



June 9, 2005

Forest Management Branch
Department of Energy, Mines and Resources
Box 2703 (K918)
Whitehorse, YT Y1A 2C9

Re: CPAWS-Yukon response to EAA Screening for Barney Lake and False Canyon Creek Fires, SE Yukon

To: Robin Sharples

CPAWS-Yukon appreciates the opportunity to respond to the above mentioned Environmental Assessment Act Screening. We trust that all interests and concerns will be heard and important alterations will be made to the guiding principles of potential salvage operations prior to operational planning.

We acknowledge that the aftermath of the 2004 fire season presents some opportunities for salvage logging, however; we believe that the following recommendations need to be considered and changes made prior to operational planning. Most of our comments directly relate to the strong need to reconsider the context of proposed volumes, perform progressive forestry practices, adequately address wildlife and landscape level ecological diversity and consider road density concerns prior to further planning.

Years ago, the primary role of forest managers was to ensure that an economical supply of wood was available for local industry. With timber extraction as the main focus, large-scale clearcutting, or clearcutting with minimal retention, has been the dominant timber harvesting method used throughout Canada's boreal forest and has resulted in serious environmental degradation.

Over the past two decades, North American society and the international community has come to realise that the forests provide us with far more than just wood products. This growing awareness is leading to a different style of forest management. Today, in addition to managing for the essential production of timber, forest managers must also ensure that sensitive species and ecosystems are protected, natural diversity is

maintained, water quality and scenic values are not degraded, and the values and goals of other forest users are considered. For these reasons, and in order to uphold the principles of ecosystem-based forest management planning, ecological features must be considered first and foremost.

General Comments and Recommendations related to both fires

Under progressive forest management principles, ecological features (such as wildlife habitat corridors) are considered management goals rather than constraints, and harvesting systems (e.g. variable retention) as techniques to maintain features like structural diversity in managed forests as well as ways to get wood out of the forest. The use of retention as a habitat and biodiversity management strategy by forest managers throughout Canada's boreal forest is increasing. Instead of using unmerchantable stands as the template for retention, forest managers are basing the amount and pattern of retention on the ecological character of the region and the natural range of age class and species in the area in order to best meet the habitat needs of specific species. To maximize structural diversity, patches with a variety of tree species, sizes and decay condition are favoured. Patches should be selected to reduce the risk of windthrow with the understanding that some will occur inevitably. If the intent of the development planning is to "...provide habitat and bridge the harvested areas within the remaining burn" the proposed retention selection method is inadequate.

Recommendation: Revise the way retention ranges are chosen. Rather than basing retention ranges on unmerchantable wood that cannot limit potential salvage operations, develop an ecological rationale for retention design. Percentage of reserves should not be less than 25% (including full burn areas in False Canyon Creek burn) as per the FSC Canadian Boreal certification standards (<http://www.fsccanada.org/boreal/index.shtml>) and should focus on internal group retention with minimal dispersed retention.

All water bodies are important and serve many well known ecological purposes. An ecosystem-based approach to planning first decides what ecological characteristics are to be maintained within the landscape; which includes water bodies and stream courses. It appears from the associated maps (specifically Map 6) that several water bodies are within the proposed operating unit boundaries. This could lead to river, stream, lake, and wetland degradation. While we assume that this consultation is step 2 of the assessment process, further consideration needs to be given to all water bodies prior to implementation of the final planning (step 3).

Recommendation: Apply specific, appropriate-sized buffers (including reserve and management zones) around all water courses and bodies and wetlands within the entire burn areas and ensure operating units are oriented around all buffers.

With regards to potentially allowing logging in the Riparian Management Zone, specific consideration to wildlife connectivity and attributes must first be applied.

Note in the THPOG that logging may occur within the Riparian Management Zone provided a plan is submitted and approved.

“This plan should ensure: 1) the integrity of the reserve zone is protected

2) the windthrow in the reserve zone or management zone is addressed

3) wildlife attributes are identified and protected. Retain important wildlife attributes including wildlife trees, larger trees, hiding and resting cover, nest sites, structural diversity, coarse woody debris, and food source requirements of the natural riparian ecosystem, and;

4) visual screening for wildlife is maintained.

The interface between the Management Zones and the Reserve Zones may vary to reflect existing ground conditions. Increasing or decreasing zone widths must be supported by data and a plan supplied by the timber permit applicant. This plan is to be provided by the project description.”

Recommendation: Survey potential operating units on the ground during the summer months or by aerial photos, with qualified biologists and hydrologists to accurately determine stream, Riparian Reserve and Riparian Management Zone locations based on ecological considerations. Do not allow any logging operations within Riparian Reserve and/or Riparian Management Zones.

I realize that the potential salvage area constitutes 1.3% of the burn area in Kaska Traditional Territory (KTT); however, it is inadequate to assume that post-fire specialist species will relocate to another fire patch in the KTT for reproduction, cover and food. It is the responsibility of forest managers to consider the variety of species across the landscape and within planning units.

Several wildlife species, in addition to those mentioned in the development planning document (woodpeckers and secondary cavity nesters), are known to inhabit burnt forests or early seral stages that follow forest fires. These include, but are not limited to: Olive-sided Flycatcher (*Contopus cooperi* nuttall), a high priority candidate species suspected to be at high risk of extirpation from Canada under the February 2005 COSEWIC listing, Western Wood-pewee (*Contopus sordidulus* Sclater), Three-toed Woodpecker (*Picoides tridactylus* Linnaeus), Black-backed Woodpecker (*Picoides arcticus* Swainson) all of which are common in southern Yukon and known to feed in burned areas. Additionally, small mammals and ungulates are known to be most abundant post disturbance (including fire). Marten are known to inhabit early post-fire habitat in Alaska and their prey (Taiga voles) may use post-fire early seral staged forests also. Lynx and their prey are also known to inhabit post-fire cover, and mid-successional stands for foraging and denning habitat that includes large-diameter trees. The wide use of burnt forests by a variety of species should move us towards the realization that such forests are far from dead as they are often referred to.

Recommendation: Consider the full range and habitat requirements of all post-fire specialist species and ensure adequate habitat is maintained for each. Do not assume that species will move elsewhere within KTT. Allow for only winter harvesting operations in order to minimize negative impact on habitat, soil, water, and limit all-season vehicle use.

The anticipated volume of stands >17m in height within the proposed units in the False Canyon Creek and Barney Lake burn area equals (302 920 + 16 461) 319 381m³. This number approaches the maximum 3 year interim wood limit of 384 000m³, much of which has already been planned for and gone through Environmental Assessment Screenings. This leaves the question of why such a large volume of salvage timber has been identified. Is there a demand or market for this wood that combined with the interim wood supply volumes exceeds 600 000 m³, a volume that greatly surpasses the agreed upon interim wood supply limit? These questions require further consideration by the KFRSC, Technical Working group, all interested parties, and the Yukon Forest Management Branch.

Recommendation: Ensure that wood volumes for each year do not exceed 128 000 m³. Either amend the Years 2 and 3 KFRSC interim wood supply by substituting the salvage wood for the existing Cosh/Contact Creek blocks, which would require another EAA Screening or decrease the number of units and associated volumes within the proposed salvage area to meet the agreed upon interim wood supply volume outlined in the Memorandum of Understanding on Forest Stewardship.

It is unclear who is responsible for conducting operational planning (step 3) following appropriate changes to the development plan. The level of detail that will result from the operational planning is critical in the design and performance of operations on the ground.

Recommendation: Perform an Environmental Assessment Act Screening of the operational plan for any proposed salvage harvesting that includes detailed operating unit prescriptions based on ecological principles.

Comments specific to Barney Lake fire

Proposed unit 3 of the Barney Lake fire appears to be either within or on the very edge of the pending Coal River Special Management Area (SMA). Performing salvage logging operations next to or within a proposed SMA could have serious ecological consequences to maintaining ecological integrity of the associated SMA. At least a 200m no-go buffer should be applied to the perimeter of the pending SMA to maintain ecological character.

Recommendation: Ensure that unit 3 is at least 200 metres from the pending Coal River SMA boundary or remove unit 3 entirely from the development and operational planning considering its proximity to the pending lower Coal River SMA and contribution to increasingly high road density. Remove unit 1 from the planning due to its lack of stands >17m.

The effects of roads on wildlife are well documented (<http://www.yfwmb.yk.ca/pub/down.htm>). If all operations occur in winter and only impermanent winter roads are created, access becomes less of a concern. However, proposing 15 km of new roads (with the possibility of additional spur roads) in an area 10.43 km² (1043 ha) greatly exceeds the recommended density of <0.45 km of road/km². Following this recommendation, 4.7 km of roads (rather than 15+ km) for an area 10.43 km² would be the maximum limit of new roads within the 3 units. This calculation does not take into consideration the existing permanent roads that further increase the road density of the area.

Recommendation: Reduce the road density of the operating units so proposed mainline and spur roads combined do not exceed a density of 0.45km/km².

Comments specific to False Canyon Creek fire

The development plan mentions a connectivity corridor that was developed from air photos and forest inventory based on pre-fire conditions. The design, rationale, and subject of connectivity along with what species this corridor intends to connect remain to be answered. In ecosystem-based forest management, several ecological characteristics are considered first and foremost, such as the ecology of the landscapes pre and post fire, unique, rare and sensitive habitats, landscape level linkages, ephemeral streams, etc.

Recommendation: Prior to operational planning, consider the impact of proposed salvage logging on wildlife connectivity corridors that are scientifically based. Minimize wildlife impact within this corridor, rather than focussing on optimizing timber extraction.

The effects of roads on wildlife are well documented (<http://www.yfwmb.yk.ca/pub/down.htm>). If all operations occur in winter and only impermanent winter roads and ice bridges (across Frances River) are created, access becomes less of a concern. However, proposing 56 km of new roads (with the possibility of additional spur roads) in a burn area 89.5 km² (8950 ha) exceeds the recommended density of <0.45 km of road/km². Following this recommendation, 40 km of roads (rather than 56+ km) for an area 89.5 km² would be the maximum limit of new roads within the burn area. This calculation does not take into consideration the existing permanent roads (Robert Campbell highway) that further increase the road density of the area.

Recommendation: Reduce the road density of the operating units so proposed mainline and spur roads do not exceed a density of 0.45km/km².

The proposed operating units appear to conflict with Liard First Nation Order in Council (OIC) lands. CPAWS-Yukon can not speak on behalf of Liard First Nation but does strongly believe that all land users, including land stewards, trapline holders, guide outfitting operations and the associated First Nation should be adequately consulted prior to any planning.

Recommendation: Consult with appropriate Liard First Nation members and Chief regarding proposed operating units for the False Canyon Creek fire area.

While we don't have any serious concerns with the nature of salvage logging, the proposed volume and manner in which the area has been planned deserve more attention to a more ecosystem-based approach, where the species and habitat are considered important and given priority. We trust that all of the recommendations above will be adequately considered and changes will be made to both development plans prior to operational planning.

Yours truly,

Theresa Gulliver
Forest Conservation Coordinator
CPAWS-Yukon

Some further sources to consider:

B.C. Forest Service Extension Notes on various subjects such as Principles of Patch Retention Harvesting:

http://www.for.gov.bc.ca/rni/Research/Extension_notes/Extension_Notes.htm

Canada Lynx Biological Assessment. 2001. United States Department of Agriculture. Forest Service.

Morisette, J.L., Cobb, T.P., Brigham, R.M., James, P.C. 2002. **The response of boreal forest songbird communities to fire and post fire harvesting.** Canadian Journal of Forest Research. Vol 32 Issue 12.

Ruggiero, L.F., Aubry, K.B., Buskirk, S.W., Lyon, L.J., Zielinski, W.J., tech eds. 1994. **The Scientific Basis for Conserving Forest Carnivores: American Marten, Fisher, Lynx and Wolverine in the Western United States.** Gen. Tech. Rep. RM-254. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service. Rocky Mountain Forest and Range Experiment Station. 184 p.

Wilkinson, L., and Fisher, J. 2005. **The response of mammals to forest fire and timber harvest in North American boreal forest.** Mammal Rev. Volume 35. No.1, p 51-81.