

Squamish-Lillooet Regional District Fuel Management Strategy



Submitted to:

Kevin Creery
Planning - SLRD

Prepared by:

John Davies, RPF
Davies Wildfire Management Inc
#409 2570 Hemlock Street
Vancouver, BC V6H 2V4



Mike Coulthard, RPF, RPBio
Diamond Head Consulting Ltd
342 West 8th Avenue
Vancouver, BC V5Y 3X2



GIS Support
Timberline Forest Inventory Consultants Ltd

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Table of Contents

1.0	Introduction.....	1
2.0	Major Communities	1
3.0	Fuel Management Areas	1
4.0	Fuel Management Treatments	2
5.0	FMA Recommendations.....	2
6.0	Public Information Plan	3
7.0	First Nations Consultation	3
8.0	Appendix A: Fuel Management Strategy for Electoral Area A	4
8.1	Overview.....	5
8.2	FMA # A1: Gold Bridge.....	6
8.3	FMA # A2: Gun Lake/Tyughton Lake	8
8.4	FMA # A3: Resource Management Area.....	10
8.5	Prioritized Interface Hazard Polygons	10
9.0	Appendix B: Fuel Management Strategy for Electoral Area B	13
9.1	Overview.....	14
9.2	FMA # B1: Bridge River FMA	15
9.3	FMA # B2: Fraser North FMA	17
9.4	FMA # B3: Pavilion Lake FMA.....	19
9.5	FMA # B4: Fountain Valley FMA	21
9.6	FMA # B5: Texas Creek FMA.....	23
9.7	FMA # B6: Seton FMA.....	25
9.8	FMA # B7: Resource Management Area.....	27
9.9	Prioritized Interface Hazard Polygons	27
10.0	Appendix C: Fuel Management Strategy for Electoral Area C	37
10.1	Overview	38
10.2	FMA # C1: Birkenhead Lake FMA	39
10.3	FMA # C2: Mt. Currie – D'arcy Corridor FMA	42
10.4	FMA # C3: Pemberton Valley FMA	44
10.5	FMA # C4: Pemberton Meadows FMA	46
10.6	FMA # C5: Green River FMA	48
10.7	FMA # C6: Lillooet Lake Estates FMA	50
10.8	FMA # C7: Resource Management Area FMA	52
10.9	Prioritized Interface Hazard Polygons.....	52
11.0	Appendix D: Fuel Management Strategy for Electoral Area D	57
11.1	Overview	58
11.2	FMA # D1: Garibaldi FMA	59
11.3	FMA # D2: Howe Sound FMA.....	61
11.4	FMA # D3: Resource Management Area FMA	63
11.5	Prioritized Interface Hazard Polygons.....	63

1.0 Introduction

Considering how to undertake fuels management for an area as large and ecologically diverse as the SLRD can be daunting. The SLRD contains varying levels of structural densities, social values on the land, fuel hazards, ecosystems, cultural values and features and potential fire behavior. There is no one ‘solution’ for abating fuel hazard that encompasses all the variability within the SLRD.

To make the task less intimidating, fuel management has been addressed per electoral area. Furthermore, since variability exists within each electoral area and because fuel management should be site specific, each electoral area has been broken down into several Fuel Management Areas (FMAs). The last and final step (not covered by CWPP funding) would be to develop fuel treatment prescriptions for each interface polygon.

The following fuel management strategy covers as much detail to as small a scale as is allowed by CWPP funding. The boundaries, description, key issues and values of concern for each Fuel Management Area are described with maps included for a frame of reference.

2.0 Major Communities

All communities fall within a designated FMA with the exceptions being those with the highest populations: the District of Lillooet, the Village of Pemberton, the Resort Municipality of Whistler, and the District of Squamish. A separate CWPP has been completed for each of these communities that address the interface hazard along each town’s respective boundaries. The SLRD, when considering development permits adjacent to or in proximity of the boundaries of these communities should work with the community to ensure these developments are abating the fire risk associated with the fuel hazard as has been addressed in the SLRD CWPP.

3.0 Fuel Management Areas

Each electoral area within the SLRD has been divided into several strategic FMAs. The delineation of areas was based on wildfire risk, urban density, and geographic features. Areas within an FMA generally have similar wildfire risk rankings, urban densities, fuel types, and potential management issues. Nomenclature reflects local geography for easy reference. Boundary descriptions should be considered general and amendable. There are two types of FMAs: *Interface FMAs* and *Resource Management FMAs*.

The Interface FMAs surround low to high density interface zones to a distance of 2 km from structures or to the height of land. An area that does not contain any interface zones, or has only minor, scattered interface occurrences, has been classified as a Resource Management FMA.

The Resource Management FMA classification does not infer that the scattered interface values found in Resource Management FMAs are any less important than those found within Interface FMAs. The nomenclature indicates that the area is predominately oriented toward resource extraction or wildland activities rather than towards dense

settlement. Such resource or wildland based activities are less likely to occur (or to a much lesser degree) within Interface FMAs.

FMAs naming format is standardized for the whole SLRD as per the following example.

FMA #A1: Gold Bridge	
FMA	Fuel Management Area
A	Electoral Area
1	FMA number within electoral area
Goldbridge	Geographic label

Only the Interface FMAs have been delineated on the maps. The area outside of these Interface FMAs is considered to be within the Resource Management FMA for that FMA with the spatial extent extending to electoral area or SLRD boundaries.

4.0 Fuel Management Treatments

An interface fuel hazard assessment was performed for each interface area with a fire behavior rating greater than 50 (moderate). If ground-truthing determined that the GIS information was incorrect, or the hazard was low to nil, then the polygon was removed. These polygons should be reviewed once all other higher priority polygons have been treated. All other polygons were given a priority rating based on the interface assessment. Fuels management treatments should target the highest priority areas first. However, lower ranked polygons adjacent to high ranked polygons can be treated concurrently if there are economic benefits to doing so.

Interface fuels treatment prescriptions should be developed by a qualified professional with an understanding of fire behavior, suppression and forest ecology. Prescriptions should be ecologically based and accommodate all natural and social values while still achieving interface fire risk reduction.

Landscape level fuels mitigation within Resource Management FMAs should be addressed in co-operation with the MoFR, BC Timber Sales, or other licensees.

Additionally, consultation with First Nations should occur to incorporate their cultural heritage values, as well as to protect their communities.

5.0 FMA Recommendations

Specific recommendations have been made for each FMA. The following are general recommendations for all FMAs.

Recommendations for all FMAs:

- Treat interface polygons within FMAs as prioritized
- All future developments should have to address the fuel hazard prior to development and should follow FireSmart guidelines
- Ensure interface treatments are driven by interface protection objectives rather than timber objectives
- Consult with First Nations to abate risks around their reserves and cultural heritage resource values
- Work with licensees to abate interface fuels hazard through harvesting activities in conjunction with post-harvest slash abatement methods (prescribed burning, pile and burning, etc)

6.0 Public Information Plan

Prior to conducting interface treatments, the SLRD should implement a public information program. This would consist of holding public open houses for those communities that will be affected by interface treatments. Alternatively, an information sheet could be mailed to the homes or placed in the local paper. The information sheet should contain the following information:

- Location of treatments (with a map)
- Type of treatments (a description)
- Rational behind the treatments
- A web link to the CWPP and Fuel Management Strategy
- Contact information for feed back
- A date and location for a public open house

7.0 First Nations Consultation

For any areas in which the SLRD wishes to conduct fuel treatments, the appropriate First Nations should be consulted and, if possible, approached for partnership within the project. Implementing fuel management would assist First Nations with building skills and employment capacity within their community.

8.0 Appendix A: Fuel Management Strategy for Electoral Area A

8.1 Overview

Electoral area A has been divided into three fuel management areas.

FMA #1: Gold Bridge

FMA #2: Gun Lake/Tyaughton Lake

FMA #3: Resource Management Area

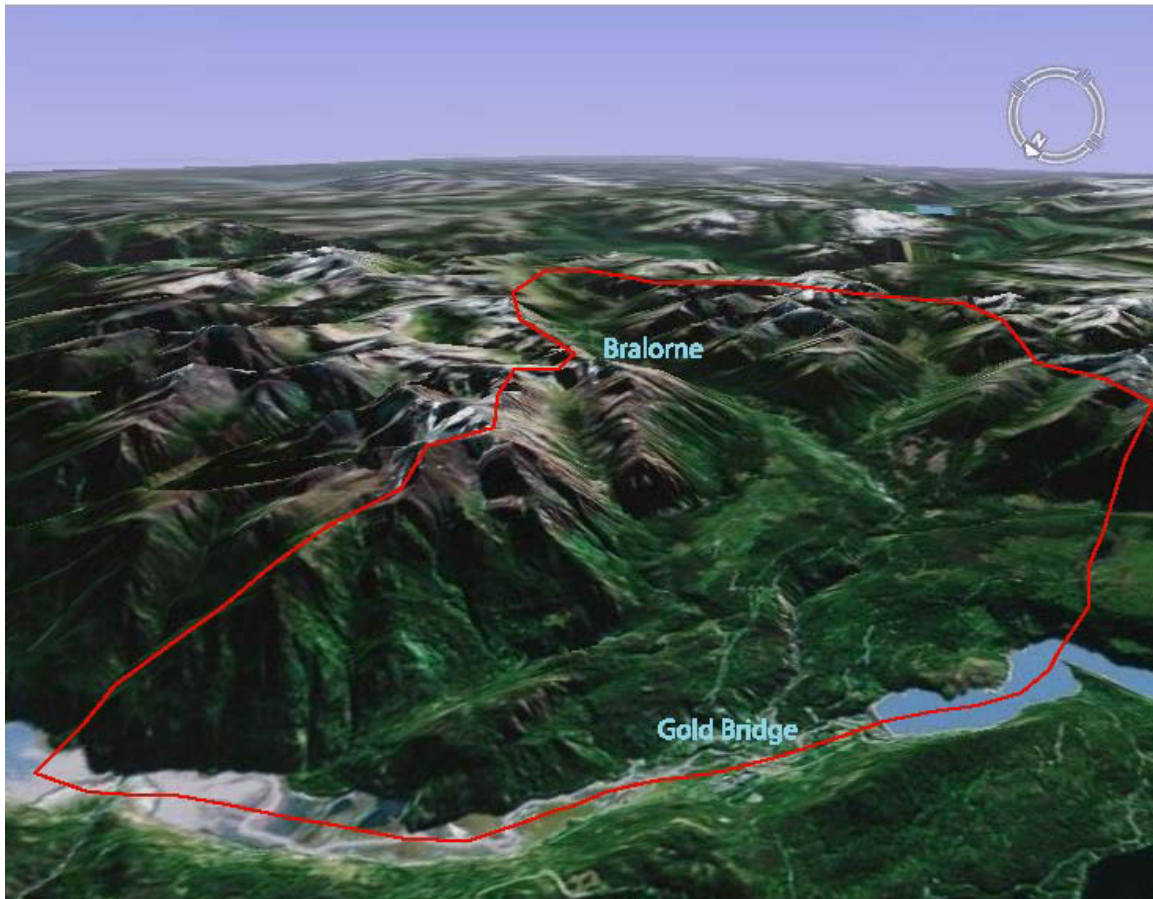
The boundaries for these FMAs are shown below.



8.2 FMA # A1: Gold Bridge

Boundaries

The interface area along the Gold Bridge to Bralorne corridor (within 2 km of structures or to the height of land) and the scattered structures between these communities. The general boundaries are shown in the figure below.



Description

This FMA contains the 2 km interface zone around Gold Bridge, Brexton, and Bralorne. There is an operational mine and associated old buildings from the past mining era. Additionally, all three communities contain old structures that may be of heritage value. The area contains a BCTC transmission corridor, a dam, and a generating station. Bralorne has only one egress road that would be accessible by all vehicles. An alternate route (the Hurley Forest Service Road) is a wilderness forest service road.

Key Issues of Concern

- Response time for wildfire suppression services
- Potential evacuation issues with a single egress route out of Bralorne

- Harvesting in proximity to the communities without slash abatement (pile and burning, prescribed burning, etc)
- High potential for human caused ignition
- Transmission corridor slash

Values at Risk

- Structures
- Industry (mine)
- Utilities (transmission lines, generating station, and dam)
- Heritage buildings
- Transportation corridor

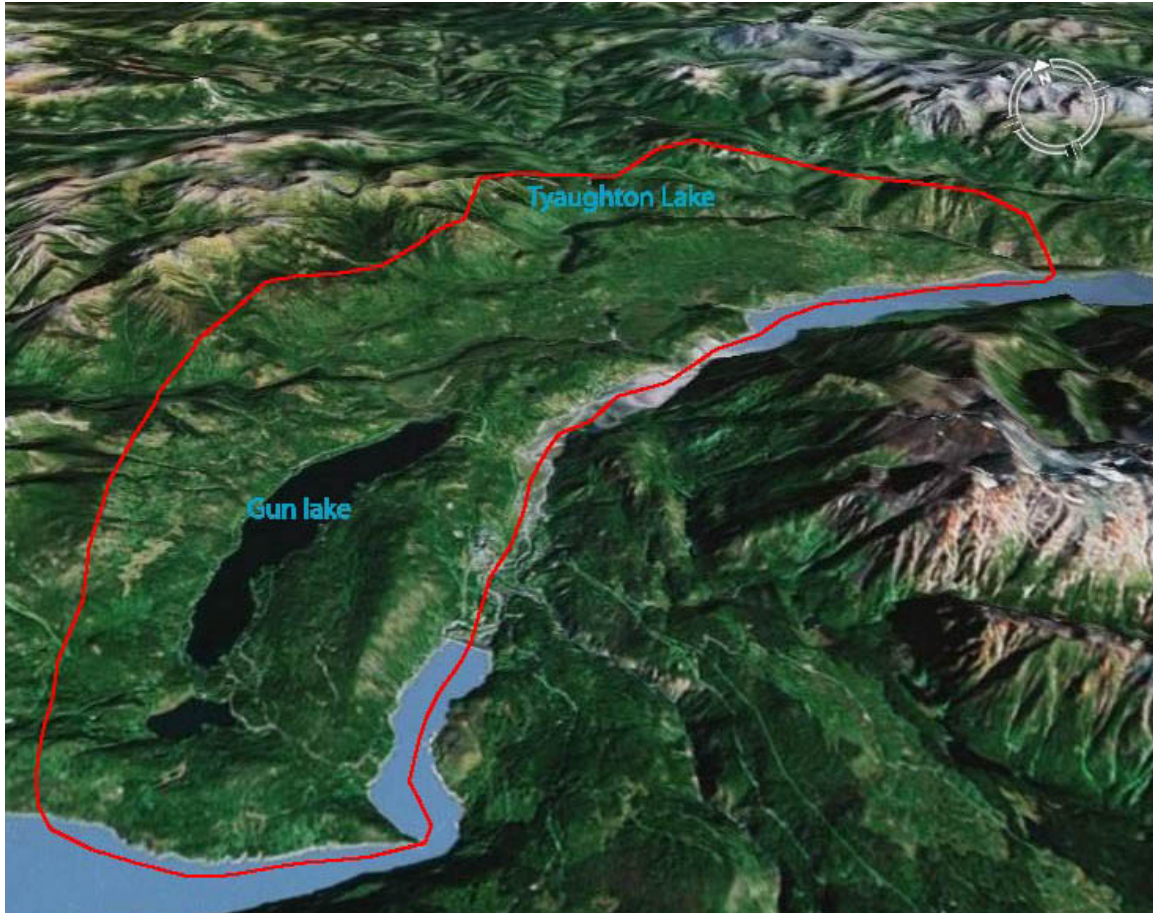
Recommendations for FMA # A1: Gold Bridge

- Develop a strategic landscape level fuel break adjacent to the towns in conjunction with the interface polygons, natural fuel breaks, BCTC transmission line and potential harvest blocks
- Consult with BCTC on developing fuel breaks in conjunction with their utilities and right-of-way (ROW) corridors where applicable
- Establish a marshalling point in the vicinity of Bralorne in the event a wildfire compromises the egress route to Goldbridge

8.3 FMA # A2: Gun Lake/Tyaughton Lake

Boundaries

The interface areas of Gun Lake and Tyaughton Lake (within 2 km of structures or to the height of land) and scattered structures between, adjacent to, and enroute to these communities. The general boundaries are shown in the figure below.



Description

This FMA contains homes surrounding Gun Lake, Tyaughton Lake and within the Gun Creek drainage. Structures within this FMA range from summer cabins to year round homes. There is also a year-round, log structure resort on Tyaughton Lake. There are year round outdoor commercial activities that occur within the FMA or are based out of the FMA. It was noted there were few addresses visible from the road or no addresses at all.

Key Issues of Concern

- Response time for suppression services
- Fuel hazard along transmission corridors adjacent to the interface

- Harvesting in proximity to the communities without slash abatement (pile and burning, prescribed burning, etc)
- Potential evacuation issues around Tyaughton Lake and along Gun Creek
- High potential for human caused ignition
- Lack of information on addresses can hamper suppression response time

Values at Risk

- Structures
- Utilities (transmission lines, generating station, and dam)
- Recreational properties

Recommendations for FMA #A2: Gun Lake

- Develop a strategic landscape level fuel break around Gun Lake, the homes along Gun Creek and those in the Tyaughton Lake area in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks
- Work with licensees to abate interface fuels hazard through harvesting activities in conjunction with post-harvest slash abatement methods (prescribed burning, pile and burning, etc)
- Establish a marshalling point within Gun Creek and around Tyaughton Lake in the event a wildfire compromises the egress routes for these areas
- Provide addresses at driveways or mileage markers along the road to assist suppression crews

8.4 FMA # A3: Resource Management Area

Boundaries

All areas outside of the Interface FMAs to the extent of the electoral or SLRD boundaries.

Description: This area has minor, scattered interface sites. These sites tend to be isolated individual dwellings, or small groups of structures.

Key Issues of Concern

- Response time for suppression services
- Fuel hazard along transmission corridors adjacent to the interface
- Harvesting in proximity to the communities without slash abatement (pile and burning, prescribed burning, etc)
- High potential for human ignition
- Potential evacuation issues around Tyaughton Lake and in Gun Creek
- High potential for human caused ignition

Values at Risk

- Structures
- Utilities (transmission lines, generating station, and dam)
- Recreational properties

Recommendations for FMA #A3: Resource Management Area

- Treat interface areas where they exist
- Work with licensees and BCTC to develop a strategic landscape level fuel break utilizing natural fuel breaks and potential harvest blocks that serves to protect life, communities, transportation corridors and utilities

8.5 Prioritized Interface Hazard Polygons

The following table outlines the prioritization of interface polygons for treatment. These polygon ID labels correspond with the Interface Polygon Maps for each electoral area. The gradient of colours from red to green in the Fuel Hazard row corresponds to the relative hazard ranking of the polygons. Treatments should begin with the highest rated polygons.

Polygon Id	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
Fine Fuel Loading <1cm	VH	H	VH	H	M	H	L	M	H	L	L	L
Fine Fuel Loading 1-3cm	VH	VH	VH	H	M	H	H	M	H	M	M	L
Surface Fuels Continuity	H	L	VH	H	H	M	M	M	M	L	M	L
% Cover	M	L	M	M	M	M	Nil	M	L	M	H	L
Total Spread Rate Index	22	16	23	19	15	18	12	14	16	10	13	7
Crown Mass	H	H	M	VH	H	H	H	M	H	M	M	M
Crown Fuels	VH	H	H	VH	H	VH	H	M	H	H	M	H
Ladder Fuels	M	H	M	L	H	L	VH	M	L	H	L	M
Total Crowning Potential Index	25	27	19	27	27	22	29	18	21	22	15	19
Duff Layer	M	M	M	M	H	M	M	M	H	M	M	H
Fuel Loading	H	H	H	H	M	M	H	M	M	M	M	M
Horizontal Continuity	H	L	VH	H	M	M	M	L	M	L	L	M
Fire Intensity	25	25	25	23	17	19	23	16	20	16	16	14
Slope	M	H	M	L	M	M	M	L	M	M	M	M
Aspect	W	W	W	SE	SE	W	W	E	E	W	W	S
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH
Fuel Break Modifiers	14	15	14	12	13	14	14	9	10	14	14	16
Wildfire Behavior Ranking	86	83	81	81	72	73	78	57	67	62	58	56
Structure Density	M	M	L	L	VH	H	L	VH	M	M	H	M
Slope Position	H	VH	VH	H	L	L	L	H	L	H	L	VH
Structures at Risk Subtotal	13	15	10	8	21	16	6	23	11	13	16	15
Fuel Break	no fuel break	no fuel break	no fuel break	no fuel break	10-20m	10-20m	10-20m	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break
Fuel Break Value	1	1	1	1	0.8	0.8	0.8	1	1	1	1	1
Structures at Risk Total	13	15	10	8	16.8	12.8	4.8	23	11	13	16	15
Fuel Hazard Ranking	99	98	91	89	88.8	85.8	82.8	80	78	75	74	71
Fuel Hazard	VH	VH	VH	VH	VH	VH	H	H	H	H	H	H
Polygon Id	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12

Polygon Id	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24
Fine Fuel Loading <1cm	M	L	L	M	L	L	L	L	L	M	L	L
Fine Fuel Loading 1-3cm	M	M	L	M	L	L	L	L	L	M	L	L
Surface Fuels Continuity	H	L	L	L	Nil	L	L	L	L	L	L	Nil
% Cover	H	M	M	M	H	VH	L	M	M	M	H	M
Total Spread Rate Index	16	10	7	12	12	9	7	7	8	12	8	6
Crown Mass	M	L	M	M	L	M	M	M	M	M	H	M
Crown Fuels	H	M	H	H	M	H	H	M	H	H	H	M
Ladder Fuels	M	M	L	M	M	H	M	H	H	M	L	M
Total Crowning Potential Index	19	13	16	19	13	22	19	21	22	19	21	18
Duff Layer	M	M	M	M	M	M	M	M	M	M	M	H
Fuel Loading	M	M	M	M	L	L	L	L	L	L	L	L
Horizontal Continuity	M	L	L	L	Nil	L	L	L	L	M	L	Nil
Fire Intensity	16	16	13	16	8	8	8	8	8	11	8	9
Slope	L	L	L	M	H	H	M	M	VH	L	M	L
Aspect	E	S	S	N	W	E	S	S	NE	N	E	E
Size Of Continuous Fuel Area	VH	VH	VH	H	H	VH	VH	VH	VH	VH	VH	VH
Fuel Break Modifiers	9	15	15	7	14	11	16	16	11	7	10	9
Wildfire Behavior Ranking	60	54	51	54	47	50	50	52	49	49	47	42
Structure Density	M	M	M	M	M	M	L	L	L	L	L	M
Slope Position	L	VH	VH	L	VH	L	VH	VH	VH	H	VH	H
Structures at Risk Subtotal	11	15	15	11	15	11	10	10	10	8	10	13
Fuel Break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	10-20m	no fuel break	no fuel break	20-30m	10-20m
Fuel Break Value	1	1	1	1	1	1	1	0.8	1	1	0.6	0.8
Structures at Risk total	11	15	15	11	15	11	10	8	10	8	6	10.4
Fuel Hazard Ranking	71	69	66	65	62	61	60	60	59	57	53	52.4
Fuel Hazard	H	M	M	M	M	M	M	M	M	M	L	L
Polygon Id	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24

9.0 Appendix B: Fuel Management Strategy for Electoral Area B

9.1 Overview

Electoral area B has been divided into seven fuel management areas.

FMA # B1: Bridge River

FMA # B2: Fraser North

FMA # B3: Pavilion Lake

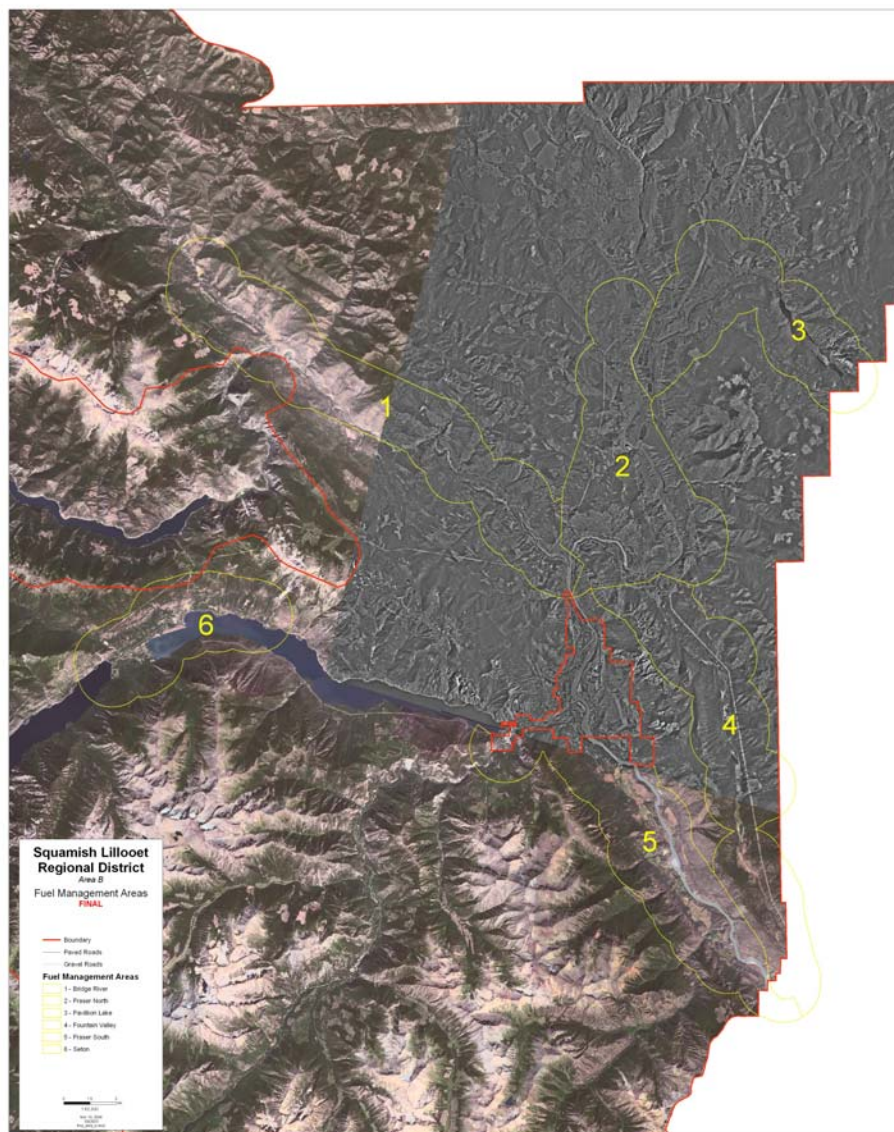
FMA # B4: Fountain Valley

FMA # B5: Texas Creek

FMA # B6: Seton

FMA # B7: Resource Management Area

The boundaries for these FMAs are shown below.



9.2 FMA # B1: Bridge River FMA

Boundaries

The interface area extends along the Yalakom/Bridge River corridor (within 2 km of structures or to the height of land) to the confluence of Bridge River with the Fraser River. The general boundaries are shown in the figure below.



Description

This FMA contains the 2 km interface zone around structures along the Yalakom River and Bridge River course. The area contains a BCTC transmission corridor at its eastern end. This FMA has only one route in and out of the valley, which could be an issue in the event of an emergency. Interface areas are generally scattered individual structures, or small groups of structures. Higher density interface areas predominantly consist of First Nation Reserves. It was noted there were few, or no, addresses visible from the road.

Community members encountered during field work were enthusiastic with regards to conducting fuel treatments in the corridor. The valley would be a suitable location for both a fuel management pilot project and an operational fuel management project.

Key Issues of Concern

- Potential evacuation issues associated with a single egress route

- Lack of information on addresses can hamper suppression response time
- Potential for smoke to settle in the valley during a wildfire
- Consistent fuel source within interface area
- Continuous fuel hazard adjacent to homes

Values at Risk

- Structures
- Utilities (transmission lines)
- Transportation corridor

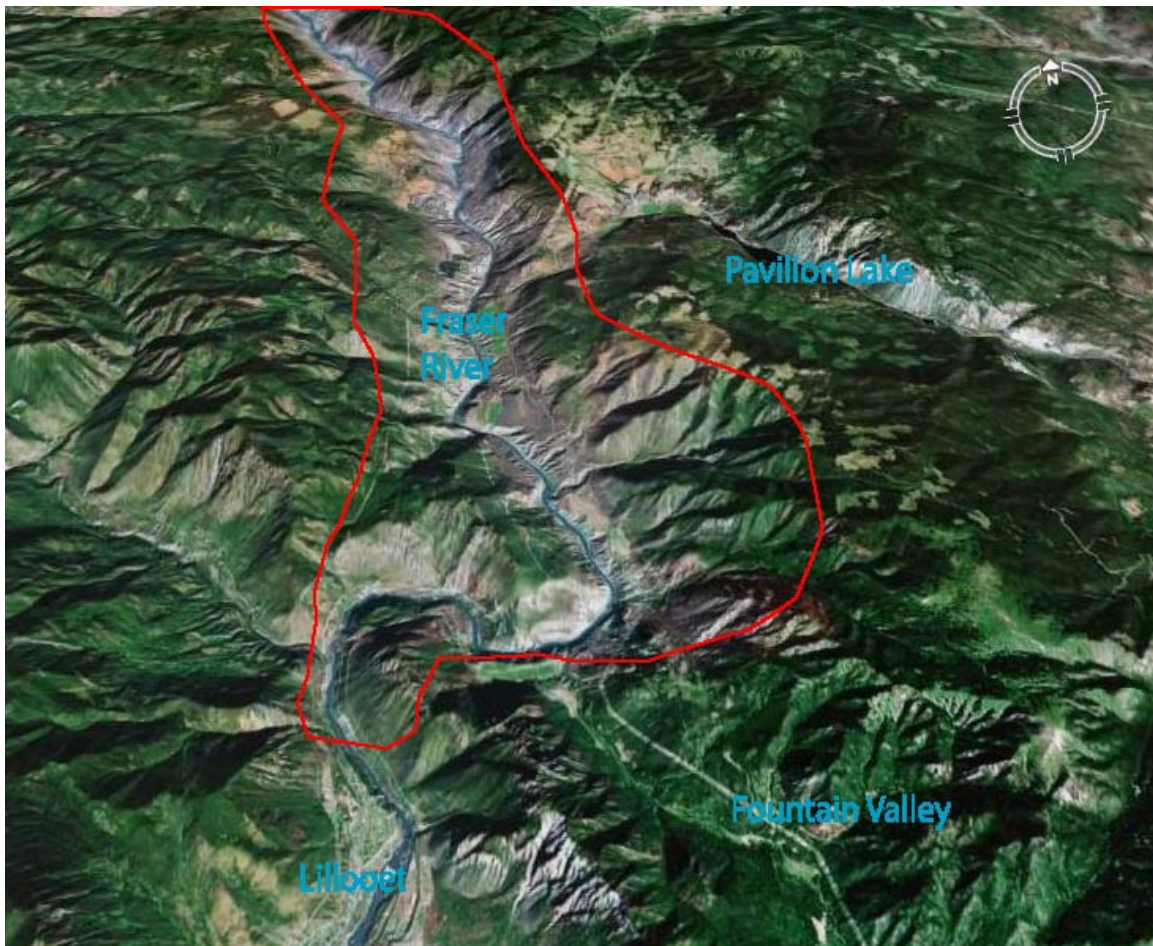
Recommendations for FMA # B1: Bridge River

- Develop a strategic landscape level fuel break within the valley in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks
- Consult with BCTC on developing fuel breaks in conjunction with their utilities and right-of-way (ROW) corridor where applicable
- Provide addresses at driveways or mileage markers along the road to assist suppression crews
- Establish marshalling points along the eastern side of the river in the event a wildfire or the associated smoke compromises the transportation corridor
- Pursue a fuel management pilot project for the valley

9.3 FMA # B2: Fraser North FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) along the Fraser River from the northern boundary of the District of Lillooet to where the Fraser River crosses the northern boundary of the SLRD. The general boundaries are shown in the figure below.



Description

The structures within this FMA are generally scattered farm-oriented structures. However, there are also First Nations structures, and individual structures along the river. There are First Nation Cultural Heritage values along the river banks. Numerous past fires are visible on the landscape throughout this FMA. Only one road exists on the west side of the Fraser, which poses a possible evacuation issue in the event of a wildfire. The presence of large, cultivated fields provides some protection for the homes along this road, as well as potential marshalling points for evacuation. The transportation corridor along the eastern side of the river is a major highway that leads to other communities that could assist evacuees in the event of a wildfire.

Key Issues of Concern

- High potential for human ignition
- Potential evacuation issues along the western side of the river
- Protection of the transportation corridor on the eastern side of the river

Values at Risk

- Structures
- Utilities (transmission lines)
- Transportation corridor

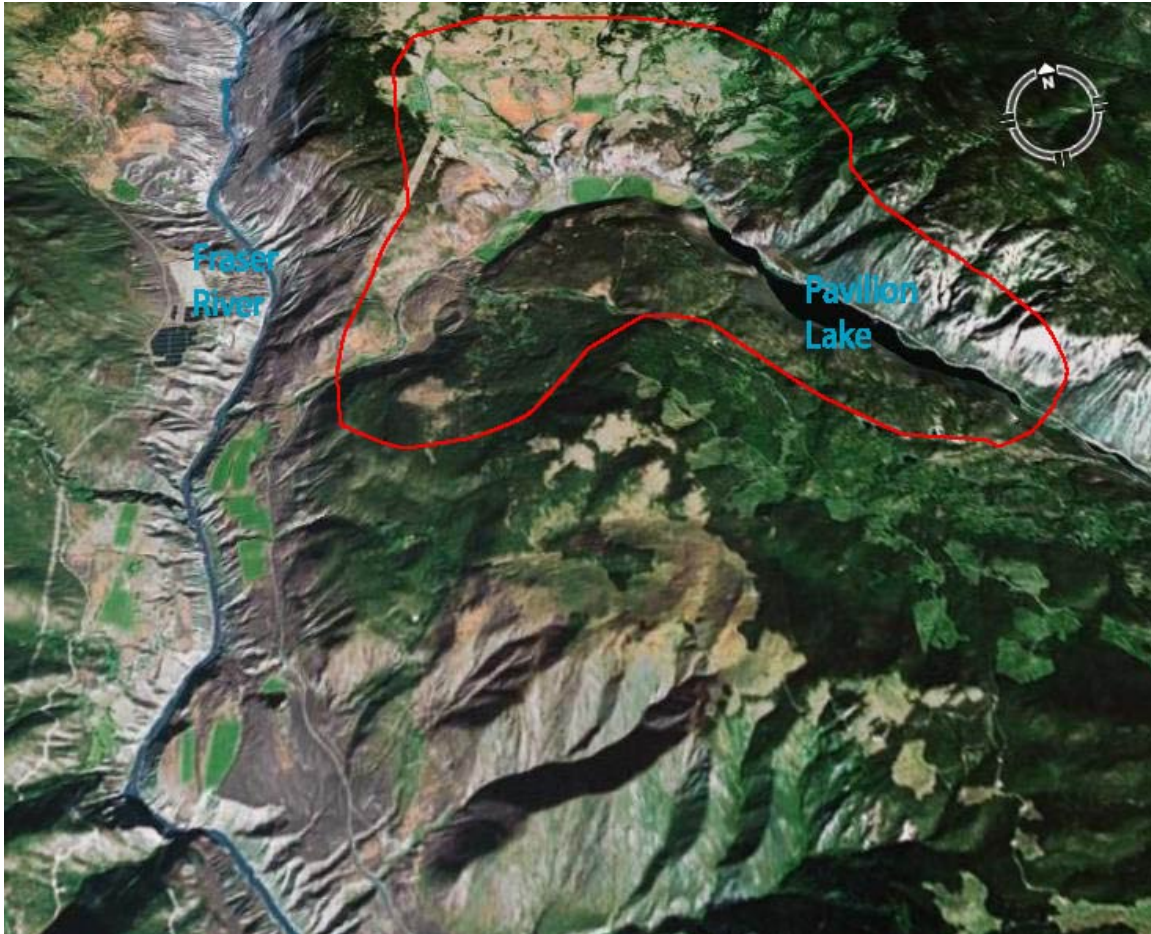
Recommendations for FMA # B2: Fraser North

- Develop a strategic landscape level fuel break around First Nation reserve sites and clustered structures in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks
- Work to protect the major transportation route along the eastern side of the river
- Establish marshalling points along both sides of the river in the event a wildfire compromises the egress route for this area

9.4 FMA # B3: Pavilion Lake FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) within the Pavilion Lake corridor from the eastern SLRD boundary to where the corridor joins the Fraser River. The general boundaries are shown in the figure below.



Description

The structures within this FMA consist of individual to clustered structures, and First Nation structures. The presence of large, cultivated fields to the west of Pavilion Lake provide some protection for the homes along this corridor, as well as potential marshalling points for evacuation. Two cluttered development sites, consisting of summer cottages and year round homes, exist on Pavilion Lake. These are both a value at risk as well as a potential ignition source.

Key Issues of Concern

- High potential for human ignition
- Protection of the transportation corridor
- Potential for smoke to settle in the valley during a wildfire
- Transmission lines at the western end of the Pavilion Lake corridor

Values at Risk

- Structures
- Transportation corridor
- Transmission lines

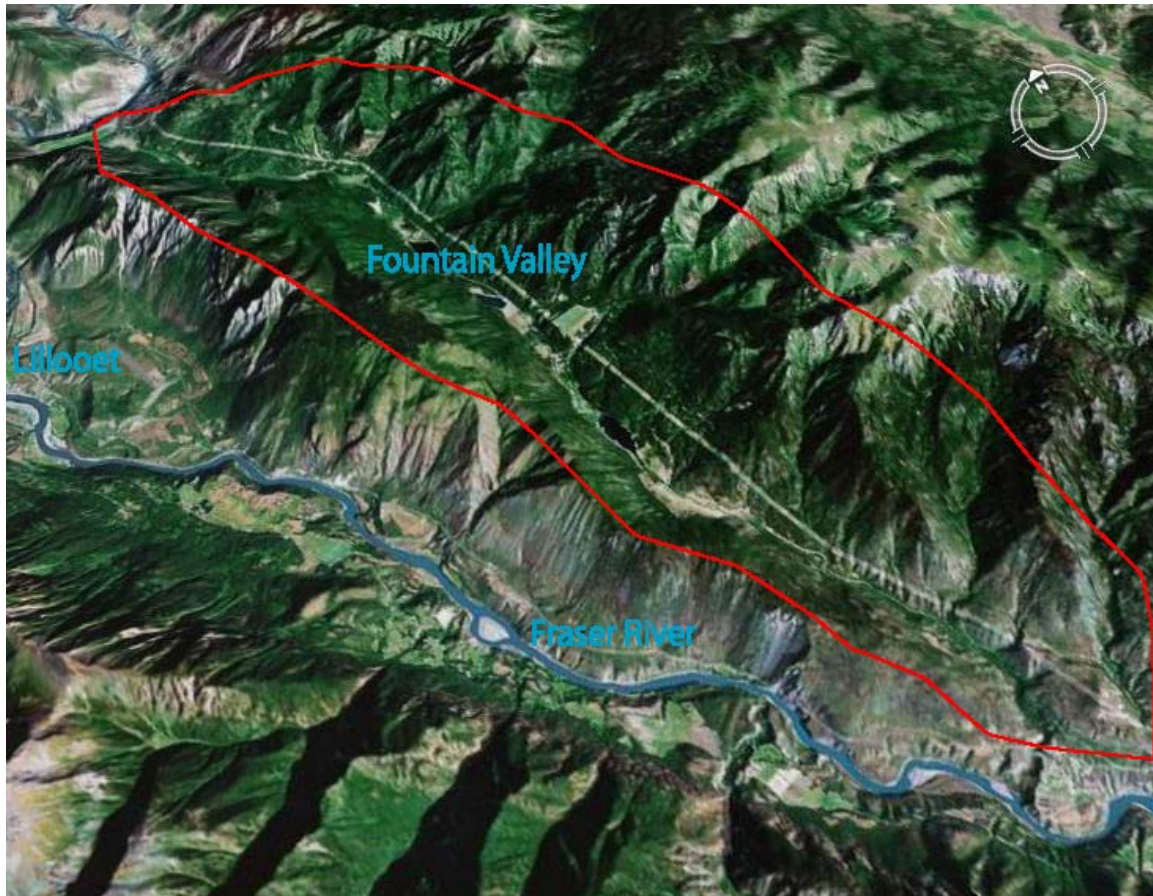
Recommendations for FMA # B3: Pavilion Lake

- Develop a strategic landscape level fuel break around First Nation reserve site(s) and clustered structures in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks
- Establish marshalling points within the valley in the event a wildfire or the associated smoke compromises the transportation corridor
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season
- Work with the MoT to ensure fuels management is conducted along the transportation corridor

9.5 FMA # B4: Fountain Valley FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) within the Fountain Valley from the southern SLRD boundary to Fountain First Nation Reserve at the north end of the valley. The general boundaries are shown in the figure below.



Description

The structures within this FMA consist of individual to clustered structures, and First Nations reserve sites. There are several recreational sites associated with the lakes in the valley and, therefore, there is a high potential for human ignition. The valley is a narrow drainage, with steep slopes, that is oriented with the prevailing north-south winds of the Fraser Canyon. There is a high potential for a fire within the valley to be wind-driven the full extent of the valley. The transmission line corridor may contain a fuel hazard that increases wildfire risk within the valley.

The Fountain Valley is an excellent location for a fuel management pilot project or an operational fuel management project. There is strong public support from First Nations, who have already done some work, and from non First Nation residents who are keen to do some fuels work. There is already a movement within the First Nations to seek funding to undertake fuels management within the valley. The SLRD would be a great

partner for such a project and may want to consider partnering with the First Nations on this project or on a new community tenure.

Key Issues of Concern

- High potential for human ignition
- Potential for a large, wind driven fire to run the full extent of the valley
- Fuel hazard along the transmission line corridor

Values at Risk

- Structures
- Transportation corridor
- Transmission lines
- Recreational properties

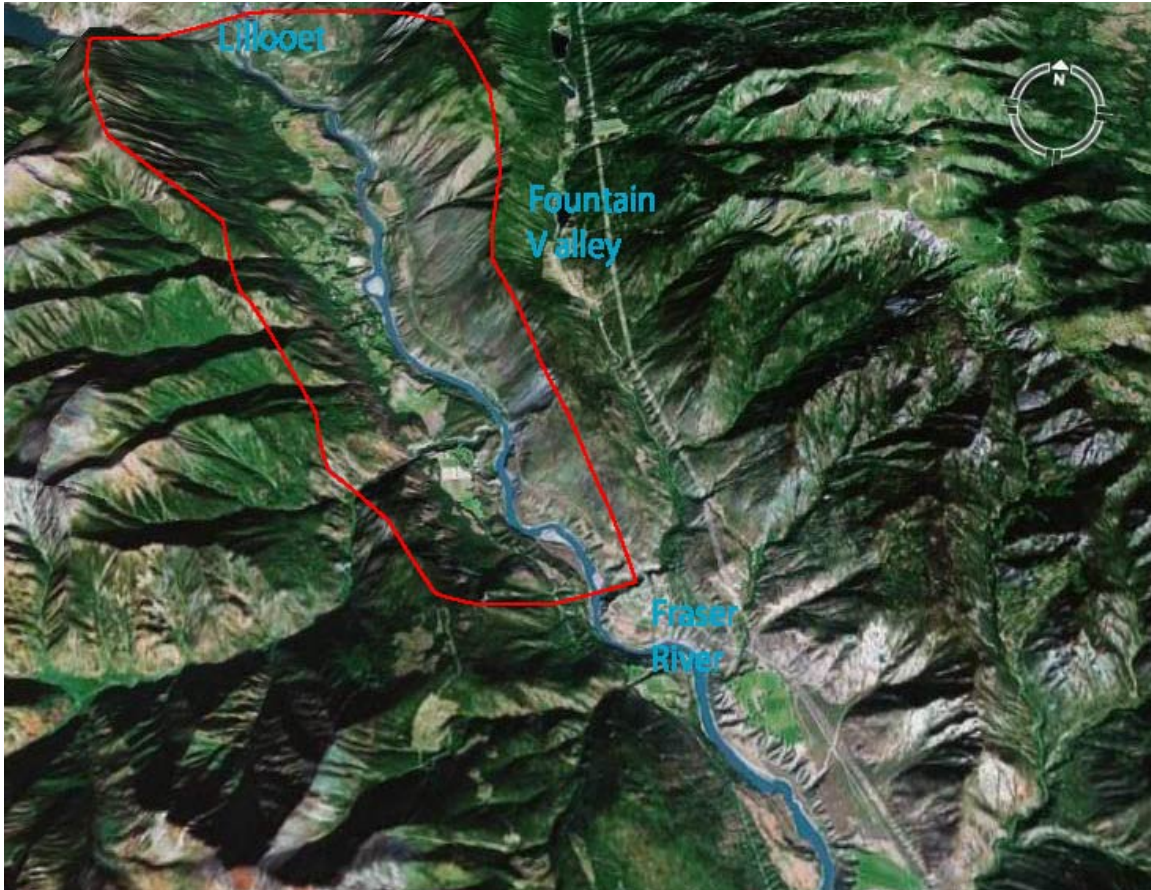
Recommendations for FMA # B4: Fountain Valley

- Develop a strategic landscape level fuel break within the valley, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Consider a community tenure, in partnership with First Nations, for addressing the fuels issue within the valley
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

9.6 FMA # B5: Texas Creek FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) along the Fraser River from the southern boundary of the District of Lillooet to the southern boundary of the SLRD. The general boundaries are shown in the figure below.



Description

The structures within this FMA are generally scattered farm-oriented structures. However, there are also First Nations reserves, and individual structures along the river. Numerous past fires are visible on the landscape to the south of this FMA. Only one road exists on the west side of the Fraser, which poses a possible evacuation issue in the event of a wildfire. The presence of large, cultivated fields provides some protection for the homes along this road, as well as potential marshalling points for evacuation. The transportation corridor along the eastern side of the river is a major highway that leads to Lytton, which could assist evacuees in the event of a wildfire.

Key Issues of Concern

- Potential evacuation issues along the western side of the river
- Protection of the transportation corridor on the eastern side of the river

- History of fire to the south of the FMA

Values at Risk

- Structures
- Utilities (transmission lines)
- Transportation corridor

Recommendations for FMA # B6: Texas Creek

- Develop a strategic landscape level fuel break around First Nation reserves and clustered structures in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Work to protect the major transportation route along the eastern side of the river
- Establish marshalling points along the western and eastern side of the river in the event a wildfire compromises the egress route for these areas

9.7 FMA # B6: Seton FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) around the communities of Shalalth and Seton Portage. The general boundaries are shown in the figure below.



Description

There are two settlements within this FMA: the community of Seton Portage and the Shalalth First Nation reserve. Both are isolated settlements with limited, and potentially poor, access routes in and out of the community. Both communities are adjacent to locations of past wildfires. Seton Portage is the site of a major hydro power generating facility and substation. There are also several transmission corridors in the vicinity that are a value at risk and likely possess a fuel hazard from past slashing activities. There is a consistent fuel hazard in all directions around the communities.

Key Issues of Concern

- Potential evacuation issues in the event of a wildfire
- Protection of the transmission corridors and hydro facilities
- Fuel hazard along the transmission corridors
- History of fire adjacent to the communities
- Consistent fuel hazard around the communities

Values at Risk

- Structures
- Utilities (transmission lines, substation, generating facility)

Recommendations for FMA # B6: Seton

- Develop a strategic landscape level fuel break around the communities, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Establish marshalling points for both communities in the event a wildfire compromises the egress route for these areas

9.8 FMA # B7: Resource Management Area

Boundaries

All areas outside of the Interface FMAs to the extent of the electoral or SLRD boundaries.

Description

There are minor, scattered interface sites. These sites tend to be individual dwellings, or small groups of structures. Most of the area is within the Timber Harvesting Land Base and the opportunity exists to work with First Nations and licensees to abate the fuel hazard on harvest blocks within proximity of interface areas. These harvest blocks could be used to develop landscape level fuel breaks for the communities. Similarly, there would be an opportunity for the SLRD to work with First Nations and communities on community tenure to reduce the interface wildfire risk.

Key Issues of Concern

- Response time for suppression services
- Fuel hazard along transmission corridors adjacent to the interface
- Harvesting in proximity to these structures without slash abatement (pile and burning, prescribed burning, etc)
- High potential for human ignition
- Potential evacuation issues
- Future development within wildland area

Values at Risk

- Structures
- Utilities (transmission lines, generating station, and dam)
- Recreational properties
- Transportation corridor

Recommendations for FMA # B7: Resource Management Area

- Treat interface areas where they exist
- Work with licensees and BCTC to develop a strategic landscape level fuel break utilizing natural fuel breaks and potential harvest blocks that serve to protect communities, transportation corridors and utilities
- Ensure all future developments address the fuel hazard and follow FireSmart guidelines

9.9 Prioritized Interface Hazard Polygons

The following table outlines the prioritization of interface polygons for treatment. These polygon ID labels correspond with the Interface Polygon Maps for each electoral area.

The gradient of colours from red to green in the Fuel Hazard row corresponds to the relative hazard ranking of the polygons. Treatments should begin with the highest rated polygons.

Polygon Id	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
Fine Fuel Loading <1cm	M	H	M	M	H	M	M	M	L	M	M	L	M
Fine Fuel Loading 1-3cm	M	H	M	M	M	M	L	M	M	M	L	L	M
Surface Fuels Continuity	M	H	M	M	M	M	M	M	M	H	H	M	M
% Cover	VH	Nil	VH	H	Nil	L	VH	L	M	H	VH	H	VH
Total Spread Rate Index	16	16	16	15	12	12	13	12	12	16	14	10	16
Crown Mass	VH	VH	VH	M	H	VH	VH	M	M	H	H	H	VH
Crown Fuels	M	H	M	H	H	M	VH	H	VH	H	VH	VH	VH
Ladder Fuels	VH	M	VH	M	M	VH	H	L	VH	M	M	8	VH
Total Crowning Potential Index	30	29	30	19	24	30	33	16	25	24	25	28	35
Duff Layer	M	M	M	M	M	M	M	M	M	M	M	M	M
Fuel Loading	L	M	M	L	L	M	L	L	M	L	L	L	L
Horizontal Continuity	M	H	M	M	M	M	L	M	M	H	M	M	L
Fire Intensity	11	19	16	11	11	16	8	11	16	11	8	8	11
Slope	H	L	M	M	M	Nil	M	L	M	L	L	L	L
Aspect	SW	N	SE	SW	S	S	S	SE	W	W	SW	W	E
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	H	VH
Fuel Break Modifiers	16	7	13	15	16	14	16	13	14	13	14	12	9
Wildfire Behavior Ranking	73	71	75	60	63	72	70	52	67	64	61	58	71
Structure Density	M	M	M	VH	VH	L	L	M	L	M	M	H	L
Slope Position	VH	VH	L	H	VH	H	VH	VH	VH	H	VH	H	H
Structures at Risk Subtotal	15	15	11	23	25	8	10	15	10	13	15	18	8
Fuel Break	no fuel break	no fuel break	no fuel break	no fuel break	10-20m	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	20-30m
Fuel Break Value	1	1	1	1	0.8	1	1	1.8	1	1	1	1	0.6
Structures at Risk Total	15	15	11	23	20	8	10	27	10	13	15	18	4.8
Fuel Hazard Ranking	88	86	86	83	83	80	80	79	77	77	76	76	75.8
Fuel Hazard	VH	VH	VH	H	H	H	H	H	H	H	H	H	H
Polygon Id	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13

Polygon Id	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	B24	B25
Fine Fuel Loading <1cm	M	M	M	M	H	M	M	M	L	H	L	M
Fine Fuel Loading 1-3cm	L	M	M	L	H	L	M	M	M	H	L	M
Surface Fuels Continuity	H	M	M	H	H	H	M	M	M	Nil	H	M
% Cover	H	M	M	H	L	L	H	M	VH	H	VH	H
Total Spread Rate Index	13	14	14	13	17	10	15	14	14	20	12	15
Crown Mass	H	H	H	H	H	H	H	H	VH	M	M	VH
Crown Fuels	H	VH	H	VH	H	VH	VH	H	M	H	H	VH
Ladder Fuels	M	M	M	M	M	VH	L	M	L	H	M	M
Total Crowning Potential Index	24	25	24	25	24	30	22	24	22	22	19	30
Duff Layer	M	M	M	M	M	M	M	M	M	M	M	M
Fuel Loading	L	L	M	L	M	L	L	M	L	M	L	L
Horizontal Continuity	M	L	M	H	M	H	M	M	L	M	M	M
Fire Intensity	8	11	16	8	19	8	11	16	11	19	8	11
Slope	L	VH	M	L	L	VH	H	M	M	L	H	M
Aspect	SW	E	E	S	SE	E	SW	NE	S	NE	SW	N
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH
Fuel Break Modifiers	14	12	10	15	12	12	16	9	16	8	16	8
Wildfire Behavior Ranking	59	62	64	61	72	60	64	63	63	69	55	64
Structure Density	H	M	M	M	L	M	L	L	L	M	M	L
Slope Position	VH	H	H	H	H	VH	VH	H	VH	L	VH	L
Structures at Risk Subtotal	20	13	13	13	8	15	10	8	10	11	15	6
Fuel Break	10-20m	no fuel break	10-20m	no fuel break	40-50m	10-20m	10-20m	no fuel break	10-20m	10-20m	no fuel break	no fuel break
Fuel Break Value	0.8	1	0.8	1	0.2	0.8	0.8	1	0.8	0.1	1	1
Structures at Risk Total	16	13	10.4	13	1.6	12	8	8	8	1.1	15	6
Fuel Hazard Ranking	75	75	74.4	74	73.6	72	72	71	71	70.1	70	70
Fuel Hazard	H	H	H	H	H	H	H	H	H	H	H	H
Polygon Id	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	B24	B25

Polygon Id	B26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36	B37	B38	B39
Fine Fuel Loading <1cm	L	L	M	M	L	H	M	M	L	M	L	L	L	M
Fine Fuel Loading 1-3cm	L	L	M	L	M	M	L	L	L	M	L	L	L	M
Surface Fuels Continuity	L	M	M	H	L	H	H	H	M	L	M	L	L	M
% Cover	H	H	H	VH	H	M	M	M	VH	H	VH	H	M	Nil
Total Spread Rate Index	8	10	15	14	11	16	12	12	11	13	11	8	7	11
Crown Mass	L	H	H	VH	M	H	M	H	H	M	M	M	M	H
Crown Fuels	H	VH	VH	VH	M	H	M	VH	VH	M	VH	H	H	VH
Ladder Fuels	H	H	H	M	M	L	L	M	H	H	VL	H	H	M
Total Crowning Potential Index	17	28	28	30	18	21	15	25	28	21	15	22	22	25
Duff Layer	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Fuel Loading	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Horizontal Continuity	L	L	M	H	M	L	L	H	L	L	L	L	L	H
Fire Intensity	8	8	11	8	11	11	8	8	8	11	8	8	8	11
Slope	H	VH	L	L	VH	M	VH	Nil	L	L	Nil	H	M	H
Aspect	W	SW	N	W	E	SE	S	FLAT	S	W	S	NW	SE	N
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	H	VH	VH	VH	VH	H	VH	L
Fuel Break Modifiers	15	17	7	13	12	13	17	9	15	13	14	12	13	6
Wildfire Behavior Ranking	48	63	61	65	52	61	52	54	62	58	48	50	50	53
Structure Density	H	5	L	L	M	L	M	M	L	L	H	M	M	M
Slope Position	VH	L	H	H	VH	VH	VH	H	H	VH	H	VH	VH	VH
Structures at Risk Subtotal	20	6	8	8	15	10	15	13	8	10	18	15	15	15
Fuel Break	no fuel break	10-20m	10-20m	30-40m	no fuel break	20-30m	no fuel break	no fuel break	20-30m	10-20m	no fuel break	no fuel break	no fuel break	10-20m
Fuel Break Value	1	0.8	0.8	0.3	1	0.6	1	1	0.6	0.8	1	1	1	0.8
Structures at Risk Total	20	4.8	6.4	2.4	15	6	15	13	4.8	8	18	15	15	12
Fuel Hazard Ranking	68	67.8	67.4	67.4	67	67	67	67	66.8	66	66	65	65	65
Fuel Hazard	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Polygon Id	B26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36	B37	B38	B39

Polygon Id	B40	B41	B42	B43	B44	B45	B46	B47	B48	B49	B50	B51	B52
Fine Fuel Loading <1cm	L	L	M	M	L	M	L	M	L	L	M	L	M
Fine Fuel Loading 1-3cm	L	L	M	M	L	L	M	L	L	L	M	L	L
Surface Fuels Continuity	L	M	L	H	M	H	M	H	L	L	M	H	H
% Cover	L	M	L	M	M	VH	L	VH	VH	M	L	VH	M
Total Spread Rate Index	5	9	10	15	9	14	10	14	9	7	12	12	12
Crown Mass	M	M	M	H	H	L	M	H	M	M	M	M	M
Crown Fuels	H	M	M	H	VH	M	H	H	M	H	H	VH	H
Ladder Fuels	M	M	M	L	M	H	L	H	H	VH	H	H	M
Total Crowning Potential Index	19	18	18	21	25	16	16	27	21	24	22	23	19
Duff Layer	M	M	L	M	H	M	L	M	M	M	M	M	L
Fuel Loading	L	L	L	L	M	L	L	L	L	L	L	L	L
Horizontal Continuity	L	M	L	M	M	L	M	M	Nil	L	M	L	H
Fire Intensity	8	8	9	11	14	8	9	8	8	8	11	8	6
Slope	Nil	H	L	L	Nil	M	M	L	M	VH	VH	L	H
Aspect	SW	W	S	N	E	E	S	SW	W	NE	NE	SE	SE
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	VH	H	VH	VH	VH	H	VH
Fuel Break Modifiers	13	15	15	7	8	10	16	12	14	11	11	11	14
Wildfire Behavior Ranking	45	50	52	54	56	48	51	61	52	50	56	54	51
Structure Density	H	M	VH	M	L	H	M	H	L	M	L	L	M
Slope Position	VH	VH	L	H	H	L	VH	L	VH	VH	VH	H	H
Structures at Risk Subtotal	20	15	21	13	8	16	15	16	10	15	10	8	13
Fuel Break	no fuel break	no fuel break	20-30m	10-20m	no fuel break	no fuel break	10-20m	>50	no fuel break	10-20m	20-30m	no fuel break	10-20m
Fuel Break Value	1	1	0.6	0.8	1	1	0.8	.1	1	0.8	0.6	1	0.8
Structures at Risk Total	20	15	12.6	10.4	8	16	12	1.6	10	12	6	8	10.4
Fuel Hazard Ranking	65	65	64.6	64.4	64	64	63	62.6	62	62	62	62	61.4
Fuel Hazard	M	M	M	M	M	M	M	M	M	M	M	M	M
Polygon Id	B40	B41	B42	B43	B44	B45	B46	B47	B48	B49	B50	B51	B52

Polygon Id	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B63	B64
Fine Fuel Loading <1cm	L	M	L	L	M	L	L	L	L	M	L	M
Fine Fuel Loading 1-3cm	L	M	M	L	M	L	L	L	L	L	L	M
Surface Fuels Continuity	L	M	M	Nil	H	H	H	H	L	L	M	L
% Cover	VH	M	L	VH	Nil	H	VH	VH	M	M	M	VH
Total Spread Rate Index	9	14	10	8	16	11	12	12	7	9	9	14
Crown Mass	M	M	M	M	M	M	M	M	M	M	H	M
Crown Fuels	H	H	VH	M	M	M	H	M	H	H	VH	H
Ladder Fuels	M	VL	M	M	H	M	M	M	M	M	M	H
Total Crowning Potential Index	19	14	20	18	21	18	19	18	19	19	25	22
Duff Layer	M	M	M	M	M	M	M	M	M	M	M	M
Fuel Loading	L	Nil	L	L	L	L	L	L	L	L	L	L
Horizontal Continuity	L	M	H	L	M	M	M	M	L	L	M	L
Fire Intensity	8	8	11	8	11	8	8	8	8	8	8	11
Slope	H	L	Nil	VH	L	Nil	Nil	L	H	M	M	M
Aspect	N	SW	FLAT	SW	E	SW	SE	SE	SE	SE	SW	N
Size Of Continuous Fuel Area	VH	H	Nil	VH	VH	VH	VH	VH	VH	H	VH	H
Fuel Break Modifiers	9	13	5	17	9	13	11	12	14	12	15	7
Wildfire Behavior Ranking	45	49	46	51	57	50	50	50	48	48	57	54
Structure Density	M	M	M	L	L	L	L	L	L	L	L	M
Slope Position	VH	H	H	H	L	H	H	H	VH	VH	L	L
Structures at Risk Subtotal	15	13	13	8	6	8	8	8	10	10	6	11
Fuel Break	no fuel break	10-20m	no fuel break	no fuel break	30-40	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	>50	30-40m
Fuel Break Value	1	0.8	1	1	0.3	1	1	1	1	1	0.1	0.3
Structures at Risk Total	15	10.4	13	8	1.8	8	8	8	10	10	0.6	3.3
Fuel Hazard Ranking	60	59.4	59	59	58.8	58	58	58	58	58	57.6	57.3
Fuel Hazard	M	M	M	M	M	M	M	M	M	M	M	M
Polygon Id	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B63	B64

Polygon Id	B65	B66	B67	B68	B69	B70	B71	B72	B73	B74	B75	B76
Fine Fuel Loading <1cm	L	L	M	L	L	L	L	L	M	L	L	L
Fine Fuel Loading 1-3cm	L	L	L	M	L	L	L	L	L	L	L	L
Surface Fuels Continuity	L	Nil	M	H	M	L	L	L	L	L	H	M
% Cover	H	Nil	M	L	VH	VH	H	VH	H	L	H	M
Total Spread Rate Index	8	3	11	11	11	9	8	9	10	5	11	9
Crown Mass	L	M	M	M	H	M	M	L	M	L	M	M
Crown Fuels	M	H	H	VH	H	H	H	M	M	M	H	H
Ladder Fuels	H	H	M	L	H	H	M	H	H	M	M	M
Total Crowning Potential Index	16	22	19	17	27	22	19	16	21	13	19	19
Duff Layer	M	M	M	H	M	M	M	M	M	M	H	H
Fuel Loading	L	L	L	L	L	L	L	L	L	L	L	L
Horizontal Continuity	L	L	M	M	L	L	L	L	L	L	M	M
Fire Intensity	8	8	8	12	8	8	8	8	8	8	9	9
Slope	H	M	M	Nil	L	M	L	M	VH	M	Nil	Nil
Aspect	W	SW	E	FLAT	E	NE	E	W	N	S	NE	E
Size Of Continuous Fuel Area	VH	VH	VH	L	H	VH	VH	VH	VH	VH	VH	VH
Fuel Break Modifiers	15	15	10	6	8	9	9	14	10	16	7	8
Wildfire Behavior Ranking	47	48	48	46	54	48	44	47	49	42	46	45
Structure Density	L	M	M	M	L	L	M	M	L	M	L	L
Slope Position	VH	L	L	H	H	H	VH	L	L	VH	H	H
Structures at Risk Subtotal	10	11	11	13	8	8	15	11	6	15	8	8
Fuel Break	no fuel break	10-20m	10-20m	10-20m	30-40m	no fuel break	10-20m	10-20m	no fuel break	10-20m	no fuel break	no fuel break
Fuel Break Value	1	0.8	0.8	0.8	.3	1	0.8	0.8	1	0.8	1	1
Structures at Risk Total	10	8.8	8.8	10.4	24	8	12	8.8	6	12	8	8
Fuel Hazard Ranking	57	56.8	56.8	56.4	56.4	56	56	55.8	55	54	54	53
Fuel Hazard	M	M	M	M	M	M	M	M	M	L	L	L
Polygon Id	B65	B66	B67	B68	B69	B70	B71	B72	B73	B74	B75	B76

Polygon Id	B77	B78	B79	B80	B81	B82	B83	B84	B85	B86	B87	B88	B89
Fine Fuel Loading <1cm	M	L	L	L	L	L	M	L	L	L	L	L	L
Fine Fuel Loading 1-3cm	L	L	L	L	L	L	L	L	L	L	L	L	L
Surface Fuels Continuity	L	L	L	M	L	L	L	L	L	L	L	L	L
% Cover	M	VH	H	VH	H	VH	H	H	H	L	M	H	VH
Total Spread Rate Index	9	9	8	11	8	9	10	8	8	5	7	8	9
Crown Mass	M	L	M	L	VL	L	M	M	L	M	L	M	L
Crown Fuels	M	H	H	H	L	M	M	H	L	VH	H	H	H
Ladder Fuels	VL	M	H	L	L	M	M	L	L	L	L	L	L
Total Crowning Potential Index	13	14	22	11	3	13	18	16	8	17	11	16	11
Duff Layer	L	M	M	M	M	M	M	M	L	M	M	M	M
Fuel Loading	L	L	L	L	L	L	L	L	L	L	L	L	L
Horizontal Continuity	L	L	L	M	Nil	L	L	L	Nil	L	L	L	Nil
Fire Intensity	6	8	8	8	8	8	8	8	6	8	8	8	8
Slope	L	M	L	L	M	M	M	L	H	Nil	H	L	M
Aspect	W	SW	E	S	S	N	NE	E	S	SE	W	SE	SE
Size Of Continuous Fuel Area	H	VH	H	H	VH	VH	VH	VH	VH	VH	VH	H	VH
Fuel Break Modifiers	12	15	8	14	16	8	9	9	17	11	15	11	13
Wildfire Behavior Ranking	40	46	46	44	35	38	45	41	39	41	41	43	41
Structure Density	M	L	L	L	H	M	L	L	M	M	M	L	L
Slope Position	VH	L	L	H	VH	H	VH	VH	L	VH	L	H	H
Structures at Risk Subtotal	15	6	6	8	20	13	10	10	11	15	11	8	8
Fuel Break	10-20m	no fuel break	no fuel breakK	no fuel breakK	10-20m	no fuel break	20-30m	no fuel break	no fuel break	20-30m	10-20m	10-20m	no fuel break
Fuel Break Value	0.8	1	1	1	0.8	1	0.6	1	1	0.6	0.8	0.8	1
Structures at Risk Total	12	6	6	8	16	13	6	10	11	9	8.8	6.4	8
Fuel Hazard Ranking	52	52	52	52	51	51	51	51	50	50	49.8	49.4	49
Fuel Hazard	L	L	L	L	L	L	L	L	L	L	L	L	L
Polygon Id	B77	B78	B79	B80	B81	B82	B83	B84	B85	B86	B87	B88	B89

Polygon Id	B90	B91	B92	B93	B94	B95	B96	B97	B98	B99	B100
Fine Fuel Loading <1cm	L	L	L	L	L	L	L	L	L	L	L
Fine Fuel Loading 1-3cm	L	L	L	L	L	L	L	Nil	L	L	L
Surface Fuels Continuity	M	L	L	L	L	L	L	Nil	L	Nil	Nil
% Cover	M	L	VH	M	VH	VH	M	VH	VH	L	L
Total Spread Rate Index	9	5	9	7	9	9	7	6	9	4	4
Crown Mass	M	M	M	M	L	L	M	M	L	VL	L
Crown Fuels	M	H	M	H	VH	L	H	H	M	L	L
Ladder Fuels	M	M	M	L	M	L	L	L	VL	L	L
Total Crowning Potential Index	18	19	18	16	15	8	16	16	8	3	8
Duff Layer	M	M	M	M	M	M	M	M	M	M	M
Fuel Loading	L	L	L	L	L	L	L	Nil	L	Nil	L
Horizontal Continuity	M	Nil	M	L	L	Nil	L	Nil	L	Nil	Nil
Fire Intensity	8	8	8	8	8	8	8	3	8	5	8
Slope	L	L	L	M	M	L	L	L	L	H	Nil
Aspect	NE	NE	NE	W	NE	W	NE	SE	SE	SE	N
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	H	H	H	H	VH
Fuel Break Modifiers	9	8	8	14	9	13	7	11	11	13	6
Wildfire Behavior Ranking	44	40	43	45	41	38	38	36	36	25	26
Structure Density	L	L	L	L	L	L	L	L	L	H	L
Slope Position	H	H	H	H	H	H	H	VH	H	VH	H
Structures at Risk Subtotal	8	8	8	8	8	8	8	10	8	20	8
Fuel Break	20-30m	no fuel break	20-30m	30-40m	10-20m	no fuel break	10-20m	10-20m	no fuel break	10-20m	no fuel break
Fuel Break Value	0.6	1	0.6	0.3	0.8	1	0.8	0.8	1	0.8	1
Structures at Risk Total	4.8	8	4.8	2.4	6.4	8	6.4	8	8	16	8
Fuel Hazard Ranking	48.8	48	47.8	47.4	47.4	46	44.4	44	44	41	34
Fuel Hazard	L	L	L	L	L	L	L	L	L	L	L
Polygon Id	B90	B91	B92	B93	B94	B95	B96	B97	B98	B99	B100

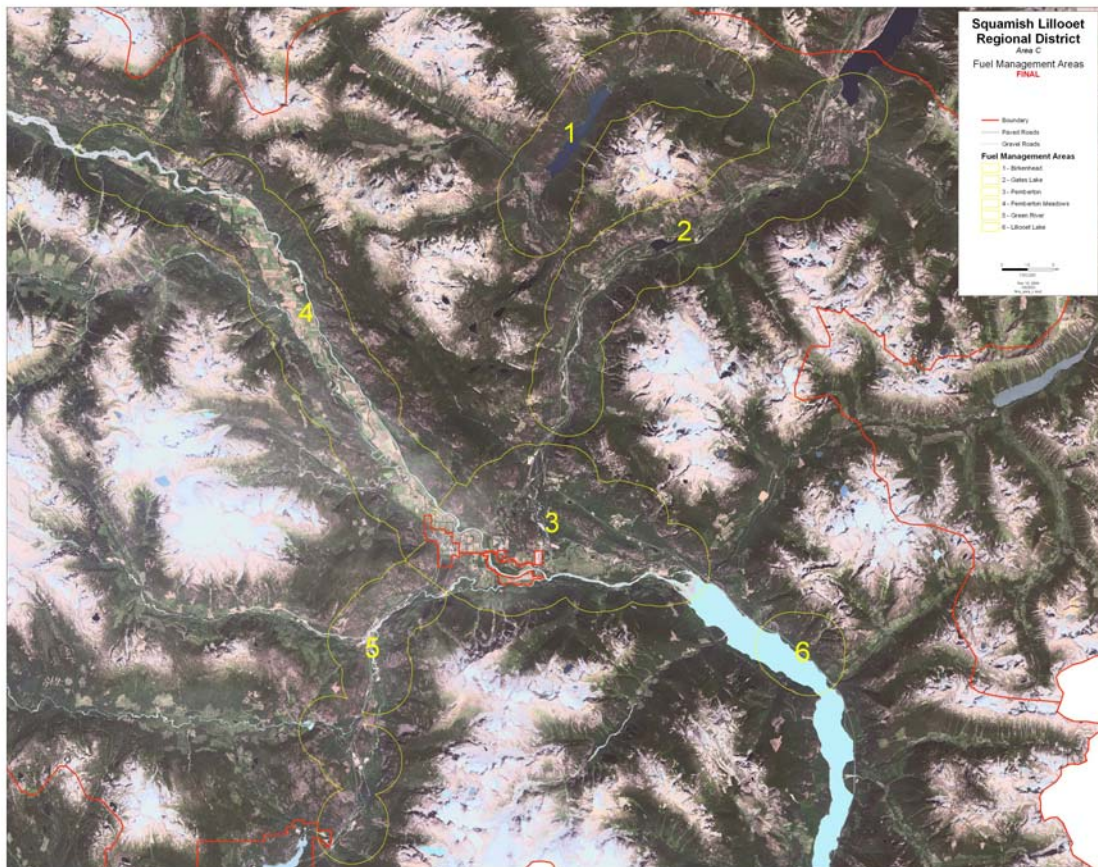
10.0 Appendix C: Fuel Management Strategy for Electoral Area C

10.1 Overview

Electoral area C has been divided into seven fuel management areas.

- FMA #C1: Birkenhead Lake
- FMA #C2: Mt. Currie – D’arcy Corridor
- FMA #C3: Pemberton Valley
- FMA #C4: Pemberton Meadows
- FMA #C5: Green River
- FMA #C6: Lillooet Lake Estates
- FMA #C7: Resource Management Area

The boundaries for these FMAs are shown below.



10.2 FMA # C1: Birkenhead Lake FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) within the Blackwater Creek Valley, the Birkenhead Lake area and along the Birken River from Birkenhead Lake Estates to the Pemberton-Portage Road. The general boundaries are shown in the figure below.

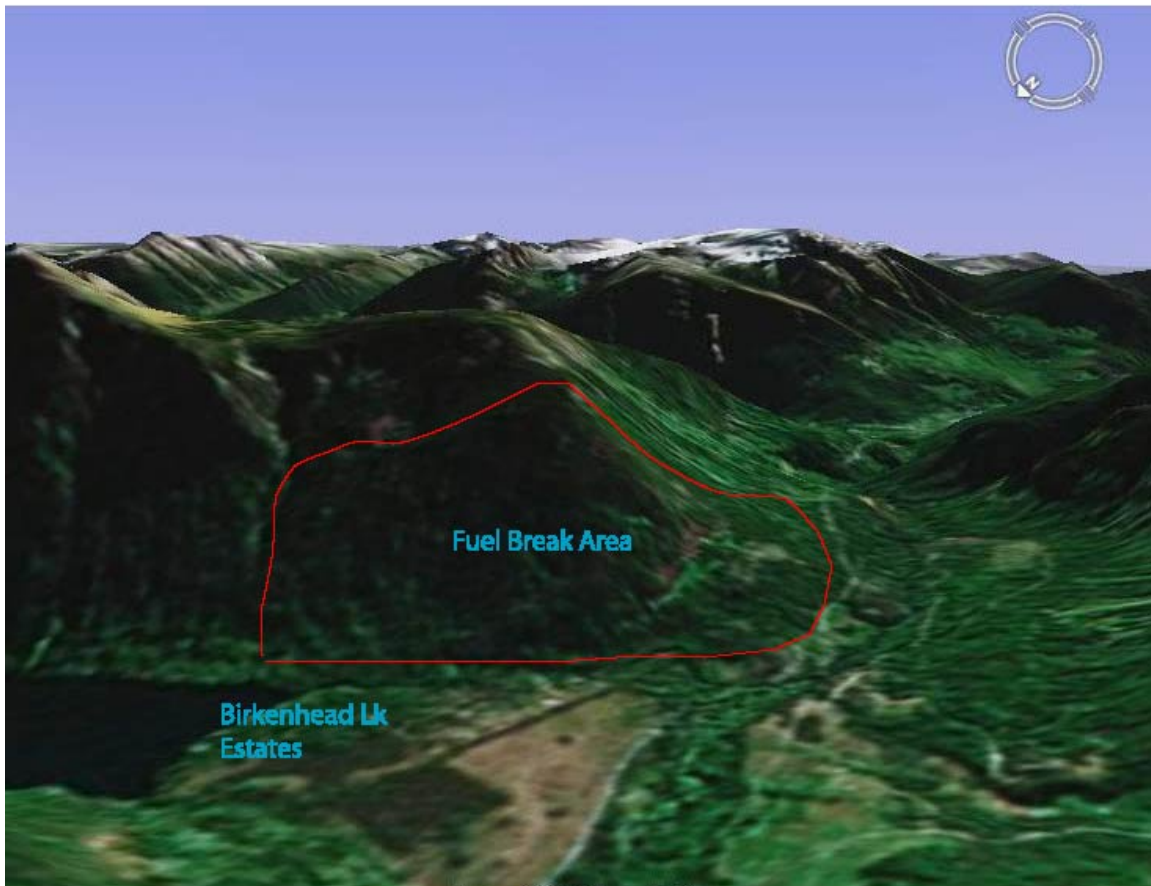


Description

The structures within this FMA consist of both individual scattered structures and the Birkenhead Lake Estates recreational properties. Birkenhead Lake Estates is mostly a summer recreational community. It has a high potential for human ignition. The Estates are located at the south end of Birkenhead Lake and have heavy, continuous forest fuels directly to the south. There is a high potential for a fire south of the Estates to be wind-driven into the community. Similarly, the Blackwater Valley structures are surrounded by continuous heavy fuels.

Some fuel treatment has occurred adjacent to the Estates. Developing a landscape-level fuel break south of Birkenhead Lake Estates, in conjunction with BC Timber Sales, would be a feasible pilot project and a logical next step. It may also serve as an opportunity for the SLRD

to partner with BCTS for a community forestry tenure. Rough boundaries for such a pilot project are outlined in the picture below.



Key Issues of Concern

- High potential for human ignition
- Potential for a large, wind driven fire to move through the communities
- Adjacent harvesting with fuels abatement
- Old harvest block adjacent to the community regenerating to dense pine
- Past effects of beetle on pine with the adjacent park

Values at Risk

- Structures
- Recreational properties

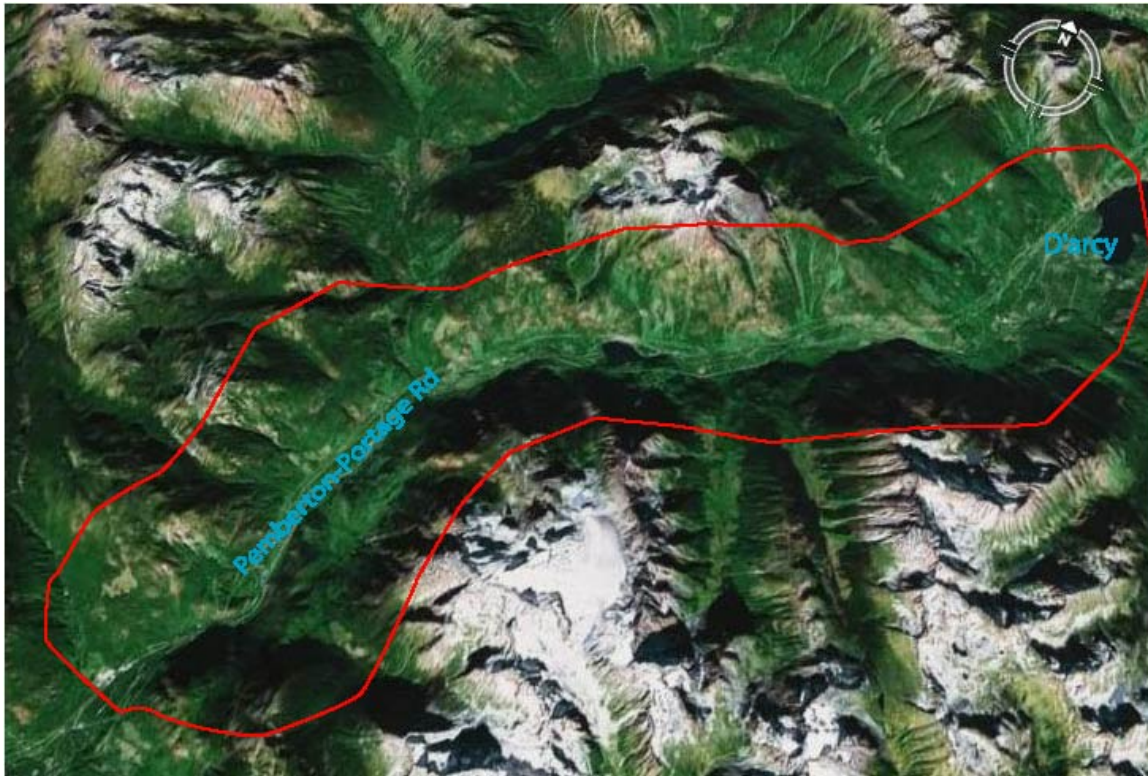
Recommendations for FMA #C1: Birkenhead Lake

- Develop a strategic landscape level fuel break within the Blackwater Creek Valley, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Work with BC Parks (MoE) and BCTS to develop a fuel break south of Birkenhead Lake Estates (in combination with fuel treatments and park fuel hazard reduction projects)
- Work with BC Parks to address the fuel hazard within the park resulting from mountain pine beetle
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season
- All harvest blocks within the interface area of Birkenhead Lake Estates (2km) should consider interface protection as an objective
- Work with the residents of Birkenhead Lake estates to undertake fuel management work within their community

10.3 FMA # C2: Mt. Currie – D’arcy Corridor FMA

Boundaries

The interface area (within 2 km of structures or to the height of land) along the Pemberton-Portage Road from Owl Ridge to D’arcy. The general boundaries are shown in the figure below.



Description

The structures within this FMA consist of individual structures, small communities (Birken, D’arcy, Devine), and a First Nations reserve. There are several recreational sites associated with the lakes in the valley and, therefore, there is a high potential for human ignition. The valley is a narrow drainage, with steep slopes, with prevailing north-south winds. There is a high potential for a fire to be wind-driven through the valley. The transmission line corridor may contain a fuel hazard that increases wildfire risk within the valley. Additionally, some of these power lines may provide a fuel break. Similarly, the presence of valley bottom farm fields provide for some fuel breaks within the valley.

Key Issues of Concern

- High potential for human ignition
- Potential for a large, wind driven fire
- Fuel hazard along the transmission line corridor
- Only one egress route for D’arcy and Devine areas

Values at Risk

- Structures
- Transportation corridor
- Transmission lines
- Recreational properties

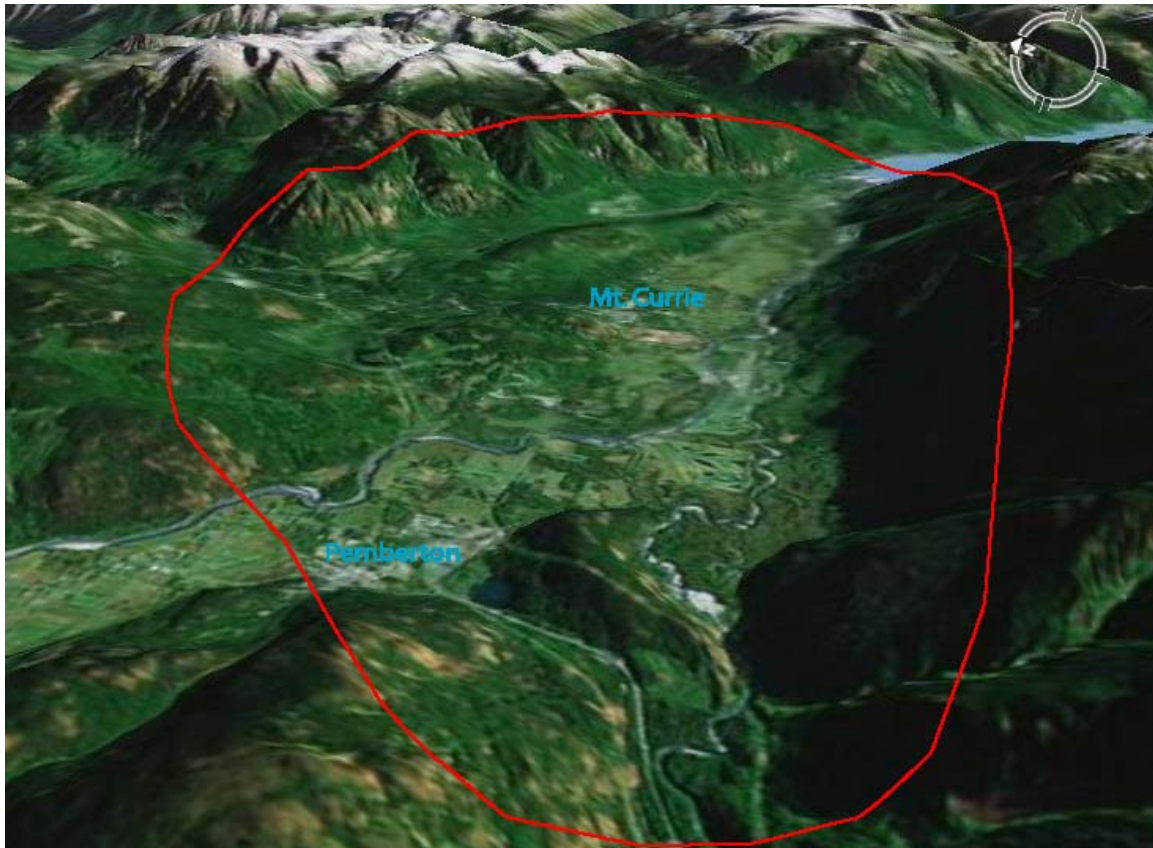
Recommendations for FMA # C2: Mt. Currie – D’arcy Corridor FMA

- Consider a community tenure, in partnership with First Nations, for addressing the fuels issue within the valley
- Treat interface polygons as per ranking system
- Work with BCTC to abate the fuel hazard on the transmission lines
- Work to protect the transportation corridor

10.4 FMA # C3: Pemberton Valley FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) from the Village of Pemberton to the head of Lillooet Lake and from Owl Ridge to the Rutherford River. The general boundaries are shown in the figure below.



Description

This FMA consists of structures in high density areas (Village of Pemberton, Mt. Currie First Nation Reserves), medium density areas (Ivey Lake, Owl Ridge) as well as scattered homes and structures. There are BCTC substations and transmission lines and a municipal park (One Mile Lake). While much of the valley bottom contains deciduous species and has a relatively low fire behavior potential, the slopes of the valley pose a high fuel hazard to all developments within the valley.

The Village of Pemberton has a heavy, continuous fuel source to the south and west, as well as significant dead and dying trees associated with the mountain pine beetle. Prevailing winds into the Pemberton Valley could easily carry burning debris from a fire south of the village into the valley.

Owl Ridge and Ivey Lake are both located at the top of a southern, dry aspect slope with heavy fuels and a potential ignition source at the base of the slope (CN Rail line). Several power lines

run through the FMA and likely contain a fuel hazard associated with past slashing operations. Similarly, the new Mt. Currie Reserve is also at the top of a southern aspect, dry slope with heavy continuous fuel below and around the community.

Key Issues of Concern

- High potential for human ignition
- Potential for a large fire south of the village to threaten Pemberton
- Owl Ridge, Mt. Currie's new reserve and Ivey Lake are at high risk of a wildfire moving upslope and into the communities
- Fuel hazard along the transmission line corridors
- Southern aspect slopes of the valley (on the north side of the valley) have high densities stand that are prone to high fire risk and fire behavior with adjacent and upslope structures

Values at Risk

- Structures
- Transportation corridor
- Transmission lines

Recommendations for FMA #C3: Pemberton Valley

- Develop a strategic landscape level fuel break south of the Village of Pemberton and on the southern aspect slopes of the Pemberton Valley (below Ivey Lake, Owl Ridge and the Mt. Currie new reserve), in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Consider a community tenure, in partnership with First Nations and the Village of Pemberton for addressing the fuels hazard issue within the valley
- Work with the MoE and BCTS to address the fuel hazard along the south aspect slopes of the valley
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

10.5 FMA # C4: Pemberton Meadows FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) within the Pemberton Meadows from the western boundary of the Village of Pemberton to the western boundary of the SLRD. The general boundaries are shown in the figure below.



Description

This FMA consists of mostly farmland and deciduous dominated valley bottom fuel types. There are minor occurrences of scattered homes with adjacent dense, coniferous fuel types. The greatest risk within this fuel type would be the spotting hazard from a wildfire on the adjacent slopes.

Key Issues of Concern

- One transportation route into and out of the FMA

Values at Risk

- Structures

Recommendations for FMA #C4: Pemberton Meadows

- Treat interface polygons as per ranking system
- Establish marshalling points within the valley in the event of a wildfire

10.6 FMA # C5: Green River FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) from the south end of the Village of Pemberton boundary to the north end of the Resort Municipality of Whistler boundary. The general boundaries are shown in the figure below.



Description

The structures within this FMA consist of individual structures and a hydro generating plant and substation.

Key Issues of Concern

- High potential for human ignition
- Potential for a large, wind driven fire to threaten the Pemberton Valley
- Fuel hazard along the transmission line corridor

Values at Risk

- Structures
- Transportation corridor

- Transmission lines

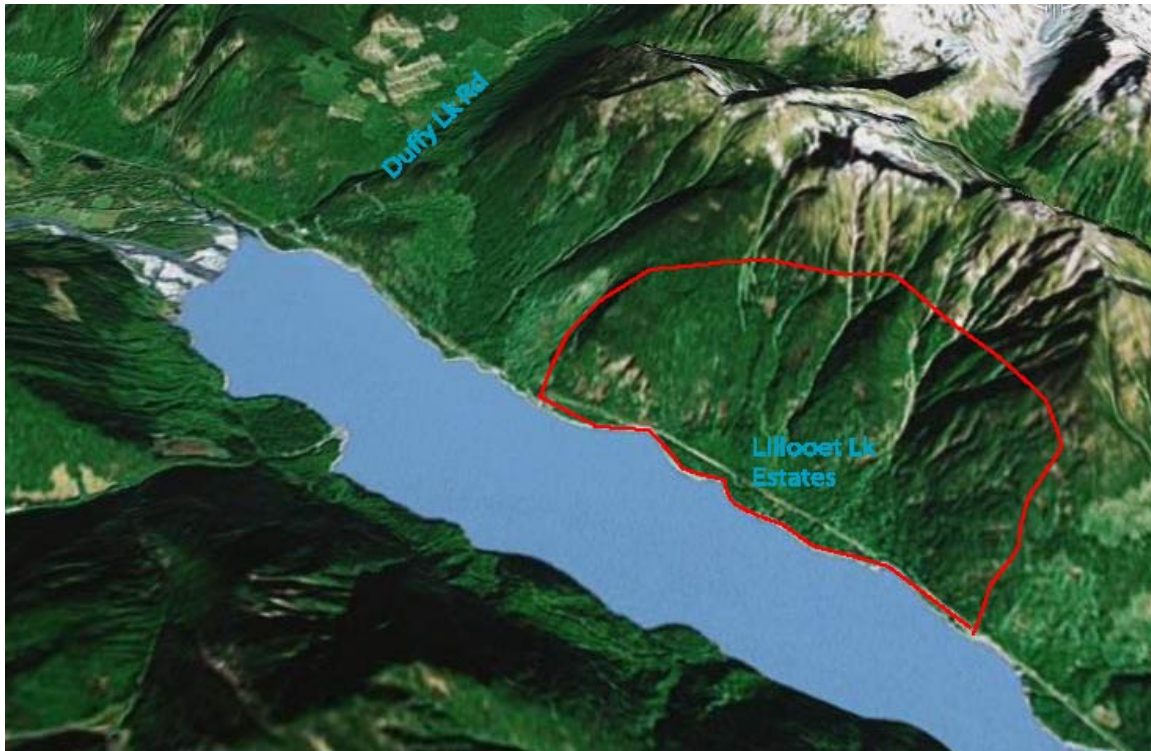
Recommendations for FMA # C5: Green River

- Develop a strategic landscape level fuel break south of Pemberton, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Consider a community tenure, in partnership with First Nations for addressing the fuels issue
- Work with the MoE to pursue funding to treat stands in the valley bottom to promote deer winter range and provide interface protection
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

10.7 FMA # C6: Lillooet Lake Estates FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) surrounding the Lillooet Lake Estates. The general boundaries are shown in the figure below.



Description

The structures associated with this FMA are entirely within the Lillooet Lake Estates. They are lakeshore properties, on a south aspect slope, with transmission corridors adjacent to the development, and have limited access. They are a combination of year round and recreational properties. This FMA straddles the only transportation corridor between First Nation reserves down the Lillooet Lake Valley and the Pemberton Valley.

Key Issues of Concern

- High potential for human ignition
- Fuel hazard along the transmission line corridor
- Dry, south aspect slopes with heavy, continuous fuels

Values at Risk

- Structures
- Transportation corridor
- Transmission lines
- Recreational properties

Recommendations for FMA # C6: Fountain Valley

- Develop a strategic landscape level fuel break around the community, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Consider a community tenure, in partnership with First Nations for addressing the fuels around the community
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

10.8 FMA # C7: Resource Management Area FMA

Boundaries

The balance of the area outside of the aforementioned FMAs.

Description

Most of the structures within this FMA consist of individual or small clusters of homes, with the exception being the First Nation Reserve down the Lillooet Lake Valley. Most structures are adjacent to dense, continuous fuels and are in remote locations with limited access.

Key Issues of Concern

- High potential for human ignition
- Remote dwellings
- Limited access to structures
- Response time for emergency services

Values at Risk

- Structures
- Transmission lines
- Recreational properties

Recommendations for FMA #C7: Resource Management Area

- Develop strategic landscape level fuel breaks (where applicable), in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Consider a community tenure, in partnership with First Nations, for addressing the fuels issue within the valley and around their reserves
- Work with licensees and the MoE to abate the fire risk and fuel hazard adjacent to interface areas and within 2km of interface areas
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

10.9 Prioritized Interface Hazard Polygons

The following table outlines the prioritization of interface polygons for treatment. These polygon ID labels correspond with the Interface Polygon Maps for each electoral area. The gradient of colours from red to green in the Fuel Hazard row corresponds to the relative hazard ranking of the polygons. Treatments should begin with the highest rated polygons.

Polygon Id	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Fine Fuel Loading <1cm	M	M	M	M	H	M	H	M	M	M	M	L
Fine Fuel Loading 1-3cm	M	M	M	M	H	M	H	M	M	M	L	L
Surface Fuels Continuity	M	M	M	M	H	M	M	M	M	M	M	M
% Cover	M	M	M	L	L	M	M	M	L	H	NIL	M
Total Spread Rate Index	14	14	14	12	17	14	18	14	12	15	8	9
Crown Mass	H	H	H	H	M	H	H	H	VH	M	VH	H
Crown Fuels	VH	VH	H	H	VH	H	M	H	VH	M	H	H
Ladder Fuels	H	VH	H	H	L	M	H	M	H	H	M	M
Total Crowning Potential Index	28	30	27	27	17	24	26	24	33	21	29	24
Duff Layer	M	M	M	M	M	M	M	H	H	M	M	H
Fuel Loading	M	M	M	M	H	M	L	M	L	M	M	M
Horizontal Continuity	M	M	M	L	H	M	L	M	L	M	M	M
Fire Intensity	16	16	16	16	23	16	14	17	12	16	13	14
Slope	M	L	L	L	Nil	M	Nil	L	L	Nil	L	Nil
Aspect	S	S	S	S	FLAT	W	S	S	SW	FLAT	S	S
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	VH	VH	H	VH	VH	VH
Fuel Break Modifiers	16	15	15	15	9	14	14	15	13	9	15	14
Wildfire Behavior Ranking	74	75	72	70	66	68	72	70	70	61	65	61
Structure Density	H	M	M	M	H	M	M	M	L	H	M	M
Slope Position	VH	VH	VH	VH	H	VH	H	H	VH	H	H	VH
Structures at Risk Subtotal	20	15	15	15	18	15	13	13	10	18	13	15
Fuel Break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	10-20m	10-20m	no fuel break	no fuel break	no fuel break	no fuel break
Fuel Break Value	1	1	1	1	1	1	0.8	0.8	1	1	1	1
Structures at Risk Total	20	15	15	15	18	15	10.4	10.4	10	18	13	15
Fuel Hazard Ranking	94	90	87	85	84	83	82.4	80.4	80	79	78	76
Fuel Hazard	VH	VH	VH	H	H	H	H	H	H	H	H	H
Polygon Id	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12

Polygon Id	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24
Fine Fuel Loading <1cm	L	M	L	M	L	M	L	L	L	M	L	L
Fine Fuel Loading 1-3cm	L	M	L	M	L	M	L	L	L	M	L	L
Surface Fuels Continuity	M	L	L	M	M	M	L	L	M	M	L	L
% Cover	M	H	M	M	L	L	L	M	M	M	M	M
Total Spread Rate Index	9	13	7	14	7	12	5	7	9	14	7	7
Crown Mass	H	H	H	H	H	H	H	H	H	H	H	H
Crown Fuels	H	H	H	H	VH	H	H	H	H	H	M	H
Ladder Fuels	M	H	H	M	M	L	H	H	H	M	M	L
Total Crowning Potential Index	24	27	27	24	25	21	27	27	27	24	23	21
Duff Layer	M	M	M	H	M	H	M	M	M	M	H	H
Fuel Loading	M	L	M	L	L	L	M	L	L	L	L	L
Horizontal Continuity	M	L	M	L	L	L	L	L	L	L	L	L
Fire Intensity	13	11	13	12	8	12	13	8	8	11	9	9
Slope	M	Nil	L	L	Nil	Nil	L	Nil	L	Nil	L	L
Aspect	SE	S	S	E	S	FLAT	E	FLAT	N	FLAT	S	E
Size Of Continuous Fuel Area	VH	VH	VH	VH	VH	VH	VH	H	VH	VH	H	VH
Fuel Break Modifiers	13	14	15	9	14	9	9	8	7	9	14	9
Wildfire Behavior Ranking	59	65	62	59	54	54	54	50	51	58	53	46
Structure Density	M	M	M	M	VH	M	M	H	M	L	M	H
Slope Position	VH	VH	VH	VH	VH	VH	VH	H	VH	H	H	VH
Structures at Risk Subtotal	15	15	15	15	25	15	15	18	15	8	13	20
Fuel Break	no fuel break	20-30m	10-20m	no fuel break	20-30m	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break	no fuel break
Fuel Break Value	1	0.6	0.8	1	0.6	1	1	1	1	1	1	1
Structures at Risk Total	15	9	12	15	15	15	15	18	15	8	13	20
Fuel Hazard Ranking	74	74	74	74	69	69	69	68	66	66	66	66
Fuel Hazard	H	H	H	H	M	M	M	M	M	M	M	M
Polygon Id	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24

Polygon Id	C25	C26	C27	C28	C29	C30	C31	C32	C33	C34	C35	C36
Fine Fuel Loading <1cm	M	M	M	L	L	L	L	M	L	L	L	L
Fine Fuel Loading 1-3cm	M	L	M	L	M	L	L	M	L	L	L	L
Surface Fuels Continuity	M	M	M	L	M	L	L	M	M	L	Nil	L
% Cover	L	M	M	L	L	H	M	L	L	L	M	M
Total Spread Rate Index	12	11	14	5	10	8	7	12	7	5	6	7
Crown Mass	H	H	M	H	H	M	M	H	H	H	H	H
Crown Fuels	H	H	H	H	H	M	H	H	VH	H	H	VH
Ladder Fuels	L	M	M	H	M	H	H	M	H	L	M	M
Total Crowning Potential Index	21	24	19	27	24	21	22	24	28	21	24	25
Duff Layer	M	M	M	M	M	M	H	M	M	M	H	M
Fuel Loading	M	L	L	M	L	L	L	L	L	L	L	L
Horizontal Continuity	L	L	L	L	Nil	Nil	L	L	L	L	L	L
Fire Intensity	16	8	11	13	11	8	9	11	8	8	9	8
Slope	Nil	Nil	Nil	Nil	Nil	L	Nil	Nil	Nil	L	L	Nil
Aspect	FLAT	FLAT	S	SW	NE	S	SE	FLAT	FLAT	W	SE	FLAT
Size Of Continuous Fuel Area	VH	VH	H	VH	H	VH	VH	H	VH	VH	VH	VH
Fuel Break Modifiers	9	9	13	13	6	15	11	8	9	13	12	9
Wildfire Behavior Ranking	58	52	57	58	51	52	49	55	52	47	51	49
Structure Density	L	M	L	L	M	M	M	L	L	M	L	L
Slope Position	H	H	VH	H	H	H	H	H	H	H	H	H
Structures at Risk Subtotal	8	13	10	8	13	13	13	8	8	13	8	8
Fuel Break	no fuel break	no fuel break	10-20m	10-20m	no fuel break	10-20m	no fuel break	10-20m	no fuel break	no fuel break	no fuel break	no fuel break
Fuel Break Value	1	1	0.8	0.8	1	0.8	1	0.8	1	1	1	1
Structures at Risk Total	8	13	8	6.4	13	10.4	13	6.4	8	13	8	8
Fuel Hazard Ranking	66	65	65	64.4	64	62.4	62	61.4	60	60	59	57
Fuel Hazard	M	M	M	M	M	M	M	M	M	M	M	M
Polygon Id	C25	C26	C27	C28	C29	C30	C31	C32	C33	C34	C35	C36

Polygon Id	C37	C38	C39	C40	C41	C42	C43	C44
Fine Fuel Loading <1cm	L	L	L	L	L	L	L	L
Fine Fuel Loading 1-3cm	L	L	L	L	L	M	L	L
Surface Fuels Continuity	L	L	L	L	L	L	L	M
% Cover	L	L	M	L	M	L	L	M
Total Spread Rate Index	5	5	7	5	7	8	5	9
Crown Mass	H	H	H	H	M	L	H	M
Crown Fuels	H	H	H	VH	M	M	H	H
Ladder Fuels	M	M	L	L	L	L	L	M
Total Crowning Potential Index	24	24	21	22	15	10	21	19
Duff Layer	H	M	M	M	H	M	H	M
Fuel Loading	L	L	L	Nil	L	L	M	L
Horizontal Continuity	L	L	L	Nil	L	L	L	L
Fire Intensity	9	8	8	5	9	11	14	8
Slope	Nil	Nil	L	Nil	M	L	L	Nil
Aspect	W	FLAT	E	S	SE	S	N	FLAT
Size Of Continuous Fuel Area	VH	VH	VH	M	VH	VH	VH	VH
Fuel Break Modifiers	12	9	9	12	13	15	7	9
Wildfire Behavior Ranking	50	46	45	44	44	44	47	45
Structure Density	L	L	L	L	L	L	L	L
Slope Position	H	H	H	H	VH	H	L	H
Structures at Risk Subtotal	8	8	8	8	10	8	6	8
Fuel Break	10-20m	no fuel break	no fuel break	no fuel break	10-20m	no fuel break	10-20m	10-20m
Fuel Break Value	0.8	1	1	1	0.8	1	0.8	0.8
Structures at Risk Total	6.4	8	8	8	8	8	4.8	6.4
Fuel Hazard Ranking	56.4	54	53	52	52	52	51.8	51.4
Fuel Hazard	M	L	L	L	L	L	L	L
Polygon Id	C37	C38	C39	C40	C41	C42	C43	C44

11.0 Appendix D: Fuel Management Strategy for Electoral Area D

11.1 Overview

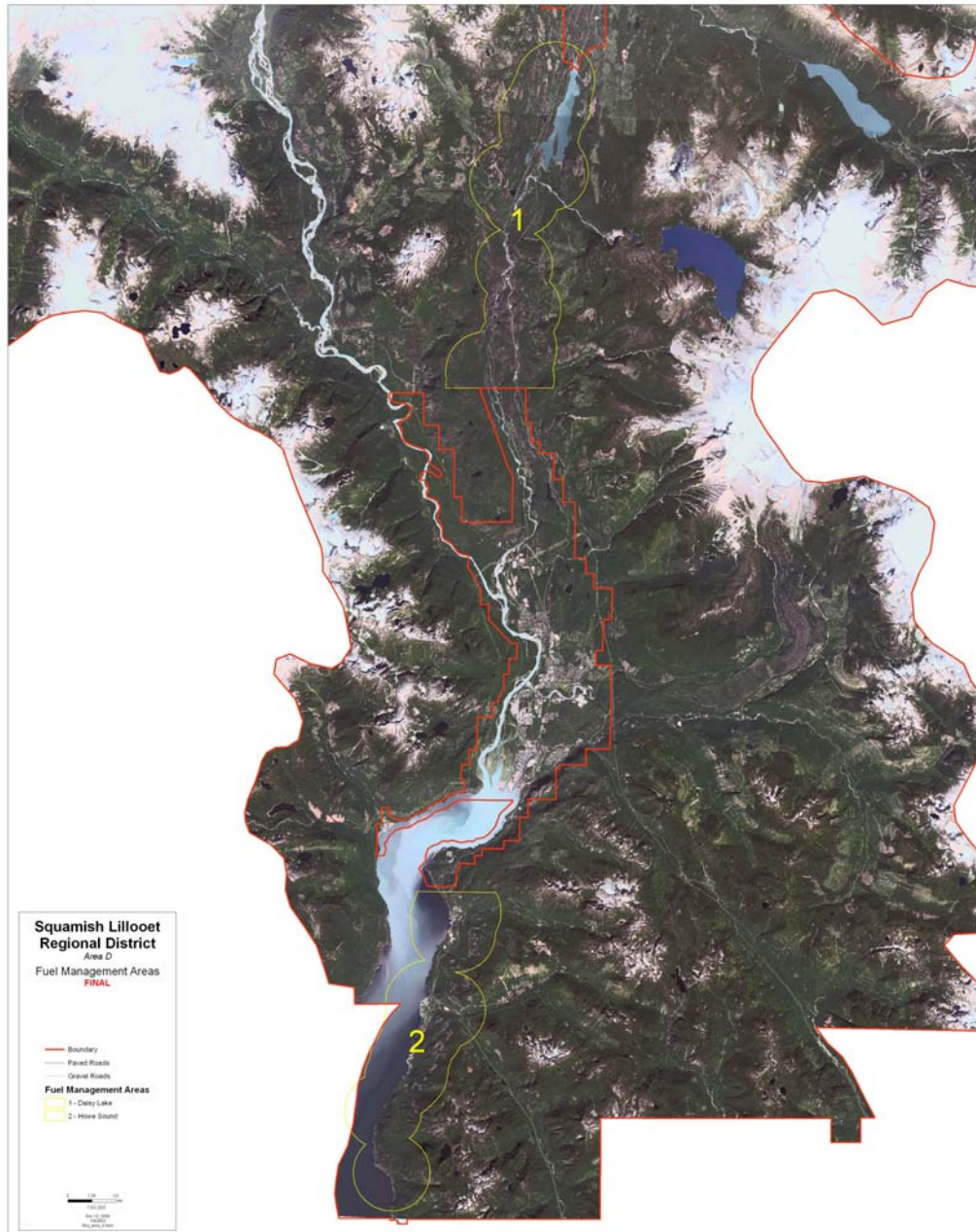
Electoral area D has been divided into three fuel management areas.

FMA # D1: Garibaldi

FMA # D2: Howe Sound

FMA # D3: Resource Management Area

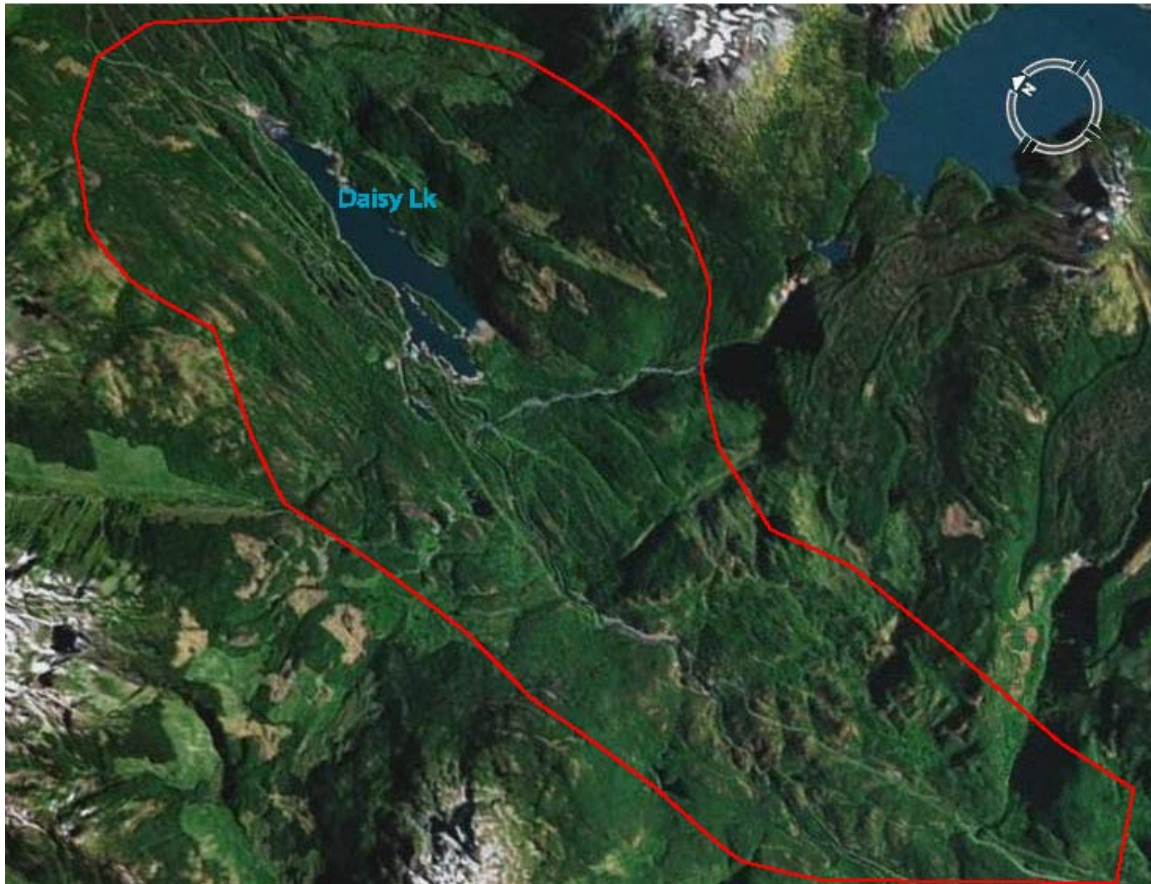
The boundaries for these FMAs are shown below.



11.2 FMA # D1: Garibaldi FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) from the southern boundary of Whistler to the northern boundary of Squamish. The general boundaries are shown in the figure below.



Description

The structures within this FMA are concentrated in the Pinecrest Estates and Black Tusk Village. The communities have transmission lines through them and are adjacent to the CN Rail line and the highway (potential ignition sources). The fuel type within and adjacent to the community are pure pine stands and dense, mixed coniferous stands: both of which produce a high fire behavior. Both communities have year round and recreational properties.

The Pinecrest Estates and Black Tusk Village would be a good location for a fuel management pilot project. Such a project could work in conjunction with hazard abatement on the adjacent power lines and with the adjacent highway improvement project.

Key Issues of Concern

- High potential for human ignition

- Fuel hazard along the transmission line corridor
- Volatile fuel type within and adjacent to the communities

Values at Risk

- Structures
- Transportation corridor
- Transmission lines
- Recreational properties

Recommendations for FMA # D1: Garibaldi

- Develop a strategic landscape level fuel break around the community, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Work with BCTC and adjacent licensees to abate the fuel hazard adjacent to the communities
- Submit a funding application for a fuel management pilot project around the communities
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

11.3 FMA # D2: Howe Sound FMA

Boundaries

The interface areas (within 2 km of structures or to the height of land) from the southern boundary of Squamish to the northern boundary of GVRD along the Sea to Sky corridor. The general boundaries are shown in the figure below.



Description

The structures within this FMA are concentrated around Furry Creek and Britannia Beach. There are scattered individual structures south of Squamish. There are also several proposed developments around Britannia Beach, Porteau Cove and Furry Creek. There are several communication towers within the Petgil Lake area where there is a high potential for human caused ignition.

Key Issues of Concern

- High potential for human ignition
- Communication towers around Petgil Lake
- Proposed developments within Porteau Cove and Britannia Beach area

Values at Risk

- Structures
- Transportation corridor
- Transmission lines

Recommendations for FMA #D2: Howe Sound

- Develop a strategic landscape level fuel break around the communities of Britannia Beach and Furry Creek, in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Work with developers to ensure they are addressing the future interface fuel hazard within their proposed developments
- Work with the owners of the communication towers in Petgill Lake to protect these towers

11.4 FMA # D3: Resource Management Area FMA

Boundaries

The balance of the area outside of the aforementioned FMAs.

Description

Most of the structures within this FMA consist of individual or small clusters of homes. Most structures are adjacent to dense, continuous fuels and are in remote locations with limited access.

Key Issues of Concern

- High potential for human ignition
- Remote dwellings
- Limited access to structures
- Response time for emergency services

Values at Risk

- Structures
- Transmission lines
- Transportation corridors
- Recreational properties

Recommendations for FMA # D3: Howe Sound

- Develop strategic landscape level fuel breaks (where applicable), in conjunction with the interface polygons, natural fuel breaks and potential harvest blocks, to protect life and property
- Consider a community tenure, in partnership with First Nations, for addressing the fuels issue within the valley
- Work with licensees and the Ministry of Environment to abate the fire risk and fuel hazard adjacent to interface areas and within 2 km of interface areas
- Ensure areas with a high human ignition potential have public information displays on fire danger and campfire safety and are monitored during the fire season

11.5 Prioritized Interface Hazard Polygons

The following table outlines the prioritization of interface polygons for treatment. These polygon ID labels correspond with the Interface Polygon Maps for each electoral area. The gradient of colours from red to green in the Fuel Hazard row corresponds to the relative hazard ranking of the polygons. Treatments should begin with the highest rated polygons.

Polygon Id	D1	D2	D3	D4	D5	D6	76	D8	D9	D10	D11	D12
Fine Fuel Loading <1cm	L	M	L	M	L	L	L	L	L	L	L	L
Fine Fuel Loading 1-3cm	L	M	L	L	M	M	L	L	L	M	L	L
Surface Fuels Continuity	L	L	L	M	H	L	L	L	L	L	L	L
% Cover	H	L	M	Nil	H	L	H	M	Nil	M	L	L
Total Spread Rate Index	8	10	7	8	14	8	8	7	4	10	5	5
Crown Mass	VH	VH	VH	VH	H	H	H	VH	VH	M	H	H
Crown Fuels	M	H	M	H	VH	M	H	H	VH	M	M	M
Ladder Fuels	M	H	H	M	M	H	H	M	H	H	L	H
Total Crowning Potential Index	28	32	31	29	25	26	27	29	33	21	20	26
Duff Layer	VH	H	VH	M	H	H	M	H	M	M	VH	H
Fuel Loading	M	L	M	M	L	M	L	M	M	M	M	L
Horizontal Continuity	L	L	L	M	H	L	L	L	L	L	L	L
Fire Intensity	15	12	15	13	12	17	8	14	13	16	15	9
Slope	M	H	M	L	L	H	L	H	L	Nil	L	L
Aspect	W	SW	W	S	W	W	FLAT	E	W	FLAT	W	NE
Size Of Continuous Fuel Area	M	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH	VH
Fuel Break Modifiers	12	16	14	15	13	15	10	11	13	9	13	8
Wildfire Behavior Ranking	63	70	67	65	64	66	53	61	63	56	53	48
Structure Density	VH	M	H	M	M	M	H	M	M	M	H	H
Slope Position	VH	VH	VH	H	H	L	VH	VH	L	H	VH	VH
Structures at Risk Subtotal	25	15	20	13	13	11	20	15	11	13	20	20
Fuel Break	no fuel break	no fuel break	10-20m	No fuel break	no fuel break	no fuel break	no fuel break	10-20m	10-20m	no fuel break	10-20m	no fuel break
Fuel Break Value	1	1	0.8	1	1	1	1	0.8	0.8	1	0.8	1
Structures at Risk Total	25	15	16	13	13	11	20	12	8.8	13	16	20
Fuel Hazard Ranking	88	85	83	78	77	77	73	73	71.8	69	69	68
Fuel Hazard	VH	H	H		H	H	H	H	H	M	M	M
Polygon Id	D1	D2	D3	D4	D5	D6	76	D8	D9	D10	D11	D12

Polygon Id	D13	D14	D15
Fine Fuel Loading <1cm	M	L	L
Fine Fuel Loading 1-3cm	M	L	L
Surface Fuels Continuity	L	Nil	M
% Cover	L	L	M
Total Spread Rate Index	10	4	9
Crown Mass	M	M	M
Crown Fuels	L	M	M
Ladder Fuels	H	M	M
Total Crowning Potential Index	19	18	18
Duff Layer	VH	M	L
Fuel Loading	L	L	L
Horizontal Continuity	L	Nil	L
Fire Intensity	13	8	6
Slope	L	L	Nil
Aspect	W	S	FLAT
Size Of Continuous Fuel Area	L	VH	VH
Fuel Break Modifiers	10	15	9
Wildfire Behavior Ranking	52	45	42
Structure Density	M	M	M
Slope Position	VH	H	H
Structures at Risk Subtotal	15	13	13
Fuel Break	no fuel break	10-20m	20-30m
Fuel Break Value	1	0.8	0.6
Structures at Risk Total	15	10.4	7.8
Fuel Hazard Ranking	67	55.4	49.8
Fuel Hazard	M	M	L
Polygon Id	D13	D14	D15