

Mosaic Forest Management Ltd.

June 24th, 2007

Protech Consultants Ltd.,
#200 – 1449 St. Paul St.,
Kelowna, B.C.
V1Y 2E4

Attn: Grant Maddock

re: Wildfire Mitigation Assessment - Lower Peachland Area Structure Plan

Dear Grant:

This letter report describes the existing wildfire potential conditions and outlines the measures required for the reduction of hazard from wildfire in the location noted as the Lower Peachland Area Structure Plan. The report consists of a prescription applicable to those areas that are presently vulnerable to wildfire. The report also contains a table describing each Wildfire Hazard Zone and a map showing the location of the existing Wildfire Hazard Potential Zones.

Methodology:

On June 16th, 2007, David Gill, Registered Professional Forester of Mosaic Forest Management Ltd. completed the wildfire hazard field assessment of the area identified as the Lower Peachland Area Structure Plan. The assessment consisted of gathering information pertinent to the determination of potential wildfire hazard (such as slope, proximity to existing and future improvements, tree size, species, height, density, live crown, forest health, duff and woody debris accumulations, etc). During the assessment the approximate boundaries of the hazard zones, based on the information collected, were sketched onto a field map.

Following the field assessment, the field map was verified with a recent orthophoto to confirm the linework. A final map was produced overlaying the 2004 orthophoto that identifies the location of the existing wildfire hazard potential zones.

Existing Conditions:

The area assessed lies between Highway 97, Princeton Avenue, Lipsett Avenue, Highway Lane, and Renfrew Road in the District of Peachland. This area consists of approximately 30 lots presently zoned with a mixture of single and multi-family residential, rural residential, and commercial uses. Homes are found throughout the area and small scale agriculture occurs on some of the larger lots. Most of the area has been previously cleared and replaced with deciduous trees, shrubs and grass, however individual and small patches of Ponderosa Pine remain in places. Slopes range from less than 25% to in excess of 45% north of Renfrew Road. The

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following table summarizes the characteristics of each zone and gives a potential fire hazard ranking (**H**igh, **M**oderate, or **L**ow).

Zone	Description	Potential Hazard
1	Homes, roads, deciduous trees, scattered Py, grass and shrubs	L
2	Patches of mixed deciduous and coniferous trees	M
3	Patches of Ponderosa Pine, steep in places.	H

Zone 1 constitutes approximately 80 percent of the plan area. It consists of areas that have been significantly altered from their natural conditions and now consist of roads, houses, clearings and landscaping. The general absence of closed canopy forests and few conifers result in a **Low** Wildfire Potential Hazard for this zone.

Zone 2 consists of clumps of mixed deciduous and coniferous trees. These patches are generally quite small, but relatively dense. However, despite the dense patches, the relatively high deciduous component results in Wildfire Potential Hazard of **Moderate** for this zone..

Zone 3 consists of patches of Ponderosa Pine, some occurring on moderately steep slopes. Though not as dense as Zone 2, the Wildfire Potential Hazard of this zone is **High** due in part to the slopes, exposure to winds, but predominantly because the vegetation consists of a high component of Ponderosa Pine and the presence of ladder fuels. Some of the Ponderosa Pine are dying or dead, possibly a result of beetle attack, further contributing to the wildfire potential.

The entire area is exposed to southerly and northeasterly winds coming off Okanagan Lake, and westerly downslope winds. Slopes in the area range from gently (less than 25% to moderately steep (more than 45%). Accumulated coarse woody debris (CWD) is sporadic except in isolated areas where yard waste has been improperly disposed of.

Prescription:

No wildfire mitigation works are prescribed for areas that fall within Zones 1 or 2.

Wildfire mitigation works are only recommended in Zone 3. The following recommendations apply to these areas:

- Establish a minimum inter-tree spacing of 3 to 5 meters (small, widely scattered clumps are permissible);
- When thinning, retain a mixture of small and large diameter trees;
- All dead, dying and considerably malformed trees should be removed, unless prescribed otherwise by a wildlife biologist;

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- “Green attack” Ponderosa Pine must be removed;
- All remaining trees must be pruned to at least 3 meters above ground from any point on the tree. Saplings (trees less than 5 meters tall) need only be pruned to a maximum of 1/3 their total height;
- Deciduous shrubs and trees do not have to be cut and removed;
- Felled trees and pruned branches must be gathered and removed from the site; and,
- To retain a source of coarse woody debris, existing downed trees may remain onsite provided they are in full contact with the ground, larger than 25 centimeters in diameter at the butt end, and no branches are attached.

These measures, once completed, will reduce the potential for damage as a result of wildfire in Zone 3.

Throughout the area, residents should be reminded of the following:

- Yard waste should be composted properly or removed from their properties;
- Coniferous landscaping (such as cedar hedging or mugo pines) should not be used within 5 meters of their homes
- More information on being “Firesmart” can be found at the following link:
<http://www.bcwildfire.ca/Prevention/Property/FireSmart.htm>

Please contact the undersigned if there are any questions.

Yours Truly,
MOSAIC FOREST MANAGEMENT LTD.

Dave Gill, RPF

Attachments

Site Photographs

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Photo 1: From Lipsett Ave. Scattered Py. Herbaceous layer. Low wildfire potential



Photo 2: From Lipsett Ave. Py patch in background



Photo 3: From Lipsett Ave. Low ground cover. Scattered Py.



Photo 4: From Hwy 97. Shrubs and scattered Py.



Photo 5: From Renfrew Ave. Steep. Py Patch.



Photo 6: From Hiwy 97. Steep Py Patch.