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APR 13 2007

Dr. Bruce Fraser
Chair
Forest Practices Board
3rd Floor 1675 Douglas Street
PO Box 9905 Stn Prov Govt
Victoria, British Columbia
V8W 9R1

Dear Dr. Bruce Fraser:

Re: Response Letter to Managing Forest Fuels – Special Report, Forest Practices Board

Please accept this joint response from the Ministry of Forests & Range and the Integrated Land Management Bureau to your report Managing Forest Fuels from June 2006.

Fuel Management is a high priority for the province and we will continue to work with our agencies, local governments, First Nations, and forest professionals to reduce the threat of wildfires to BC communities and resources through sound fuel management planning, research, and treatments.

If you have any further questions regarding our response we would be pleased to clarify them for you.

Yours truly,

Doug Konkin
Deputy Minister

Attachment(s): Ministry of Forests and Range Response to the Forest Practices Board report Managing Forest Fuels

FOREST PRACTICES BOARD	
APR 17 2007	
RECEIVED by:	
Original <u>Bruce Fraser</u>	
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Dr. Bruce Fraser

pc: Larry Pedersen, Deputy Minister, Ministry of Agriculture & Land
Mike Lambert, Associate Deputy Minister, Integrated Land Management Bureau
Allan Lidstone, Manager, Land Use Planning Policy, Ministry of Agriculture & Land
Peter Fuglem, Director, Protection Program
Diane Medves, Director, Forest Practices Branch
Christine Weese, Forest Practices Liaison, District Okanagan Shuswap

APR 17 '07

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March 29, 2007

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Overview



Forest Protection Program

**MINISTRY OF FORESTS & RANGE
RESPONSE TO:**

Forest Practices Board Special Report on Managing Forest Fuels

Fuel management is a leading issue with the Ministry of Forests and Range, Protection Program. The program is making a five-year transition from its traditional core role of firefighting suppression services to a broader mandate of providing "wildfire management" services. This transition is set out in the Protection Program Strategy (finalized in January 2006) that calls for increased planning around "integrated fire and land use management." The new strategy is in its first phases of implementation. Within the strategy, one of the four Strategic Goals is "Leading wildfire planning, management and practices". The two priorities within this strategic goal are: fuel management, and integrated fire and land use management."

Since the 2003 fire season and the release of the Filmon report, fuel management has become a primary issue with the Ministry of Forests and Range, many local governments, and First Nations. Although fuel management is not new to British Columbia, the new heightened awareness of British Columbians on the issue has created an opportunity to move ahead on fuel management initiatives with public interest and support.

The Forest Practices Board special report "Managing Forest Fuels" has served to further heighten public and professional awareness on the issue of forest fuel management, and outlines many of the inherent risks, complexities and knowledge gaps surrounding this important public safety issue. The Ministry of Forests is working aggressively in a lead role to assist in protecting communities from catastrophic wildfires. The province, along with local governments, First Nations, and the Federal government are pursuing quick wins on many fronts. However, it must be understood and acknowledged that this is a complex issue arising from decades of forest practices and policies, an expanding wildland urban interface with population growth, public complacency, as well as weather and climate changes, all of which have contributed to the current fuel loading and forest health situation. The fuel management challenges that communities face in British Columbia, and many other areas of Canada and the world, will not be resolved quickly by any single party. Rather, a continued concerted effort and collaboration from all levels of governments, communities, First Nations, Industry and homeowners is required to resolve the issues at hand.

The Ministry of Forests and Range is committed to long-term, broad perspective solutions in fuel management with the goal of enhancing public safety through sound fuel management planning and practices. The province has taken a lead role in and participated on many initiatives that involve fuel management including: the development of the Protection Program Strategy; the development of FireSmart tools with "Partners in Protection"; the development of the Canadian Wildland Fire Strategy; and participating at the 1st International Fuels and Fire Behaviour conference. The Ministry of Forests and Range participates on a number of multi-agency teams that are addressing the application of fire at a landscape level, smoke management, fuel management, and restoration of fire dependent ecosystems, which are closely related issues that cannot be considered in isolation.



Forest Protection Program

The province launched a formal fuel management program in late 2004. Staffing of key positions was completed through 2005, and includes a program Superintendent, Fire Centre Fuel Specialists, Regional Fire Management Specialists and a G.I.S. Analyst. These staff members are the core of the Provincial Fuel Management Working Group. For program delivery, the province works cooperatively with the Union of BC Municipalities and First Nations Emergency Services Society to deliver a cost shared program with local governments. In the past two seasons, much work has been done to simultaneously build the program and launch key initiatives.

The Provincial Fuel Management Strategy

The Fuel Management Strategy for the province has four key elements that address many of the points raised in the Special Report. The four key elements of the strategy are: the Provincial Strategic Threat Analysis; Community Wildfire Protection Plans; Pilot Projects; and, Operational fuel treatments.

Provincial Strategic Threat Analysis

The Provincial Strategic Threat Analysis (PSTA; completed in Dec. 2004) is a high level analysis that identifies forest stands that may pose a risk of fire to Wildland Urban Interface (WUI) areas. The PSTA identifies 1.7 million hectares of potentially hazardous fuels within two kilometers of WUI, and broadly prioritizes these areas for treatment with low, moderate, or high risk. This information has been shared with local governments, First Nations, Indian and Northern Affairs Canada, Natural Resources Canada and Public Safety & Emergency Preparedness Canada (PSEPC).

Community Wildfire Protection Plans

Community Wildfire Protection Plans (CWPPs) are action plans developed by communities that outline a strategy for protection from catastrophic wildfires. These plans use the PSTA as a starting point, and where required take a more detailed look at forest fuels in and around communities. CWPPs include a general description of the community and the fire risk it faces, identify priority areas for fuel mitigation work, outline a wildfire prevention program, and generally outline proactive planning approaches to reduce the general impacts of wildfires on the community. Adoption of FireSmart principles are often a key component of these plans. The Provincial Fuel Management Working Group developed guidelines for CWPP contents, and this information is provided to communities through the UBCM.

Pilot Projects

Pilot Projects are small scale projects intended to explore a range of fuel treatments to gain a clear understanding of treatment effectiveness, impacts on other values, maintenance implications and costs. These projects involve communities, forest consultant professionals, the forest industry, utility industries, the bio-energy sector, and research groups like the Canadian Forest Service, FERIC and Universities. As projects are completed, information and lessons learned will be shared through a number of venues as identified in the fuel management communication strategy. Information from these projects will also be used in the development of fuel management "best practices" and "discussion" papers currently under development.

Operational Treatments

Operational treatments are carried out on areas identified by the PSTA or within Community Wildfire Protection Plans. A new forest license to cut was established for fuel management for community protection in the fall of 2006 to facilitate these treatments. It is important to note that while the total area treated has been growing slowly (approximately 4300 hectares in 05/06 and 6830 hectares in



Forest Protection Program

06/07, respectively), treatments cannot begin until communities complete their plans. In addition to the areas noted above, standard forest harvesting carried out adjacent to WUI areas may also serve to further reduce the threat of wildfire to communities. Treatments are expected to accelerate as more communities finalize their CWPP's (82 plans initiated, 39 plans completed).

While the four key elements of the provincial fuel management strategy are focused primarily upon fuels management efforts in the WUI, the Ministry of Forests and Range is also committed to fuel management at the landscape level. Fire Management Specialists, located in the three Regional offices, are leading efforts to enhance local fire management planning and to include fire and fuel management objectives into higher level plans. Outside of the WUI, the many other forest management issues take a stronger role. For example, the hydrological impact of fuel management treatments within riparian areas must be considered.

The Fuel Management Strategy also fosters cooperation between multiple partners and stakeholders in the planning, management and maintenance of forest fuels, which addresses recommendations of the Filmon and Attorney General's report. Planning for and treating high risk forest fuels is a complex endeavor. As stated in Filmon's 2003 Firestorm report, to be successful, communities must take a lead role in fuel management and the public must be supportive and actively engaged in the process. The province through UBCM and FNESS, provides guidance and tools to carry out planning and fuel treatments to enhance community protection. The province encourages a team development approach for CWPP's and facilitates a coordinated planning approach for multiple partners and stakeholders including communities, First Nations, Industry and other interest groups. The province recognizes that each group has vested interest in these plans but limitations on funding, technical knowledge, staff and other resources. This coordinated team approach ensures the best chance for success.

The Ministry of Forests and Range is also currently engaged in a tri-party planning initiative with First Nations and the Federal government to work towards a harmonized plan for fuel management and WUI community protection for British Columbia's First Nations. This committee has made good progress, and exemplifies the government's new relationship with First Nations. Protection Branch currently has two staff members seconded to the First Nations Emergency Services Society (FNESS) to assist in the development and implementation of a First Nations fuel management strategy. These FNESS representatives are also members of the Provincial Fuel Management Working group.

The province has committed priority funding and resources to establish British Columbia as a leader in fuel management and community protection. Public safety, healthy forest ecosystems and the protection of resources are the foundation of the province's Fuel Management Strategy. The Ministry of Forests and Range will continue to work collaboratively with forest professionals, industry, fire sciences and research groups, to develop sound fuel management planning and practices.



Recommendation Responses

Forest Fuel Planning

- 1. The Integrated Land Management Bureau, through land use planning teams, should establish strategic fuel management objectives at the landscape level in SRMPs.*
- 2. The Ministry of Forests and Range should amend the Forest and Range Practices Act to include fuel as one of the objectives that must be addressed in forest stewardship plans.*

The Ministry of Agriculture and Lands (MAL) and the Integrated Land Management Bureau (ILMB) are responsible for the development and implementation of strategic land use planning in British Columbia. Currently, only a few of British Columbia's Strategic Land Use Plans, including Land and Resource Management Plans (LRMPs), Regional Land Use Plans (RLUPs), and Sustainable Resource Management Plans (SRMPs), address general fire management or set objectives for fuel management. As an example, a proposed 2006 Vanderhoof draft LRMP update was designed to provide strategic goals, objectives, and strategies for a variety of wildland fire management options and activities. Objectives included predicting and identifying where wildfire effects on ecosystems are beneficial and detrimental; minimizing fire hazard concerns in mountain pine beetle infestation areas, and developing a smoke management plan for prescribed wildland fires. However, the planning process is still at a preliminary stage, with requirements for draft document revisions, data collection, public and stakeholder consultation, and pilot projects still to be considered.

MAL/ILMB are willing to address future fuel management objectives in landscape level plans (or other strategic land use planning processes) when the MoFR raises these issues as a priority in specific planning exercises and is able to provide the expertise, required resources, and technical support to help craft appropriate and effective objectives.

The Ministry of Forests and Range Protection Program Strategic Plan outlines the need for a strategy to address fuel management and fire management planning. Within the Program Strategy, one of the four Strategic Goals is "Leading wildfire planning, management and practices". The two priorities within this strategic goal are: fuel management, and integrated fire and land use management. These two areas are interrelated and have priority task teams that have developed implementations strategies for each of these key strategic priorities.

One of the key initiatives from the strategic plan was to hold a cross government fire management forum to help establish provincial wildland fire management policy and strategy to enhance fire management planning across the province. Participants at this forum included representatives from the following ministries: Forests and Range, Agriculture and Lands, Environment, Energy, Mines and Petroleum, Tourism, Sports and the Arts, and representatives from the Office of the Fire Commissioner, and the Provincial Emergency Program. The forum explored options to strengthen the role of wildland fire management integrated within a broader land and natural resource management framework. Forum discussions also considered the need to balance ecological, economic and public safety considerations in wildland fire management planning and practices, and explored mechanisms to involve external stakeholders and the public in the development of a Wildland Fire Management Strategy for British Columbia. This strategy, which is currently under development, has linkages with the Program Strategy as well as the Canadian Wildland Fire Strategy.



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Fuel management and a balanced approach to fire response and the application of fire (prescribed and natural) at a landscape level are key elements to be addressed by way of a Wildland Fire Management Strategy for BC. The Ministry of Forests and Range is actively pursuing steps to ensure fuel management and fuel reduction become priorities within forest management policy and practices.

In the summer of 2006, the Ministry of Forests and Range initiated broad policy discussions internally and with industry to review existing options and the need to enhance the Forest and Range Practices Act for inclusion of a fuel management or a fire management objective. Discussion centered on the appropriateness of FRPA over the Wildfire Act as a mechanism for such an objective, because the Wildfire Act applies to a much broader range of industrial operators and land manager than does FRPA. Policy discussions will continue to explore options to strengthen fuel and fire management planning as required.

Spring 2007 amendments to the *Forest Act* and the *Forest and Range Practices Act* will strengthen fuel management by:

- Enhancing content provisions of forestry licence to cut for interface fire purposes;
- Providing a power to authorize the damage or destruction of Crown timber for wildfire hazard reduction purposes.

For those carrying out industrial activities, the Wildfire Act has sections that deal specifically with fuel management by way of hazard assessment and abatement, and the Act obliges all to ensure their activities do not contribute to the spread of a fire.

Within the Provincial Fuel Management working group, the Ministry of Forests and Range has three Regional Fire Management Specialists who are working with the Ministry of Agriculture and Lands, Integrated Land Management Bureau to ensure that fire management and fuel management objectives are addressed as higher level plans are reviewed or developed. Fire management is also being strengthened with the development and implementation of a new provincial framework for fire management planning at a landscape level.

Fuel Assessment and targets

3. The Ministry of Forests and Range should establish a standardized system for assessing fuels.

4. The Ministry of Forests and Range's inventory of forest fuel hazards should be broadened to include areas surrounding the WUI and other areas with important forest values, such as community watersheds and habitat for species at risk.

All Canadian fire management agencies including BC's Protection Program apply the Canadian Forest Fire Danger Rating System (CFFDRS) and the standard fuel types within the Fire Behaviour Prediction System (FBP) to develop tools that assess forest fuels and potential fire behaviour within British Columbia. Standard procedures (e.g. FRDA 001) are available in support of the CFFDRS for measuring fuel loads in the field. Protection Program also supports the Office of the Fire Commissioner to promote the use of hazard assessment systems within the National FireSmart program. With the advent of the Wildfire Act, the Ministry of Forests and Range has developed and implemented standard hazard assessment procedures to support government's compliance and enforcement program associated with the Wildfire Act and regulation.



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The Provincial Strategic Threat Analysis, implemented at a 1:20,000 scale for the entire province regardless of land jurisdiction, identifies fuel hazard across the province, within all landscapes as well as adjacent to communities within the WUI. Like any model, there are limitations and assumptions associated with available science and data, but it has served effectively over the past two years to identify critical areas of forest fuels that may pose a threat to communities. This information has been made available to local Governments and other agencies, and the Protection Program is committed to continue to refine and improve tools for evaluating the threat of wildfire.

In the process of identifying, planning for, and treating hazardous fuels, it is important to focus on the areas that pose the highest risk to the greatest values. The PSTA and FireSmart assessment tools are designed to focus on high priority areas in and adjacent to the WUI. The first analysis shows approximately 1.7 Million hectares of forest fuels potentially requiring treatment within two kilometers of the WUI. From a public safety and security perspective, it is these areas that must receive the highest priority for planning and fuel treatments. As communities develop Community Wildfire Protection Plans, they may carry out more detailed fuel assessments for their particular community. Many community plans have identified values such as watersheds, animal habitat and Visual Quality Objectives as values to be considered.

One of the initiatives underway to enhance fire management planning and response prioritization is the development of a prototype system to better clarify government's mandate and incorporate values at risk as a decision aid. This model will be prototyped over the 2007 fire season, and considers not only WUI values but also considers such things as timber, wildlife, watershed, and client assets as well. As a framework for fire management planning is developed, tools will also be developed so that potential positive impacts of fire on forest ecosystem health can also be considered in the response decision making process.

The Union of BC Municipalities and the Ministry of Forests Protection Program have developed a web-portal that forms the foundation of BC's Fuel Management Information System. This system has been developed to track fuel management treatments spatially over time across British Columbia.

Fuel reduction practices

5. The Ministry of Forests and Range should assess the effectiveness of different fuel reduction treatments in producing fire-resilient stands over time, and produce guidelines for best management practices in fuel reduction. Effectiveness of different spatial patterns of treatment across the landscape should also be assessed. Current fuel reduction activities should be monitored and assessed in an adaptive management approach.

6. The provincial government should address public and stakeholder concerns with the increased use of prescribed fire and other fuel reduction techniques. The challenges of liability, public acceptance, smoke management and incentives need to be addressed so this valuable tool can be returned to the landscape.

The Ministry of Forests and Range is assessing the effectiveness of different fuel reduction treatments in various ecosystems through the Pilot Project program and through collaboration with other agencies, Industry, and research organizations. The province will report out on the findings of these studies and will continue to monitor treatment areas to assess their effectiveness over time.



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The province also assesses and monitors the effectiveness of operational fuel treatments and forest industry hazard reduction activities. This process follows adaptive management principles. Lessons learned regarding fuel treatment areas, their maintenance, and related fire behaviour will be applied to subsequent planning and treatments.

In conjunction with the Pilot Project program, the Ministry of Forests and Range has commenced developing a series of fuel management "best practices" and/or "discussion" papers. The first three papers are in the final stages of drafting, and it is expected that an additional three to five papers will be developed in 2007.

It is recognized that fire is an integral part of fuel management and healthy forest ecosystems. Restoring fire on the landscape through prescribed natural fire and planned prescribed fire is an objective of the Ministry's Ecosystem Restoration program and is to be addressed by way of BC's Wildland Fire Strategy. Fire is a natural agent of change, and is a key process in maintaining healthy forest ecosystems. Fire is also an important fuel management tool that is efficient and cost effective. Fire exclusion policies have limited natural fires on many of British Columbia's landscapes, and in some cases, have led to unhealthy forests with elevated fuel loadings. Fire management specialists are working within a number of multi-agency task-teams and forums to establish appropriate guidelines and principles to effectively re-introduce fire on the landscape, as well as to ensure that the application of fire is consistent with other land management, air quality and smoke management objectives. Fire management is an important component of the Future Forest Ecosystems Initiative, which aims to adapt the forest and range management policy framework to a changing climate. Some of the proposed projects under FFEI call for fire management planning and practices (as per the BC Wildland Fire Strategy) that enable more natural fire-based ecological processes to occur where feasible. These projects are intended to help maintain and enhance forest health and ecological resilience as our ecosystems change over time.

An investment in awareness and education programs will be required to gain higher levels of public support for fuel management, fire management and related issues such as smoke management in the use of fire on the landscape. Policies associated with limited fire suppression response and the use of prescribed fire can be controversial. It will take time to elevate awareness and education levels on these important issues. The Ministry of Forests and Range actively pursues this course through Communication Plans that address fuel and fire management initiatives.

Fuel reduction in the WUI

7. The Ministry of Forests and Range should explore incentives to encourage fuel reduction in high priority areas, and develop appropriate streamlined Forest and Range Practices Act regulations to better enable local governments to carry out fuel treatments.

The Ministry has worked diligently over the past two years to elevate awareness and understanding of fuel management issues in British Columbia. Information has been presented to Local Governments, First Nations, professionals, and various provincial and federal agencies. One of the first incentives provided to Local Governments, was to initiate planning processes by providing our Provincial Strategic Threat Analysis (PSTA) data at no cost. This is an important first step to ensure that communities have the tools they need in order to establish their treatment priorities. One of the key messages from the 1st fire behaviour and fuels conference in Portland Oregon in March 2006, was to ensure that processes are in place to establish the "right treatments, in the right locations, at the right time".



Targeted funding for fuel management planning and treatments has been established for local governments through the Union of BC Municipalities. Funding is available on a 50/50 cost-sharing basis and a great deal of flexibility is offered to communities who are able to leverage their costs using "in kind support." As a further incentive, to recognize the sense of urgency with regards to the current Mountain Pine Beetle (MPB) infestation, funding for treatments in areas affected by MPB fall under a 75/25 funding ratio. It is important to note that funding and delivery models must also meet requirements of our softwood lumber agreement. Every effort is being made to streamline the application and funding process and make funds as readily accessible as possible.

Local Governments now have a range of tools and options that support the implementation of fuel treatments. A free use permit, s52 FRPA, the new FLTC for community protection, are all mechanisms that can be applied for fuel treatment. Funding and delivery models must reflect the nature and scope of work to be accomplished, and will be reviewed on an ongoing basis.

The Union of BC Municipalities conducted an independent survey of its members in 2006 to assess the effectiveness of the incentives provided for fuel management planning and treatments and identify any impediments to the process. Comments were generally favorable and the UBCM and the MoFR will continue to work together to provide support to local governments and First Nations for fuel management endeavors.

Ministry staff will continue to work with Local Governments, First Nations, and Forest Professionals to develop an effective streamlined process for fuel management planning and treatments.

Summary

Fuel and fire management are key components of the Ministry of Forests' Protection Branch Strategic Plan. The new plan is in its first phases of implementation. One of the four Strategic Goals within the strategic plan is: "Leading wildfire planning, management and practices". The two priorities within this strategic goal are fuel management, and integrated fire and land use management.

The Ministry has worked aggressively towards implementing the recommendations from the 2003 Filmon Firestorm report. Within the past two seasons, new staff, funding, planning and treatment initiatives have commenced for fuel management in B.C. Assisting communities to reduce the threat of wildfire through fuel management planning and treatments is at the core of this initiative. The Ministry will continue to work cooperatively with all parties required, to develop sound fuel management policies and practices for British Columbia. Adaptive management principles will be applied to ensure lessons learned are incorporated into future planning, policies, and treatments.

B.C. will continue to participate in national and international forums and conferences to ensure we share and learn the most current fuel management strategies. B.C. is a signatory to the declaration for the Canadian Wildland Fire Strategy, which commits governments to investing further in fuel reduction, ecosystem management, public education and research.

The Ministry of Forest and Range is committed to working together with forest professionals, other levels of government, and First Nations to re-introduce fire on the landscape as an integral part of its fuel management strategy. Ministry staff continue to maintain and develop expertise in the use of applied fire through our suppression program, prescribed fire, and ecosystem restoration initiatives.



Forest Protection Program

Fuel and fire management initiatives have far ranging implications for the province. Although there is not consensus on some issues, it is important to start and stay focused on the Wildland Urban Interface. These areas have the highest values and greatest risk associated with them.

It is important to continue to invest in public awareness and education to ensure communities and individuals have a clear understanding of fuel and fire management issues and solutions. Individual homeowners, communities and all levels of government must work together to develop the most effective community protection programs.

The Ministry of Forests and Range will continue to develop its fuel and fire management strategy and implement these in a safe, effective, and efficient manner. The issues being addressed did not arise overnight, and resolving them will take time and commitment. New challenges will surface such as Mountain Pine Beetle and climate change. Wildland fires will continue to occur each year and while there are no guarantees, through these important initiatives, the Protection Program will be working to minimize the potential for catastrophic wildfires in British Columbia.

Respectfully submitted on behalf of the Ministry of Forests and Range by:

Peter Fuglem, M.Sc.F., RPF
Director
Protection Program

March 29, 2007



File: 97350-20/2006-03

September 27, 2007

Doug Konkin
Deputy Minister
Ministry of Forests and Range
3rd Floor – 1520 Blanshard Street
Victoria, BC V8W 3K2

Dear Doug Konkin:

Re: Managing Forest Fuels – Forest Practices Board Recommendations

Please accept this letter as our reply to government's response, on April 13, 2007, to the recommendations made in the Forest Practices Board (FPB) Special Report on Managing Forest Fuels.

To summarize your response, MoFR is already conducting pilot studies or in some cases implementing most of the recommendations of the FPB report. We are pleased that government is making strides in the area of fuel management and we will be monitoring progress in this area over the next few years.

We accept your response to our recommendations and now consider this file to be closed.

Yours sincerely,

A handwritten signature in black ink that reads "Bruce Fraser".

Bruce Fraser, PhD
Chair