specialist	2025

- Tools/levers to incentivize and assist compliance with legislation and policy updates relates to tools, technology, research objective 4
 - Contributes to landscape resiliency and fibre utilization
- Increased windows of opportunity for WRR related abatement activities; Enabling:
 - \circ More effective and timely fuel reduction relates to compliance objective 2



Compliance and Enforcement

Objective 2.1

Strategy: Research and assess BC Wildfire Service fire crews' capacity to burn debris piles resulting from Crown Land Wildfire Risk Reduction (WRR) fuel treatments and other forestry practices and participate in fuel reduction prescribed fire.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Create and distribute survey to BCWS Wildfire Officers (WO) to collect pertinent data related to current fuel reduction treatment involvement and concerns, barriers, and opportunities to further crew involvement in WRR work.	Advanced scoping	Wildfire Technician (WT) Fuel Management	2024
Summarize survey findings and identify opportunities for further research and collaboration.	Early scoping	WPO FHAA, OCF Land and Resource Specialist	2024
Create follow-up project plan	Early scoping	WPO FHAA	2024

- Increased documentation of current BCWS crew involvement in fuel reduction prescribed fire and pile burning.
- A tool to assess current opportunities and barriers to further BCWS crew involvement in WRR pile burning and prescribed fire.
- A project plan to explore opportunities for further research and collaboration.



Strategy: Research and assess existing platforms (i.e. RESULTS and the Open Fire Tracking System (OFTS)) for new FHAA framework opportunities to increase reporting requirements for practitioners and increase data accessibility for Compliance and Enforcement Branch.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Research OFTS for opportunity for registrants to report back on category 3 and 4 burn completion.	Early scoping	WPO FHAA	2024
Collaborate with the BCWS Risk and Planning department, RESULTS authorities and OCF on comprehensive suite of dedicated FORM B report-outs for industry/licensee hazard abatement treatments. Specifically, roadside pile and burn activities.	Early scoping	WPO FHAA	2024

- Increased capacity within RESULTS for FHAA activity reporting.
- A centralized and accessible tool for tracking and monitoring licensee FHAA activities across the landscape, specifically for completion and compliance.
- A platform to monitor, inform and improve the FHAA program into the future.
- Tools to assist the integration of fire management into forest management planning prior to the post-harvest stage (ex. road locations, access levels cutblocks designed for fuel reduction etc.).



Strategy: Re-assess Waste in Block Arc GIS prototype as an online tool to monitor industrial activities and abatement in BC (linked to objective 2.2)

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
To be informed by 2.2	Early scoping	WPO FHAA	Dependent on potential RESULTS, OFTS updates

- A robust data library that communicates with various platforms (RESULTS, Wildfire One, Fuel Management System (FMS), OFTS, Waste System, Forest Tenure Administration System, etc.) to provide comprehensive province wide FHAA analysis.
- Increased data accessibility to inform BCWS modelling and operational decisions.



Guidance

Objective 3.1

Strategy: Rewrite the fire hazard assessment and abatement guidance document to align with current policy, up-to-date science and fuel management best practices. Expand upon the current methodology to include language that speaks directly to managing fine fuels and more specific instruction on how to complete fire hazard assessments.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
To be informed by 1.1	Early scoping	WPO FHAA	Dependent on Bill 23 FRPA/FPPR updates

- Up to date and specific FHAA guidance to help increase professionals' ability to interpret legislated requirements, complete accurate fire hazard assessments and prescribe effective abatement treatments; Including:
 - Clear information on the linkages between fuels and fire behavior, suppression, and management to help professionals interpret and implement legislated objectives to individual sites.
 - Content targeted at risk identification to reinforce accurate and site-appropriate prescriptions.
- A tool to assist the integration of fire management into forest management planning prior to the post-harvest stage (ex. road locations, access levels cutblocks designed for fuel reduction etc.) relates to guidance objective 3.2.

Strategy: Work with the Cultural & Prescribed Fire (C&Rx) program on guidance updates that direct burn plans (maps) to identify treatment unit and allowable burn areas to mitigate liability risks to industry when implementing broadcast burning as a fuel reduction treatment.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Participate in C&Rx working group	Early scoping	WPO Fuel Management	Ongoing
Participate in C&Rx litigation framework working group	Early scoping	Supt. Fuel Management	2024 (start)

- Increased opportunity for industry implementation of Rx fire due to reduction of liability risk; Incentivizing:
 - Industrial activity related landscape level fuel hazard reduction.
 - Potential progress toward BCWS mandate: encourage sustainable, healthy, and resilient ecosystems.



Strategy: Review all FHAA best management practices documents for relevant and required updates. Assess requirements for additional guidance, process, and protocol tools. Assess and update exemption requirements and guidance.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Update FHAA Q&A document	Closing	WPO FHAA	2024
Develop project plan	Early scoping	WPO FHAA, WT Fuel Management	2024

- Increased practitioner accessibility to the most accurate and up to date FHAA information, tools, and guidance.
- Increased consistency in FHAA practices.



Strategy: Coordinate production of new media to communicate importance of FHAA (i.e. human life and safety, landscape resiliency, etc.) and its effect on wildfire behaviour.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Engage with BCWS videographers to inventory relevant footage and brainstorm project ideas. Develop FHAA video.	Advanced scoping	WPO FHAA	2024
Explore FHAA instructional video opportunities with Site Partners	Early scoping	WPO FHAA	2025/2026

- A 5–10-minute video highlighting wildland fire behavior in cut blocks (and other areas with fuels arising from industrial activities) with poorly managed versus well managed slash. The feature will link fuel management to fire behavior, suppression success, and potential impact to surrounding values. Intended uses include reminding forest professionals about the potential adverse impacts of their day-to-day practices on human lives, property, and values and an education tool to be shown at upcoming Fuel Hazard Assessment and Abatement training sessions.
- FHAA instructional videos for training and professional development purposes.



Equipment and Technology

Objective 4.1

Strategy: Complete review of chipping, dispersal, mastication, and mulching literature review and develop associated best management practice. Redevelop fuel management/treatment guidance to incorporate findings.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Oversee chipping, dispersal, mastication, and mulching literature review	Closing	Supt. Fuel Management, WPO Fuel Management	2023
Provide feedback on chipping, dispersal, mastication, and mulching best management practice and literature review draft	Closing	Supt. Fuel Management, WPO Fuel Management	2024
Develop communication pieces for decision makers to inform fuel management/guidance redevelopment decisions relating to the chipping, dispersal, mastication, and mulching BMP and literature review	Implementing	Supt. Fuel Management, WPO Fuel Management (WPO FHAA)	2024

- Recognized and accepted cost-effective, smoke-free alternatives to pile burning (reduction of smoke)
- Additional hazard abatement tools that allow flexibility in treatment; Improving practitioners' capacity to:
 - o Attract contractors
 - o Stay in compliance
 - Meet treatment objectives
 - o Innovate
 - Maintain social license



Strategy: Develop stronger relationships with academy and non-government organizations and work closely with them to inform and stay connected on research initiatives.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Research current FHAA criteria within third-party forest certification standards and investigate opportunities to incentivize more effective FHAA practices on the landscape.	Early scoping	WPO FHAA	2025/2026
Research additional mechanical abatement methods to inform guidance and continue to build catalogue of accepted, cost effective, smoke free alternatives to pile burning (ex, disc trenching, deep ripping, excavator screefing, etc.)	Early scoping	WPO FHAA	2025/2026

- Opportunities to investigate data gaps and assumptions about interactions between wildfire and fuels.
- Opportunities for further research to inform fuel hazard assessment and abatement practices.
- Reduced redundancy in research leading to effective resource allocation.
- New FHAA tools and educational materials.
- Opportunities to incentivize more effective FHAA practices through third-party certification processes.

Strategy: Develop comprehensive wildfire/fuel treatment/FHAA interaction program and protocols for assessing these interactions (case studies).

Item	Stage	Fuels management lead	Estimated completion date
Oversee preliminary program testing	Building	WPO Fuel Management	2024
Participate in program refinement/finalization	Early scoping	WPO Fuel Management	2025/2026
Explore opportunities to translate the program into an FHAA specific tool to inform practices (i.e. post-harvest slash management) on the broader landscape	Early scoping	WPO FHAA	Dependent on completion of wildfire/fuel treatment interaction program

- An accessible and broadly implemented tool to evaluate treatment effectiveness and inform changes in practice.
- Opportunities to build internal capacity as staff gain experience by completing case studies/field assessments.
- Opportunities to fill data gaps on interactions between wildfire and fuels.



Education and Engagement

Objective 5.1

Strategy: Develop comprehensive fuels management curriculum targeted at forest professionals, including consultants and government staff.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Identify key knowledge and experience requirements of fuel management practitioners in BC. Organize subject areas under broader focus areas.	Closing	WT Fuel Management	2023
Compile available resources to support the Fire and Fuels and Fuel Management focus areas.	Closing	WT Fuel Management (WPO FHAA)	2024
Identify gaps in available learning resources and prioritize them for creation of added resources.	Early scoping	WT Fuel Management (WPO FHAA)	2024
Collaborate with BCWS staff development to build required resources to support learning of the subjects that were identified in the gap analysis and develop specific, module like training for fuel management	Early scoping	WT Fuel Management (WPO FHAA)	2024
Engage with FPBC joint working group: Roadmap to Wildfire Competency	Implementing	WT Fuel Management (WPO FHAA)	Ongoing
Collaborate with MOECC on open burning and OBSCR BMP webinar for internal and external participants, specifically professionals working in the field of WRR.	Implementing	WPO FHAA	2024



- A directory of currently available technical fuels management education resources.
- An internal professional development resource designed for use as a competency checklist for specified fuel management/prevention roles (i.e. consistent internal standards for role certification).
- Targeted modular fuel management training.
- Continued BCWS Fuels Management input into FPBC credentialing/training development.
- Collaborative webinars with MOECC to clarify legislative requirements (i.e. OBSCR, Wildfire Act and Regulation) and management options pertaining to fuels management related open burning.



Strategy: Develop comprehensive fire hazard assessment and abatement training targeted at forest professionals (including consultants and industry) and government staff

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Coordinate 2-day FHAA training course for Cariboo Fire Center and Prince George Fire Center staff and local C&E. Depending on interest, invitation may be extended to corresponding BCTS and Ministry staff	Closing	WPO FHAA	2024
Refine program based on feedback/ learnings from inaugural session	Implementing	WPO FHAA	2024
Develop priority list for training	Building	WPO FHAA	2024
Implement prioritized training plan	Early scoping	WPO FHAA	2024 (start)

- Knowledgeable professionals trained to a common standard resulting in:
 - Increased treatment consistency.
 - Increased ability for professionals to interpret legislated requirements and implement site-appropriate fire hazard assessment and abatement practices.
 - Increased compliance and reduction of wildfire risk in post-harvest (or industrial activity) sites.
 - Increased FHAA training capacity through 'train the trainer' approach.
- A tool to assist the integration of fire management into forest management planning prior to the post-harvest stage (ex. road locations, access levels cutblocks designed for fuel reduction etc.) relates to guidance objective 3.2.
- Professional networks and working relationships between First Nations, BCWS, C&E, local government, industry, and consultants relates to objective 5.4.



Strategy: Evaluate internal and external websites for content and intuitive use. Ensure guides, policy, BMPs, etc. and other supporting documents are updated, relevant and easy to find.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Engage with communications to establish information and accessibility objectives and develop project modernization/maintenance plan	Early scoping	WPO FHAA, WT Fuel Management	2024
Implement modernization/maintenance program	Early scoping	WPO FHAA, WT Fuel Management	Dependent on completion of modernization/maintenance plan

- Maintained accessibility of pertinent FHAA information and resources to practicing professionals.
- An intuitive and easy to follow online FHAA interface.

Strategy: Develop stronger relationships with industry and consultants (including distribution list for outreach) which inform work to reduce fuel hazard on the landscape

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Create distribution list	Implementing	Supt. Fuel Management, WPO FHAA	Ongoing
Identify opportunities for industry and consultant involvement in Roadmap projects	Implementing	WPO FHAA	Ongoing
Engage with communications on outreach strategy	Early scoping	WPO FHAA	2024

- Increased accessibility to the operational and technical knowledge and understanding of professionals practicing FHAA.
- An outreach model to help improve the effectiveness of updates to the FHAA framework.



Strategy: Hire a Wildfire Prevention Officer to implement the FHAA Strategic Roadmap and explore other strategic options related to the Roadmap.

Timelines:

Item	Stage	Fuels management lead	Estimated completion date
Onboard successful candidate	Closing	Supt. Fuel Management	2023
Complete 1 st draft of FHAA Roadmap	Closing	WPO FHAA	2024





Summary

This Roadmap is a living document that will continue to evolve. Its purpose is to communicate BCWS' stance on the FHAA environment, highlight current and future plans to action FHAA-related issues, and highlight BCWS' dedication to working with all FHAA stakeholders, both internal and external, to find solutions.

The safety of human life and values is the top priority. The Roadmap items are not meant to increase workload but to advance FHAA practices and encourage resilient landscapes. If the items do result in any significant workload increases, support measures will be put in place.

Achieving success requires adaptation at all levels. To collectively meet provincial mandates, the Minister and Deputy Minister may need to provide direction to balance and prioritize the transition from a competing objectives environment to one of collaboration. Subsequently, government agencies must collaborate to develop complementary policies and legislation. A consistent approach and clear communication on the value of the changes and actions will help implement these updates effectively. Building a strong provincial FHAA program that encompasses legislation, policy, process, engagement, education, and guidance will significantly contribute to a more resilient landscape.

