City of Kamloops
Community Wildfire Protection Plan
July 20, 2016

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EXECUTIVE SUMMARY

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The City of Kamloops (the City) is located in some of the driest ecosystems within the province of B.C. and all of Canada. These wildfire dependent ecosystems experience long, dry summers with regular drought conditions which are conducive for wildfire ignition and spread. The size and shape of the developed parts of the City result in extensive wildland/urban interface (the interface) between residential houses and forest or grasslands. The City of Kamloops has conducted wildfire threat reduction work on City owned and B.C. Crown land since 1987. An annual wildfire threat reduction program was initiated by the City in 1994. These efforts were accelerated in the mid-2000s due to a pine beetle epidemic that caused mortality in over 90% of the mature ponderosa pine trees within the City limits.

The City has identified over 4200 houses directly adjacent to forests or grassland within its boundaries. The more rural subdivisions typically have more structures prone to wildfires. Mobile home parks, most with very small lots and narrow setbacks from the grasslands, are commonly located immediately adjacent to forests and grasslands.

Long term wildfire threats exist throughout the City. The houses on the western edge of Peterson Creek and within the Rose Hill subdivision face the most serious long term threats. The other main areas of concern include Barnhartvale, Juniper Ridge, Heffley and Pineview. The intention of the City of Kamloops fuel management program is to retain all interface areas within the City in a moderate or low wildfire threat class for the long term. Fuel management treatments are targeted for 200 meters in width when appropriate. The City has completed over 780 hectares of fuel management treatment area on sixty-eight unique sites. Some areas have been treated three or more times. Another fourteen sites, covering 162 hectares, are still requiring their first treatment. Not all private land within interface areas meet a moderate wildfire threat standard. Private land with a high wildfire threat rating adjacent to houses can be found in Barnhartvale, Juniper Ridge, Rose Hill, Pineview and Heffley.

The maintenance requirements on the forest and grasslands within the City of Kamloops will depend on further developments in the area, tree species, forest health, mortality in the stand, conifer ingress/regeneration, grass growth and other factors that increase the amount of dead and down forest fuel, coniferous canopy closure or reduced wildfire suppression crew safe access. Of the sixty-eight past treatment areas, seventeen are requiring maintenance work in the next five years to retain the moderate threat class. As forest stands re-establish themselves after the pine beetle infestation, bio-mass and the associated wildfire threats are expected to increase incrementally each year unless regular, site specific fuel management treatments are continued.

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1 Community Wildfire Protection Plan Goals

The goals of the City of Kamloops Community Wildfire Protection Plan (CWPP) include;

- to identify and quantify the forestland wildfire threats that directly impact on the developed land within the City of Kamloops,
- to identify and map all possible fuel management treatment areas within approximately 200 meters of developed areas, that would assist in reducing the wildfire threats in the area,
- to establish fuel management guidelines for the City of Kamloops to allow quantifiable assessments of past fuel management activities to ensure fuel treatments meet a consistent standard over time and identify maintenance priorities,
- to prioritize new fuel management activities and a maintenance schedule for past treatment units,
- to identify opportunities to improve wildfire suppression access to the crown land surrounding the community,
- to ensure all fuel management activities recognize the important recreational and visual values of the forested land in and around the City of Kamloops.
- to increase awareness of the unique wildfire threats in the City of Kamloops area.

2 Community Description

Located on the Intermontane Plateau, Kamloops is the meeting place of the South and North Thompson Rivers that form the Thompson River and flow into Kamloops Lake. The Secwepemc people named Kamloops Tk'emlúps**,** which means "*where the rivers meet*" and is also known as the Hub City, where major highways meet. The two major ecosystems, grasslands and forests, of southern BC are found in Kamloops and the boundary between the gently rolling Interior Plateau and the vast, rugged Shuswap Highland lies just to the east of the city.

Kamloops has a population of approximately 86 000 residents, is 311 square kilometers in size and located at 340-550 meters in elevation. The City boasts a growing season of 166 days and over 2000 hours on annual sunshine making it the second sunniest City in British Columbia. Annual rainfall is 217.9 mm, with 75.5 cm coming as snow. The mean maximum temperature is 21C and the mean minimum temperature is -4.2C.

The City of Kamloops (the City) is located in some of the driest ecosystems within the province of B.C. and all of Canada. These fire dependent ecosystems experience long, dry summers with regular drought conditions which are conducive for wildfire ignition and spread. The size and shape of the developed parts of the City result in extensive wildland/urban interface (the interface) between residential houses and forest or grasslands. This interface exposes thousands of homes within the City to potential wildfire impacts.

3 City of Kamloops Forest Fuel Management History

The City has been conducting wildfire threat reduction work on City owned and B.C. Crown land since at least 1986. Community concerns led to fuel reduction treatments in Peterson Creek, Barnhartvale and other high wildfire hazard areas on the perimeter of the developed part of the City in the 1980s. Most of the treated areas were initially selected based on local homeowner concerns. An annual wildfire threat reduction program was initiated by the City in 1994. These efforts were accelerated in the mid-2000s due to a pine beetle epidemic that caused mortality in over 90% of the mature ponderosa pine trees within the City limits. The fuel management treatments to improve public safety and reduce wildfire threats have focused on City owned and B.C. Crown land within the City boundaries. A province wide program initiated after the 2003 Filmon Report on wildfires and wildfire preparedness provided much of the funding for the major work up to 2010. Private land treatments have been ongoing as well, but are largely at the expense of the individual landowner. A majority of the larger private land treatments have been in the form of salvage harvesting. The City provided wood collection and disposal services for homeowners with dead pine trees on their property after the pine beetle epidemic. Over 800 hectares have been treated through a variety of grant programs and the City's own budget.

This is the fourth official wildfire threat assessment and planning document completed on the City of Kamloops. The initial wildfire threat assessment was completed in 1990, with follow up reports and maps in 1998 and 2004. A significant portion of the forest stands adjacent to the residential areas have been treated in some fashion to reduce wildfire threats and safety issues. Wildfire threat reduction treatments have been aggressively pursued on B.C Crown and Municipal Crown lands within the City boundaries. These varied treatments have included salvage harvesting, basic pine removal activity with heavy equipment, to hand crew treatments involving danger tree removal, spacing and pruning and surface fuel reduction activities.

The City of Kamloops fuel management treatments covered a gross total of 958 hectares since 1994. Many of these areas have been previously treated before the pine beetle epidemic forced the City to conduct further fuel modification work on these sites. The Peterson Creek area has had at least four different entries since 1994. Numerous other sites have been partly treated at least three times. Approximately 62% of the fuel management work was completed with hand crews, the remaining 38% with completed with heavy equipment.

Table One – Wildfire Threat Reduction Efforts within the City of Kamloops from 1997 to 2010

Initial Wildfire Behaviour Threat Class	Fuel Treatment Type			
	Hand	Machine	Prescribed Burn	Total
Extreme	252.47	161.71	0	414.18
High	331.04	176.91	0	507.95
Moderate	16.86	12.45	6.77	36.08
Total	597.24	351.07	6.77	958.22*

*This number is much larger than that shown in the Table Eleven. Some areas have been treated as many as three times and inconsistent data tracking and estimates have led to inaccuracies.

4 Local Wildfire History/Starts and Weather

Kamloops is located within some of the driest ecosystems in B.C. The ten year fire weather data summaries for four local weather stations suggest that fire weather is a regular occurrence in the area. The Afton weather station, the closest to Kamloops, shows an average of 83.5 high and extreme fire weather days annually for the last decade, with a peak of 122 days in 2009. Fire weather days are not an exact indicator of wildfire threats but it does suggest that there are many drying days in this area that will allow for dry forest fuels.

Table Two – Kamloops Area Fire Weather Data Summary (2006-2015)

Wx Station	Moderate Average Days (Range)	High Average Days (Range)	Extreme Average Days (Range)	Maximum High and Extreme Days (year)
Afton	59.3 (35-95)	63.4 (28-84)	20.1 (5-45)	122 (2009)
Leighton Lake	53.2 (40-78)	40.1 (8-61)	5.6 (0-10)	78 (2006)
Paska Lake	41.7 (22-63)	22.9 (0-43)	2.9 (0-8)	25 (2009)
Sparks Lake	45.9 (35-64)	43.9 (12-65)	4.3 (0-10)	71 (2009)

The Kamloops Fire and Rescue has only recently started to track interface wildfires separately from other grass and wildland fires. In the last four years they have responded to 117 'grass' fires within the City for an average of almost 30 per year.

Table Three – Kamloops Fire and Rescue Wildfire Response Statistics 2005-2015

Year	Data Source	# of Grass Fires	# of Interface Fires	Total
2005	Firehouse Software	90 **		90
2006	Firehouse Software	134 **		134
2007	Firehouse Software	118 **		118
2008	Firehouse Software	90 **		90
2009	Firehouse Software	130 **		130
2010	Firehouse Software	64 **		64
2011	Firehouse Software	56**		56
2012 until August (switched to FDM Software)	Firehouse Software	56 **		
2012 (August to present)	FDM Software	14 ^	17	87
2013	FDM Software	10 ^	36	46
2014	FDM Software	41 ^	35	76
2015	FDM Software	46 ^	29	75

**Grass Fires combined with Interface Fires (possibly burning violations)… not separated during these years

^ grass/landscape fires and other outdoor fires does not include burning violations

5 Wildfire Threat Assessment Process

Wildfires have been the main agent of change for the forest ecosystems in the City of Kamloops area for centuries. The forest ecosystems have been regularly modified by varying intensities of wildfires. The result of aggressive wildfire suppression in the last fifty or more years is the accumulation of forest fuels over time as the wildfire return interval has been lengthened. These forest fuels include an increased number of conifer trees and a buildup of dead and dry surface fuels. The resulting fuel buildup creates the potential for more intense, stand replacement wildfires to occur. The additional trees also create more inter-tree competition for moisture and nutrients, creating forest health issues and good conditions for defoliators and diseases. Spruce budworm, Douglas Fir Tussock Moth and Western and Mountain Pine Beetles have all impacted the conifers in the Kamloops area in the past decade.

5.1 Fire Weather

The valley bottoms and lower elevations in the Thompson area are located in some of the driest, hottest ecosystems in Canada. Weather that will dry forest fuels and allow for wildfire spread regularly occurs from April through October in the forest ecosystems around Kamloops.

The main east to west and north to south valleys respectively create variable wind patterns. The local prevailing upper elevation winds blow from the south and west, but are translated into valley winds and daytime heating and cooling winds at lower elevations. Summer outflow winds are also common along both the North and South Thompson drainages.

5.2 Topography

The City of Kamloops is located at the confluence of the North and South Thompson Rivers in south central British Columbia. A majority of the City is located on the flats of North Kamloops, Brocklehurst, Rayleigh, Valleyview and Westsyde, and on a moderate to steep north facing slope which includes Sahali, Aberdeen, Juniper Ridge, Barnhartvale and Rose Hill. This slope is broken by Peterson Creek, a steep, unstable gully and numerous other smaller gullies. The south aspects are rolling grassland hills to the northwest and the northeast on the Tk'emlups Indian Band I.R. #1. In general, the topography in the Kamloops area is rolling, with moderate elevation gains, by B.C. standards, with variable aspects. Silty sand soils have allowed deep narrow gullies to develop from erosion, limiting access to many areas.

5.3 Forest Fuels

The forest fuel complexes in the Kamloops area include a bunchgrass/big sage grassland ecosystem at lower elevations. The pine beetle infestation, of seven to ten years ago, that caused mortality in over 90% of the mature Ponderosa Pines (pines) in the area created an increase in the local grasslands. This forest ecosystem is best described in the Canadian Forest Fire Behaviour Prediction System (FBP) as an O-1 fuel type. The Ponderosa Pine regeneration is very healthy on the mid-slopes in the Kamloops area, mostly on the north slopes and in the draws and gullies. The regeneration is largely located in areas where the overstorey pines were killed by pine beetles and removal of the stand occurred in the 2006-2009 period.

Dense conifer regeneration on north slopes in Aberdeen greenbelt.

The pine typically germinate in clumps, creating thickets of pine trees, most in the one to four meter tall range in the spring of 2016. These fuels could develop into a serious wildfire threat if left unmanaged. This forest ecosystem is best described in the Canadian Forest Fire Behaviour Prediction System (FBP) as a transition from O-1 to C-4 fuel type. For mapping purposes these stands have been identified as O-1.

Fuel managed C-7 fuel type in Aberdeen.

The middle to upper slopes on the south side of the South Thompson and Thompson Rivers are dominated by drybelt Douglas-fir stands, with residual pines and high value wildlife trees. The City has many forested gullies and greenbelts which snake through Barnhartvale, Rose Hill, Sahali and Aberdeen. Left unmanaged, the Douglas-fir stands are multi-layered, multi-aged forests with a stressed understory and low live and dead crowns. This stand structure can allow aggressive crown fire development. A majority of these sites, within 100-200 meters of homes and structures have been fuel managed in the past decade. The treatment has generally left the live component of the mature stand and focused on the understorey, resulting in open stands best classified as C-7 or C-3 in the FBP system. The untreated sites vary dramatically from C-7 to C-4. These areas have largely been identified as C-7 for mapping purposes.

Unmanaged C4 fuel type in Kenna Cartwright Park.

5.4 City of Kamloops Wildfire Threat Summary

The City of Kamloops can be directly threatened by wildfires under numerous scenarios. The most serious wildfire threats exist on the south side of the South Thompson and Thompson Rivers corresponding to the highest developed areas. This area can be exposed to wildfires that start in the valley bottom and spread uphill into the community or a wildfire that initiates to the west, south or east of the City and spreads across slope or downhill into the developed areas with the prevailing winds. The

intermix communities of Barnhartvale and Rose Hill are also exposed to wildfires starting inside the community itself.

The Strawberry Hill Fire on Kamloops I.R. #1, immediately north of the City, in 2003 is an good example of the potential wildfire spread rates and wildfire intensity that can be expected in the Kamloops area.

5.5 City of Kamloops Structures in Interface Areas

Over 4000 houses were identified during the most recent wildfire threat assessment as directly adjacent to forests or grassland within the City of Kamloops.

Table Four - Structures Exposure to Undeveloped Forest or Grassland within the City in April 2016

Location	Number of Structures Directly Adjacent to Forest or Grassland
Heffley	42
Westsyde	429
North Shore	46
Batchelor Heights	386
Iron Mask	31
Pineview	106
Howe Street West	75
Aberdeen	531
Dufferin	240
Downtown/South Kamloops	225
Sahali/Peterson Creek	743
Knutsford	35
Rose Hill	101
Hidden Valley Trailer Park	50
Juniper Ridge	382
Valleyview	170
Campbell Creek Industrial Area	70
Barnhartvale	439
Dallas Drive	114
Totals	**4215**

Wildland Urban Interface area in Peterson Creek.

6 Biogeoclimatic Information

The City of Kamloops is covered by three different biogeoclimatic zones, each with unique tree species and fuel complexes. The Bunchgrass (BG), Ponderosa Pine (PP) and Interior Douglas Fir (IDF) biogeoclimatic zones are the warmest and driest forest ecosystems in B.C. These biogeoclimatic zones are characterized by a warm, dry climate regime with a long growing season during which moisture deficits are common. These forest ecosystems are included in the Natural Disturbance Type 4 fire regime where regular, low intensity, stand maintaining fires were the norm before European settlement and wildfire suppression activities.

More information on Natural Disturbance Types in B.C. and fire regimes can be found at;

http://www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/biodiv/biotoc.htm

The biogeoclimatic zones are shown on the CWPP Wildfire Threat Assessment Map in Appendix E. Brochures describing the three biogeoclimatic zones can be found in Appendix A.

6.1 Analysis of Climate Change on the Kamloops Area

'In May (2013) the concentration of carbon dioxide in the atmosphere reached 400 parts per million, the highest since three million years ago.' – Rising Seas, National Geographic, September 2013. This rise in greenhouse gases is expected to contribute to rising global temperatures and changes in weather patterns, moisture distribution and plant ecosystems. One of the main concerns relating to plant ecosystems is the expected rapid change in weather conditions. Plants will have to migrate to more suitable habitat in short periods of time. This will be very difficult for large plants with heavy seeds and narrow geographic ranges. The weather is expected to change faster than many plants can adapt. This will significantly impact the conifer species in the Kamloops area.

Table Five - Predicted Impacts of Climate Change on Climate Variables and Forests in B.C. During the 21st Century

Expected Impact of Climate Change on Climatic Variables in B.C.
1 to 4 C increase in surface air temperature with winter temperatures most affected
10 to 20% increase in annual precipitation with less snowfall and more rainfall
Reduced snow depth and an increase in the length of the growing season
Increasing the risk of summer drought and decreasing soil moisture
More thunderstorm activity
Predicted Impacts of Climate Change on B.C. Forests
Increase in frequency and severity of forest damaging events including forest fires
Higher than present treeline and northward migration of treeline
Major expansions of grasslands and shrublands
Disappearance of wetlands, shrinking lakes and changing hydrology
Increase in incidents of insects, disease outbreaks and spread of invasive species
New assemblages of species occurring in time and space
Overall loss of biodiversity
Changes in disturbance regimes and forest productivity
Forest migration into previously treeless landscapes
Reduced access for winter logging

Source: Expected Impacts of Climate Change: Dery and Jackson 2006
Predicted impacts of CC on Forests:Ohlson et al; Hebda 2006; Gov't of B.C. 200c; Spittlehouse 2005.
Copied from BC Forest Professional May-June 2008

The impacts of climate change on BG, PP and IDF biogeoclimatic zones in the Thompson area are likely to be;

a. The BG. PP and IDF biogeoclimatic zone that we know of today may also be shifted upwards in elevation, although the different topography found at higher elevations in the Thompson area will alter the zones in many ways.

b. Severe moisture stress and insect infestations. This will lead to increasing tree mortality on the lower slopes dominated by Douglas-fir. This has already occurred in the Ponderosa Pine stands in the Kamloops area.
c. Climate change occurring at a rate faster than the forest can adapt, creating potentially catastrophic conditions. This could include high mortality of the present forest cover in a short period of time.
d. Longer and more severe fire seasons.
e. Increased wildfire starts from increased thunderstorm activity.
f. Less available water for wildfire suppression activities.
g. Stress on riparian area deciduous trees due to changing hydrology.
h. Loss/alteration of lakeshore habitat.
i. Changes in mule deer winter range.
j. Additional stress on SARA listed species.
k. Less opportunity to utilize heavy equipment on frozen ground for fuel management and timber harvesting to minimize site impacts.

6.2 Climate Change Impacts on Fuel Management/Wildfire Threat Reduction Activities in the Kamloops area

1. The protection and enhancement of riparian/wetland areas must be a priority for any forest related activities in the Kamloops area.
2. Tree mortality in the lower Douglas-fir stands can be expected to increase substantially. This is not occurring in a significant way in the short term. There are indications of very limited Douglas-fir regeneration throughout the fuel managed areas in the City, suggesting moisture challenges for establishing seedlings.
3. All fuel management activities must be designed to ensure stand resiliency through partial retention of all available tree species and size classes.
4. Management for mule deer winter range should be conducted outside the presently identified winter range.
5. Forest stands are to be treated as lightly as possible to reach the moderate wildfire threat goal while retaining biodiversity, stand resiliency and other forest values.

6.3 Important Forest Health Issues

The Kamloops area has had significant forest health challenges in the past decade. The Western and Mountain Pine Beetle decimated the local pine stands. A majority of these trees were removed shortly after mortality on both crown and private property.

The spruce budworm had limited defoliating Douglas-fir impacts in the Kamloops area. Spruce budworm impacts are cyclical and were heaviest in the mid-2000s and are hardly evident in 2016. This pest thins the crowns of the mature trees and makes them susceptible to moisture stresses and the Douglas Fir Beetle. In areas with a heavy understorey, a significant portion of the smaller trees are directly killed by multi-year infestations. This defoliator can significantly increase the wildfire threats in the area as the small dead trees accumulate as surface and ladder fuels under the main canopy. The Spruce Budworm populations have dropped significantly in the Kamloops area since 2014. The worst infestation occurred in the Pineview area. The Douglas Fir Tussock Moth had a three year cycle from 2009-2011. This defoliator causes tree mortality or severe reduction in growth in Douglas-fir trees. The three year infestation resulted in patches of dead Douglas-fir trees in many parts of the City, mostly in Barnhartvale and Westsyde.

7 Timber Harvesting Land Base

Approximately one-third of the land within the City of Kamloops boundary is provincial crown land. Timber harvesting activities are presently limited to the southwest corner of the City, outside the WUI boundary. This selective harvesting of Douglas-fir is a valuable treatment to reduce surface fuel and crown closure.

8 Wildfire Behaviour and WUI Wildfire Threat Assessment

The wildfire threat assessment mapping and assessment work, as part of this CWPP, was completed in April 2016. This work was conducted to identify, quantify and map all wildfire threat issues within the City of Kamloops and a two kilometer buffer around its perimeter. The assessment was conducted using Wildland Urban Interface Wildfire Threat Assessment Worksheet and Guide (January 24, 2013) recommended by the B.C. Wildfire Service to assess wildfire threats in B.C. All areas were assessed regardless of land ownership to properly access the overall wildfire threats within the City. The area was broken into one of five wildfire behaviour threat classes; very low, low, moderate, high or extreme. A colour coded map showing the five wildfire threat classes was completed. No extreme wildfire behaviour threat class areas were identified during this assessment.

The wildfire threat assessment included ninety-nine threat plots that covered all fuel complexes in the Kamloops area. Forest polygons not directly assessed with a threat plot were assessed using up-to-date ortho photos and near 100% ground truthing. The only areas not directly ground truthed are located in the two kilometer

perimeter buffer, where no structures exist. All plots and associated pictures can be found in Appendix B.

Table Six - Wildfire Behaviour Threat Class Area Summary

Wildfire Behaviour Threat Class	City of Kamloops Hectares (Ha)	Two Km Buffer Hectares (Ha)
None	172	69
Low	7578	2189
Moderate	16358	17535
High	5320	7480
Extreme	0	0
Total	29428	27273

The following wildfire behaviour threat class definitions have been developed specifically for the Kamloops area. The low, moderate, high and extreme threat classes are taken from the wildfire threat assessment worksheet. The specific definitions for each threat class have been developed to clarify the wildfire threat definition and to provide a locally relevant written description of each wildfire threat class. This wildfire threat class system is similar to that used in the Fire Smart publication.

Table Seven - Wildfire Behaviour Threat Class Definitions

Very Low (Blue)	Water bodies, active or freshly disturbed gravel pits.	
Low (Green)	Developed land that will not support wildfire spread.	Examples: Golf course, watered and mowed grass, irrigated or heavily managed agricultural land, severely disturbed land, fully developed residential and commercial areas not directly adjacent to forested or undeveloped land.
Moderate (Yellow)	Developed and undeveloped land that will support surface fire spread only.	Examples: Open bunchgrass and Big Sage grassland. Deciduous forest cover dominated areas. Previously fuel managed forest stands assessed as moderate utilizing a threat worksheet.
High (Orange)	Forested land that will support candling, intermittent crown and continuous crown fires.	Examples: Unmanaged forested land with coniferous coverage exceeding 20% canopy closure. Multi-layered Douglas-fir dominated stands. Open conifer stands with heavy surface fuel loading. Past fuel managed areas with new dead standing conifers, heavy surface fuel loads or heavy conifer regeneration or not treated to a satisfactory standard.
Extreme (Red)	Forested land in drybelt ecosystems on south or west facing slopes across contour or below developments that will support intermittent or continuous crown fires adjacent to and within communities, or surrounding individual homes.	Examples: Forested land with relatively continuous coniferous canopy closure, in excess of 40%, within 200 meters of homes. Continuous dead pine within 200 meters of homes or developments. Areas of live and dead pine beetle attack of greater than 40% adjacent to structures. Partly developed subdivisions with unmanaged coniferous forest fuels on the undeveloped lots.

The threat worksheet guide 'Wildland Urban Interface Wildfire Threat Assessments in B.C. (July 31, 2012) states that low and moderate wildfire threat polygons in the wildland/urban interface are acceptable. High and extreme wildfire threat polygons, adjacent to developments, are considered unacceptable and are to be targeted for wildfire threat reduction (forest fuel management) activities.

All accessed polygons also receive a Wildland Urban Interface (WUI) Wildfire Threat Score as part of the assessment process. The WUI threat assessment identifies the forest land on a community's perimeter, or in intermix situations, that is most likely to directly threaten the adjacent homes and structures in the event of a wildfire. These are the wildland urban interface areas where forest fuels and structures meet. This assessment depends on the location of the assessment polygon relative the developed area, the type of development and the overall position of the development on the slope. The high and extreme WUI wildfire threat class areas are shown as hatched marked areas on the wildfire threat map. Only the high and extreme WUI threat class areas are mapped as the low and moderate areas are considered acceptable and are not targeted for fuel management treatments. The High and Extreme WUI threat class areas are the locations directly targeted for fuel management activities when they overlap a high or extreme wildfire behaviour threat polygon.

Table Eight – City of Kamloops 2016 Wildland Urban Interface Wildfire Threat Class Summary

WUI Threat Class	**City of Kamloops Hectares (Ha)**	**Two Km Buffer Hectares (Ha)**
High	7736	1664
Extreme	871	77
Total	8607	1741

The WUI wildfire threat class definitions for the Kamloops area are;

Table Nine - Wildland Urban Interface Wildfire Threat Class Definitions

High **(black hatch lines)**	High WUI wildfire threat class areas are located up to 200 meters above and 500 meters side hill or below developed areas. Forest polygons in these areas can directly threaten adjacent structures and developments through radiant or convective heat of a candling and crowning wildfire within the polygon, or through ember spotting activity ahead of the main fire front.
Extreme **(black double hatch lines)**	Extreme WUI threat class areas are located within 200 meters side hill or below of a developed area. These forest polygons can directly threaten adjacent structures and developments through radiant or convective heat of a candling and crowning wildfire within the polygon, or through ember spotting activity ahead of the main fire front.

8.1 Wildfire Threat Mapping

Ryan Strank of City of Kamloops GIS Department completed the wildfire threat mapping digitizing work. The five City of Kamloops CWPP Map are found in Appendices D through H. The report author collected all field data. Any errors, omissions or inaccuracies are the sole responsibility of the report author.

8.2 PSTA Structure Data Analysis and Management

The PSTA data provided by the BC Wildfire Service for the City of Kamloops included 8750 data points outside the Density Class 5 areas of the City. The data is largely from two sources, 1990s era Trim data and the ICI Society. The Trim data appears to identify all structures, not necessarily occupied houses as is the intent of the PSTA Structure data layer (Melinda McClung, MoFLNRO GIS Analyst, personal communication). These structures can be industrial, farm buildings such as barns and hay storage, and outbuildings in urban areas. The ICI Society data provides all private lots with a street address but not necessarily any structures. There is extensive overlap between the two data sets. Some of the newer developments in the City, specifically in Batchelor Heights, Aberdeen and Juniper Ridge are not captured on either data set. These developments are all inside or immediately adjacent to Density Class 5 areas and should show as such in the next iteration of the PSTA data.

To adequately meet the intent of the spatial data requirements for a CWPP, the following procedure was used to sort and analyze the PSTA Structure data.

1. All data points in Density Classes 3, 4 and 5 were retained as is. There is extensive overlap within these areas but all structures appear to be captured accurately with the exception of the three new development areas identified above. Few 'phantom' or non-structure data points were located in these areas. Those extra points identified are all in close proximity to identified, legitimate house structures.
2. The Trim data in Density Class 1 and 2 areas was removed. This is where a majority of the non-structure data points are located. The ICI Society data alone appears to accurately capture rural houses within the City of Kamloops and around its perimeter.
3. All data points within the Density Class 1 and 2 areas were analyzed using the latest City of Kamloops ortho mosaics and Google Earth to determine if a structure is present and whether it is an occupied dwelling or critical infrastructure. This resulted in the identification of twenty-five data points where no structure existed. These points have been identified on the spatial data for the City of Kamloops CWPP update.
4. The Tk'emlups Indian Band I.R. #1 PSTA data was used as provided.

The final CWPP map and PSTA Structure spatial data will show;

a. All PSTA Structure data points in Density Classes 3, 4 and 5 as they were provided. Critical infrastructure such as schools in Density Classes 3 and 4 were identified.
b. No Trim data in Density Classes 1 and 2 will be shown on the CWPP map. These data points will all be shown as overlap or non-dwelling data points in the spatial data.
c. The ICI data will be shown on the map, without the twenty-five points determined to have no structures present. The twenty-five data points will be identified in the spatial data as having no structure present.
d. New structures located in Batchelor Heights, Aberdeen and Juniper West have been added to the structure layer and shown on the map.
e. The Kamloops I.R.# 1 spatial data is mapped as per the PSTA data.

8.3 Mapped Fuel Management Treatment Units

The mapped Fuel Management Treatment Units (FMTUs) within the City of Kamloops boundaries, on municipal or provincial crown land, have been divided into four separate categories as shown in the following Tables. The fourteen new FMTU are a combination of four previously identified FMTUs that were not treated before the hiatus from fuel management within the City boundaries in 2010, and ten new FMTUs

that have been identified to meet the wildfire threat reduction guidelines 200 meter buffer criteria. The previously treated FMTUs have been divided into three maintenance streams based on the stand response and present condition since fuel management treatments were conducted. The M1 areas typically have dead standing trees or patches of thick regeneration that are immediately adjacent to private land. These areas do not meet the City of Kamloops fuel management guidelines and are identified as needing work in the short term to bring them in line with the established guidelines (see 9 City of Kamloops Forest Fuel Reduction Guidelines). The M2 areas have younger regeneration clumps or pruning that does not meet the standard but are not requiring direct action at this time. These areas have been tentatively scheduled for fuel reduction treatments in five years or more. The M3 areas presently meet the City of Kamloops fuel management standard and do not require any action for the foreseeable future. These assessments are for present stand conditions as of April 28, 2016. Impacts of further development, human activities, forest pests, disease, windthrow or snow press can significantly change an area in a short time frame, changing its maintenance status and overall wildfire threat.

The continued effort to manage City owned and Crown land will depend largely on continued grant funding from the provincial government for both initial site treatments and maintenance.

Table Ten – Summary of Fuel Management Treatment Units in the City of Kamloops

Treatment Unit Category	Description	Number of Treatment Units	Total Area Ha)
New	Untreated forest land within approximately 200 meters of developed areas.	14	162.3
M1	Previously fuel managed treatment units that require further treatment to meet City of Kamloops fuel management standards.	17	121.3
M2	Previously fuel managed treatment units that will require maintenance in the next five years.	19	212.7
M3	Previously fuel managed treatment units that do not require any treatment for at least five years.	32	447.8
Total		82	944.1

NOTE: The digital data for the shapes and areas of the previously treated FMTUs is from historical records, some of unknown origin or data collection standards. No effort has been made to 'clean up' this data, to resolve private/crown land conflicts or changes in ownership since treatments. This work will be done when these sites are re-treated as part of the City of Kamloops maintenance program.

Table Eleven - Summary of Previously Treated Fuel Management Treatment Units

FMTU #	Location	Area (Ha)	Maintenance Schedule	Last Treatment (Yr)	Type of Treatment	Treated By	Funding Source
1	Rose Hill	0.8	2	2009	Hand	Contract	SWPI
2	Rose Hill	25.2	1	2009	Machine	Contract	SWPI
4	Westsyde	1.4	2	2008	Hand	Contract	SWPI
5	Juniper	29.4	3	2009	Hand	Contract	SWPI
6	Juniper	5.4	3	2009	Hand	Contract	SWPI
7	Westsyde	58.3	2	2008	Machine	Contract	SWPI
8	Barnhartvale	29.7	3	2008	Machine	Contract	SWPI
10	Juniper	0.2	3	2008	Hand	Contract	SWPI
11	Barnhartvale	2.8	2	2007	Hand	Contract	SWPI
13	Barnhartvale	3.4	3	2007	Hand	Contract	SWPI
15	Barnhartvale	21.6	3	2007	Hand	Contract	SWPI
18	Rose Hill	8.2	2	2009	Hand	Contract	SWPI
19	Barnhartvale	29.0	3	2008	Hand	Contract	SWPI
34	Barnhartvale	13.2	3	2009	Hand	Contract	SWPI
36	Pineview	1.3	2	2006/07	Hand	BCWS	BCWS
37	Pineview	7.0	1	2007	Hand	BCWS	BCWS
38	Barnhartvale	19.7	2	2008	Hand	Contract	SWPI
40	Westsyde	6.3	3	2008/09	Hand	Contract	SWPI
42	Westsyde	8.6	2	2008/09	Hand	Contract	SWPI
43	Westsyde	9.6	1	2008/09	Hand	Contract	SWPI
46	Westsyde	14.8	2	2008/09	Hand	Contract	SWPI
47	Juniper	43.4	1	2008	Hand	Contract	SWPI
48	Kenna Park	26.9	3	2009	Hand	Contract	SWPI
49	Kenna Park	19.4	2	2009	Hand	Contract	SWPI
50	Kenna Park	43.7	3	2009	Machine	Contract	Federal
51	Kenna Park	10.9	3	2009	Hand	Contract	SWPI
52	Kenna Park	17.2	3	2009	Hand	Contract	SWPI
53	Hillside Dr	0.7	3	2010	Hand	Contract	SWPI
54	Aberdeen	3.7	3	2008/09	Hand	Contract	SWPI
55	Aberdeen	2.0	3	2008/09	Hand	Contract	SWPI
56	Aberdeen	1.9	3	2008/09	Hand	Contract	SWPI
57	Aberdeen	2.4	1	2008/09	Hand	Contract	SWPI
58	Aberdeen	4.6	1	2008/09	Hand	Contract	SWPI
59	Aberdeen	1.1	1	2008/09	Hand	Contract	SWPI

60	Aberdeen	0.7	1	2008/09	Hand	Contract	SWPI
61	Sahali	5.3	2	2008/09	Hand	Contract	SWPI
62	Sahali	4.0	3	2008/09	Hand	Contract	SWPI
63	Sahali	7.6	2	2008/09	Hand	Contract	SWPI
64	Aberdeen	6.1	2	2008/09	Hand	Contract	SWPI
65	Aberdeen	0.7	1	2008/09	Hand	Contract	SWPI
66	Aberdeen	8.1	1	2008/09	Hand	Contract	SWPI
67	Aberdeen	4.8	3	2008/09	Hand	Contract	SWPI
68	Aberdeen	1.4	1	2008/09	Hand	Contract	SWPI
69	Knutsford	0.9	3	2008/09	Hand	Contract	SWPI
70	Peterson Ck	2.7	3	2009	Hand	Contract	SWPI
71	Peterson Ck	0.2	3	2009	Hand	Contract	SWPI
72	Peterson Ck	16.9	2	2009	Hand	Contract	SWPI
73	Sahali	0.4	2	2009	Hand	Contract	SWPI
74	Sahali	0.6	1	2009	Hand	Contract	SWPI
75	Sahali	3.2	3	2009	Hand	Contract	SWPI
76	Sahali	1.3	3	2009	Hand	Contract	SWPI
77	Sahali	0.3	3	2009	Hand	Contract	SWPI
78	Juniper	0.5	1	2010	Hand	Contract	SWPI
79	Juniper	3.4	2	2010	Hand	Contract	SWPI
80	Kenna Park	142.0	3	2009	Machine	Contract	Federal
82	Rose Hill	11.3	1	2008	Hand	Contract	SWPI
83	Juniper	18.2	3	2005	Hand	Contract	SWPI
84	Barnhartvale	1.7	3	2009	Hand	Contract	SWPI
86	Barnhartvale	10.8	3	2009	Machine	Contract	SWPI
87	Barnhartvale	2.1	3	2009	Hand	Contract	SWPI
88	Barnhartvale	0.6	3	2009	Hand	Contract	SWPI
89	Peterson Ck	0.6	1	2009	Hand	Contract	SWPI
94	Pineview	26.9	2	2006/07	Hand	Contract	BCWS
126	Barnhartvale	3.7	1	2007/08	Machine	Contract	SWPI
99	Kenna Park	9.8	3	2009	Hand	Contract	SWPI
106	Barnhartvale	10.7	2	2008	Hand	Contract	SWPI
130	Juniper	0.1	2	2009	Hand	Contract	SWPI
132	Juniper	0.4	1	2009	Hand	Contract	SWPI
Total		781.8					

Table Twelve - Summary of Untreated Fuel Management Treatment Units

FMTU #	Priority	Location	Area (Ha)
9	2	Iron Mask	11.7
45	3	Westsyde	4.2
93	1	Barnhartvale	29.8
100	11	Barnhartvale	10.6
125	10	Barnhartvale	22.3
115	5	Pineview	9.1
117	4	Pineview	25.9
118	14	Juniper Ridge	13.1
120	6	Kenna Cartwright Park	6.3
121	8	Kenna Cartwright Park	9.3
122	7	Kenna Cartwright Park	8.0
123	9	Juniper Ridge	11.2
131	12	Juniper Ridge	0.1
133	13	Juniper Ridge	0.7
Total			**162.3 Ha**

9 Wildfire Threat Reduction Maintenance

Fuel management maintenance regimes will vary greatly. The regime will often depend on the condition of the stand before initial treatment, the intensity of the activity carried out and the reaction of the remaining forest stand to the treatment. Properly planned and implemented fuel management activities should improve the overall health and vigour of a stand, making it more resilient and more able to withstand wildfires, moisture deficits, pests and diseases.

Many forest stands are not able to withstand aggressive fuel management treatments and must instead be planned for multiple entries to reach an acceptable standard. For example, very heavily stocked lodgepole pine stands that have grown tall with little diameter growth can be prone to windthrow and snow press when opened up too quickly.

In a healthy stand with no new disease or environmental impacts, spacing and pruning treatments should last a decade or more before further work is required. The amount of will depend on tree species, forest health, mortality in the stand, tree ingress, windthrow or snow press, grass growth and other factors that increase the amount of dead and down forest fuel.

Eight year old spaced, pruned and surface fuel treatment in Kenna Cartwright Park.

10 City of Kamloops Forest Fuel Reduction Guidelines

All sixty-eight past Fuel Management Treatment Units (FMTUs) were assessed as part of the 2016 CWPP update. These areas have been treated from 1997 to 2010 under prescription prepared by forest professionals. The treatments have varied, with three main activities undertaken;

A. Heavy Equipment dead pine removal through harvesting or pile and burn.
B. Hand crew removal of dead pine through piling and burning on inaccessible and steep slopes.
C. Hand crew treatments in multi-layered conifer dominated stands involving danger tree removal, spacing, pruning, surface fuel cleanup, debris piling and open burning.

A majority of the sites were completed by hand crews. The stand response has varied widely. In general, the following responses have been noted.

1. The conifer regeneration response is strongest on north and west facing slopes and in water catchment areas in largely clearcut areas, those where the mature pine were all removed due to mortality from the pine beetle epidemic.
2. The regeneration response is least in the Douglas-fir stands with 20-40% canopy retention.

3. The response of Saskatoon (Amelanchier alnifolia) has been significant wherever it was present before fuel treatments. It has come dominate many stands, especially underneath partial retention Douglas-fir stands.
4. The stands offering the best biodiversity, wildlife habitat and stand resilience are those where all available trees species and size classes were maintained during the fuel management treatment.
5. The large coarse woody debris left behind has decayed significantly in the last five or more years since treatment.
6. A majority of the dead Ponderosa Pine wildlife trees left behind for habitat have fallen over. Tree failure is highest where the trees are in the open, without the benefit of other trees to reduce the wind impacts. Most of the remaining standing dead trees were dead before the pine beetle infestation. These trees stand far longer than those killed by pine beetles.

The City of Kamloops will attempt to complete fuel management treatments on all crown and municipal lands within the city boundary, as identified in this report, to the following guidelines, within the next decade.

1. Two hundred meter buffer of all structures where high wildfire behaviour threat polygons are identified. This applies to suitable City owned of Crown land only. Private land is not to be directly managed under this CWPP. The wildfire threat will be reduced from high or extreme to a moderate standard based on the WUI wildfire behaviour threat assessment worksheet as recommended by the BCWS. The worksheet can be found at http://www.ubcm.ca/assets/Funding~Programs/LGPS/SWPI/Resources/swpi-WUI-WTA-worksheet-2012-Update.pdf
2. All treatments will be conducted by hand crews immediately adjacent to homes and structures unless high tree mortality or other safety reasons determined that mechanized equipment should be utilized.
3. Fuel management activities will be limited the treatment of conifers and dead deciduous trees and brush. Live deciduous trees and brush will only be removed for access and to manage for worker and fire fighter safety.
4. All fuel management treatments will respect biodiversity and stand resilience by maintaining a component of all the available tree and shrub species.
5. All fuel management work will respect wildlife habitat by retaining high value wildlife trees, coarse woody debris and degrees of visual and thermal cover where safe and prudent to do so.
6. All fuel management work involve live tree spacing activities up to a maximum of 17.5 cm at dbh unless there is a site specific forest health or wildfire hazard issue that requires a more aggressive treatment. Where tree removal larger than 17.5 cm (merchantable timber) is being considered, timber harvesting must be considered whenever possible.
7. Pruning activities will be limited to conifers in excess of two meters tall. Pruning will include all live and dead branches to a maximum of 50% of the

tree's height or three meters clear of the surface fuels, whichever is lowest. Pruning stub length to be a maximum of one centimeter in length.

8. Surface fuel clean up includes dead felled trees to a maximum of 15 cm in diameter unless high surface fuel loads required additional debris removal. Removal of all surface fuels from spacing activities and at least 95% of the pruned branches down to 1 cm in diameter. Surface fuel removal to be completed by the most cost effective method available. This debris is usually burned on site, but can include removal and chipping or hauling away. Chipping and spreading is not a preferred treatment.
9. Coarse woody debris to be cut to lie in close proximity to the ground, with supporting limbs intact on slopes for stability. Vertical and horizontal branches removed and at least five meters apart whenever possible. Coarse woody debris fuel load not to exceed 15 Tonnes per hectare unless removal is dangerous to workers or not practical.
10. All fuel management activities are to respect water values in the gullies through Aberdeen and Sahali.

11 Wildfire Threat Reduction Options

Reducing the wildfire threat to existing communities, homes, and to future developments can be a very complex planning process. All plans or prescriptions for wildfire threat reduction must be site specific, aesthetically pleasing, economically feasible and environmentally sensitive.

The objective of wildfire threat reduction efforts should not be to stop all fires, which is not realistic or achievable. The objectives should be:

- to alter wildfire behaviour on the forested land adjacent to developments, through forest fuel management, to greatly reduce the potential for house and structure losses,
- to create safe access for wildland fire crews to more efficiently and effectively control wildfires, and
- to construct and maintain houses that are designed to withstand a wildfire.

Building construction materials and design are outside the scope of this report but are discussed in detail in the Fire Smart manual, Chapter 3. Improving structure survivability through forest fuel management has two key components; one, separating the structures from the forest with Fire Smart landscaping, and two, reducing or modifying the forest fuels in the surrounding forest to reduce the wildfire behaviour.

Table Thirteen - Recommended Wildfire Hazard Reduction Guidelines for Each Wildfire Hazard Class

Wildfire Behaviour Threat Class[1]	Forest Fuel Description[2]	Wildfire Behaviour	Maximum Fire Intensity Rank	Wildfire Threat Reduction Requirements [3]
Low	None	Smoldering	1	None
Moderate	Grass/Sage, fuel reduced forested areas, Deciduous forest - Surface Fuels Only	Surface Fires	2 - 3	Priority Zone 1 and 2 (as required)
High	Conifers dominated stands and Surface Fuels	Candling/Crown Fires	4 – 5	Priority Zone 1 and 2 and 3 (as required)
Extreme	Continuous, Dense Conifers and Surface Fuels	Aggressive Crown Fires	4 - 6	Priority Zone 1, 2 and 3 (as required)

1 Wildfire Hazard Class for Priority Zone 2 from Fire Smart
2 See full definitions for each Priority Zone 2 Hazard Class
3 Priority Zones from Fire Smart

Landowner awareness and buy-in are the only options for reducing the wildfire hazard to their own property. Fire Smart information needs to be distributed to the private landowners in established developments with unacceptably high wildfire threat..

The City of Kamloops needs to ensure any new developments or subdivisions are not established without adequate wildfire threat reduction efforts put in place before construction begins. By ensuring the new developments are adequately planned and managed to reduce the wildfire hazard to acceptable levels, many of the present problem areas will have their wildfire threats reduced.

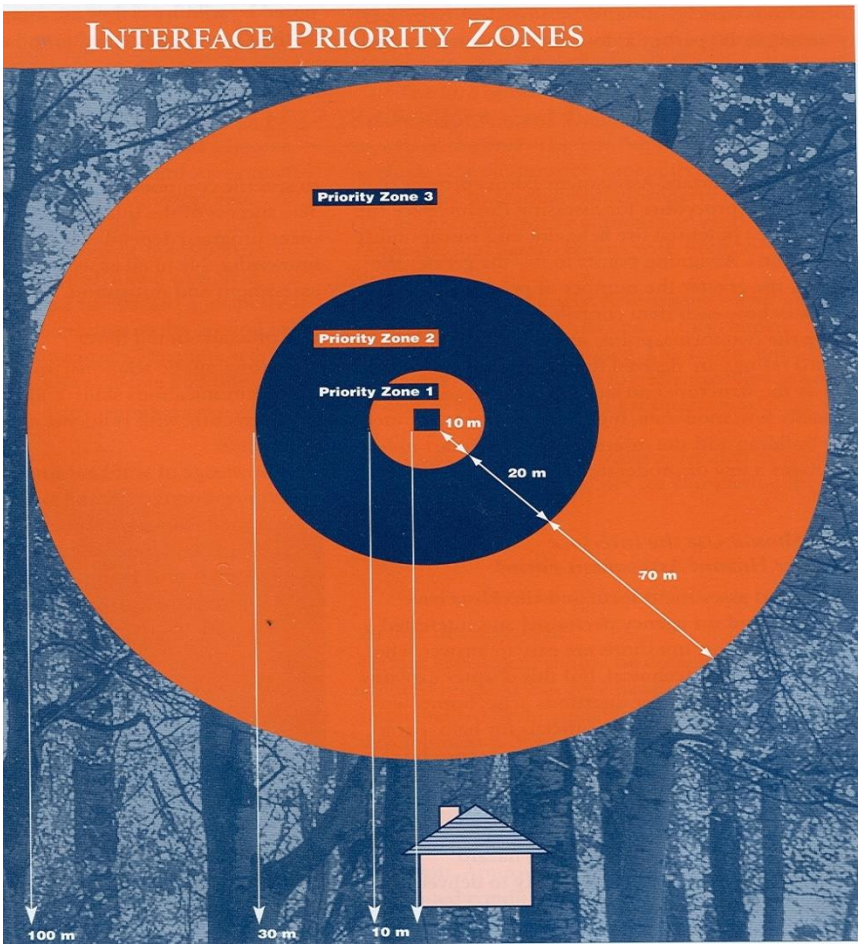
12 Fire Smart Landscaping

Separating homes and other structures from the forest environment involves establishing Fire Smart landscaping around the structure so a wildfire cannot spread directly up to the structure. Direct radiant and convective heat can ignite structures. Creating a barrier between the structure and the combustible material will greatly increase structure survivability in the event of a local wildfire. Fire Smart landscaping can include a wide variety of plants and surface covers, as long as they do not support combustion. Fire Smart landscaping is referred to as Priority Zone One in the Fire Smart manual and is discussed in detail in Chapter 3 of that publication.

A minimum of 10 meters of Fire Smart landscaping from the structure to unmanaged forested land is recommended. This distance should be increased with increasing slopes and the extent of the wildfire threat in the adjacent forest. For example, a 10 meter buffer would likely be sufficient on flat ground adjacent to an unmanaged field of matted grass. The distance should be increased greatly, or combined with other treatments in an area of continuous, dense, tall coniferous trees on a steep (greater than 20%) slope. Fire Smart landscaping alone is suitable for structures adjacent to Low and Moderate (relatively flat ground) Wildfire Behaviour Threat Class areas as identified on the maps attached to this report.

Fire Smart landscaping alone is not enough to increase house survivability in the areas identified as high and extreme wildfire behaviour threat class areas in this report. The high and extreme wildfire behaviour threat class areas will need much wider Fire Smart landscaping or some other type of forest fuel modification on the adjacent forest lands.

Fire Smart Interface Zones



13 Forest Fuel Modification

Wildfire behaviour is based on three factors.

1. Forest Fuel – the woody material available to burn, configuration and continuity
2. Weather – daytime temperature, the amount of drying and wind
3. Topography – the lay of the land, slope, aspect and terrain

Of these three factors, only the forest fuels are within our control. Reducing the volume and continuity of the forest fuels can reduce the intensity, maximum behaviour and the rate of spread of a wildfire, thus reducing the wildfire threat. The objectives for forest fuel management should be:

a) Reducing the crown fire potential,
b) Reducing the surface fire intensity,
c) Improving wildland fire suppression opportunities through better access, better site lines and fewer danger trees,
d) Maintaining bio-diversity and wildlife habitat, and
e) Minimizing site impacts during fuel management activities.

Other important benefits include better firefighter safety and greater effectiveness of aerial wildfire suppression resources.

There are two basic approaches to wildfire threat reduction or forest fuel management. The chosen method will depend on numerous site-specific factors.

13.1 Timber Harvesting/Mechanical Fuel Management Treatments

Timber harvesting in interface areas can be a very effective management tool. In large areas of commercially viable forest, a form of timber harvesting to remove a portion of the stand is the most logical option. The wildfire threat reduction work can be self-funding and a valuable resource gets properly utilized. The intensity and method of harvesting will depend on the topography, trees species, forest health, degree of wildfire threat, community acceptance and a variety of other site-specific factors. Clearcut harvesting, while usually not a very popular option for any community, may be the only solution in pure pine or spruce forest stands decimated by bark beetles.

Where necessary, a form of partial or selective harvesting is better accepted. Removal of targeted tree species, based on forest health, wind firmness, diameter limits and a wide assortment of other factors is a common practice.

Harvesting for fuel management, or wildfire threat reduction, is significantly different from conventional commercial harvesting. The emphasis should be directed towards the final product left behind in the forest, not necessarily the timber removed from the site. This can result in additional costs.

Dead Pine removal in Barnhartvale (FMTU 8) in 2007.

13.2 Hand Crew Forest Fuel Management

In immature, inaccessible, sensitive and small patches of forestland where harvesting is not an option, wildfire threat reduction efforts can be completed without timber extraction. Treatments can be carried out by hand, with equipment or a combination of the two. These treatments are rarely self-funded and require a funding source for completion. Treatments can vary in cost from $2800 to $7000 per hectare.

Reducing the amount and configuration of the forest fuels consists of four basic activities.

a. Danger Tree Removal

Dead and dangerous trees that will add significantly to the future surface fuel loading should be targeted for removal. Dead trees that can reach private land or access roads must be removed before fuel management activities commence. Retention of high value wildlife trees must be considered.

b. Spacing or Thinning

Spacing, thinning or tree removal involves the reduction of the number of stems and associated branches and needles within the forest canopy. There are a number of different techniques. The spacing treatment necessary is dependent on many factors including; tree species, forest health, age of the stand, stand structure and other factors. Spacing treatments must be designed on a site-specific basis. In some cases, small scale forest harvesting may be the best method to space the area and cover the costs of the treatment. Any forest harvesting in interface areas must be well planned and supervised.

Spacing activities in multi-layered stands involves the removal of the weakest trees on site. These trees have usually been outcompeted, damaged or suffered forest health issues and are falling out of the stand. Caution must be taken to ensure the multi-aged characteristics of the stand are maintained. This is often referred to as 'spacing from below', or forest health style spacing. This usually increases the crown base height and creates a healthier, more vigorous forest. In relatively even aged stands, spacing the trees so the crowns are separated by a set average distance is a reasonable treatment option. This inter-crown distance should be increased on slopes. This spacing distance is also dependent on crown base height and the amount of surface fuel remaining after the site treatment.

c. Pruning

Pruning involves the removal of the lower live and dead branches of coniferous tree species to separate the crown fuels from the surface fuels. By raising the Crown Base Height (CBH) within the stand, it will be more difficult for a surface fire to spread upwards into the tree canopy where it will spread quickly, greatly increase the wildfire intensity and create ember showers, or spotting, onto adjacent structures. The required height of the pruning is variable depending on; canopy closure, tree species, topography and amount of surface fuels remaining after the site treatment.

One commonly used convention for pruning is a three meter crown base height. This is based as much on the crew's reach as on crown fire initiation concerns. Again, there is no one prescription to manage all situations. Pruning must take into account the tree height and amount of live crown. The tree must be left a certain portion of its live crown to remain healthy and vigorous.

d. Surface Fuel Reduction

Surface fuel reduction involves the removal, chipping or burning of the accumulated felled, spaced and pruned material, and sometimes additional downed and dead material that will contribute to wildfire spread. Removal of the fine (small diameter) fuels is the priority as these fuels dry out quickly, ignite easily and are the main contributor to surface fire spread on most sites.

Surface fuel treatments are often considered the most important component of any fuel modification activities and the most expensive. Overly aggressive surface fuel clean up can cause serious environmental impacts including erosion, introduction of noxious weeds and loss of wildlife habitat.

These techniques should be employed on the forested land adjacent to homes or new developments in all High and Extreme wildfire behaviour threat class areas to reduce the wildfire threat to Moderate or below.

No one prescription will solve all wildfire threat problems. All prescriptions must be site specific and developed by an experienced individual.

14 Other Factors to Consider When Conducting Fuel Management

The 'All Things Considered' approach is necessary when conducting any forest management activity. Fuel management is no exception. Fuel management plans and prescriptions must address other forest values that could be impacted by the planned treatments. The other values include; visuals, water, wildlife habitat, site stability, noxious weeds, access, biodiversity, Old Growth Management Areas and endangered species.

A widely spaced and pruned forest will not support crown fires.

15 Implications of Wildfire Threat Reduction Work

Reducing wildfire threats through the reduction of the forest fuels sounds simple enough, but forest fuel treatments can have a wide range of implications. Fuel treatments can have both positive and negative effects on wildfire threats.

Mechanized timber harvesting as a stand alone treatment can be very effective in reducing crown fires but usually results in a significant increase in finer surface fuels composed of needles, limbs and tops. This surface debris can increase surface fire intensity.

Hand crew treatments of dead and danger tree removal, spacing, pruning and surface fuel removal techniques can create lower fuel loaded, more open forest stand. Open forest stands;

- allow more light to reach the surface, often drying out the site or allowing more grass, herb and shrub growth, creating heavier, more continuous surface fuels
- can lengthen the fire season on the site by allowing the site to dry up faster and stay dry longer,
- allow more wind to move through the stand and along the surface, possibly increasing the rate of spread of surface fires, and
- often have lower relative humidity in the summer months from the increased sunlight and temperatures.

The positive effects of wildfire threat reduction through forest fuel reduction include;

- lower probability of crown fires due to the more open forest canopy and higher crown base height,
- lower intensity surface fires from the reduced forest fuels,
- easier and safer access for wildland firefighters, and
- more effective aerial fire control efforts with air tankers.

In general, properly planned and implemented forest fuel reduction work reduces the crown fire potential and overall intensity of wildfires within the treatment area. This will increase the survivability of the trees in the stand and of adjacent homes and structures. Forest fuel reduction work can also increase the dryness on the site, and allow more wind to reach the surface, creating conditions for fast moving, low intensity wildfires to spread.

16 Effectiveness of Hand Fuel Management Treatments

Hand crew treatments is usually the preferred fuel management option, compared to mechanized harvesting and treatments, immediately adjacent to structures because of;

- Better visuals and aesthetics,
- Limited impact on recreational opportunities and established trails,
- Less overall site impacts and soil disturbance, minimizing noxious weed potential impacts, and
- Better protection of wildlife habitat, biodiversity and water resources.

Hand crew completed fuel management treatments usually consist of a combination of danger tree removal, spacing, pruning and surface fuel removal, at varying intensities. The main forest canopy is often kept in place. Much of the work on Crown land is often restricted by merchantable timber utilization standards, where only live trees below the utilization standards can be cut and removed.

This type of treatment can be very effective for small fires that start in the community or within the treatment area. Good visuals, reduced danger trees and ladder fuels can allow safe, fast, aggressive wildfire suppression action within the managed area. Initial attack success can be far higher under these circumstances. Hand crew treatments can be less effective in a landscape level wildfire event that sweeps into the treatment area from the unmanaged forestland. A well developed Rank 5 or 6 wildfire (continuous crown fire) that spreads into a hand treatment area surrounding a community, may easily spread quickly and aggressively through all or a portion of the hand treated fuel management treatment area, providing only minimal safety to the community. The aggressiveness of the treatment will also need to determine the width of the treatment. A lower intensity treatment will have to be wider than a more aggressive treatment to be as effective.

Hand crew fuel management treatments are most effective when supported by forest harvesting along the treatment area perimeter. If the harvesting can reduce the wildfire intensity significantly before the wildfire enters the hand treatment areas, the effectiveness of the hand treatments is significantly increased.

17 Resource Issues and Operational Constraints

The City recommended fuel management treatments are all suggested as hand crew work, supported where possible by smaller pieces of heavy equipment. A

combination of danger tree removal, spacing and pruning of the remaining stand, plus debris disposal is required to reduce the crown fire threshold and improve wildfire suppression access. Most areas are recommended for hand treatments only because the areas selected for treatment are all within highly visual, high use recreation areas. Many sites are relatively steep or located in riparian areas or narrow greenbelts. These sites require sensitive treatments that can only be carried out by hand crews.

18 Higher Level Plans

This area is included within the Kamloops Land and Resource Management Plan (LRMP). This document does not directly address forest fuel management or have significant discussions on wildfires. The LRMP has been reviewed when developing this CWPP and there does not appear to be any conflicts between the stated objectives of the LRMP and properly prescribed and implemented fuel management projects.

The Kamloops LRMP does address Old Growth Management Areas (OGMA's) and Ungulate Winter Range. The fuel management treatment units identified in this document may overlap with local OGMAs but do not impact on the key OGMA attributes on which the areas are based. There is no conflict between the established winter range and the fuel management projects. The planning work to date identifies improvements for winter range within the fuel managed areas.

19 Partnership Contact List

The following individuals and organizations can be very useful in pursuing funding and land use approvals.

Table Fourteen - Partnership List

Name	Organization	Title	Phone #
Kirsten Wourms	City of Kamloops	Nature Park Crew Leader	250 214-5501
Ryan Strank	City of Kamloops	GIS Technician	
Mike Aldred	Ministry of Forests, Lands and Natural Resource Operations – B.C. Wildfire Service	Kamloops Fire Center – Fuel Management Specialist	250-554-5500

Les Leduc	Ministry of Forests, Lands and Natural Resource Operations – B.C. Wildfire Service	Kamloops Fire Zone Fuel Management Specialist	250-554-5500
Hugh Murdoch	Ministry of Forests, Lands and Natural Resource Operations – B.C. Wildfire Service	Kamloops Fire Zone Manager	250-554-5500
Peter Hisch	Ministry of Forests, Lands and Natural Resource Operations - B.C. Wildfire Service	Provincial Fuel Management Specialist	250-426-1773
Peter Ronald	Union of B.C. Municipalities – Victoria	Programs Officer	250-356-5134
Bill Ashman	Ministry of Forests, Lands and Natural Resource Operations	Thompson Rivers District - Tenures Forester	250 371-5500

20 Municipal Council Support

The City of Kamloops council has given its full support to the Forest Fuel Management Program and wildfire threat reduction efforts. Direct threats to the community in 2003 and 2009 have brought the concern of wildfire to the forefront, and the council will continue to support threat reduction efforts.

21 Cultural Heritage Values and Overview

The City of Kamloops completed a city wide Preliminary Field Reconnaissance (PFR) project with the Tk'emlups Indian Band in 2009. This was meant to identify any high value or sensitive cultural values on the crown lands surrounding the city that would be impacted by fuel management treatments. Although nothing specific was located, there will be ongoing consultation with the TIB for future fuel management projects.

22 Discussion of Funding Opportunities

As of the April 2016 creation of this Community Wildfire Protection Plan, there is only one program available to cover the costs of fuel management projects on Crown lands.

Strategic Wildfire Prevention Initiative (SWPI) program

The UBCM distributes fuel management funding provided by the B.C. Wildfire Service to Regional Districts, Municipalities and First Nations on a first come first serve basis to plan and implement fuel management projects.

The UBCM requires that a Community Wildfire Protection Plan be completed before operational funding is provided. This ensures that the entire community area is assessed and the highest priority projects are completed first. The First Nations Emergency Services Society (FNESS) is involved in distributing the funds to First Nations on UBCM's behalf. This is provincial funding that must be spent on Crown land.

Strategic Wildfire Prevention Initiative (SWPI) program guidelines for current and past years can be found at http://www.ubcm.ca/EN/main/funding/lgps/strategic-wildfire-prevention.html

23 Landscape Level Forest Fuel Management

Landscape level fuel management activities are largely beyond the scope of this report. The City of Kamloops is focusing on the perimeter fuel management treatments that directly impact on the structures and developments within the City boundaries. No treatments are being carried out outside the City boundaries or for more general landscape level purposes. This is not seen as their jurisdiction or responsibility. The younger timber types in the clearcuts and partial cut systems designed for a landscape level fuel break are less flammable with less bio-mass for combustion and do not pose a significant a wildfire threat as continuous mature conifer stands.

Landscape level fuel management activities include a combination of:

a. clearcut or selective harvesting treatments with close attention paid to windfirmness of the retained trees,
b. appreciation for visual quality objectives in the Kamloops area,
c. fuel management considerations for slash and coarse woody debris retention in the harvested areas.
d. An accessible road system with wide right-of-ways to act as fuel breaks,
e. identified and developed water resources for wildfire suppression, and
f. aggressive fuel management around communities and culturally significant sites.

24 City of Kamloops Capacity/Experience

The City of Kamloops has over twenty years of fuel management efforts supervised and administered by city staff. Their parks department directly manages the fuel management program through local consultants and contractors. The Kamloops Fire and Rescue are involved with site selection and the Fire Smart program. They have bush trucks and gear and regularly conduct cross-over training with the BC Wildfire Service local crews and staff.

There is the B.C. Wildfire Service Branch Office, Air Operations, Fire Center and Fire Zone located at the Kamloops Airport. Initial Attack crews, Unit Crews, wildfire management staff and Air Tankers are all available during the wildfire season.

25 Relevant Legislation and Local Government By-Laws and Policies

City of Kamloops Fire Prevention By-Law 10-37 covers open burning and permitting. Kamloops Fire and Rescue (KFR) provides mandatory permits for all open fires. They are limited to properties on 0.4 hectares or bigger and are for the burning of yard waste only during daylight hours. Land clearing and burning permits are also issued by the KFR. The permit system provides that people are responsible for their fire, must be constantly monitored by a competent person and any other obligations the Fire Chief deems necessary.

26 Recommendations/Action Items

The following recommendations are actions items for the City of Kamloops to continue their fuel management program to reduce the wildfire threat to the structures and recreational areas within the City.

1 Continue to support fuel management activities designed to reduce the wildfire threats to the forests and structures within the City of Kamloops.

2 Pursue all possible funding options to complete the recommended fuel management treatments.

3 Continue the prescribed fire program within the City boundaries to reduce surface fuels and fuel continuity.

4 Complete fuel management activities on all identified new Fuel Management Treatment Units identified in this CWPP in the next five years, subject to available funding.

5 Initiate a FMTU maintenance program to ensure all past treatment areas continue to meet a reasonable standard.

6 Conduct all fuel management activities considering climate change and the implications on biodiversity and forest health in the Kamloops area.

7 Ensure local building design requirements address Fire Smart principles specifically in terms of using non-combustible exterior materials, establishing adequate building setbacks from the adjacent forested lands, and ensuring Fire Smart Priority Zone 1 areas are non-combustible.

8 Strive to become a recognized Fire Smart Community through the national Fire Smart program that will bring attention to the issue of wildfire prevention while encouraging all business and property owners to reduce the wildfire potential in and around the community.

27 Summary

The City of Kamloops (the City) is located in some of the driest ecosystems within the province of B.C. and all of Canada. These fire dependent ecosystems experience long, dry summers with regular drought conditions which are conducive for wildfire ignition and spread. The size and shape of the developed parts of the City result in extensive wildland/urban interface (the interface) between residential houses and forest or grasslands. The City of Kamloops has conducted wildfire threat reduction work on City owned and B.C. Crown land since 1987. An annual wildfire threat reduction program was initiated by the City in 1994. These efforts were accelerated in the mid-2000s due to a pine beetle epidemic that caused mortality in over 90% of the mature ponderosa pine trees within the City limits. The City has identified over 4200 houses directly adjacent to forests or grassland within its boundaries. The more rural subdivisions typically have more structures prone to wildfires.

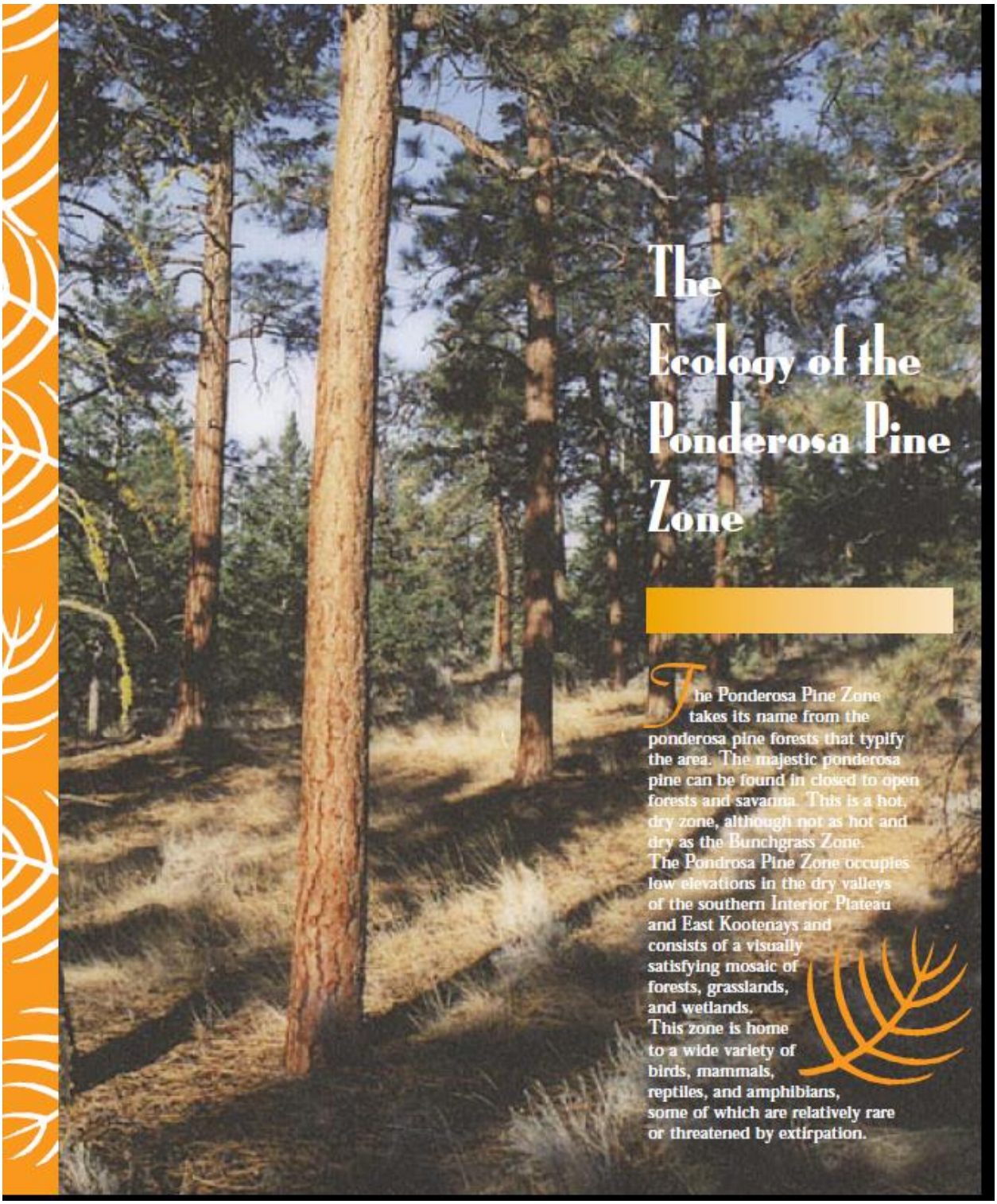
Long term wildfire threats exist throughout the City. The houses on the western edge of Peterson Creek and within the Rose Hill subdivision face the most serious long term threats. The other main areas of concern include Barnhartvale, Juniper Ridge, Heffley and Pineview. The intention of the City of Kamloops fuel management program is to retain all interface areas within the City in a moderate or low wildfire threat class for the long term. Fuel management treatments are targeted for 200 meters in width when appropriate. The City has completed over 780 hectares of fuel management treatment area on sixty-eight unique sites. Some areas have been treated three times. Another fourteen sites, covering 162 hectares, are still requiring their first treatment. Not all private land within interface areas meet a moderate wildfire threat standard. Private

land with a high wildfire threat rating adjacent to houses can be found in Barnhartvale, Juniper Ridge, Rose Hill, Pineview and Heffley.

The maintenance requirements on the forest and grasslands within the City of Kamloops will depend on further developments in the area, tree species, forest health, mortality in the stand, conifer ingress/regeneration, grass growth and other factors that increase the amount of dead and down forest fuel, coniferous canopy closure or reduced fire suppression crew safe access. Of the sixty-eight past treatment areas, seventeen are requiring maintenance work in the next five years to retain the moderate threat class. As forest stands re-establish themselves after the pine beetle infestation, bio-mass and the associated wildfire threats are expected to increase incrementally each year unless regular, site specific fuel management treatments are continued.

Appendix A

Biogeoclimatic Zone Brochures


The Ecology of the Ponderosa Pine Zone
The Ponderosa Pine Zone takes its name from the ponderosa pine forests that typify the area. The majestic ponderosa pine can be found in closed to open forests and savanna. This is a hot, dry zone, although not as hot and dry as the Bunchgrass Zone. The Pondrosa Pine Zone occupies low elevations in the dry valleys of the southern Interior Plateau and East Kootenays and consists of a visually satisfying mosaic of forests, grasslands, and wetlands. This zone is home to a wide variety of birds, mammals, reptiles, and amphibians, some of which are relatively rare or threatened by extirpation.

Location

The Ponderosa Pine Zone is located at low elevations along the very dry valleys of British Columbia's southern interior. The zone occupies a narrow band along the bottoms and lower side walls of a number of major river valleys, including the Fraser (in the Lytton-Lillooet area), lower Thompson, Nicola, Similkameen, and lower Kettle. It also occurs in areas adjacent to Okanagan Lake and in southeastern British Columbia near Cranbrook and Lake Kookanusa. The Ponderosa Pine Zone extends south into the United States where it is much more widespread than in Canada.

Ponderosa pine stand

Similkameen Valley

Ecosystems

The vegetation in this zone often consists of a mosaic of forests and grassland. Ponderosa pine, which dominates most forests in this zone, is also called yellow pine and is best known for its characteristic vanilla-scented, cinnamon-coloured bark made up of jigsaw-puzzle-shaped scales. The thick bark helps make the tree resistant to surface fires. Stands are often open and park-like, with a ponderosa pine canopy and an understory of blue-bunch wheatgrass, rough fescue, and arrow-leaved balsamroot. Other dominant species in this landscape include saskatoon, pasture sage, lemonweed, and yarrow. Tree regeneration, in natural conditions, is uncommon in the understory, and there are few, if any, shrubs. Additional plant species can include silky lupine, orange arnica, rosy pussytoes, Rocky Mountain fescue, Idaho fescue, slender hawksbeard, timber milk-vetch, junegrass, and cheatgrass.

Ponderosa pine bark

Climate

The Ponderosa Pine Zone is the driest of the forested zones in British Columbia, and in summer it is also one of the warmest. In July, mean temperatures range from 17 to 22° C. The low precipitation of 250–450 mm per year is a result of the strong rain-shadow cast over this area by the Coast and Purcell Mountains. Most precipitation falls in winter, with December and January being the wettest months. Winters are cool, with a light, intermittent snow cover. The snowpack varies from 0 to up to 50 cm and may come and go throughout the winter. The growing season is relatively long, with a continuous frost-free period of 125–175 days. This makes the area suitable for agricultural purposes, provided there is water for irrigation.

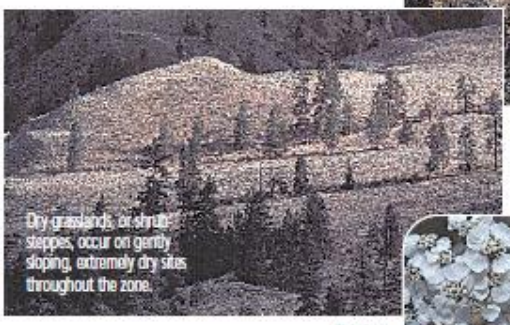
Arrow-leaved balsamroot
Balsamorhiza sagittata

Rosy pussytoes
Antennaria rosea

Due to cutting and fire suppression, many sites that previously supported open stands now contain dense young thickets or, alternatively, grasslands on sites where regeneration of trees has been poor.

Dry grasslands, or shrub-steppes, occur on gently sloping, extremely dry sites throughout the zone and often extend into the lower-elevation Bunchgrass Zone.

Shrubs, like big sagebrush or rabbit-brush, are found in combination with bluebunch wheatgrass, pasture sage, yarrow, and fescues on grasslands that are in good condition. On heavily grazed sites, big sagebrush or rabbit-brush increase in abundance and other species like, bluegrasses, cheatgrass, and knapweed are found.


Dry grasslands, or shrub-steppes, occur on gently sloping, extremely dry sites throughout the zone.

The driest forested sites in this zone are found on south-facing rocky outcrops and steep escarpments. Here ponderosa pine dominates the open forest canopy, and herbs include yarrow, compact selaginella, and red three-awn. On drier sites in the northern part of the zone, Douglas-fir occurs as a minor species mixed with the ponderosa pine.


The driest forested sites in this zone are found on south-facing rocky outcrops and steep escarpments.

Dense stands of Douglas-fir grow on moist sites such as gullies, draws, and streambanks, and on steep northerly aspects. Throughout the zone, trembling aspen is a common species in dense stands on sites kept wet by seepage. Water-loving black cottonwood is the main species on floodplains. The shrubby understory includes water birch, along with common snowberry, roses, red-osier dogwood, Douglas maple, and tall Oregon-grape.


Common rabbit-brush
Chrysothamnus nauseosus


Yarrow
Achillea millefolium


Trembling aspen
Populus tremuloides

Fire History

As a result of lightning strikes and a general lack of moisture in this zone, wildfires occur here perhaps as often as every 15–25 years. Because of their frequency, fires have played an important role in the ecology of this zone. Mature ponderosa pine trees have a thick bark and a self-pruning habit that prevents most fires from spreading upward to the crown. However, as fires speed through the understory, they burn off grasses and new growth, leaving behind a relatively bare forest floor and restricting regeneration of new trees. Historically, this pattern resulted in a mosaic of grasslands and open stands of pine. In recent times, as a result of fire suppression, dense stands of pines have replaced some of the more open stands, as well as some grasslands. These dense stands contain "ladder" fuels that will result in hotter and more abundant crown fires in the future. Because there is much housing in the Ponderosa Pine Zone, many private residences are at risk from wildfires or fires caused by humans.

Wildlife

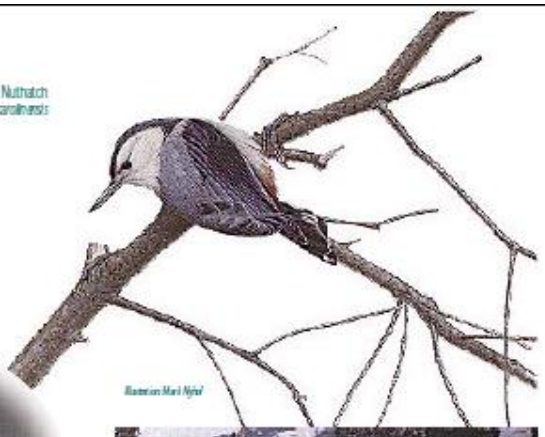
Because of the short, relatively snow-free winters, the Ponderosa Pine Zone is an important environment for many kinds of wildlife. Mule deer, white-tailed deer, bighorn sheep, and Rocky Mountain elk migrate long distances to winter here, and resident birds tend to form bigger, more visible flocks in the winter months.

The large number of wildlife species here is related to this zone's location between the Great Basin to the south and the boreal forests to the north. Northern species such as the Snowy Owl and Gyrfalcon find the southern limit of their range here, and southern species such as Canyon Wren and spotted bat are near the northern limit of their range.

Of equal importance is the rich variety of food available in the mixture of grasslands and dry forest, wetlands and dry shrub-steppe, and rugged cliffs and broken rock. ponderosa pine parklands provide habitat for species such as Clark's Nutcracker, White-breasted Nuthatch, and yellow-pine chipmunk that feed on large conifer seeds. Birds such as the Northern Flicker and White-headed Woodpecker eat insects that live in the bark of pine trees. Others, such as the Common Poorwill, feed on flying insects. In winter, ungulates such as Rocky Mountain elk, mule deer, and white-tailed deer eat the shrubs that grow under the open-canopied forests. Denser stands of Douglas-fir and ponderosa pine provide winter cover for ungulates and abundant seeds and insects for a variety of birds (the Mountain Chickadee for example) and small mammals such as the little brown myotis, California myotis, red squirrel, northwestern chipmunk, and longtailed vole.

Shrub-steppes provide winter and spring grass forage for California bighorn sheep and Rocky Mountain elk, shrub forage for mule deer and white-tailed deer, and breeding habitat for birds such as the Sage Thrasher and Brewer's Sparrow that have adapted to the sagebrush environment.

White-breasted Nuthatch
Sitta carolinensis



Yellow-pine chipmunk
Tamias amoenus

Rocky Mountain elk
Cervus elaphus nelsoni

Mountain Chickadee
Poecile gambeli

Painted turtle
Chrysemys picta

Coyote
Canis latrans

Although dry forests dominate this zone, it also includes some wetland meadows and moist, shady draws. These are home to a variety of reptiles and amphibians such as the common garter snake, tiger salamander, and northern leopard frog. Lakes and potholes provide breeding grounds for Canada Goose and various dabbling and diving ducks, and year-round habitat for the painted turtle and tiger salamander. Other species such as coyote, black bear, cougar, badger, beaver, muskrat, and yellow-bellied marmot also inhabit the forests and

wetlands of this zone. Some species of wildlife benefit from the change in vegetation associated with agriculture: for example, the coyote, American Kestrel, Western Bluebird, and Lewis' Woodpecker. Non-native bird species, such as California Quail, Ring-necked Pheasant, and European Starling, occur here as a result of direct or indirect introductions from elsewhere.

Western Bluebird
Sialia mexicana

Endangered Species

Common Poorwill
Phalaenoptilus nuttallii

Rugged cliffs and talus slopes provide breeding habitat for rare bat species such as spotted bat and pallid bat, as well as less abundant birds and reptiles such as Canyon Wren and western rattlesnake. Threatened species in this zone include Townsend's big-eared bat, fringed myotis, western small-footed myotis, western long-eared myotis, Flammulated Owl, Common Poorwill, Burrowing Owl, tiger salamander, Anatum Peregrine Falcon, White-headed Woodpecker, and White-throated Swift. Several species, including Sage Grouse, white-tailed jackrabbit, short-horned lizard, and Nuttall's cottontail, once occurred in this zone but are now considered extirpated in British Columbia.

Alkaline Ponds

Although wetlands and ponds are not a common feature in the dry Ponderosa Pine Zone, alkaline ponds can occur in depressions or basins with restricted drainage. These ponds, which dry out by the end of summer, are fringed by wetlands that contain several kinds of plants, including alkali saltgrass, rushes, and bulrushes. Wetlands such as these, even when they are limited in extent, represent the greatest source of key habitat for many rare and endangered species. Because water is so scarce in the zone, even small amounts are important to the survival of many wildlife species.

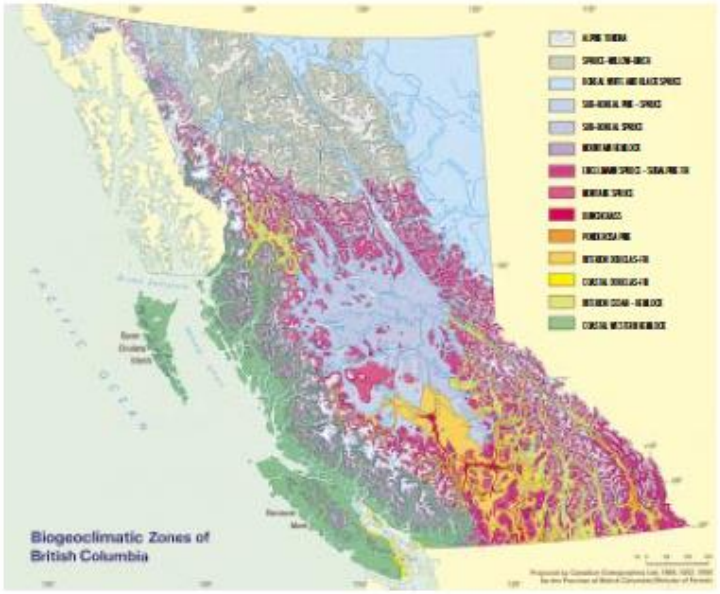
Alkaline pond

Resources

Landscapes in lower Deadman River Valley

Although the Ponderosa Pine Zone has many forested areas, the productivity of ponderosa pine and Douglas-fir is poor on most sites. Because of the prominence of grasslands, cattle grazing is the primary form of agriculture in this zone. The ponderosa Pine and Bunchgrass zones are particularly important for early spring range for cattle. Most flat areas are irrigated for the production of hay. In the Okanagan Valley, irrigation also makes orchards and vineyards possible in some areas. Much of the Ponderosa Pine Zone occupies slopes that are too steep for agricultural purposes. However, because of their ideal climate and viewscapes, these same sites provide excellent locations for housing.

Recreational uses include hiking, cycling, horseback riding, nature study, hunting, fishing, and dirt bike riding. The larger lakes and their beaches are significant tourist attractions. Some recreational activities such as the use of all-terrain vehicles and mountain bikes, which have become quite common in this zone, can present environmental hazards. These activities often bring in weed seed. They also compact the soil surface and make it more susceptable to erosion. Because of the competing demands of agriculture, forestry, urban and industrial development, recreation, biodiversity, and wildlife habitat, land-use conflicts are common in the Ponderosa Pine Zone. Integrated land-use planning can be an important tool for resolving these conflicts.



The Ponderosa Pine Zone is one of fourteen biogeoclimatic or ecological zones within British Columbia. These zones are large geographic areas that share a similar climate within the province. Brochures in this series explore each zone.

BRITISH COLUMBIA

Ministry of Forests
October 1998

For further information contact:

B.C. Ministry of Forests
Research Branch
P.O. Box 9519 Stn Prov Govt
Victoria, B.C. V8W 9C2

Detail on British Columbia's Biogeoclimatic Zones is available in:

Ecosystems of British Columbia
Special Report Series #6
D. Meidinger and J. Pojar
Ministry of Forests Research Branch, Victoria, B.C.

Text: Judith Arkritt McDowell
Technical Editors: Dennis Lloyd and Dal Mactinger
Image Co-ordination: Linda Beaird
Design and Layout: Saran Hanrich
Series Design Concept: Susan Ferguson


The Ecology of the Interior Douglas-fir Zone
The Interior Douglas-fir Zone lies in the heart of British Columbia's southern interior. Often described as "cattle country," it is a land of rolling hills and valleys covered by dry grasslands and open forests. Although it is best known for cattle ranching and forestry, this zone also supports a rich diversity of natural communities and wildlife species.

Location

The Interior Douglas-fir Zone spreads across low- to mid-elevations in the east Kootenays, the Okanagan-Similkameen and Thompson region, and southern parts of the Chilcotin and Cariboo. Most of the zone occupies the southern part of the Interior Plateau. To the west, the zone works its way up the leeward slopes of the Coast Mountains. In the east, it covers the southern portion of the Rocky Mountain Trench. Cranbrook, Vernon, Chase, Princeton, Boston Bar, Clinton, and Williams Lake all lie within the Interior Douglas-fir Zone.

Climate

The Coast, Cascade, and Columbia mountains cast a rain-shadow over the Interior Douglas-fir Zone. Warm and dry in the short summer season and cool in winter, the climate is driest at lower elevations in the Okanagan-Similkameen, Lytton-Lillooet, Chilcotin, and Kamloops areas and wettest in areas close to the Columbia and southern Coast mountains. The ecology of the area reflects the shortage of moisture in much of this zone. Plants such as pinegrass flourish here because they can survive on little moisture during the growing season.

Ecosystems

A diverse and interesting array of ecosystems occurs within the Interior Douglas-fir Zone. Forests dominated by Douglas-fir trees of all ages and sizes with a grassy understorey in which pinegrass is most common are typical in this zone. On hotter and drier sites, grassland and open ponderosa pine forest predominate, while dense, closed-canopy spruce forests occur on wetter and cooler sites such as in riparian areas. Lodgepole pine is common at higher elevations or where there has been recent fire.

Extensive grassland communities, commonly called the "upper grasslands," occur throughout drier parts of the zone. Bluebunch wheatgrass, junegrass, and fescues are prominent grasses in these communities. These grasses also occur on very hot and dry sites such as upper, south-facing slopes and ridges where ponderosa pine forms open, park-like forests. Wetlands are found in depressions and around open water. Marshes with cattails, sedges, and bulrushes ring the open water with shrubby willows and birches in nearby swamps. The prominent red stems of red-osier dogwood stand out along stream banks in winter after the leaves have fallen. A unique wetland ecosystem found in this zone consists of saline meadows dominated by saltgrasses.

Trembling aspen occurs throughout the zone, especially in younger forests.

Fire in the Grass

Ecologists believe wildfires have played an important role in maintaining grasslands in the Interior Douglas-fir Zone. Without regular grassfires, trees take root in open grassy areas and, over time, grasslands become overgrown with trees. Frequent grass fires keep the forests at bay by killing most young trees. Today, wildfires are suppressed, and there is evidence that forests are taking over areas once occupied by grasslands.

Wildfire used to be a common occurrence in the zone, especially in drier areas where there is a mosaic of grasslands and open forests.

Fire and Forest Succession

Wildfires have a big influence on forest ecosystems of the Interior Douglas-fir Zone. Ecologists classify forest fires as either low intensity or high intensity, depending on how hot they are and how they affect the forest. In this zone, most forest fires are low intensity—they scorch the forest floor every 10 to 20 years and burn less than 50 hectares. The thick bark on old Douglas-fir trees enables them to survive low-intensity fires, but many young trees and understorey plants are killed. Over time, repeated low-intensity fires create a forest made up of Douglas-fir trees of many ages—a multi-aged stand.

High-intensity fires occur on average every 150 to 250 years and burn more than 50 hectares at a time. These are stand-destroying fires—they burn not only along the ground but also through the forest canopy, killing most of the young and old trees. Following a high-intensity fire, lodgepole pine is often the first tree to grow back. This pattern results in pure, even-aged pine stands.

Wildlife

Ungulates find prime winter habitat in this zone, with its old Douglas-fir forests, low snowpack, and abundant shrubs such as snowbrush, redstem ceanothus, and snowberry. In winter mule deer find habitat in old forests, particularly those on south-facing slopes. The deer feed on litter fall and find protection from heavy snowfalls under the tree cover. South-aspect forests are also important winter habitat for other ungulates, including white-tailed deer, Rocky Mountain elk, and bighorn sheep.

Rocky Mountain elk
Cervus elaphus nelsoni

Species at Risk

There are several animal species found in the Interior Douglas-fir Zone that are considered by the Ministry of Environment, Lands and Parks to be vulnerable and at risk. For example, vulnerable or sensitive species in wetland ecosystems within this zone include the Great Blue Heron, American Bittern and painted turtle.

Painted turtle
Chrysemys picta

Great Blue Heron
Ardea herodias

Flammulated Owl

After over-wintering in Mexico and Guatemala, Flammulated Owls move north in spring to breed in mountainous areas of North America. Although most nest farther south, a small number return every summer to British Columbia's southern interior—to the Okanagan Valley, the Thompson Basin and, occasionally, the southern part of the Rocky Mountain Trench. Individuals have been observed throughout the Thompson Basin between Chase and Spences Bridge. This diminutive owl is a cavity nester. It usually makes its nest in dead trees or snags and often uses cavities made by woodpeckers. The species is considered vulnerable or sensitive, one step below endangered status.

Mule deer
Odocoileus hemionus hemionus

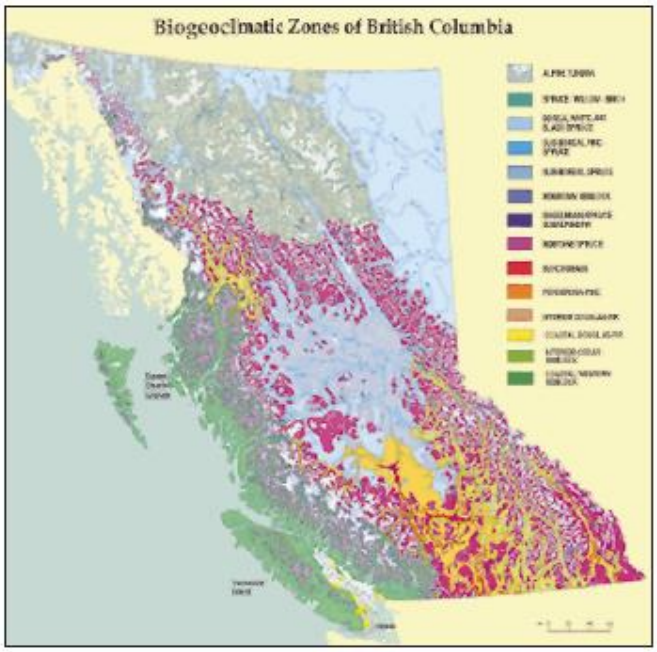
Riparian Ecosystems

Riparian zones are areas around streams, lakes, and other bodies of water. Characterized by a high water table and nutrient-rich soils, riparian zones often support productive ecosystems and a rich diversity of plants and animals. Water-loving plants, birds, amphibians, and small mammals all thrive in these ecosystems. Larger animals use them for various reasons, such as foraging or giving birth. Because moist and productive riparian areas are limited in dry regions like the Interior Douglas-fir Zone, they are especially important habitat for many species in this zone. Cattle and horses are also attracted to riparian areas and, if not properly managed, can seriously degrade these sensitive ecosystems.

Resources

Extensive and productive Douglas-fir forests provide saw and pulp logs for the forest industry. Cattle grazing is also an important land use here. In fact, this zone contains much of the province's forested summer cattle ranges, as well as many spring and fall ranges.

Wintering areas for cattle are common at lower elevations, especially in grasslands. The short growing season limits other agriculture uses. The zone is ideal for a variety of recreational activities, from hiking and fishing to cross country skiing and horseback riding.



The Interior Douglas-fir Zone is just one of the fourteen biogeoclimatic or ecological zones within British Columbia. These zones are large geographic areas that share a similar climate within the province. Brochures in this series explore each zone.

BRITISH COLUMBIA

Ministry of Forests

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Design: Susan Ferguson
Electronic graphics: Darrell Ingol

Appendix B

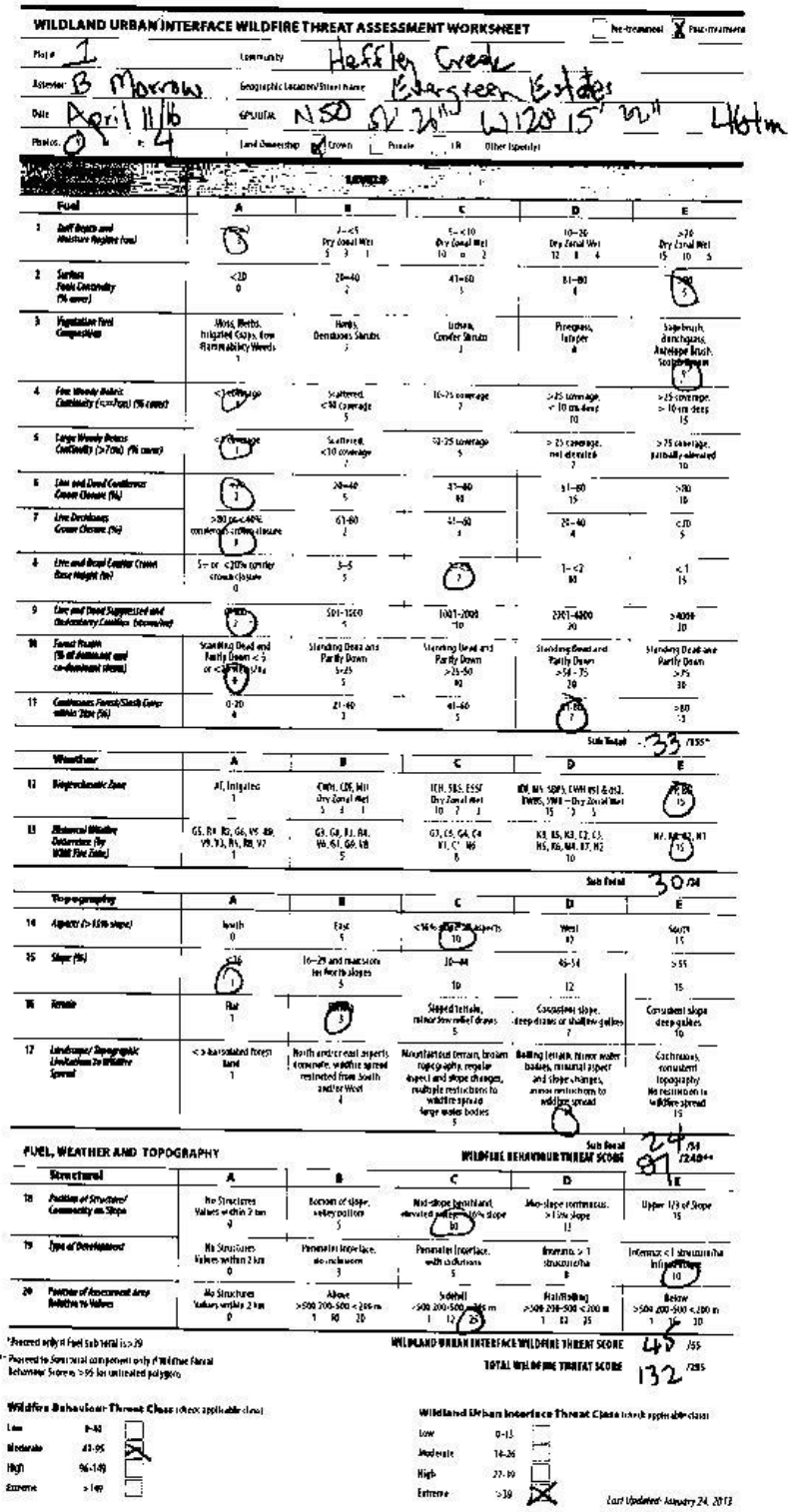
City of Kamloops

Community Wildfire Protection Plan

Wildfire Behaviour Threat Assessment

Worksheets and Pictures

April 2016



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment X Post-treatment

Plot # 1 Community Heffley Creek

Assessor B Morrow Geographic Location/Street Name Evergreen Estates

Date April 11/16 GPS/UTM N50 SV 24" W120 15' 22" 46 km

Photos: 0 to 4 Land Ownership Crown Private FN Other (specify)

1

LEVEL 2

Fuel	A	B	C	D	E
1 Surface Fuel Depth and Moisture Regime (cm)	0	1–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 8 2	10–26 Dry Zonal Wet 12 8 4	>26 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, low flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, deciduous, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=7cm dia) (% cover)	<1 coverage 0	Scattered, <50 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	> 75 coverage, pitfall / elevated 10
6 Live and Dead Coniferous Crown Closure (%)	0	20–40 5	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 (or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Coniferous Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0	501–1500 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Fuels (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <3 m ht/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 33 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Inligated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH wet & dry, BWBS, SWB – Dry Zonal Wet 15 7 5	PP, BG 15
13 Historical Weather Occurrence (by WUNF Fire Zone)	G5, R1 R2, G6, W5 R9, Y9, Y3, R4, R8, Y7 1	G3, G8, R3, R4, W6, G1, G9, G8 5	G7, C5, G4, C8 R1, C' W6 8	K9, B5, K3, C2, C3, H5, K6, K4, K7, H2 10	W, K4, K2, H1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspect (> 15% slope)	South 0	East 5	<135 (SE) aspects 10	West 10	North 15
15 Slope (%)	<16 1	16–29 and moderate benches 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Benches 3	Stepped terrain, minor draws 5	Concave slope, deep draws or shallow gullies 7	Consistent slope deep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects, if moderate, wildfire spread restricted from South and/or West 4	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 8	Continuous, consistent topography No restrictions to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 24 /30 — WILDFIRE BEHAVIOUR THREAT SCORE 87 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley position 5	Mid-slope benchland, elevated ridge <30% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no enclosure 3	Perimeter Interface, with subdivisions 5	Intermix, > 1 structure/ha 8	Intermix < 1 structure/ha Interface 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 < 200 m 1 10 20	Subdivision >500 200–500 < 200 m 1 12 25	Wildfire >500 200–500 < 200 m 1 12 25	Below >500 200–500 < 200 m 1 10 20

*Proceed only if Fuel Sub Total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /155

TOTAL WILDFIRE THREAT SCORE 132 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–30	☐
Moderate	31–95	☒
High	96–149	☐
Extreme	>149	☐

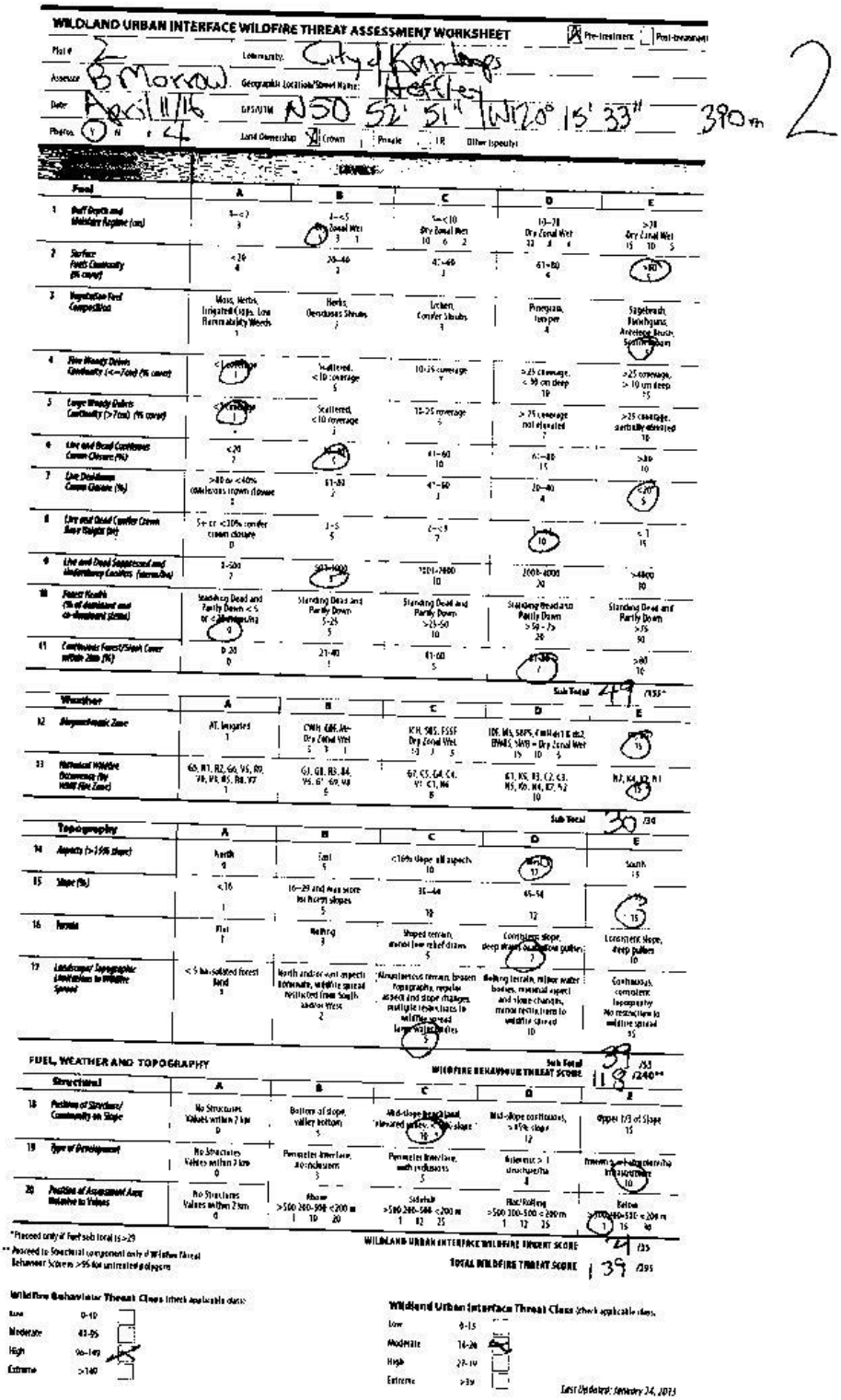
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 1

Photo 1-1 @ 340 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment | Post-treatment

Plot # 2 — Community: City of Kamloops

Assessor: B Morrow — Geographic Location/Street Name: Heffley

Date: April 11/16 — GPS/UTM: N50 52' 51" W120° 15' 33" — 390 m

Photos: Y / N # 4 — Land Ownership: Crown | Private | IR | Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<3 9	3–<5 Zonal Wet 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 4	20–40 2	41–60 1	61–80 0	>80 0
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Ponderosa Pine 5
4 Fine Woody Debris Continuity (<7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	>25 coverage, < 30 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	> 25 coverage not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	21–40 4	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 to <40% coniferous crown closure 2	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <10% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understory Conifers (stems/ha)	1–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <5% crowning 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down > 50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 200m (%)	0–20 0	21–40 1	41–60 5	61–80 7	>80 10

Sub Total 49 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, Mc-Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, SBPS, montane ICH & dk2, BWBS, SWB – Dry Zonal Wet 15 10 5	
13 Historical Wildfire Occurrence (by WMU Fire Zone)	65, W1, R2, 66, V5, R9, V8, V4, W5, R8, V7 1	G3, G8, R5, 84, V6, 67, 69, V9 5	67, C5, G4, C4, V1, C7, W6 8	C1, K5, R3, C2, C3, K5, K6, W4, K7, K2 10	N7, K4, R2, N1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspects (>16% Slope)	North 0	East 5	<16% slope, all aspects 10	West 17	South 15
15 Slope (%)	<16 1	16–29 and mix score for steep slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Shaped terrain, almost low relief drains 5	Complex slope, steep draws, saddles, gullies 7	Consistent slope, deep gullies 10
17 Landscape Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or west aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 39 /55

WILDFIRE BEHAVIOUR THREAT SCORE 118 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/ bowl, elevated position, <30% slope 10	Mid-slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter interface, disconnected 3	Perimeter interface, some exclusions 5	Extensive > 1 structure/ha 8	Intermix, high density/ha Intermixture 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/ Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

Sub Total 21 /135

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE

TOTAL WILDFIRE THREAT SCORE 139 /295

* Proceed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated plot/area

Wildfire Behaviour Threat Class (check applicable class):

Low	0–10
Moderate	11–25
High	26–149
Extreme	>140

Wildland Urban Interface Threat Class (check applicable class):

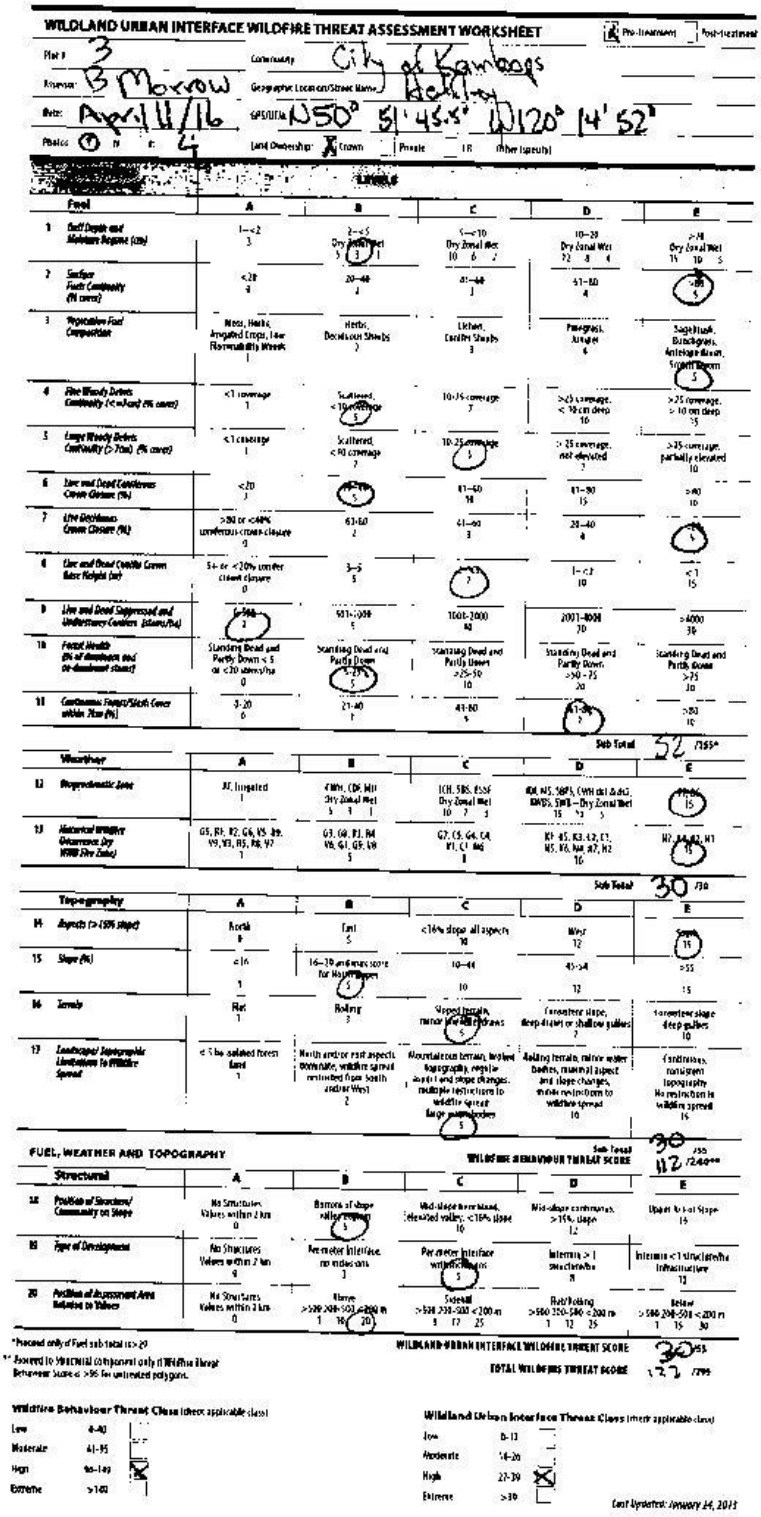
Low	0–15
Moderate	16–26
High	27–39
Extreme	>39

Last Updated: February 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 2

Photo 2-1 @ 90 degrees

3



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment | Post-treatment

Plot # 3 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Holtby

Date: April 11/16 | GPS/UTM: N50° 51' 45.5" W120° 14' 52"

Photos: # 4 | Land Ownership: X Crown | Private | FR | Other (specify)

Fuel	A	B	C	D	E
1 Fuel Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 1	41–60 3	61–80 4	>80 5
3 Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope-Brush, Spotted Knapweed 5
4 Fine Woody Debris Continuity (<6 cm) (% cover)	<1 coverage 1	Scattered, <10% coverage 5	10-25% coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <40 coverage 2	10-25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 3	21–40 5	41–60 10	61–80 15	>80 10
7 Life Deciduous Crown Closure (%)	>30 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	1–3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of deadfoliage and dead stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25% 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 30m (%)	0–20 0	21–40 1	41–60 4	61–80 7	>80 10
				Sub Total	32 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	AT, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm1 & dk1, BWBS, SWB – Dry Zonal Wet 15 12 5	PP 15
13 Historical Wildfire Occurrence (by WHR Fire Zone)	G5, H1, H2, G6, V5, H9, V3, V1, H5, H8, V7 1	G3, G8, P3, P4, V6, G1, G9, V8 5	G7, C5, G4, E4, V1, C1, H6 8	K1, K5, K3, K2, C1, H5, K6, N4, K7, H2 10	N2, N4, K4, N3, N1 15
				Sub Total	30 /30

Topography	A	B	C	D	E
14 Aspects (>10% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–39 and use score for North aspect 5	40–54 10	55–>54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor valleys/gullies 5	Canyon/steep slope, deep draws or shallow gullies 7	Canyon/steep slope deep gullies 10
17 Landscape Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects downslope, wildfire spread restricted from South and/or West 2	Mountainous terrain, incised topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, seasonal aspect and slope changes, moderate restriction to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 30 /55

WILDFIRE BEHAVIOUR THREAT SCORE 112 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope valley bottom 3	Mid-slope Bench Mod. Elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no indentations 3	Perimeter Interface with indentations 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 5 17 25	Ridge/Valley >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is > 20

** Assigned to WUI/FTM component only if WUI/FTM Threat Behaviour Score is >96 for untreated polygons.

WILDLAND-URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE 142 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	4–40	
Moderate	41–95	
High	96–149	X
Extreme	>149	

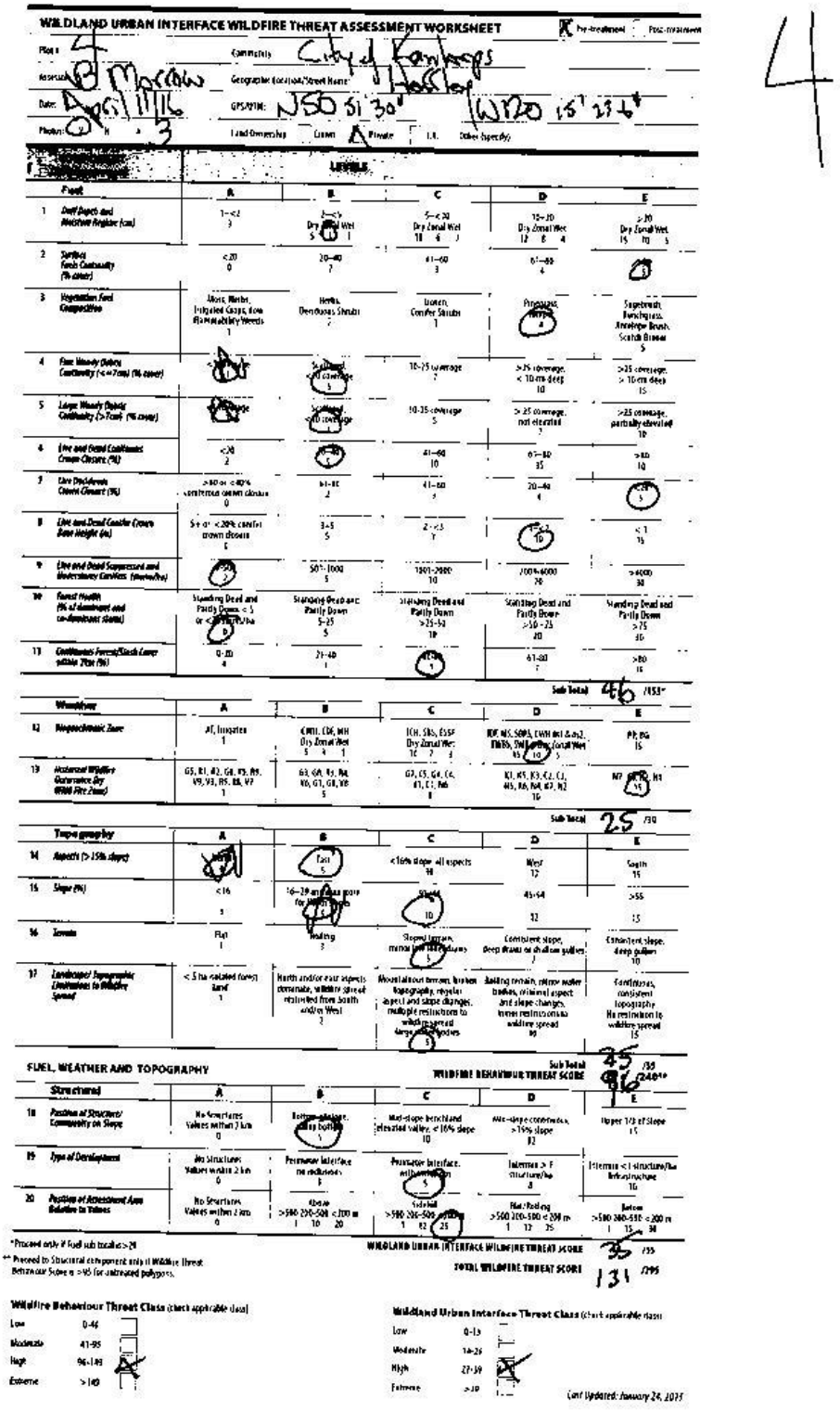
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–26	
High	27–39	X
Extreme	>39	

Last Updated: January 14, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 3

Photo 3-1 @ 315 degrees



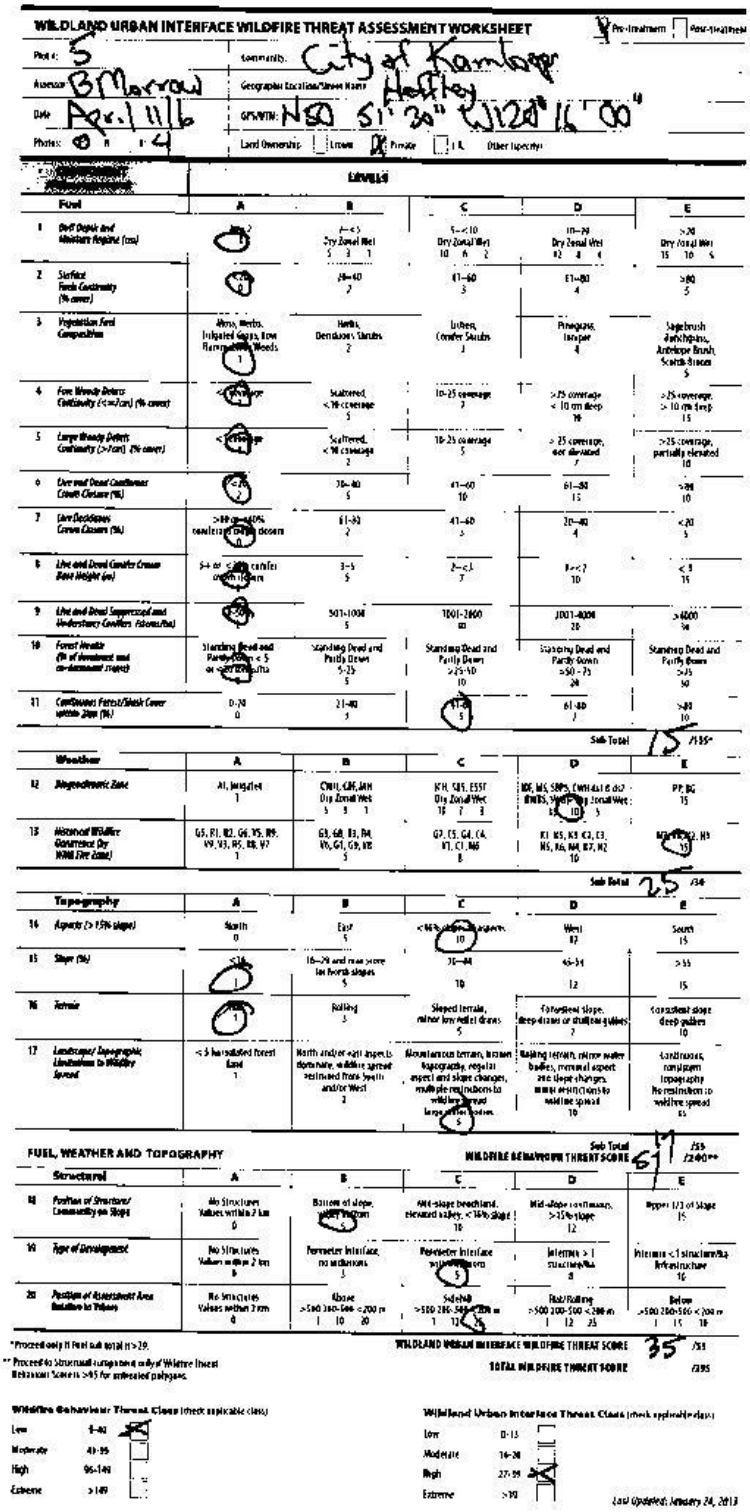
WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

4

City of Kamloops – Wildfire Threat Assessment Picture – Plot 4

Photo 4-1 @ 160 degrees

5



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 5 — Community: City of Kamloops

Assessor: B Marrow — Geographic Location/Street Name: Hartley

Date: Apr. 11/16 — GPS/UTM: N50 51' 30" W120° 16' 00"

Photo #: 0 N 1-4 — Land Ownership: Crown / Private / I.R. / Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Woody Debris (cm)	0–<2	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<5	5–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Lawns, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Saplings 3	Pinegrass, Juniper 4	Sagebrush dry/xeric, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=1/3 cm) (% cover)	<5% coverage	Scattered, <1% coverage 1	10–25 coverage 3	>25 coverage < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7 cm) (% cover)	<5% coverage	Scattered, <1% coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<26	26–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous mixed with deciduous	61–80 2	41–60 5	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <40% conifer crown height	3–5 5	2–<3 7	1–<2 10	< 1 15
9 Live and Dead Suppressed and Understorey Conifers Stems/ha)	<500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of Coniferous and co-dominant trees)	Standing Dead and Partly Down < 5 or >75 Alpha	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 15 /135*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Intrazonal 1	CWH, CDF, IMH Dry Zonal Wet 5 3 1	ICH, CWH, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dry & dry shrub, Wet Zonal Wet 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WMB Fire Zone)	G5, R1, R2, G6, Y5, R9, V9, V3, R5, R8, V7 1	G8, G8, B3, B4, V6, G1, G9, R8 5	G7, C5, G4, C4, K1, C1, N6 8	K1, N5, K9, K2, E3, N5, R6, N4, R7, N2 10	N3 15

Sub Total 25 /30

Topography	A	B	C	D	E
14 Aspects (> 15% slope)	North 0	East 5	<45% slope, Aspects 10	West 87	South 15
15 Slope (%)	<16 1	16–29 and most areas on north slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Pronounced slope, deep draws or shallow gullies 7	Consistent steep deep gullies 10
17 Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or east aspects dominate, wildfire spread restricted from south and/or West 2	Mountainous terrain, known topography, regular aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor water bodies, general aspect and slope changes, some restrictions to wildfire spread 10	Continuous, contiguous topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 61 /135 — WILDFIRE BEHAVIOUR THREAT SCORE 61 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no mitigations 3	Perimeter Interface with mitigations 5	Interface > 1 structure/ha 8	Intermix <1 structure/ha Intermixture 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 300–500 <200 m 1 10 20	Side/Hill >500 200–500 <300 m 1 12 25	Rail/Rolling >500 200–500 <300 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 35 /55

TOTAL WILDFIRE THREAT SCORE /295

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Hazard Behaviour Score is >45 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	
High	96–149	
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–26	
High	27–55	✓
Extreme	>55	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 5

Photo 5-1 @ 180 degrees

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

6

Plot #:	6	Community:	City of Kamloops
Assessor:	B Morrow	Geographic Location/Street Name:	Heffley
Date:	Apr. 11/16	GPS/UTM:	N50 51' 20" W120 16' 01"
Photos:	☐ N #: 3	Land Ownership:	☐ Crown ☒ Private ☐ I.R. Other (specify)

FUEL COMPONENT	LEVELS				
Fuel	**A**	**B**	**C**	**D**	**E**
1 *Duff Depth and Moisture Regime (cm)*	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 *Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 *Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 *Fine Woody Debris Continuity (<=7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 *Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 *Live and Dead Coniferous Crown Closure (%)*	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7 *Live Deciduous Crown Closure (%)*	>80 or <10% coniferous crown closure 0	61-80 2	41–60 3	20–40 4	<20 5
8 *Live and Dead Conifer Crown Base Height (m)*	5+ or <10% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9 *Live and Dead Suppressed and Understorey Conifers (stems/ha)*	<500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10 *Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <250 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 *Continuous Forest/Slash Cover within 2km (%)*	0–20 0	21-40 3	41-60 5	61-80 7	>80 10
				Sub Total	17 /155*
Weather	**A**	**B**	**C**	**D**	**E**
12 *Biogeoclimatic Zone*	Alpine/Treed 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & dc2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 12
13 *Historical Wildfire Occurrence (by WMB Fire Zone)*	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, M4, K7, N2 10	N7, K4, N2, N1 15
				Sub Total	16 /30
Topography	**A**	**B**	**C**	**D**	**E**
14 *Aspects (>15% slope)*	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15 *Slope (%)*	<16 1	16–29 and max score for North slopes 5	30–44 10	45-54 12	>55 15
16 *Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 *Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
				Sub Total	14 /55
FUEL, WEATHER AND TOPOGRAPHY				**WILDFIRE BEHAVIOUR THREAT SCORE**	39 /240**
Structural	**A**	**B**	**C**	**D**	**E**
18 *Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 *Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20 *Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30
				WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	36 /55
				TOTAL WILDFIRE THREAT SCORE	/295

*Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☒
Moderate	41-95	☐
High	96-149	☐
Extreme	>149	☐

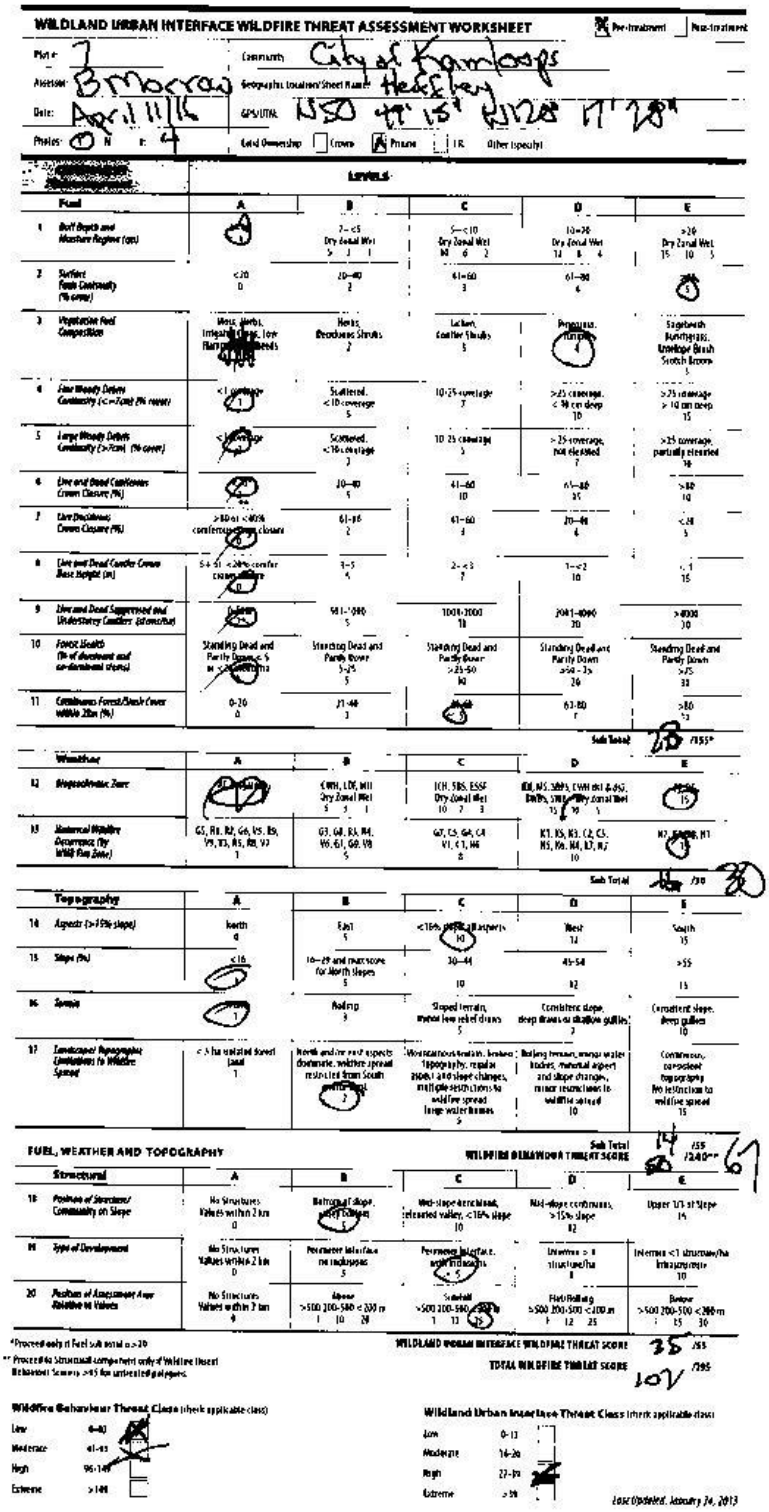
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 6

Photo 6-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 7 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Sheet Name: Heffley

Date: April 11/16 GPS/UTM: N50 47' 15" W120 17' 28"

Photos: Y N #: 4 Land Ownership: Crown / Private / FR / Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)		2 – <5 Dry Zonal Wet 5 3 1	5 – <10 Dry Zonal Wet 8 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Shrubs	Herbs, Deciduous Shrubs 2	Lichen, Conifer Thickets 3	Perennial Grasses 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 30 cm deep 10	>25 coverage > 30 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	>25 coverage, not cleared 7	>25 coverage, partially cleared 10
6	Live and Dead Coniferous Crown Closure (%)	20	20–40 5	41–60 10	61–80 25	>80 40
7	Live Deciduous Crown Closure (%)	>80 but <90% conifer crown closure 20	61–80 2	41–60 4	20–40 6	<20 8
8	Live and Dead Conifer Crown Base Height (m)	5 – 51 <20% conifer crown closure 40	3–5 4	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 25	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 in <20% of stems	Standing Dead and Partly Down >5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 20m (%)	0-20 0	21-40 3	41-60 6	61-80 9	>80 12

Sub Total /35*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	IDF, MW, PP, BG, PGdk, PGxh1, PGxh2, PGxw, SWB, SBPS, SBSdk, SBSmk1, SBSmk2, SBSvk, SBSwk1, SBSwk2, SBSwk3	CWH, IDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, EWH wet & dry, BWBS, SWB Dry Zonal Wet 15 9 1	CWH, MH 15
13	Historical Wildfire Occurrence (by WHR Fire Zone)	G5, R8, R2, G6, K5, K9, V9, V3, K5, R8, V3 1	G3, G8, R3, R4, V6, G1, G8, V8 5	G7, C5, G4, C4 V1, C1, H6 8	K1, K5, K3, C2, C5, K5, K6, H4, K7, H7 10	H2, K8, H1 15

Sub Total /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 0	16–29 and max score for North Slopes 5	30–44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief drains 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South 3	Moderate to steep topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, industrial aspect and slope change, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY Sub Total /240** 61

WILDFIRE BEHAVIOUR THREAT SCORE

	Structural	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, Valley Bottom 1	Mid-slope Benchland, Protected Valley, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 14
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface no Indigenous 5	Perimeter Interface, some Indigenous 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Intermittent 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 < 200 m 1 10 20	Same/all >500 200-500 <200 m 7 13 25	Flat/Rolling >500 200-500 <200 m 9 12 25	Below >500 200-500 <200 m 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 35 /55

TOTAL WILDFIRE THREAT SCORE 107 /295

*Proceed only if Fuel Sub total is >20

** Proceed to Structural component only of Wildfire Threat Behavioural Scores >45 for untreated plot/stand.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40
Moderate	41–95
High	96–140
Extreme	>140

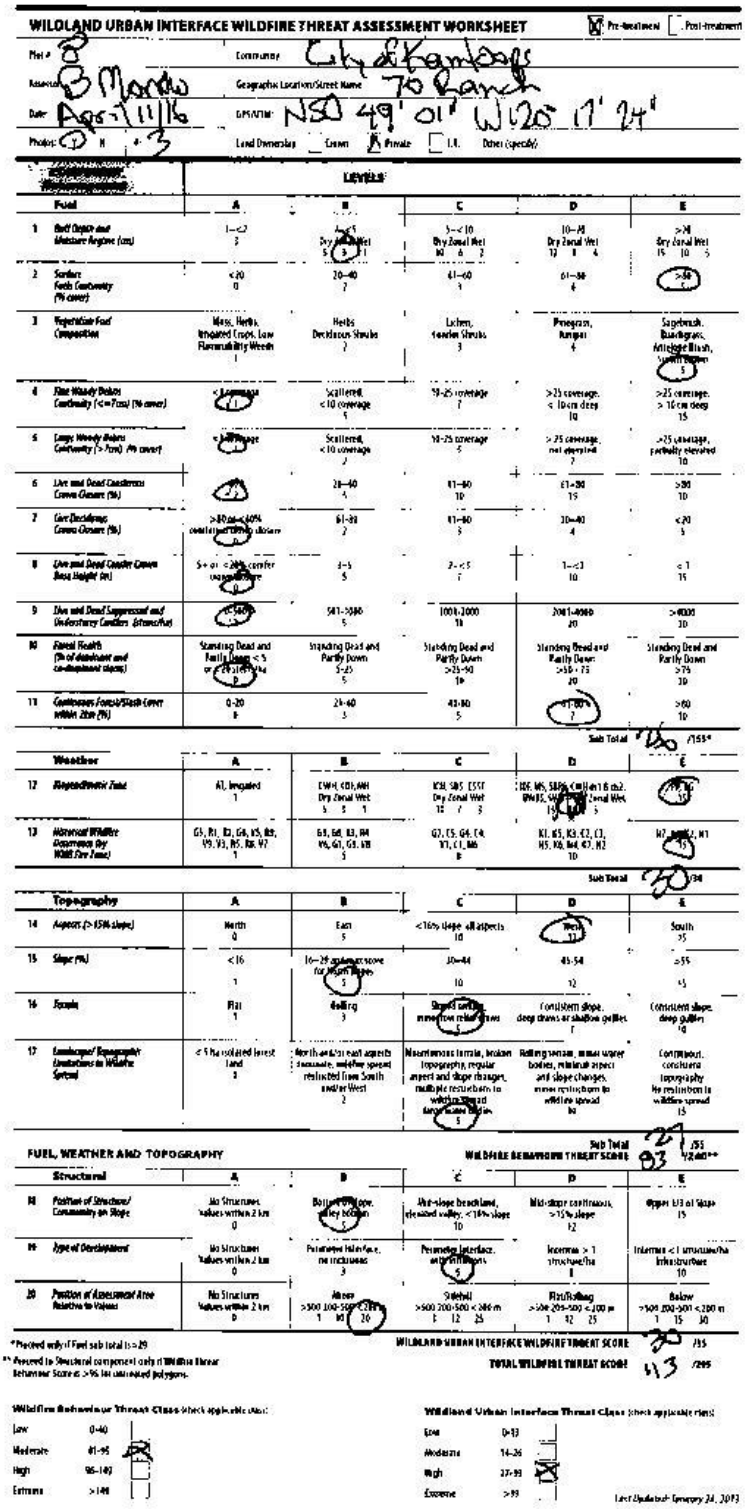
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13
Moderate	14–26
High	27–39
Extreme	>39

Last Updated: January 24, 2013

Photo 7-1 @ 315 degrees

8



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot # 8 Community City of Kamloops

Assessor B Mardon Geographic Location/Street Name 70 Ranch

Date Aug-11/16 GPS/ATM: N50 49' 01" W120 17' 24"

Photos: 1 N # 3 Land Ownership ☐ Crown ☒ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Surface Fuel Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Rumpus 4	Sagebrush, Bluebunch, Antelope Bitush, Spotted Knapweed 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 1	10–25 coverage 2	>25 coverage, < 10cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous admixture 0	61–80 2	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	4–5 5	2–<5 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1500 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of deadwood and co-dominant stems)	Standing Dead and Partly Down: < 5 or >20 (insects/disease) 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down: >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–60 5	41–80 5	81–90 7	>60 10

Sub Total 100 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 5 1	ICH, SBS, ESSF Dry Zonal Wet 12 7 3	IDF, MS, SBPS, CWH on 16 ch2. BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, R1, R2, G6, K5, R8, W3, W3, R5, R6, W7 1	G9, G8, R3, R4 W6, G1, G5, K8 5	G7, C5, G4, C4, W1, C1, M6 8	K1, K5, K3, C2, C3, H5, K6, K4, K7, H2 10	H7, H6, H2, H1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspect (> 45% slope)	North 0	East 5	<16% slope all aspects 10	West 11	South 15
15	Slope (%)	<16 1	16–25 use same score for North Slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep continuous, numerous relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topography Limitations to Wildfire Spread	< 5 ha isolated forest land 0	North and East aspects seasonally, wildfire spread restricted from South and/or West 2	Discontinuous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread danger/value rating 5	Rolling terrain, minor water bodies, moderate aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 29 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 93 /124**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom/Flat slope, valley bottom 5	Mid-slope bench land, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, and/or Intermix 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Interface 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >300 200-300 < 200 m 1 10 20	Sidehill >300 200-300 < 200 m 1 12 25	Flat/Rolling >300 200-300 < 200 m 1 12 25	Below >300 200-300 < 200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE 113 /205

* Proceed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >96 for contoured polygons.

Wildfire Behaviour Threat Class (check applicable class):

Low	0–40
Moderate	41–95
High	96–140
Extreme	>140

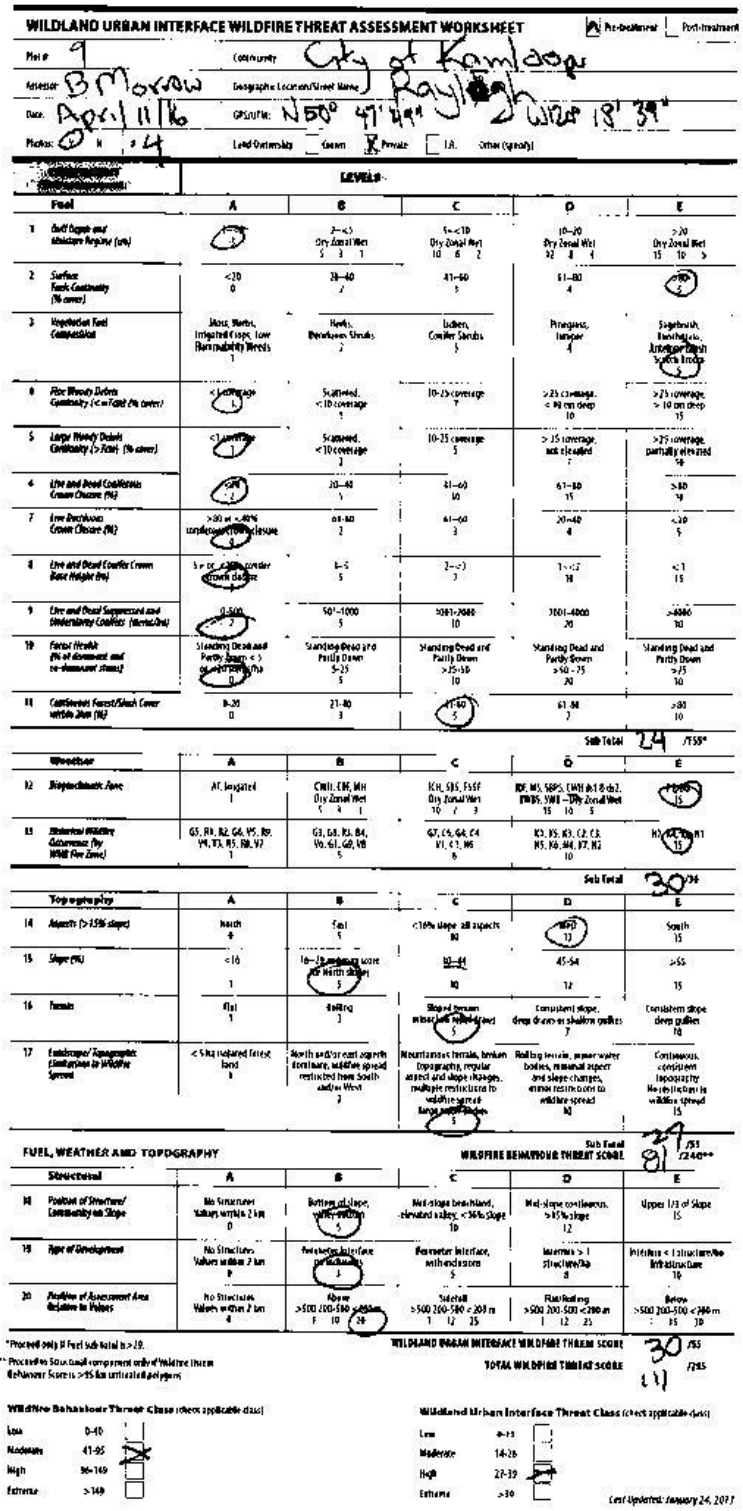
Wildland Urban Interface Threat Class (check applicable class):

Low	0–13
Moderate	14–26
High	27–99
Extreme	>99

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 8

Photo 8-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot # 9 — Community: City of Kamloops

Assessor: B Morrow — Geographic Location/Street Name: Rayleigh

Date: April 11/16 — GPS/UTM: N50° 47' 44" W120° 18' 39"

Photos: 0 N 4 — Land Ownership: Crown / X Private / I.R. / Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	<3 Dry Zonal Wet 5 3 1	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 5	61–80 8	>80 12
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Pinegrass, Juniper 8	Sagebrush, Bunchgrass, Antelope Brush, Conifer Trees 12
4	Fine Woody Debris Continuity (<6 cm Fuel) (% cover)	<1 cm coverage 1	Scattered, <10 coverage 3	10-25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 cm coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	>25 coverage, not stacked 7	>25 coverage, partially stacked 10
6	Live and Dead Coniferous Crown Closure (%)	<20 1	20–40 3	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 at <40% conifer crown closure 1	60–80 3	41–60 8	20–40 12	<20 15
8	Live and Dead Conifer Crown Base Height (m)	5 or >5 under conifer crown closure 1	4–5 5	2–<4 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/Ha)	0-500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 24 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 4 1	ICH, SBS, FdSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB – Dry Zonal Wet 15 10 5	
13	Historical Wildfire Occurrence (by WMU Fire Zone)	G5, R1, R2, G6, W5, R9, W4, T3, R5, R8, W7 1	G3, G8, R3, B4, Vo, 61, G9, V8 5	G7, C6, G4, C4 V1, C7, W6 8	K3, K5, K9, C2, C3, W5, K6, K4, K7, N3 10	N1, K1, K8, W1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–<25 moderate slope or North slope 5	25–44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain with some benches 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Fuel/Structure/ Topographic Continuum to Wildfire Spread	<5 ha isolated forest land 1	North and/or east aspects fuel/structure, wildfire spread restricted from South and/or West 3	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, numerous water bodies, seasonal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 39 /51

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 81 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Landscape/Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/land, elevated valley, <30% Slope 10	Mid-slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19	Age of Development	No Structures/ Values within 2 km 0	Perimeter/Interface protection 3	Perimeter Interface, with exclusions 5	Isolated > 1 structure/ha 8	Interface < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200-500 <200m 5 10 20	Valley/Flat >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 5 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE 111 /295

*Proceed only if Fuel sub-total is >19.

**Proceed to Structural component only of Wildfire Threat Behaviour Score is >55 for unrated fuel polygons

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	
Moderate	41-95	X
High	96-169	
Extreme	>169	

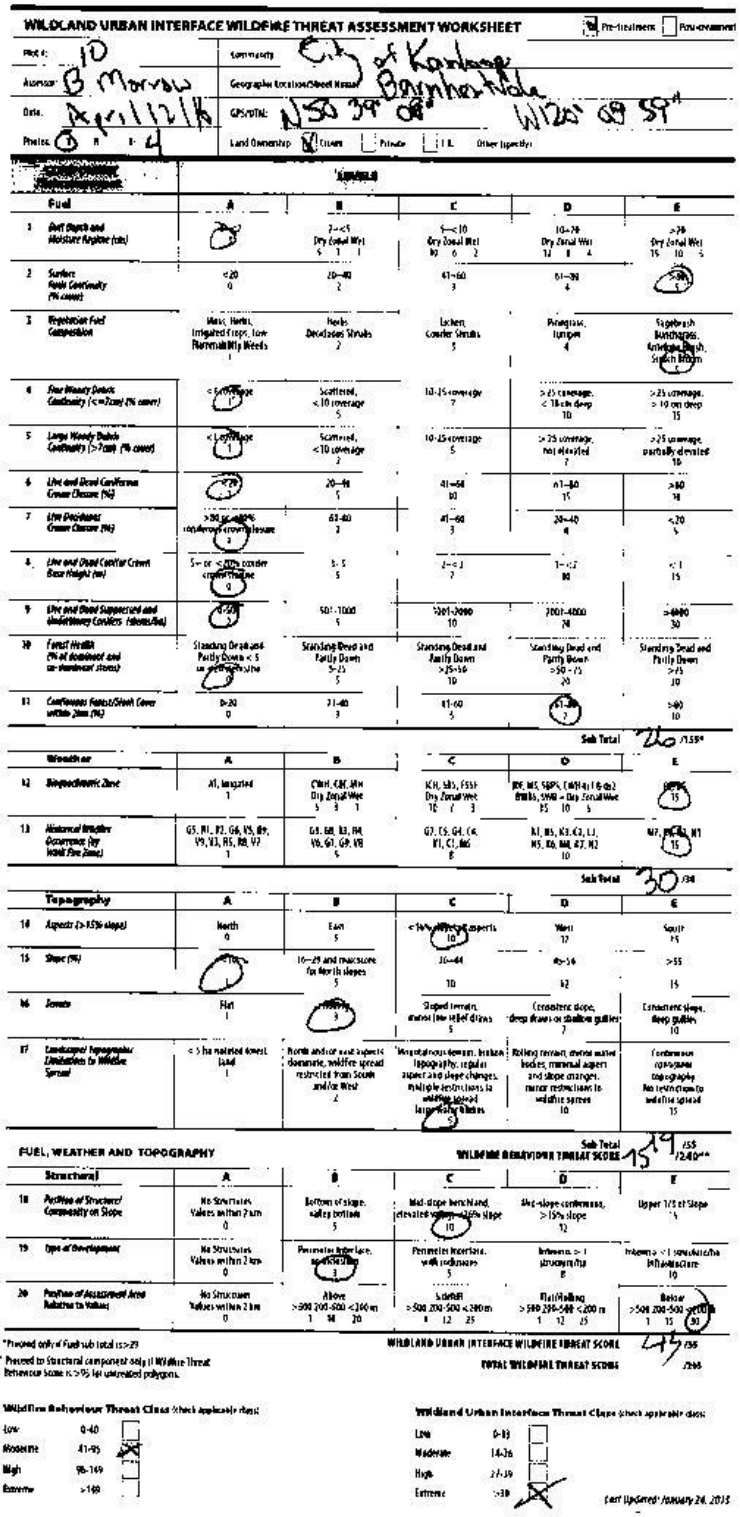
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	
Moderate	14-26	
High	27-39	X
Extreme	>39	

Last Updated: January 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 9

Photo 9-1 @ 90 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 10 | Community: City of Kamloops

Assessor: B Morrow | Geographic location/Sheet Name: Barnhartvale

Date: Apr/12/16 | GPS/UTM: N50 39 08 W120 09 59

Photos: 0 R 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

10

	Fuel	A	B	C	D	E
1	Surface Fuel Depth and Moisture Regime (cm)		2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, low flammability Weeds 1	Herbs Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Pinegrass, Juniper 4	Sagebrush Bunchgrass, Antelope Brush, Spotted Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 5	10–15 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>30 or <30% coniferous crown closure 4	61–80 3	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5– or <30% conifer crown base 9	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 20 /155*

	Weighting	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH(1 & 2) Bunchgrass, SWB – Dry Zonal Wet 15 10 5	BWBS 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, H1, H2, G6, H5, H9, V9, V3, H5, R8, V7 1	G3, G8, R3, H4, V6, G1, G9, V8 5	G7, C5, G4, C6, V1, C1, R6 8	R1, R5, R3, C2, L1, H5, R6, R4, A7, H2 10	A7, H6, R2, H7 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% or all aspects 10	West 12	South 15
15	Slope (%)	<10% 1	10–29 and max score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, several low relief drains 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha matured forest land 1	Ponds and/or west aspects dominate, wildfire spread restricted from South and/or West 2	Variegated terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, isolated large valley basins 5	Rolling terrain, diverse water bodies, mineral aspect and slope changes, minor restrictions to wildfire spread 10	Continuous homogenous topography, No restrictions to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY

Sub Total 15 29 /55 /240**

WILDFIRE BEHAVIOUR THREAT SCORE

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench land, elevated valley – <15% slope 10	Mid-slope-continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no internal 3	Perimeter interface, with inclusions 5	Intermix, > 1 structure/ha 8	Intermix, < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 50 20	Same/Flat >500 200–500 <200 m 8 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 43 /155

TOTAL WILDFIRE THREAT SCORE /395

* Proceed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

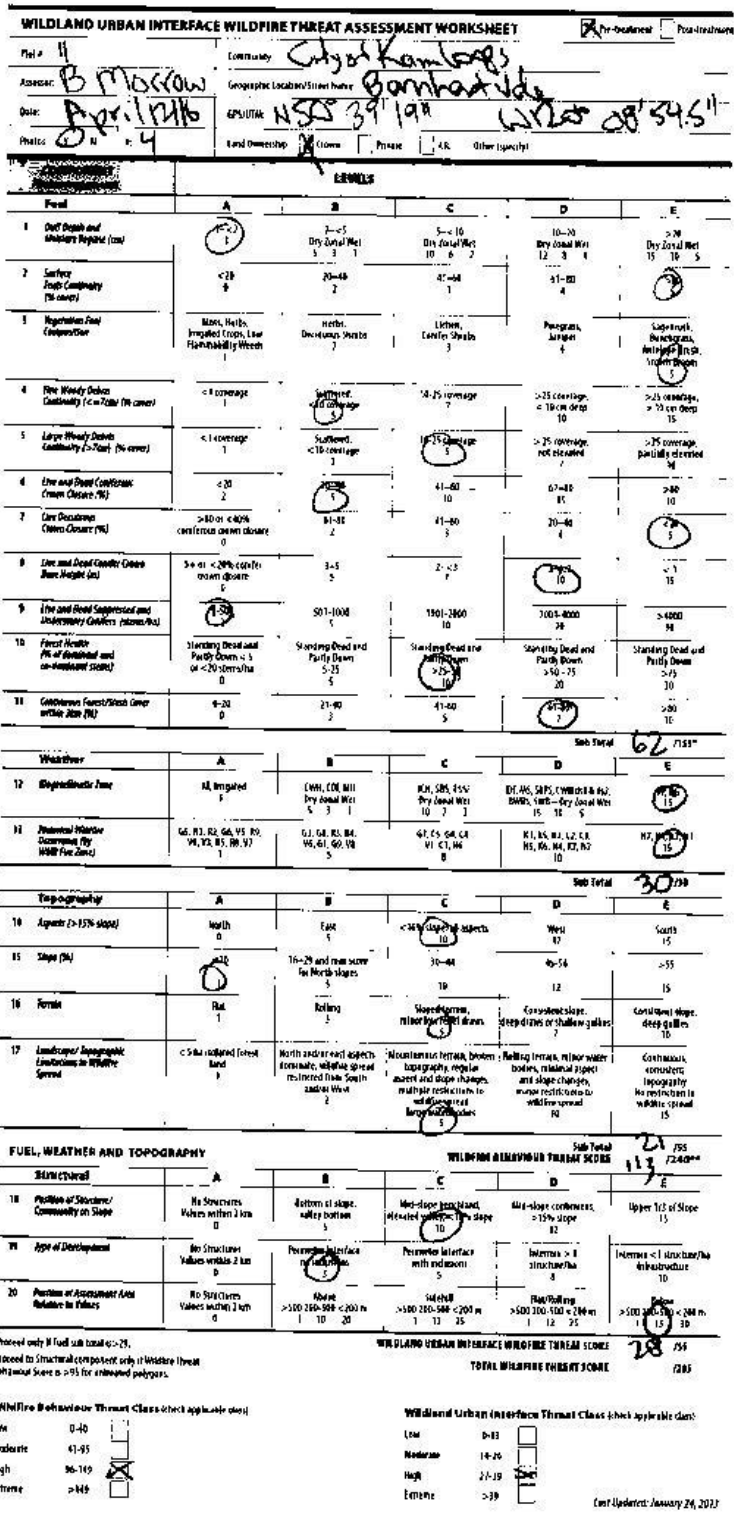
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2015

City of Kamloops – Wildfire Threat Assessment Picture – Plot 10

Photo 10-1 @ 45 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot # 11 — Community: City of Kamloops — Assessor: B Morrow — Geographic Location/Street Name: Barnhartvale — Date: April 2016 — GPS/UTM: N 50° 39' 19" W 120° 08' 54.5" — Photos: N 4 — Land Ownership: Crown / Private / I.R. / Other (specify)

LEVELS

	Fuel	A	B	C	D	E
1	Duff Depth and Woody Debris (cm)	<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 1	61–80 4	81–100 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 1	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Bitterbrush, Tall Grass 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 7	>25 coverage, <10cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifers Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% conifer crown closure 0	61–80 2	41–60 5	20–40 7	<20 10
8	Live and Dead Conifer Crown Base Height (m)	3+ or <20% conifer crown closure 0	3–5 5	2–<3 7	<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of Standard and co-dominant stems)	Standing Dead and Partly Down <5 or <20 trees/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 62 /155

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Irrigated 5	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWHdh1 & dk2, BWBS, SWB—Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMB Fire Zone)	G6, R3, R2, G6, V5, R9, V4, V3, R5, R8, V7 1	G1, G8, R1, R4, V6, G1, G9, V8 5	G7, C5, G4, C8 V1 C1, H6 8	K1, K5, H1, L2, C3, H5, K6, H4, K7, H2 10	H7, H8, K8, H1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<30% slope/all aspects 10	West 17	South 15
15	Slope (%)	<10 0	16–29 and most score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor bowl/gully drains 5	Consistent slope, steep draws or shallow gullies 7	Continual slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha sheltered forest land 0	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 21 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 113 /240*

	Structure/	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated plateau, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peripheries/interface no infrastructure 5	Peripheries/interface with infrastructure 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 13 25	Flat/Rolling >500 200–500 < 200 m 1 12 25	Below >500 200–500 < 200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 28 /55

TOTAL WILDFIRE THREAT SCORE /285

*Proceed only if Fuel sub total is >=29.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	
Moderate	41-95	
High	96-149	X
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

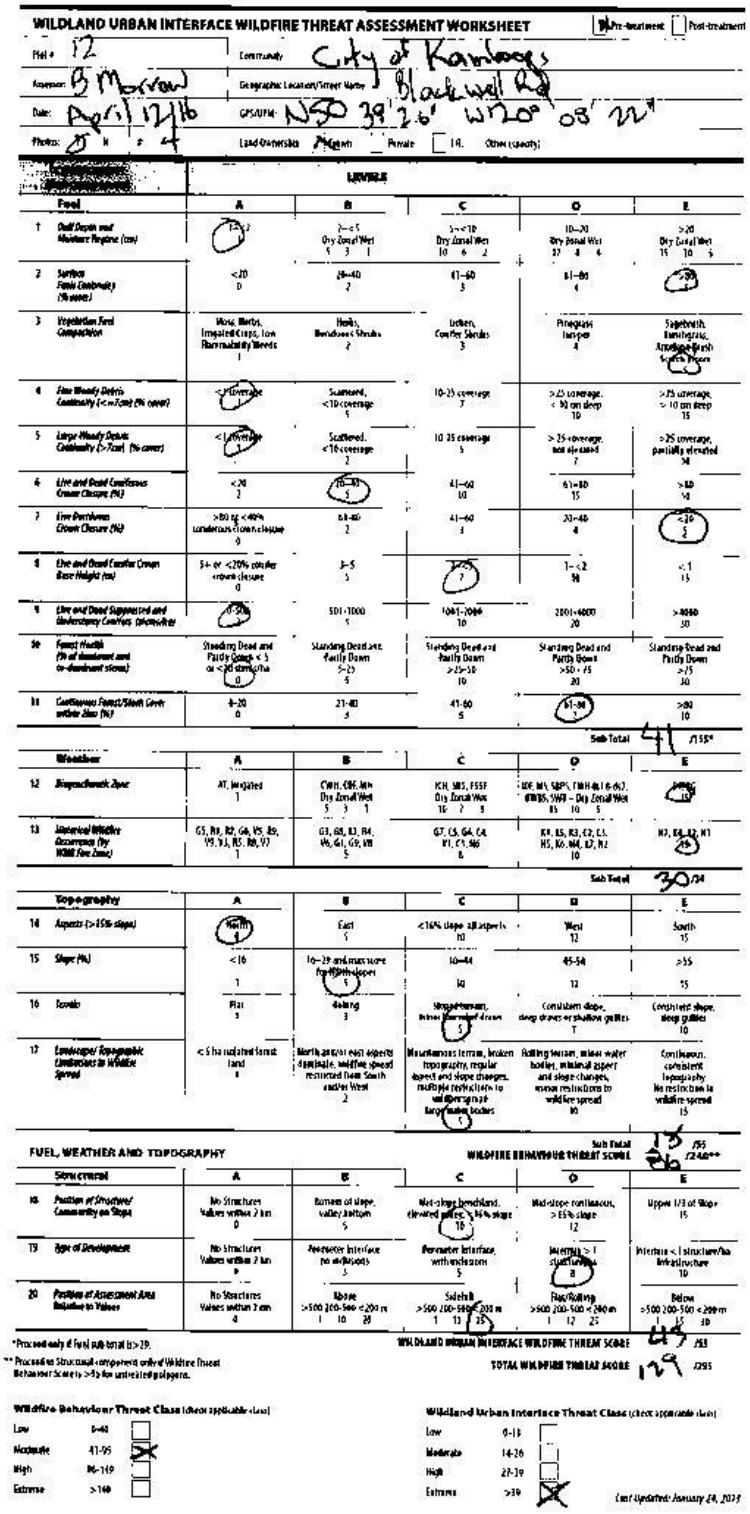
Low	0-13	
Moderate	14-26	
High	27-39	X
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 11

Photo 11-1 @ 270 degrees

12



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

[X] Pre-treatment [ ] Post-treatment

Plot # 12 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Blackwell Rd

Date: April 12/16 GPS/UTM: N50 39 26' W120° 08' 22"

Photos: [illegible] N = 4 Land Ownership: [X] Crown [ ] Private [ ] FN [ ] Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2	2–<5 Dry Zonal/Wet 5 3 1	5–<10 Dry Zonal/Wet 10 6 2	10–20 Dry Zonal/Wet 17 8 4	>20 Dry Zonal/Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Non Flammability Weeds 1	Forbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Conifer Pioneer 5
4	Fine Woody Debris Continuity (<=7.5cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 1	10-25 coverage 3	>25 coverage, < 50 on steep 10	>75 coverage, > 10 on steep 15
5	Large Woody Debris Continuity (>7.5cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	60-80 2	41–60 4	20–40 8	<20 10
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 98	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Dead < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 < 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Short Grass within 2km (%)	0–20 0	21–40 5	41–60 5	61–80 5	>80 10

Sub Total 41 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal/Wet 5 3 1	ICH, MS, FSSF Dry Zonal/Wet 10 7 3	IDF, MH, SBPS, PMH (6-8) (6-7) BWBS, SWB – Dry Zonal/Wet 15 10 5	[illegible] 15
13	Historical Wildfire Occurrence (by WUBI Fire Zone)	G5, H9, H2, G6, H5, H9, V9, V3, H5, H8, V7 1	G3, G8, K3, H4, H6, G1, G9, V8 5	G7, C5, G4, C4, H1, C9, H6 8	K9, K5, K3, C2, C3, H5, K6, H4, K7, H2 10	N7, E4, K2, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for >30% slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 3	Rolling 3	Steep terrain, minor channelled draws 5	Corrugated slope, steep draws or shallow gullies 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Continuity to Wildfire Spread	< 5 ha cultivated forest land 0	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple fire/wildland to wildland/grass to large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography, no restriction to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 45 /240**

	Structural	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottoms of slope, valley bottom 5	Mid-slope benchland, elevated plateau, < 15% slope 10	Mid-slope continuous, > 15% slope 12	Upper 1/3 of Slope 15
19	Age of Development	No Structures Values within 2 km 0	Perimeter Interface, no wildlands 3	Perimeter Interface, with wildlands 5	Interior > 1 structure/ha 8	Interior < 1 structure/ha Rural/Urban 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 13 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub-total is >39.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >5 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 44 /150

TOTAL WILDFIRE THREAT SCORE 129 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	[ ]
Moderate	41–95	[X]
High	96–149	[ ]
Extreme	>149	[ ]

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	[ ]
Moderate	14–26	[ ]
High	27–39	[ ]
Extreme	>39	[X]

Last Updated: January 28, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 12

Photo 12-1 @ 270 degrees

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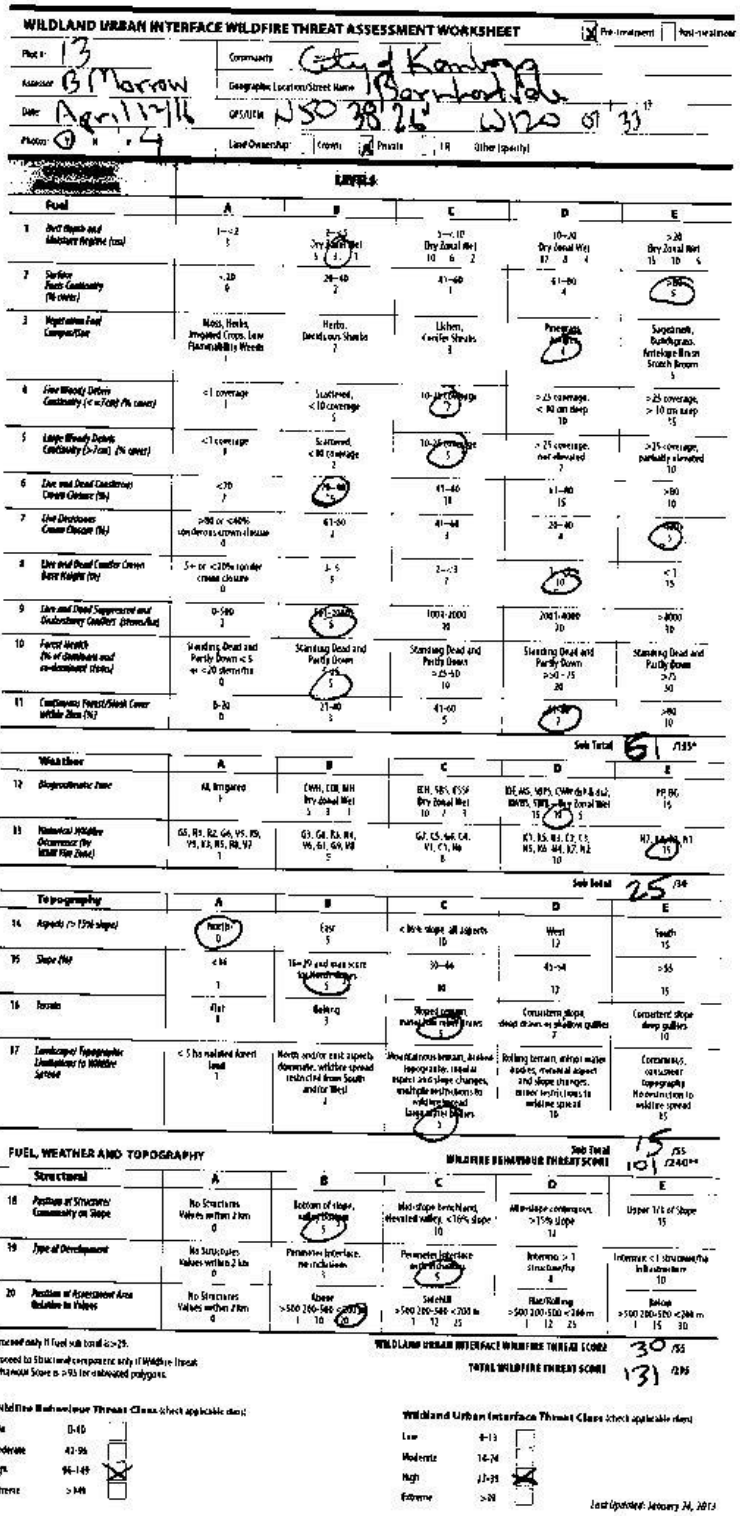

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment [X] Post-treatment [ ]

Plot #: 13

Assessor: B Morrow

Date: April 19/16

Photos: 0 N 4

Community: City of Kamloops

Geographic Location/Street Name: Barnhartvale

GPS/UTM: N50 38 25 W120 01 33

Land Ownership: Crown [ ] Private [X] FN [ ] Other (specify) [ ]

LEVEL 1

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 5	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 8 3 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 1	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Ag Crops 4	Sagebrush, Bunchgrass, Antelope Bitrush Scotch Broom 5
4	Live Woody Debris Continuity (<=7.6cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% con/deciduous/grass/shrubs 0	61–80 4	41–60 8	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–2000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 61 /185*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AB, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	IEH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, MBS, CWH dh & ds, IDWS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Fire Zone)	G5, R1, R2, G4, V5, R9, V5, K3, K5, R8, V7 1	G3, G6, R3, R4, V6, G1, G9, K8 5	G7, C5, A6, C4, V1, C1, H6 8	K1, K5, K4, C2, C3, N5, K6, A4, K7, K2 10	H7, A5, N1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (> 15% slope)	North 0	East 5	< 16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for North aspects 5	30–46 10	47–>54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, many rock relief features 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 3	Slow/Gradual terrain, broken topographic, natural aspect and slope changes, multiple restrictions to wildfire spread Large valley bottoms 5	Rolling terrain, minor water bodies, natural aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 101 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/ard, elevated valley, <16% slope 10	All mid-slope combinations, >15% slope 14	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Permanent Interface, non-inclusion 5	Permanent Interface, co-joint cluster 5	Intermix, > 1 structure/ha 8	Intermix, < 1 structure/ha Industrial 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Side/Hill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE 131 /295

*Proceed only if Fuel sub total is >29.

**Proceed to Structural components only if Wildfire Threat Behaviour Score is >95 for elevated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	
High	96–149	X
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–24	
High	25–39	X
Extreme	>39	

Last Updated: January 26, 2015

City of Kamloops – Wildfire Threat Assessment Picture – Plot 13

Photo 13-1 @ 180 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET — Pre-treatment / Post-treatment

Plot #: 14 — Community: City of Kamloops

Assessor: B Morrow — Geographic Location/Street Name: Barnhartvale Rd

Date: April 18th — UTM/LL: N50° 38' 14" W120° 05' 23"

Photos: 0 N 3 — Land Ownership: Crown / Private / FN / other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1 = <2 1	2 = <5 Dry Zonal Wet 5 6 1	5 = <10 Dry Zonal Wet 10 8 7	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Pharmaceutical Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	< 1 coverage 1	Scattered, < 20 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Coarse Woody Debris Continuity (>7cm) (% cover)	< 1 coverage 1	Scattered, < 10 coverage 3	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<30 3	30–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous with open closure 1	61–80 3	41–60 5	25–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5 or <20% conifer crown closure 1	3–5 5	2–<3 7	1 – <2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down <5 or <25% 1	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within Zone (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 26 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	IDFH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH wh1 & dk1, BWBS, SWB — Dry Zonal Wet 15 10 5	15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, H1, H2, G6, H5, H9, V2, V3, H5, H6, V7 1	G3, G8, H3, H4, H6, G1, G9, V8 5	G7, C5, G4, C8, H7, C1 H6 8	H1, H5, H3, K2, K7, C3, H5, K6 H4, H7, H2 10	H7, K4, K1, K3 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	Flat 5	< NW, steep NE aspects 10	West 17	South 15
15	Slope (%)	<30 1	16–29 and mild slope on North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steeper terrain, minor low relief draws 5	Continuous slope, steep climes or shadow gullies 7	Consistent steep deep gullies 10
17	Landscape/Topographic Continuities to Wildfire Spread	< 5 ha isolated forest land 1	North aspects exist, dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple terrain features to influence fire spread 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 73 /155 — **WILDFIRE BEHAVIOUR THREAT SCORE** 1240**

	Structures	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, flat/rolling <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/4 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no subdivision 3	Perimeter Interface, with subdivision 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 13 25	Bottom/Valley >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /90

TOTAL WILDFIRE THREAT SCORE 115 /295

*Proceed only if Fuel sub total is >29.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	X
High	96–149	
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–26	
High	27–39	X
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 14

Photo 14-1 @ 180 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ___ Post-treatment

Plot #: 15 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Barnhartvale Rd

Date: Apr 12/16 GPS/UTM: N50 39' 13.4" W120 41' 25.4"

Photos: 0 to 3 Land Ownership: [X] Crown [ ] Private [ ] FR [ ] Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<5 Dry Zonal Wet 5 3 1	5–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 3	41–60 8	61–80 9	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Smooth Brome 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	< 1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	< 1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Canopy Closure (%)	<20 3	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Canopy Closure (%)	>80 or <40% coniferous crown closure 0	41–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5 + or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–3000 12	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within Zone (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 63 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	MH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dc1 & dc2, PPBG, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMB Fire Zone)	G5, R8, R7, G6, V5, R9, V3, T3, R5, R8, V7 1	G3, G8, R3, R4, V6, 61, G9, V9 5	G7, E5, G4, E4 V1, C7, M6 8	K8, R5, R3, E2, C3, M5, K6 M4, R7, N3 10	N7, M8, N2, N1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<15% slope, No aspects 10	West 12	South 15
15	Slope (%)	<16 3	16–29 and max score for North slopes 5	30–44 10	45–58 12	>55 15
16	Terrain	Flat 0	Rolling 3	Sloped terrain, some low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, rugged aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, some water bodies, moderate aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography, no restrictions to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/knoll, elevated area <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values within 2 km 0	Perimeter Interface, scattered FRs 3	Perimeter Interface, with reductions 5	Interface, > 1 structure/ha 8	Intermix, < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200–500 < 200 m 1 10 20	Same/Valley >500 200–500 < 200 m 1 12 25	Flat/Valley >500 200–500 < 200 m 1 13 35	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >=20

** Assessed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygon.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /150

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40
Moderate	41-95
High	96-149
Extreme	>149

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13
Moderate	14-26
High	27-39
Extreme	>39

Last Updated: January 28, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 15

Photo 15-1 @ 180 degrees

16

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Plot #: 16 Community: City of Kamloops

Assessor: BMorrow Geographic Location/Street Name: Barnhartvale Rd

Date: Apr 12/16 GPS/UTM: N50 38 255' W120° 33' 466'

Photos: 0 N to 4 Land Ownership: Crown Private FR Other (specify)

	Fuel	A	B	C	D	E
1	Dead Duff and Matchstick Response (cm)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 3	41–60 7	61–80 4	5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 2	Herbs, Deciduous Shrubs 3	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Conifer Regen 5
4	Fine Woody Debris Continuity (< 7 cm) (% cover)	< 1 coverage 1	Scattered, < 10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm dens 10	>25 coverage, > 10 cm dens 15
5	Large Woody Debris Continuity (> 7 cm) (% cover)	<1 coverage 1	Scattered, < 10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifers Crown Closure (%)	2	20–40 4	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% conifer overstorey with deciduous 4	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dead/dying and re-dominant stems)	Standing Dead and Partly Down < 5 4	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within Zone (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 39 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	PCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MG, SBPS, CWH dks & wk2, BWBS, SWB—Dry Zonal Wet 15 12 8	PP, BG 15
13	Historical Wildfire Occurrence (by WFMS Fire Zone)	66, 81, R2, 66, V5, R9, X9, V3, R5, R8, Y7 1	G3, G6, R5, 64, 94, G1, 69, 98 5	67, C5, G4, 64, 91, F1, N6 8	B1, K5, E3, C2, C3, N5, 44, N4, K7, N2 10	N7, BP, K8, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (> 15% slope)	North 0	East 5	< 15% slope, SW aspects 10	West 12	South 15
15	Slope (%)	< 30 1	16–29 and steep scarps for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	1	Rolling 3	Sloped terrain, riparian bottom, valley drains 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects contiguous, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large unbroken	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 85 /55 /240**

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, valley bottom 5	Mid-Slope Benchland, Plateau/Ridge, Top of Slope 10	Mid-slope continuous, > 15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peninsular Interface, no Structures 3	Perimeter Interface, with Structures 6	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 17 25	Below >500 200–500 < 200 m 1 15 30

*Proceed only if Fuel sub total is >29

**Proceed to Structural component only of Wildfire Threat Behaviour Score is >55 for urban/rural polygons

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 84 /155

TOTAL WILDFIRE THREAT SCORE 97 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	X
High	96–149	
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

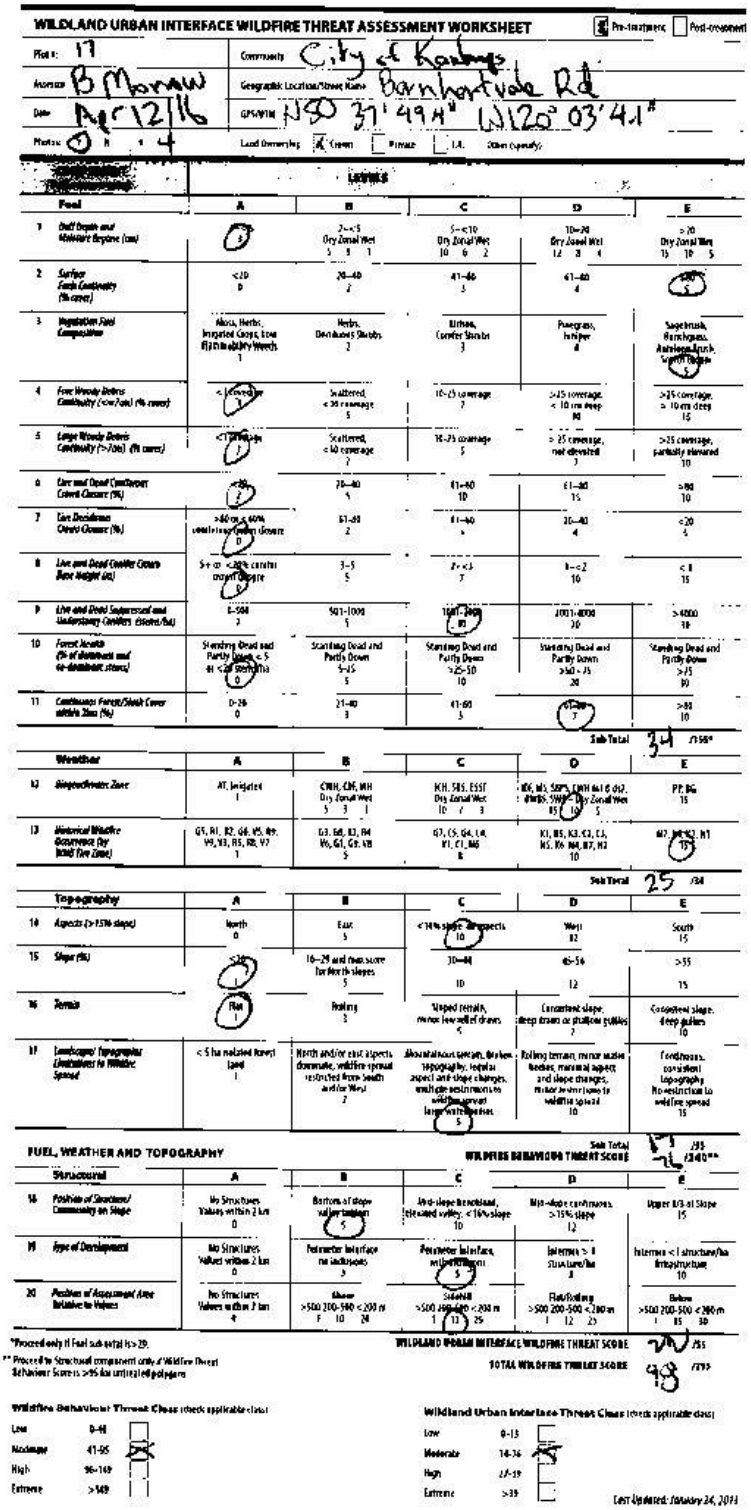
Low	0–15	
Moderate	16–26	X
High	27–39	
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 16

Photo 16-1 @ 90 degrees

17



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 17 — Community: City of Kamloops

Assessor: B Morrow — Geographic Location/Street Name: Barnhartvale Rd

Date: Mar 12/16 — GPS/MTM: N50 37' 49.4" W120° 03' 41.1"

Photos: 0 N 4 — Land Ownership: Crown / Private / I.R. / Other (specify):

FUEL

	Fuel	A	B	C	D	E
1	Duff Depth and Ladder Fuel Presence (cm)	0	2–<5 Dry Zone/Wet 5 3 1	5–<10 Dry Zone/Wet 10 6 2	10–20 Dry Zone/Wet 12 8 4	>20 Dry Zone/Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low (1) Thin Hay/Dry Weeds 1	Herbs, Deciduous Shrubs 2	Bitrbus, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Spotted Knapweed 5
4	Fine Woody Debris Continuity (<6cm/.6cm) (% cover)	<5 coverage 1	Scattered, <30 coverage 5	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7.6cm) (% cover)	<10 coverage 1	Scattered, <40 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer Crown Closure (%)	<20 1	20–40 4	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>60 or <40% conifer crown closure 0	51–60 2	41–50 4	20–40 8	<20 10
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Understorey and Understorey Conifers (Stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of deadwood and co-dominant stems)	Standing Dead and Partly Down <5 or <20 Standing 0	Standing Dead and Partly Down 5–15 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 34 /150*

WEATHER

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zone/Wet 5 3 1	MH, SBS, ESSF Dry Zone/Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB Dry Zone/Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, K3, R4 V6, G1, G9, V8 5	K7, C5, G4, L4, V1, C1, R6 8	K1, R5, K8, C2, C3, K5, K6 R4, R7, K2 10	K7, R3, K2, R1 15

Sub Total 25 /30

TOPOGRAPHY

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	16–29 and more score for North slopes 5	30–40 10	45–56 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from south and/or West 2	Mountainous terrain, Broken topography, isolated aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor limitations to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /35

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 75 /240**

STRUCTURAL

	Structural	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope valley bottom 5	Mid-slope Benchland, Elevated valley, <16% slope 10	Mid-slope continuous >15% slope 12	Upper 1/3 of Slope 15
19	Age of Development	No Structures Values within 2 km 0	Perimeter interface no subdivisions 3	Perimeter interface, with development 5	Isolated > 1 Structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m F 10 20	Side/Hill >500 200-500 <200 m 1 13 25	Flat/Rolling >500 200-500 <200 m 1 12 23	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 70 /55

TOTAL WILDFIRE THREAT SCORE 93 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	
Moderate	41-95	X
High	96-149	
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

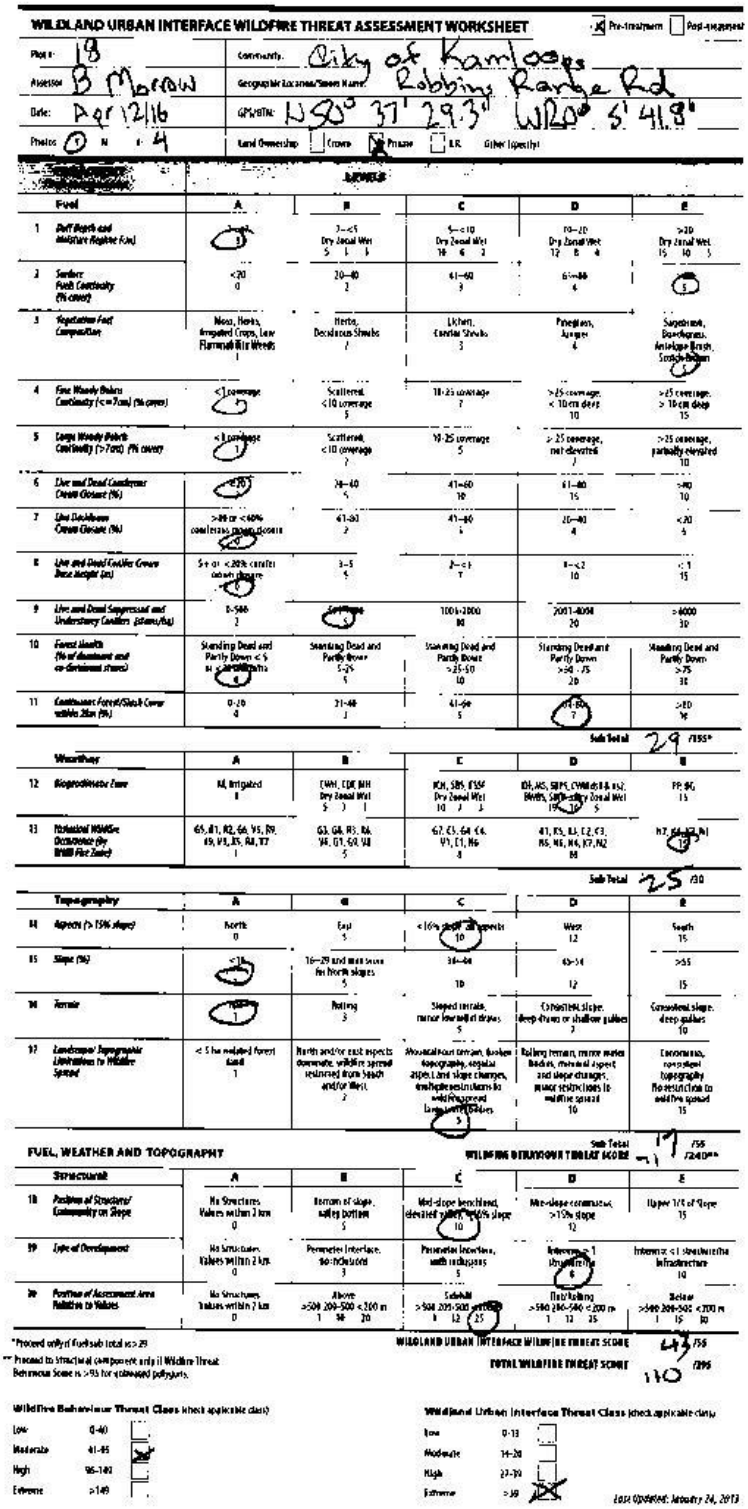
Low	0-13	
Moderate	14-36	X
High	37-59	
Extreme	>59	

Last Updated: February 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 17

Photo 17-1 @ 45 degrees

18



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

[X] Pre-treatment [ ] Post-treatment

Plot #: 18 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Robbins Range Rd

Date: Apr 12/16 | GPS/BTM: N50° 37' 29.3" W120° 5' 41.8"

Photos: 1 N 4 | Land Ownership: [ ] Crown [X] Private [ ] I.R. [ ] Other (specify)

FUEL

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1	2—<5 Dry Zonal Wet 5 1 1	5—<10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammable Bio Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Agropyron 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20—40 5	41—60 10	61—80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 20	61-80 2	41—60 4	20—40 8	<20 4
8	Live and Dead Conifer Crown Base Height (m)	5 or > <20% conifer crown closure 0	3—5 5	2—<3 7	1—<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or < 20% affected 0	Standing Dead and Partly Down 5-24 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 25m (%)	0-20 0	21-40 1	41-60 5	61-80 7	>80 10

Sub Total 29 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AB Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dry & wk2; BWBS, SWB dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Fire Zone)	65, 81, R2, 66, V5, B9, 69, V3, X5, A8, X7 1	G3, G8, H3, R6, V6, G1, 60, U8 5	G7, C5, 64, C6, V1, C1, H6 8	41, K5, L3, L2, C3, H6, N6, N4, K7, N2 10	H7, 66, K2, N1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (> 15% slope)	North 0	East 5	< 16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 5	16—29 and most south for North slopes 5	30—60 10	61—74 12	>75 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor benches/draws 5	Extensive slope, deep draws or shallow gullies 7	Canyonland, steep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or east aspects dominate, wildfire spread restricted from south and/or west 2	Mountainous terrain, broken topography, several aspects and slope changes, ends/ridges restrictions to wildfire spread Large lakes/valleys 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Extensive, non-sloped topography No restriction to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE = 71 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benched, elevated bench, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, 90-100% cover 3	Perimeter Interface, with exposures 5	Intermix, > 1 structure/ha 8	Intermix, < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 < 200 m 1 10 20	Subdivision >500 200-500 < 200 m 8 12 25	Flat/Rolling >500 200-500 < 200 m 1 12 25	Below >500 200-500 < 200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE = 42 /55

TOTAL WILDFIRE THREAT SCORE = 110 /295

*Proceed only if Fuel sub total is > 29

**Proceed to structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	
Moderate	41-95	
High	96-140	
Extreme	>140	

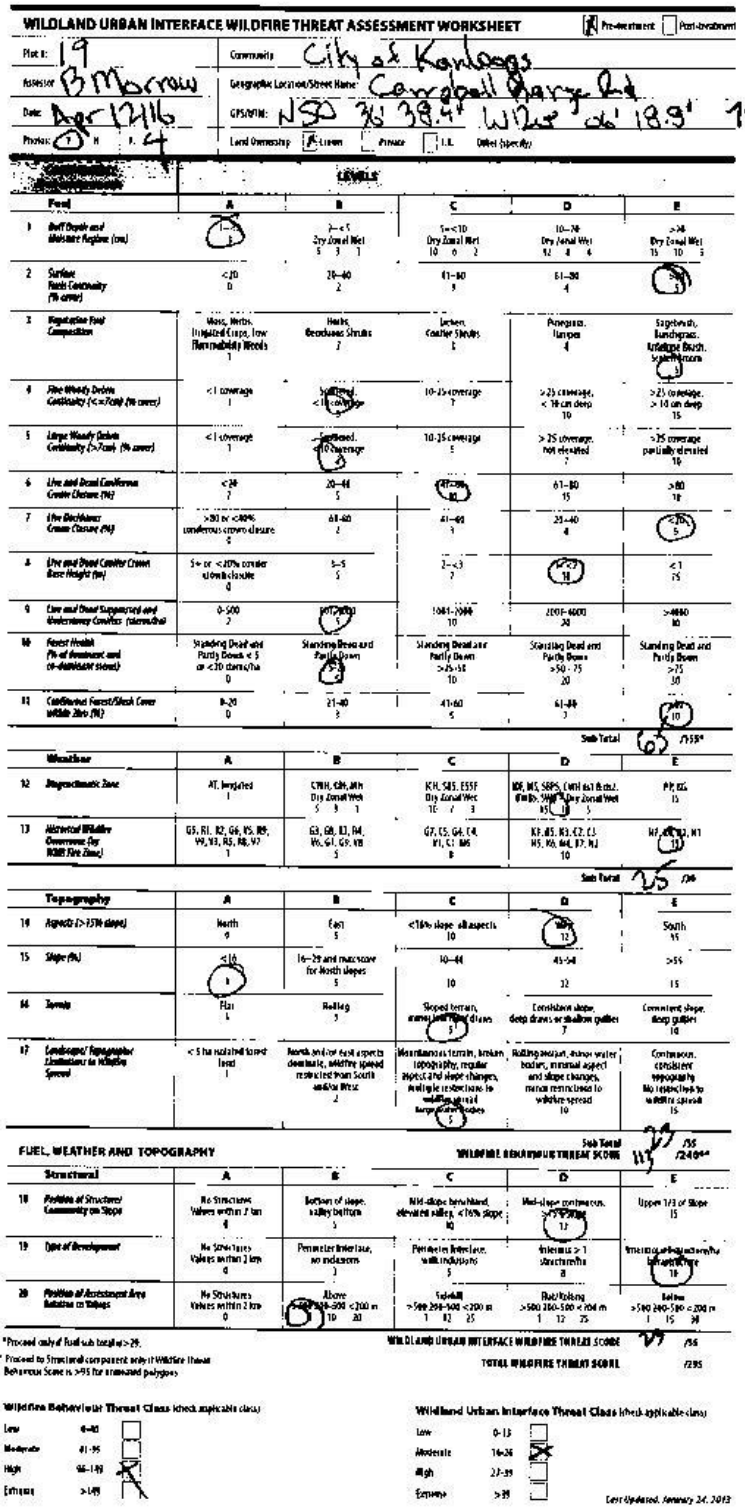
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	
Moderate	14-20	
High	21-30	
Extreme	>30	X

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 18

Photo 18-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

[X] Pre-treatment [ ] Post-treatment

Plot #: 19
Assessor: B Morrow
Date: Apr 13/16
Photos: 1 H 2 4

Community: City of Kamloops
Geographic Location/Street Name: Campbell Range Rd
GPS/UTM: N50 36 39.4' W120 26' 18.9' 18m
Land Ownership: [X] Crown [ ] Private [ ] I.R. [ ] Other (Specify)

19

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, low flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Spotted Knapweed 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25+coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 18
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	25–40 4	<25 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1 10	<1 15
9 Live and Dead Regenerated and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of deciduous and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Coniferous Forest/Slash Cover Within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
				Sub Total	/55*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, bwgalea 1	CWH, IDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH (ds1 & cm), Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WUI Fire Zone)	G5, R1, R2, G6, R5, R8, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, W6, G1, G9, V8 5	G7, C5, G4, E4, W1, C1 R6 8	K9, A5, K3, C2, C3, H5, V6, 6A, E7, N2 10	W7, A6, N2, N1 15
				Sub Total	25 /30

Topography	A	B	C	D	E
14 Aspect (>75% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15 Slope (%)	<10 1	16–29 and max score for North slopes 5	10–40 10	41–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, some ravines and draws 5	Extensive slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Continuum re Wildfire Spread	< 5 ha isolated stand/ head 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread [illegible] 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15
				Sub Total	29 /55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 117 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no indicators 3	Perimeter Interface, with indicators 5	Intermix > 1 structure/ha 8	Intermix of structures/ha throughout 10
20 Position of Assessment Area Relative to Slope	No Structures Values within 2 km 0	Above >500 300–500 <200 m 10 20	Valley >500 250–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
				WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	29 /55
				TOTAL WILDFIRE THREAT SCORE	/295

*Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	[ ]
Moderate	41–95	[ ]
High	96–149	[X]
Extreme	>149	[ ]

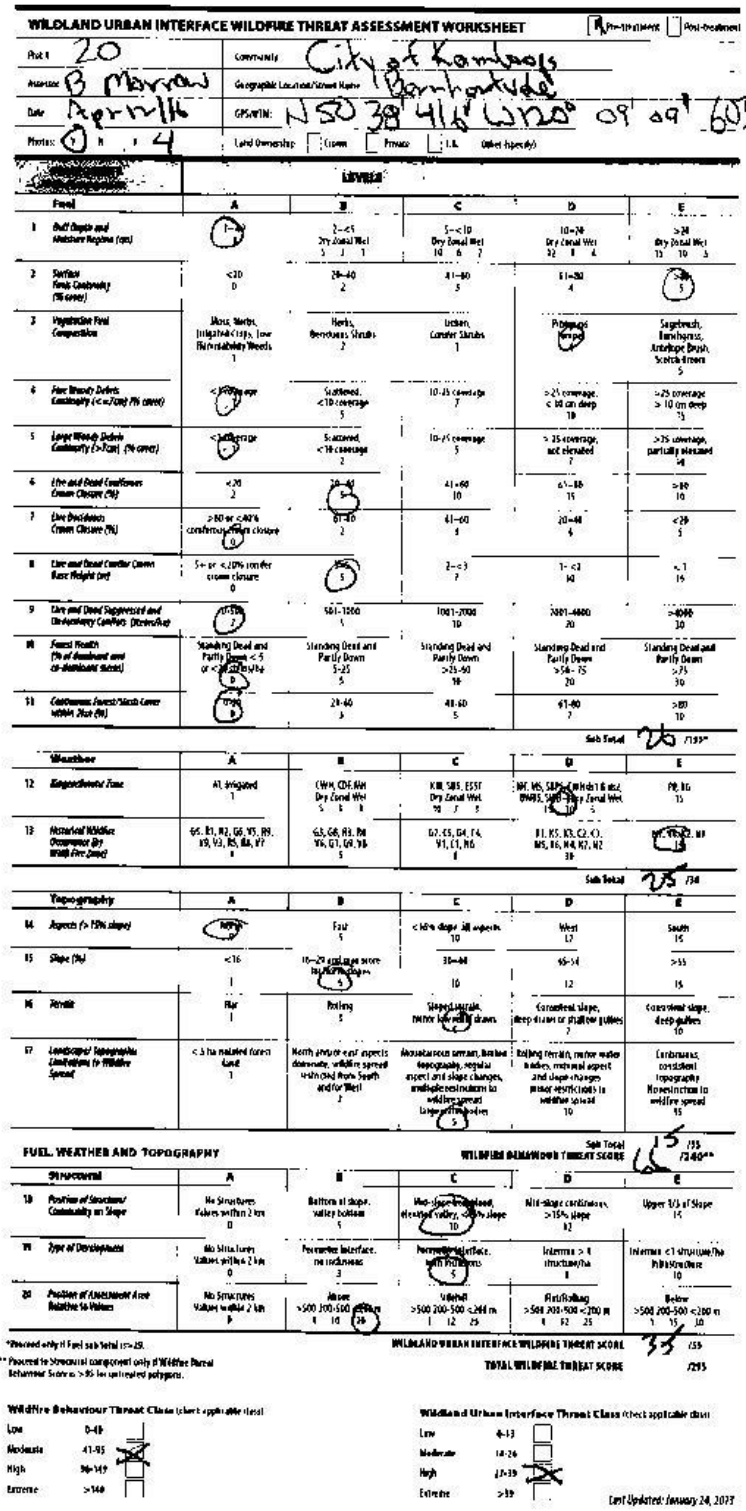
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	[ ]
Moderate	14–26	[X]
High	27–39	[ ]
Extreme	>39	[ ]

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 19

Photo 19-1 @ 90 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Plot # 20 — Community: City of Kamloops — Assessor: B Marrow — Geographic Location/Street Name: Barnhartvale — Date: April 16 — GPS/UTM: N50 38 416 W120° 09' 09" 603m — Photos: 1 to 4 — Land Ownership: Crown / Private / U.R. / Other (specify)

Fuel	A	B	C	D	E
1 Bui Depth and Moisture Regime (rpt)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 13 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 5	61–80 8	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Conifer, Conifer Shrubs 3	Pinegrass Grass 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<20% cover 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage > 10 cm deep 13
5 Large Woody Debris Continuity (>7cm) (% cover)	<20 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous, when mixed 0	61–80 2	41–60 5	20–40 8	<20 10
8 Live and Dead Conifer Crown Base Height (m)	5+ or <10% conifer crown closure 0	3–<5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understory Conifers (Stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of deadwood and re-foliated forest)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 30m (m)	0–20 0	21–60 3	61–80 5	61–80 7	>80 10

Sub Total 20 /135*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	IDF, SBS, ESSF Dry Zonal Wet 10 7 5	BWBS, SWB - Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (By Wildfire Zone)	65, 81, M2, G6, V5, B9, K9, V3, R5, BA, V7 1	G3, G8, R3, B8 V6, G7, G9, V6 5	G7, C5, G4, F4, V1, E1, R6 8	B1, K5, K3, C2, C3, M5, R6, N4, K7, N2 10	M1, V4, C2, M9 15

Sub Total 25 /30

Topography	A	B	C	D	E
14 Aspects (> 15% slope)	North 0	Flat 5	< 16% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 and slope across the dominant slopes 5	30–40 10	65–54 12	>55 15
16 Terrain	Flat 1	Rolling 5	Sloped terrain, mother lode valley draws 8	Concentral slope, deep draws or shallow gullies 7	Concentral slope, deep gullies 10
17 Landscape/ Topographic Conditions to Wildfire Spread	< 3 ha isolated forest fuel 1	North aspect and aspects downwind, wildfire spread restricted from South and/or West 2	Mountainous terrain, Broken topography, regular aspect and slope changes, unfavorable conditions to wildfire spread 5	Rolling terrain, minor water bodies, minimal aspect and slope changes minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /35

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 60 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Continuity on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope broadened, elevated valley, <30% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no structures 3	Perimeter Interface, with structures 5	Interface > 1 structure/ha 8	Interface <1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Valley >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 35 /55

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel sub total is >=20.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-48	
Moderate	47-95	X
High	96-143	
Extreme	>144	

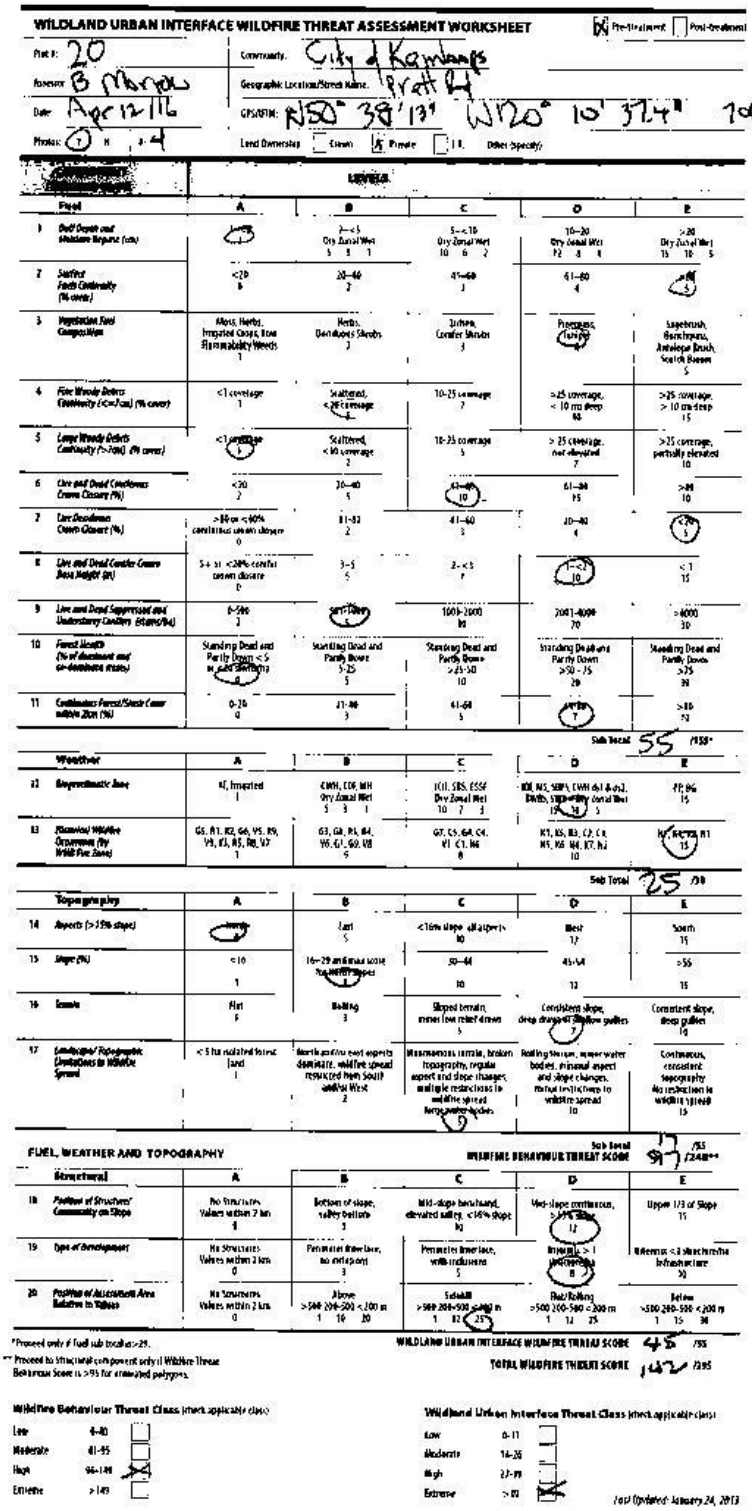
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	
Moderate	14-26	
High	27-39	X
Extreme	>39	

Last Updated: January 24, 2017

City of Kamloops – Wildfire Threat Assessment Picture – Plot 20

Photo 20-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-Treatment ☐ Post-treatment

Plot #: 20 — Community: City of Kamloops

Assessor: B Morgan — Geographic Location/Street Name: Pratt Rd

Date: Apr 12/16 — GPS/UTM: N50° 38' 13" W120° 10' 37.4" 10m

Photo #: 7 N 3-4 — Land Ownership: ☐ Crown ☒ Private ☐ I.R. ☐ Other (Specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	0-1	2-<5 Dry Zonal Wet 5 3 1	5-<10 Dry Zonal Wet 10 6 2	10-20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20-40 2	41-60 3	61-80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 3	Lichen, Conifer Shrubs 3	Pinegrass, Timothy 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <20% coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, < 10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20-40 5	41-60 10	61-80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	81-82 2	41-60 3	20-40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5-10 <20% conifer crown closure 0	3-5 5	2-<3 7	1-<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/Ha)	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Litter (% of duff layer and co-dominate trees)	Standing Dead and Partly Down <5 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 20m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 55 /150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BG, MS, SBPS, CWH dk1 & dk2, BWBS, SBS Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (By Wildfire Fire Zone)	G5, A1, K2, G6, V5, R9, V9, K1, A5, R8, V7 1	G3, G8, P1, G4, V6, G1, G0, V8 5	G7, C5, G4, C4, V1 <1, N6 8	K1, K5, B3, C2, C8, N1, K6, N4, K7, N3 10	N7, K4, N2 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<10 1	16-29 and 6 max score for Wildfire Spread	30-44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, some low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	Scattered forest aspects dominate, wildfire spread restricted from South and West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, some water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 97 /155

WILDFIRE BEHAVIOUR THREAT SCORE 97 /124***

	Structural	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope bench/and, elevated valley, <16% slope 10	Mid-slope continuous, >16% Slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no encroachment 3	Perimeter interface, with inclusions 5	Intermix, > 1 structure/ha 8	Wilderness, < 1 structure/ha Infrastructure 30
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <,200 m 1 10 20	Sidehill >500 200-500 <,200 m 1 12 25	Flat/Rolling >500 200-500 <,200 m 1 12 25	Below >500 200-500 <,200 m 1 15 30

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /155

TOTAL WILDFIRE THREAT SCORE 142 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-80	☐
Moderate	81-95	☐
High	96-148	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

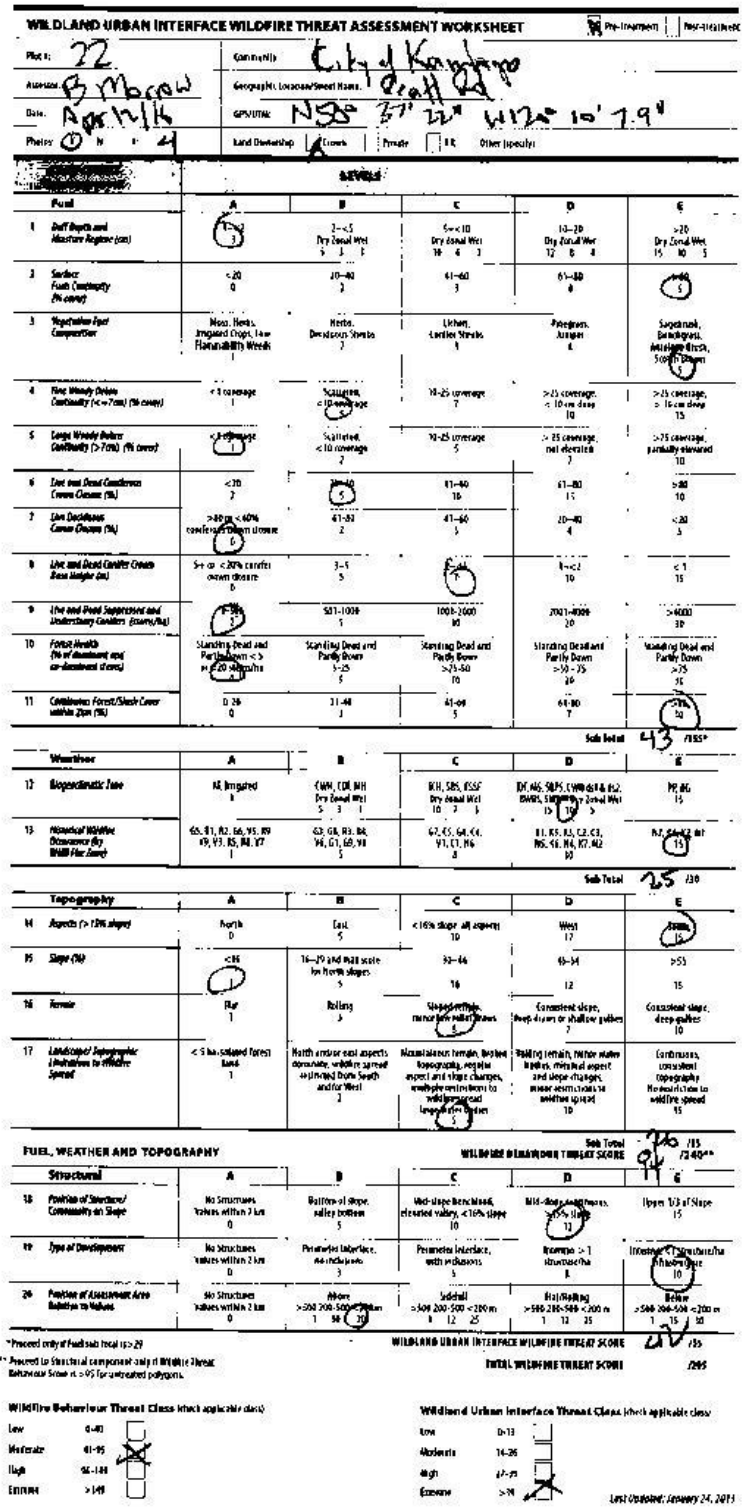
Low	0-11	☐
Moderate	16-26	☐
High	27-99	☐
Extreme	>99	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 21

Photo 21-1 @ 180 degrees

22



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment | Post-treatment

Plot #: 22

Assessor: B Moran

Date: April 14

Photos: 0 N 4

Community: City of Kamloops

Geographic Location/Street Name: Draft 22

GPS/UTM: N50° 37' 22" W120° 10' 7.9"

Land Ownership: Crown | Private | IR | Other (specify)

	Fuel	A	B	C	D	E
1	Surface Fuel Depth and Moisture Regime (cm)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 4 3	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 6	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 3	Lichen, Conifer Shrubs 4	Evergreen, Juniper 6	Sagebrush, Bunchgrass, Mixedgrass Shrub, Slough Grass 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	< 1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>40% < 60% coniferous crown closure 6	61–80 2	41–60 5	20–40 4	<20 3
8	Live and Dead Conifer Crown Base Height (m)	5+ or < 20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understory Conifers (Stems/Ha)	1–500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or > 20 Years 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 15
11	Continuous Forest/Shrub Cover within 2km (%)	0–30 0	31–40 3	41–60 5	61–80 7	>80 10

Sub Total 43 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AE, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	IDF, MS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Year)	65, 81, 82, 86, 95, 99, 93, 95, 04, 07 1	63, 68, 83, 86, 96, 01, 08, 08 5	67, 75, 84, 94, 98, 03, 11, 16 8	81, 85, 87, 92, 93, 96, 98, 02, 07, 12 10	76, 84, 92, 07 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (> 10% slope)	North 0	East 5	<16% slope, all aspects 10	West 17	South 15
15	Slope (%)	<16 1	16–29 and mild scale for North slopes 5	30–46 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped-rolling, minor low relief features 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha, isolated forest land 1	North and/or east aspects dominate, wildfire spread eastward from South and/or West 3	Mixed aspects/terrain, limited topography, negative aspect and slope changes, small pockets exist/occur to wildfire spread (expected fire size) 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15

Sub Total 30 /35

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 84 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope Benchland, elevated valley, <16% slope 10	Mid-slope/ridgetops, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ values within 2 km 0	Peninsular/interface, no inclusions 3	Peninsular/interface, with inclusions 5	Island/>1 structure/ha 8	Intermix/>1 structure/ha 10
20	Position of Assessment Area Relative to Values	No Structures/ values within 2 km 0	Above >500 200–500 <200 m 1 5 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

* Proceed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 20 /35

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	
High	96–188	X
Extreme	>189	

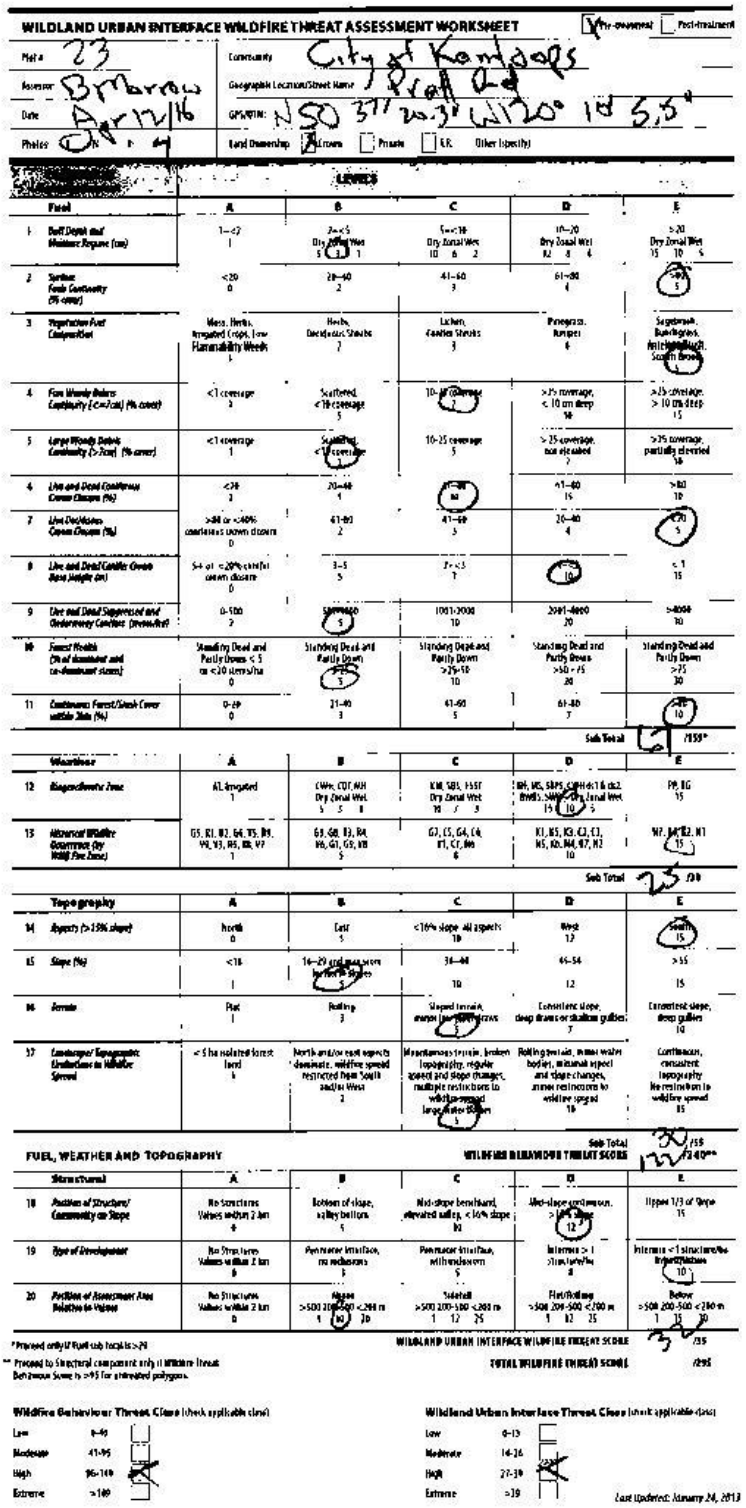
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–26	
High	27–35	
Extreme	>35	X

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 22

Photo 22-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot # 23 | Community: City of Kamloops / Pratt Rd

Assessor: BMarrow | Geographic Location/Street Name:

Date: April 7/16 | GPS/UTM: N50 37' 20.3" W120° 18' 5.5"

Photos: ON | Land Ownership: Crown / Private / R.R. / Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Rabbitbrush, Scotch Broom 5
4	Fine Woody Debris Continuity (<3cm) (% cover)	<1 coverage 2	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>3cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 4	41–60 6	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (trees/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	/150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BWBS, SWB, Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	G5, R1, R2, R6, R5, R8, W4, W5, W6, R3, W7 1	G3, G8, R3, R4, W8, G1, G9, W8 5	G7, C5, G4, C6, R7, C7, W6 6	K1, K5, K3, C2, C3, W5, K2, N4, K7, N2 10	W7, W12, W1 15
					Sub Total	/30

	Topography	A	B	C	D	E
14	Aspect (>15% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and mostly northern aspects 5	30–40 10	41–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, ravines, benches, draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Obstructions to Wildfire Spread	< 5 ha isolated forest land 4	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 1	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography, no restriction to wildfire spread 15
					Sub Total	/55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE — /150 / /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/bank, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no enclosures 3	Perimeter Interface, with enclosures 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Valleyfill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	/35
					TOTAL WILDFIRE THREAT SCORE	/285

* Proceed only if Fuel sub-total is >20

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for elevated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	
High	96–149	X
Extreme	>149	

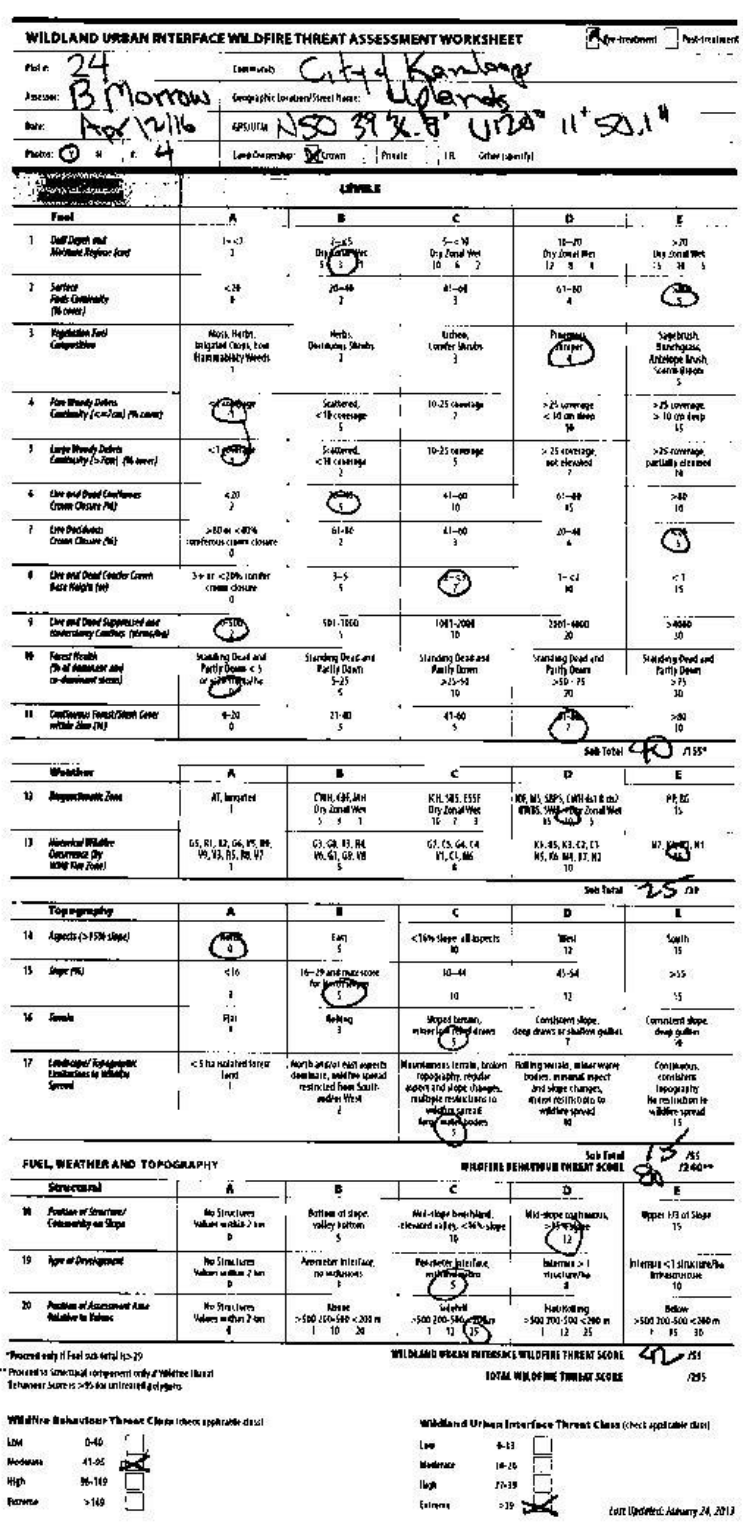
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–26	
High	27–39	X
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 23

Photo 23-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment ☒ post

Plot #: 24 Community: City of Kamloops

Assessor: B Morrow Geographic location/Street name: Uplands

Date: Apr 12/16 GPS/UTM N50 39 36.8 U120° 11' 50.1"

Photos: ☒ N E 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

24

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 3	Conifer, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Ponderosa, Antelope Brush, Coastal Slopes 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<20% coverage 1	Scattered, <10% coverage 5	10-25 coverage 7	>25 coverage < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer Crown Closure (%)	<20 2	20-40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	3+ or <20% conifer crown closure 0	3–5 5	1–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and coniferous Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or >50% live/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down > 75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 5	41–60 5	61–80 7	>80 10

Sub Total 40 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Interjected 1	CWH, CBS, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm1 & dm2 BWBS, SWB 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (By using Fire Zone)	G5, R1, R2, G6, R5, R8, V6, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, R6 6	K3, R5, K2, C2, C3, N5, K6 R4, R7, N3 10	N7, N6, N1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% Slope)	North 0	East 5	<16% Slope all aspects 10	West 12	South 15
15	Slope (%)	<16 3	16–29 and max score for North/East 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 0	Rolling 3	Sloped terrain, where land tilted down 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 8
17	Landscape/Topographic Continuities to Wildfire Spread	<5 ha isolated forest land 1	North at/or East aspects dominate, wildfire spread restricted from South-western Wind 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread forest/water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /35

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 80 /155 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, Elevated valley, <30% slope 10	Mid-slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19	Age of Development	No Structures Values within 2 km 0	Perimeter Interface, no enclosures 3	Peri-urban Interface, mixed enclosures 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Same/Hill >500 200-500 <200 m 1 12 25	Hazardous >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub-total is>29

** Proceed to structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 40 /55

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-169	☐
Extreme	>169	☐

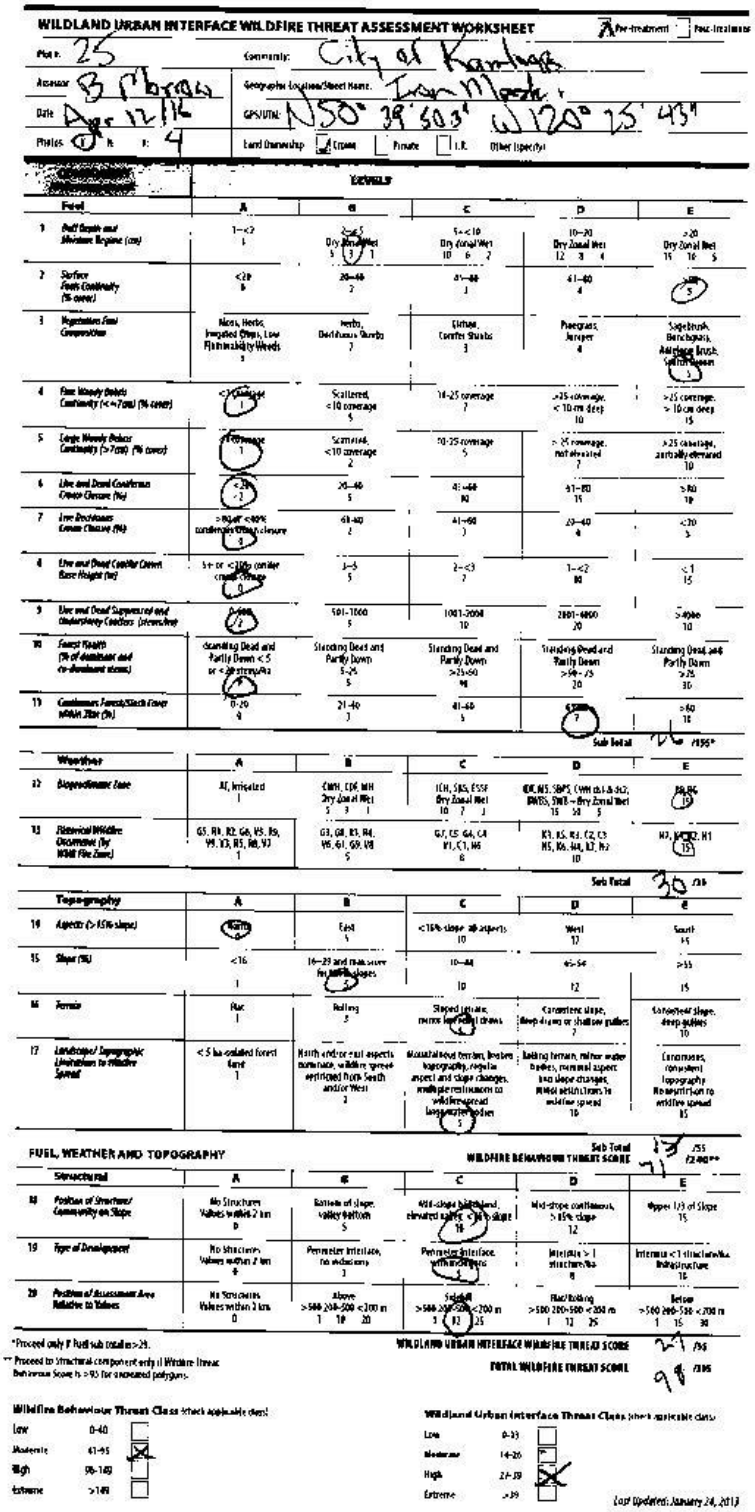
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 24

Photo 24-1 @ 90 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 25 Community: City of Kamloops

Assessor: B Pborgan Geographic Location/Sheet Name: Iron Mask

Date: Aug 12/16 GPS/UTM: N50° 39' 50.3" W120° 25' 43"

Photos #: 4 Land Ownership: ☑ Crown ☐ Private ☐ I.R. Other (specify)

25

FUELS

Fuel	A	B	C	D	E
1 Fuel Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Mes 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 6	20–40 7	41–60 8	61–80 9	>80 10
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Grass, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Saltbush 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 4	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 1	20–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80% or <40% continuous crown closure 5	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <10% conifer crown closure 1	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or < 20 stems/ha 1	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Coniferous Forest/Slash Fuel (MWH_FBH) (%)	0–20 4	21–40 3	41–60 5	61–80 7	>60 10

Sub Total 26 /155*

WEATHER

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ch1 & ds2; BWBS, SWB – Dry Zonal Wet 15 10 5	BG, PP 20
13 Historical Wildfire Occurrence (by MWH File Zone)	G5, H9, R2, G6, M5, R9, V9, K3, R5, R8, V3 1	G3, G8, K5, R4, V6, G1, G9, V8 5	G7, E5, G4, C4 M1, C1, M6 8	K9, R5, R1, C2, C3 M5, K6, M4, K7, N2 10	M7, M8, N2, H1 15

Sub Total 30 /35

TOPOGRAPHY

Topography	A	B	C	D	E
16 Aspects (> 15% slope)	North 0	East 1	<15% slope or all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 and mostly less than 16% slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 5	Sloped terrain, narrow benches/gully draws	Concentrated slope, deep draws or shallow gullies 7	Concentrated slope, deep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	Heath and/or mid aspects dominance, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple terminations to wildfire spread less water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, mild restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15

Sub Total 37 /55

WILDFIRE BEHAVIOUR THREAT SCORE 93 /240**

FUEL, WEATHER AND TOPOGRAPHY

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/bowl, elevated ridge, < 30% slope 10	Mid-slope continuous, > 30% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures/ Values within 2 km 0	Perimeter Interface, no exclusions 3	Perimeter Interface, with exclusions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha. Isolated structure 10
20 Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Subdivision >500 200–500 <200 m 5 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for annotated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 24 /95

TOTAL WILDFIRE THREAT SCORE 94 /335

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

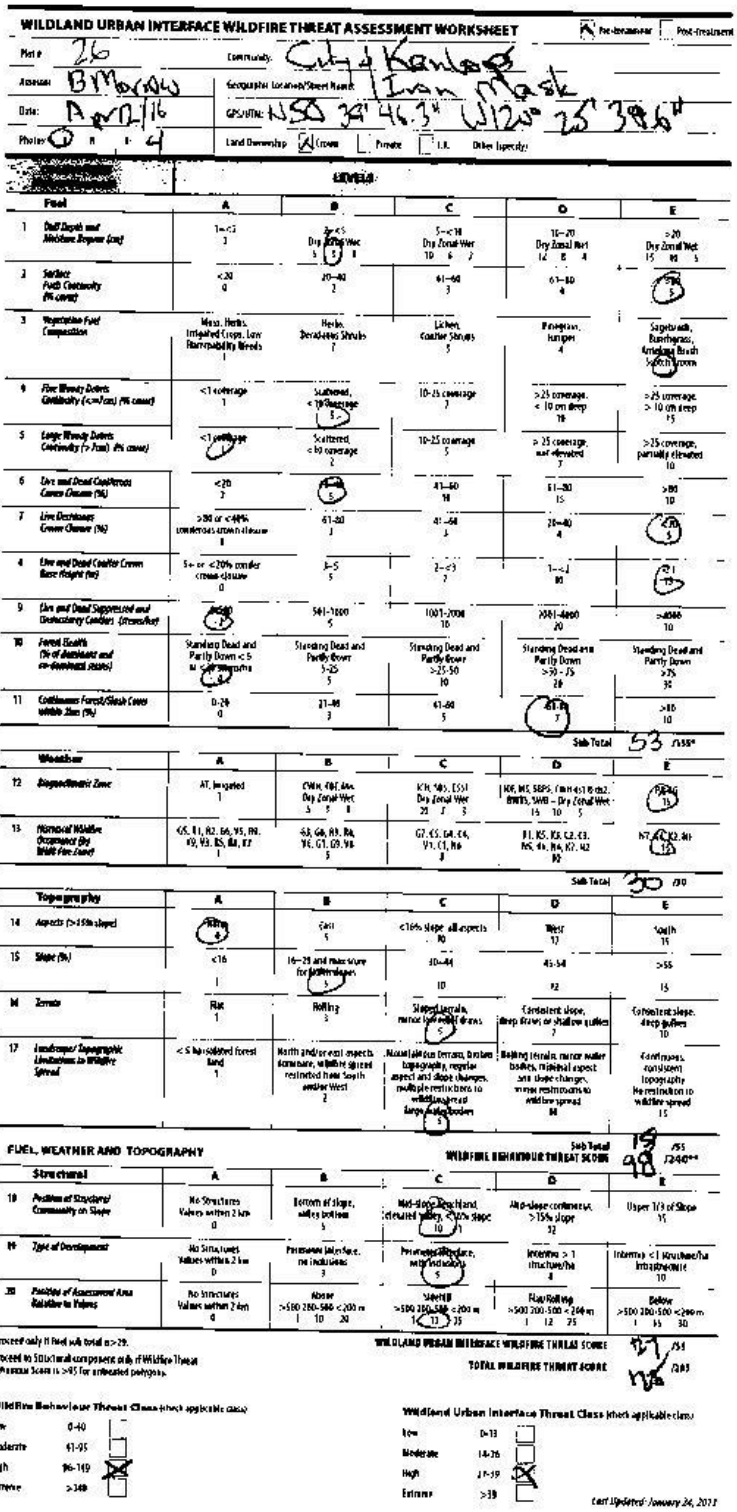
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 25

Photo 25-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot # 26 Community: City of Kamloops

Assessor: BMorrow Geographic Location/Street Name: Ivan Mask

Date: April 7/16 GPS/UTM: N50 39' 46.3" W120° 25' 39.6"

Photos: 1 R 4 Land Ownership: Crown / Private / I.R. / Other (specify)

26

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal Wet 5 8	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Ponderosa, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 0	Scattered, <50 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	21–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 3	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 10
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or >75% live trees 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 53 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, Mm, Dry Zonal Wet 3 5 8	ICH, SBS, ESSF Dry Zonal Wet 20 3 5	MH, MS, SBPS, Cmh (<1150 m), BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	K5, R1, R2, R6, Y5, F9, K9, Y3, B5, R4, K7 1	K8, G6, R3, R4, Y6, G1, G9, Y4 5	G7, K5, G4, C4, Y1, C1, R6 8	F1, K5, K6, C2, C3, R5, K1, R4, K7, K2 10	K7, K2, R4 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	Flat 4	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–25 and max score for 16% slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steeper terrain, narrow bottomed draws 5	Consistent slope, steep draws, or shallow gullies 7	Consistent steep, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 km isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mixed aspects, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large valley bottom 5	Rolling terrain, narrow valley bottoms, minimal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY Sub Total 19 /55

WILDFIRE BEHAVIOUR THREAT SCORE 98 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, valley bottom 5	Mid-slope Benchland, elevated valley, <30% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Permanent Infrastructure, no inclusions 3	Permanent Residence, with inclusions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Intermittent 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 250–500 <200 m 1 10 20	Same/Flat >500 250–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 27 /55

TOTAL WILDFIRE THREAT SCORE 125 /295

*Proceed only if Fuel sub total is >29.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for urbanized polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40
Moderate	41-95
High	96-149
Extreme	>149

Wildland Urban Interface Threat Class (check applicable class)

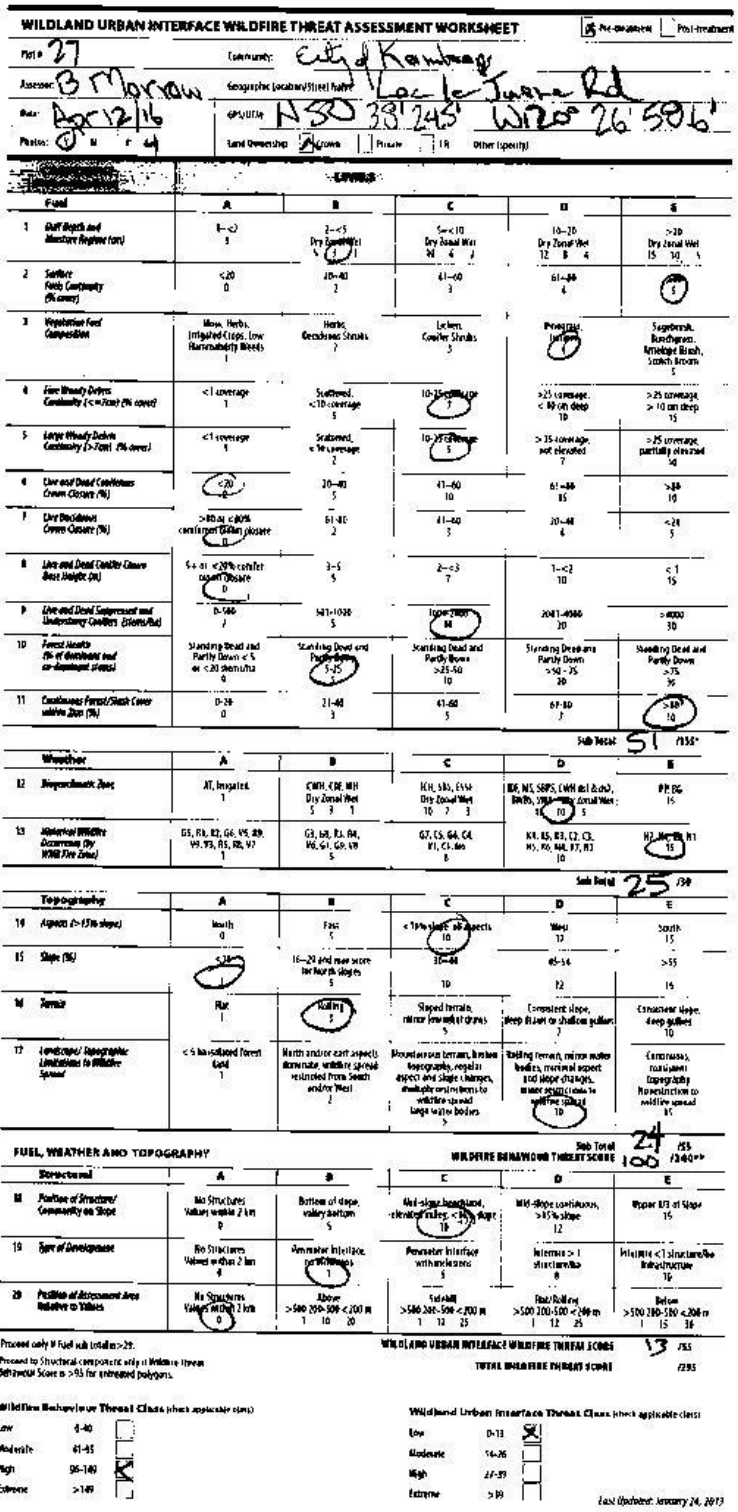
Low	0-13
Moderate	14-26
High	27-39
Extreme	>39

Last Updated: January 26, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 26

Photo 26-1 @ 180 degrees

27



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment | Post-treatment

Plot # 27

Assessor: B Morrow

Date: Apr 12/16

Photos: N E

Community: City of Kamloops

Geographic Location/Street Name: Loc le Jeune Rd

GPS/UTM: N50 33' 245" W120° 26' 506'

Land Ownership: Crown | Private | FN | Other (specify)

FUEL

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 5	2–<5 Dry Zonal Wet 3 1	5–<10 Dry Zonal Wet W 4 J	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Perennial Grasses 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 7	>25 coverage, < 80 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, < 10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	> 25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 5	41–60 10	61–80 15	>80 20
7	Dry Deciduous Crown Closure (%)	>80 or <80% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	4+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understory Conifers (Stems/Ha)	0–500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of deciduous and co-dominant stems)	Standing Dead and Partly Down < 5 or < 20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within Zone (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 51 /150*

WEATHER

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dkl &dh), BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMB Fire Zone)	G5, R4, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, L8, R3, R4, M6, G1, G9, V8 5	G7, C5, G4, C4, V1, C3, M6 8	K4, K5, K3, C2, C3, M5, M6, M4, V7, V3 10	K2, M7, M8, V1 15

Sub Total 25 /30

TOPOGRAPHY

	Topography	A	B	C	D	E
14	Aspect (>15% slope)	North 0	East 5	< 15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–20 and more uniform/smooth slopes 5	21–30 10	31–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low and/or draws 5	Consistent slope, steep ridges or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 km sheltered forest field 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mixed terrain, broken topography, regular aspect and slope changes, moderate restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 24 /55

FUEL, WEATHER AND TOPOGRAPHY

WILDFIRE BEHAVIOUR THREAT SCORE 100 /340**

STRUCTURAL

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <30% slope 10	Mid-Slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no WUI 1	Perimeter Interface with enclaves 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 250–500 <200 m 1 10 20	Valley Bottom >500 300–500 <200 m 1 12 25	Rise/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 13 /55

TOTAL WILDFIRE THREAT SCORE /395

*Proceed only if Fuel sub total is >20.

**Proceed to Structural components only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–60	
Moderate	61–95	
High	96–140	X
Extreme	>140	

Wildland Urban Interface Threat Class (check applicable class)

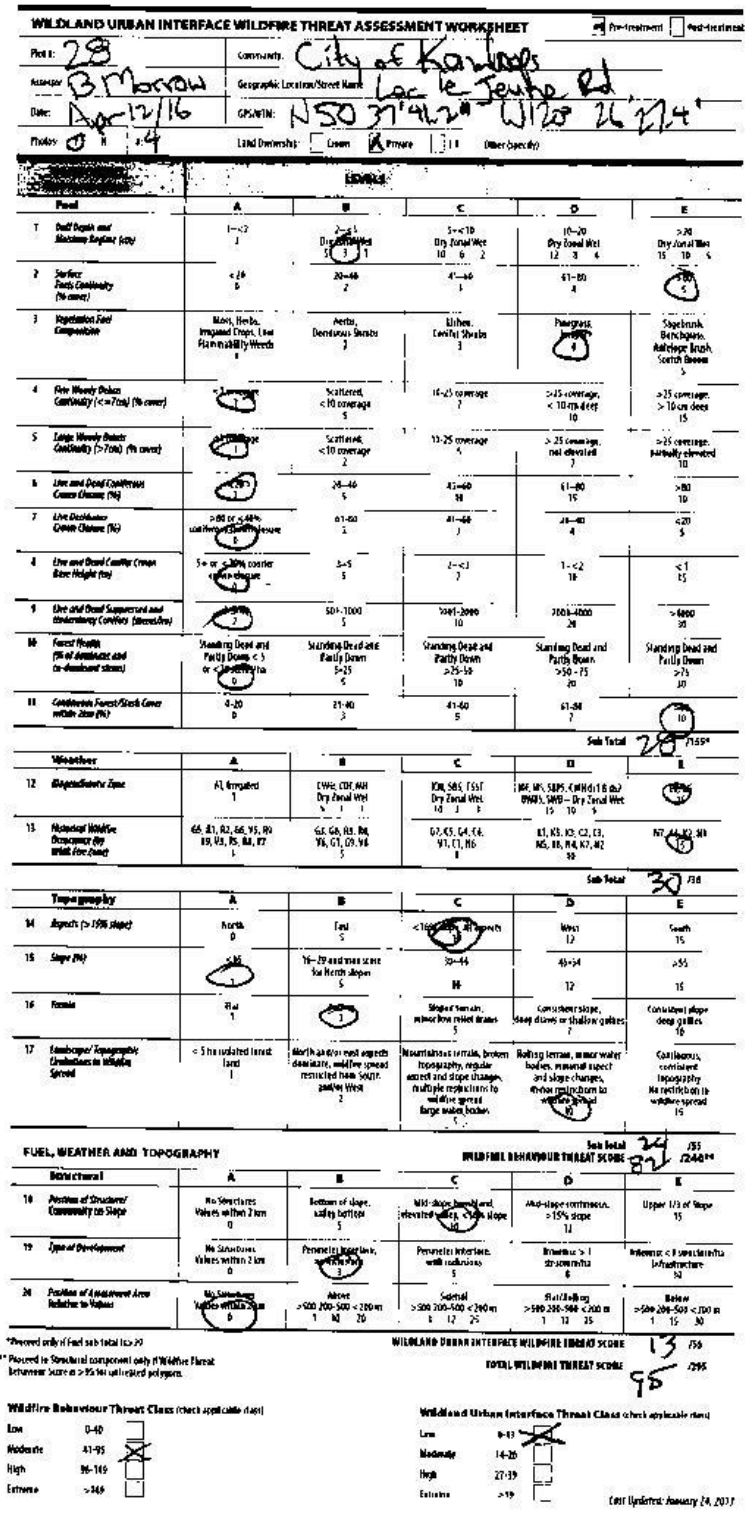
Low	0–13	X
Moderate	14–26	
High	27–39	
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 27

Photo 27-1 @ 250 degrees

28



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 28 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Loc le Jeune Rd

Date: Dec 12/16 | GPS/UTM: N50 37' 42.2" W120 26' 27.4"

Photos: Y N # 4 | Land Ownership: Crown / Private / Other (Specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<2 1	2–≤5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<10 0	20–40 2	41–60 4	61–80 8	>80 10
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 0	Asters, Deciduous Shrubs 3	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 6	Sagebrush, Bitterbrush, Saltrange Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	[illegible] coverage	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	[illegible] coverage 1	Scattered, <10 coverage 2	10–25 coverage 4	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<30 1	26–40 5	41–60 8	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous leaves 0	61–80 2	41–60 3	26–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <30% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of deciduous and co-dominant stems)	Standing Dead and Partly Down < 5 or <[illegible] ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Coniferous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 28 /165*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	EWH, CDF, AAH Dry Zonal Wet 4 3 1	ICH, SBS, FEST Dry Zonal Wet 10 3 8	IMF, MS, SBPS, CWHdr1 & dk2 BWBS, SWB – Dry Zonal Wet 15 10 5	[illegible] 20
13 Historical Wildfire Occurrence (by WHAT Fire Zone)	66, B1, B2, 66, Y5, H9 B9, V3, R5, B8, R7 1	G2, G6, R3, B6, Y6, G1, G9, Y8 5	G7, K5, G4, E4, Y1, C1, H6 8	B1, K3, K2, C2, E3, M5, B8, R4, K7, M2 10	N7, A4, K7, N9 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 0	East 5	<[illegible] all aspects 10	West 12	South 15
15 Slope (%)	<30 1	16–29 and more some for North slopes 5	30–44 10	45–>54 12	>55 15
16 Terrain	Flat 1	[illegible] 3	Steeper terrain, minor low relief draws 5	Consistent slope, steep draws or shallow gullies 7	Consistent steep slope, deep gullies 10
17 Landscape/ Topographic Conditions to Wildfire Spread	< 5 km isolated forest land 1	North and/or west aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple replacements to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, perennial aspect and slope changes, minor replacements to wildfire spread 10	Continuous, continuous topography No restriction to wildfire spread 15

Sub Total 24 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 82 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope, [illegible] and elevated valley, <[illegible] slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter/ Interface, [illegible] 3	Perimeter/ Interface, with inclusions 5	Extensive > 1 structure/ha 8	Extensive < 1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2km 0	Above >500 200–500 < 200 m 1 10 20	Subtotal >500 200–500 < 200 m 1 12 25	Flat/Rolling >500 200–500 < 200 m 1 12 25	Below >500 200–500 < 200 m 1 15 30

*Proceed only if Fuel sub total is >39

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for unthreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 13 /70

TOTAL WILDFIRE THREAT SCORE 95 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	
Moderate	41-95	X
High	96-149	
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

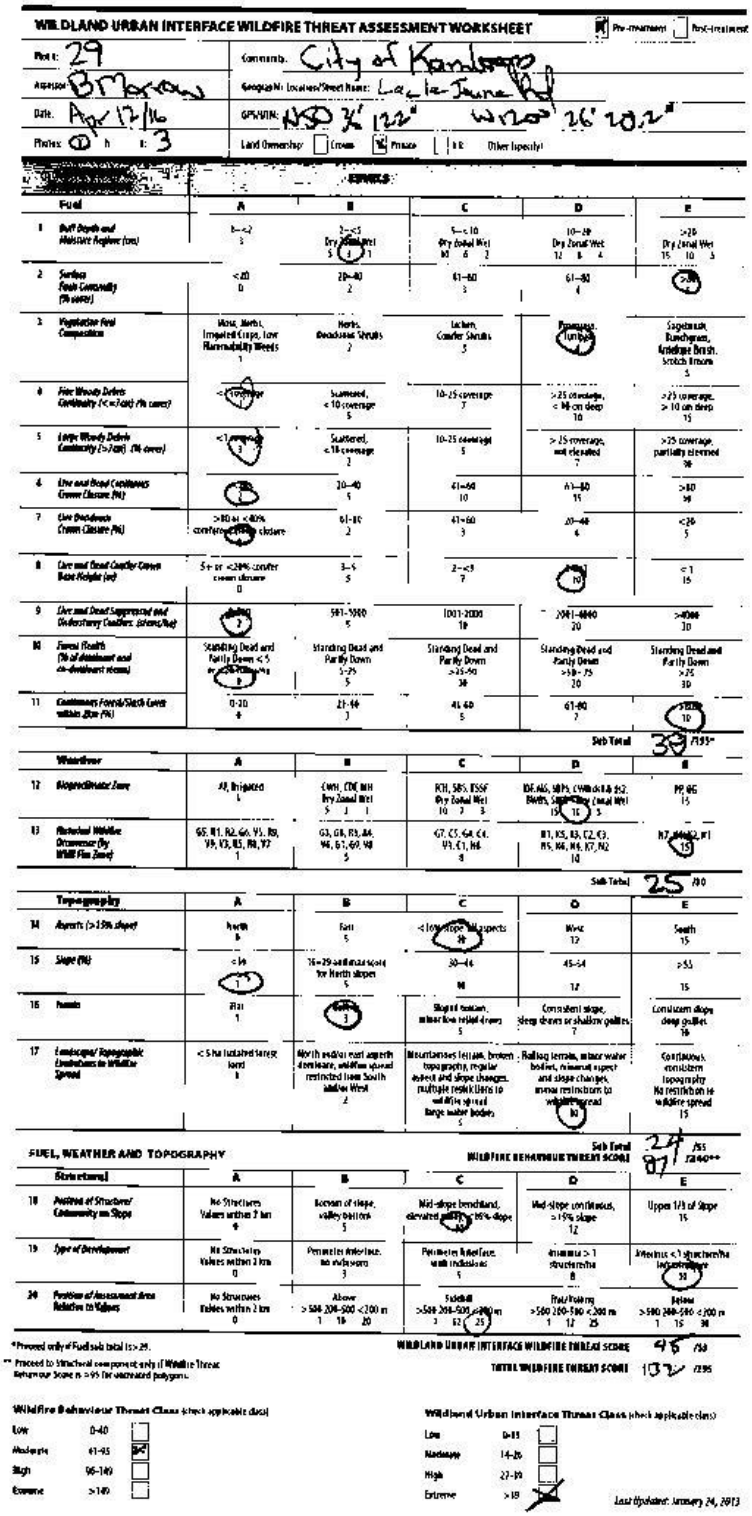
Low	0-13	X
Moderate	14-26	
High	27-39	
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 28

Photo 28-1 @ 70 degrees

29



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☒ Post-treatment ☐

Plot #: 29

Assessor: BMorrow

Date: Apr 17/16

Photos: ID h to 3

Comments: City of Kamloops

Geographic Location/Street Name: La-le-June Rd

GPS/UTM: N50 3' 122" W120° 26' 20.2"

Land Ownership: ☐ Crown ☒ Private ☐ FN ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	0–<2 3	2–<5 Dry Zonal Wet 5 4 1	5–< 10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinaceae, Juniper 4	Sagebrush, Ponderosa, Grassland Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<6 cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7 cm) (% cover)	<1 1	Scattered, <10 coverage 3	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	8	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 at <40% coniferous closure 10	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	10	< 1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 30	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 39 /195*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AR, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk & xk; Bwets, Sspruce Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Fire Zone)	G5, R1, R2, G6, Y5, R9, Y9, Y3, R5, R8, Y7 1	G3, G8, R3, A4, Y6, G1, G9, Y8 5	G7, C5, G4, C4, Y4, C1, H6 8	R1, K5, K3, C2, K3, R5, H4, H6, K7, N2 10	N7, H5, N2, H1 15

Sub Total 25 /80

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<10% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	16–29 additional score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Gentle 3	Steep mountain, minor ridges, minor benches, gullies 5	Consistent steep, steep draws or shallow gullies 7	Continuous steep, deep gullies 10
17	Landscape/Topographic Continuum to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects discontinuous, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple natural barriers to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restriction to wildfire spread 10	Continuous consistent topography, no restriction to wildfire spread 15

Sub Total 24 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 87 /1260**

	Structure and Values	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope benchland, elevated bench, 5–15% slope 5	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values within 2 km 0	Perimeter/interface, no subdivision 3	Perimeter/interface, with subdivision 5	Subdivision >1 structure/ha 8	Wildland <1 structure/ha Interface 10
20	Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above > 500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 3 62 25	Flat/Valley >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is > 29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 48 /150

TOTAL WILDFIRE THREAT SCORE 132 /1295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 29

Photo 29-1 @ 90 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET [X] Pre-treatment [ ] Post-treatment

Plot #: 30 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Space Name: Hirts Lake

Date: Apr 12/16 | GPS/UTM: N50 37 37.2" W120° 27' 5.6"

Photos: 1 N 4 | Land Ownership: [X] Crown [ ] Private [ ] I.R. [ ] Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 6 8	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (Pre-cover)	<20 0	20–40 1	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Forbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass 4	Sagebrush, Bunchgrass, Antelope Brush, Marsh Grass 5
4	Fine Woody Debris Continuity (<=7 cm) (Pre-cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 5	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (Pre-cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% conifer crown closure 0	61–80 3	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	<2 10	<1 15
9	Live and Dead Suppressed and Co-dominant Conifers (Stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–10% 5	Standing Dead and Partly Down >10–15 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Brush Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 61 /150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, IDFx Dry Zonal Wet 5 5 1	MH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, PPBS, SWB Valley Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, A1, K2, G6, V5, W9, Y9, Y3, A5, K8, V7 1	G8, G8, P3, R4, V6, G1, G9, V8 5	G7, C5, G4, E4, V1, C4, J6 8	K8, K5, R3, C2, C1, M5, K6, M4, B7, N3 10	M7, K4, K2, M1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>35% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Ridge Top 3	Sloped terrain, minor line relief drains 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	<5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular drainages and slope changes, multiple restrictions to wildfire spread. Large water bodies 5	Rolling terrain, minor water bodies, seasonal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 24 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 115 /230**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/saddle, elevated ridge, <30% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 14
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no protection 2	Perimeter Interface, with exclusions 5	Intermix > 3 structures/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 < 200 m 5 10 20	Subvalley >500 200–500 < 200 m 1 12 25	Flat/Bottom >500 200–500 < 200 m 1 10 25	Below >500 200–500 <200 m 1 15 30

*Observed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 13 /85

TOTAL WILDFIRE THREAT SCORE 178 /285

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	[ ]
Moderate	41–95	[ ]
High	96–169	[X]
Extreme	>169	[ ]

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	[X]
Moderate	14–26	[ ]
High	27–39	[ ]
Extreme	>39	[ ]

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 30

Photo 30-1 @ 90 degrees

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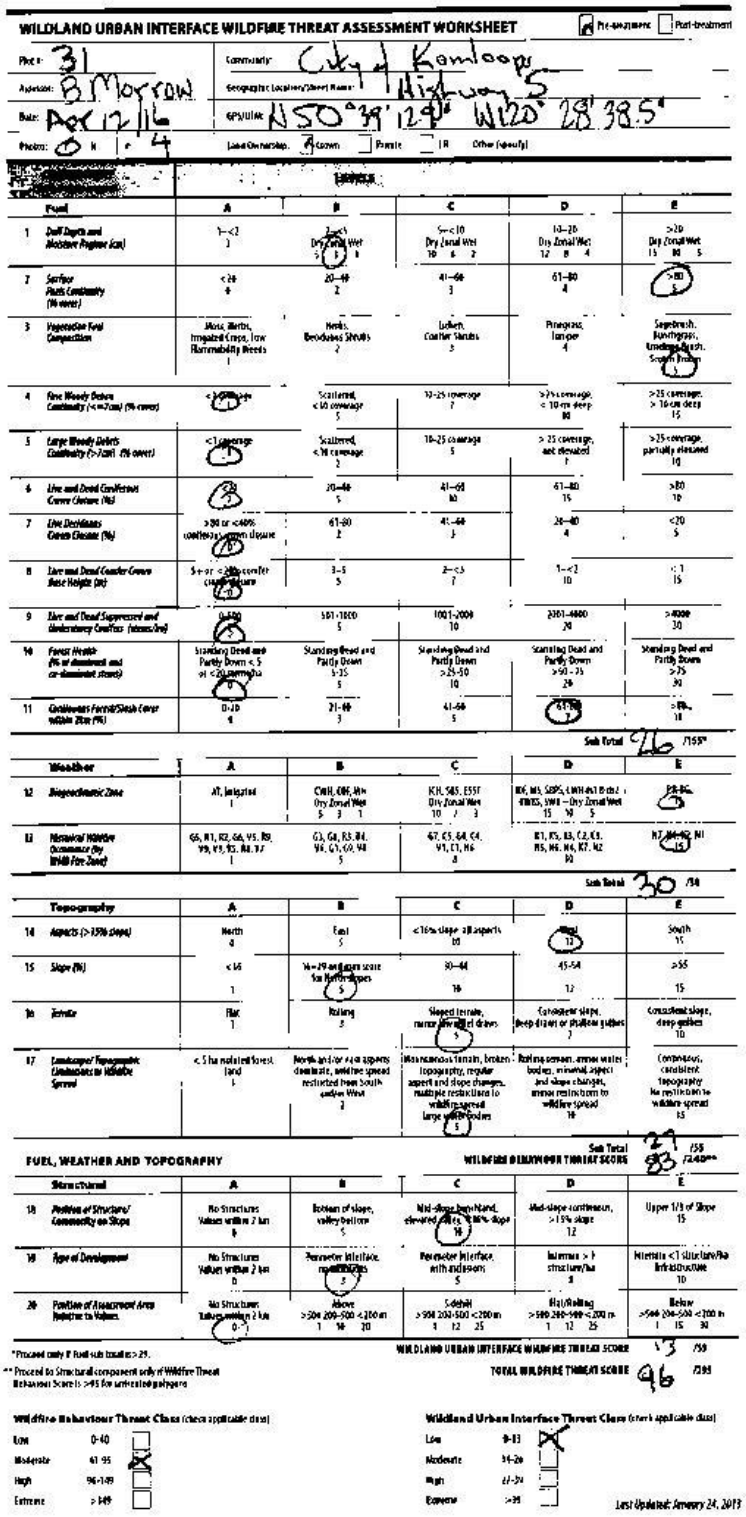

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 31 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Hillcrest

Date: Apr 12/16 | GPS/UTM: N50°39'12.9" W120° 28' 38.5"

Photos: 0 to 4 | Land Ownership: ☒ Crown ☐ Private ☐ IR ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Forbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Deciduous Bush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<25 coverage 0	Scattered, <50 coverage 5	50–75 coverage 7	>75% coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 0	Scattered, <25 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>30 or <40% coniferous crown closure 10	61–80 2	41–60 3	26–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–35 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Shrub Cover within 20m (%)	0–10 0	21–40 3	41–60 5	61–80 9	>80 10

Sub Total 26 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Integrated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm1 B chz / PPBES, SWB – Dry Zonal Wet 15 10 5	PP, BG 20
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, H1, H2, G6, V5, B9, V9, V8, B5, A8, B7 1	G3, G8, R3, B4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, H6 8	R1, R5, R3, C2, K5, H5, H6, H4, K7, H2 10	H7, H4, H3, N1 15

Sub Total 30 /50

	Topography	A	B	C	D	E
14	Aspects (>35% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, narrow low valley draws 5	Canyonlands slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Continuity to Wildfire Spread	< 5 ha isolated forest land 1	North aspects or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous Terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restriction to wildfire spread 10	Continuous, consistent topography no restriction to wildfire spread 15

Sub Total 29 /50

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 83 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/land, elevated ridges, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Age of Development	No Structures Values within 2 km 0	Perimeter Interface, no structures 5	Perimeter Interface with subdivision 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Interface/Core 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Subdivision >500 200–500 <200 m 1 12 25	Mid/Valley >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 13 /50

TOTAL WILDFIRE THREAT SCORE 96 /285

* Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☒
Moderate	14-26	☐
High	27-34	☐
Extreme	>35	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 31

Photo 31-1 @ 90 degrees

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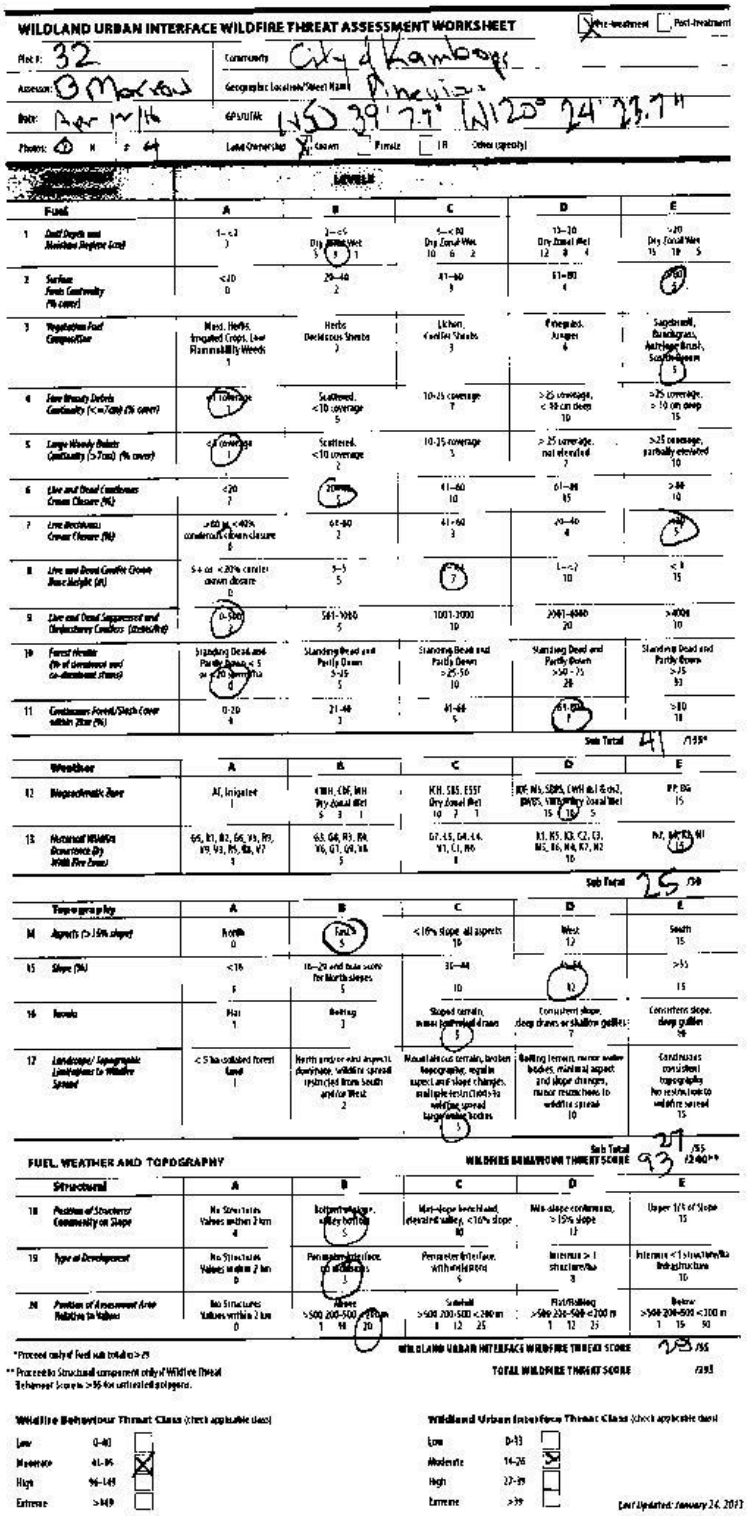

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☒ Post-treatment ☐

Plot #: 32 Community: City of Kamloops

Assessor: D Morrow Geographic Location/Sheet Name: Pineview

Date: Apr 14th GPS/UTM: N50 39' 7.7" W120° 24' 23.7"

Phone: Land Ownership: ☒ Crown ☐ Private ☐ FN ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Fuel Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal/Wet 5 3 1	5–<10 Dry Zonal/Wet 10 6 2	10–20 Dry Zonal/Wet 12 8 4	>20 Dry Zonal/Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Mosses, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs Deciduous Shrubs 3	Lichen, Coniferous Shrubs 3	Evergreens, Junipers 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Low Woody Debris Continuity (<7.5cm) (% cover)	Nil Coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 30 cm deep 10	>25 coverage, > 30 cm deep 15
5	Large Woody Debris Continuity (>7.5cm) (% cover)	<10 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>60 in, <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5–6 or <20% conifer crown closure 0	3–5 5	2–3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of coniferous and co-dominant stems)	Standing Dead and Partly Down, < 5 or < 20 stems/ha 0	Standing Dead and Partly Down 5–15 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 20m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 41 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	IDFdk, CDF, MH Dry Zonal/Wet 5 3 1	ICH, SBS, ESSF Dry Zonal/Wet 10 7 1	IDFdk1, SBPS, CWH dk1 (Rain), BWBS, MH Dry Zonal/Wet 15 10 5	IDFdk2, IDFdk3, MH 15
13	Historical Wildfire Occurrence (#) Within Five Years	0, X1, X2, X6, X9, X9, X5, X8, X7 1	0.5, G4, H3, H4, H6, G1, G9, H8 5	G7, I.5, G4, I.4, V1, C1, H6 8	X1, H5, X3, C2, C3, H5, I6, H4, K7, H2 10	H7, H8, H3, H1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East, S 5	<15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 5	10–20 and base score for North slopes 5	35–44 10	45–54 10	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, some benches/draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha sheltered forest land 1	North aspect and Aspects downslope, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, major aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor valley breaks, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous consistent topography no restrictions to wildfire spread 15

Sub Total 27 /55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 93 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures/ Values within 2 km 4	Bottom/valley, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope cond'ns, >10% slope 13	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values within 2 km 0	Permanent interface, no wildlands 3	Permanent interface, with wildland 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha, Indigenous 10
20	Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Same/all >500 200-500 <200 m 8 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 93 /55

*Proceed only if Fuel sub total is > 25

** Proceed to Structural component only if Wildfire Threat Behaviour Score is > 95 for unthinned stands.

TOTAL WILDFIRE THREAT SCORE /293

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☒
High	27-39	☐
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 32

Photo 32-1 @ 315 degrees

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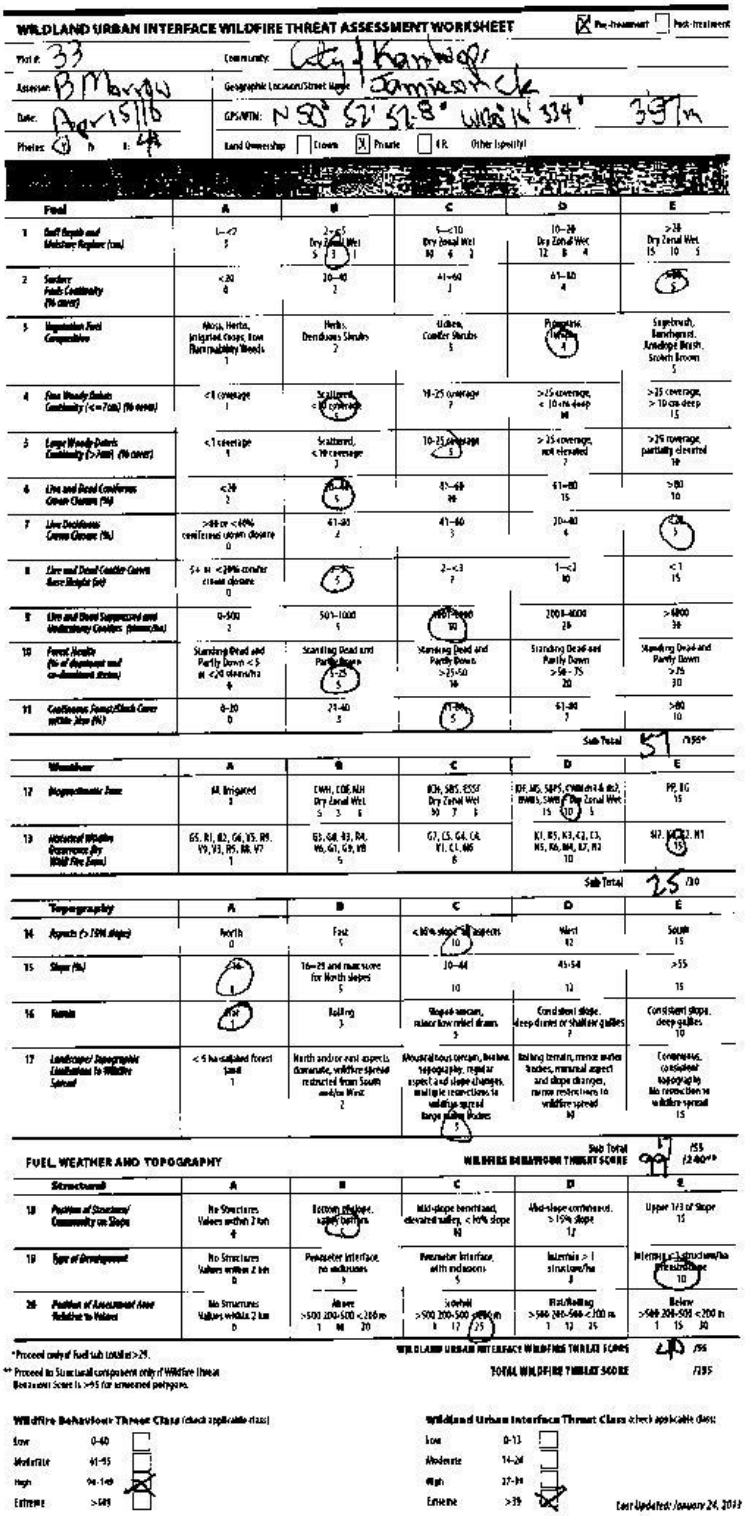


WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Visit #: 33 Community: City of Kamloops

Assessor: B Murray Geographic Location/Street Name: Tamiasco Dr

Date: Apr 15/16 GPS/MTN: N 50° 52' 51.8" W 120° 16' 334" 397m

Photos: ☐ fr ☐ fr: 44 Land Ownership: ☐ Crown ☒ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Surface and Moisture Regime (cm)	1–<2 5	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels (Continuity (% cover))	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Conifer Shrubs 3	Deciduous Trees 4	Sagebrush, Bunchgrass, Deadfall Beetle, Standing Brown 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ M <20% conifer crown closure 0	3–<5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 at <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within Zone (%)	0–10 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	57 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Irrigated 2	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWH (dh1 & dk2, mw1), SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, R1, R2, G6, Y5, R9, Y9, Y3, R5, R8, Y7 1	G3, G4, R3, R4, Y6, G1, G9, Y8 5	G7, C5, G4, C6, Y1, C1, M5 8	K1, R5, K3, K2, C3, N5, K6, M4, K7, N2 10	K12, K10, K2, N1 15
					Sub Total	25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<10% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and more than 30% for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief drains 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha subalpine forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Moderately broken terrain, benches, topography, regular aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography, no restriction to wildfire spread 15
					Sub Total	47 /55
					TOTAL	99 /240**

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE**

	Structures	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom, gully or ridge 3	Mid-slope bench and, elevated valley, < 30% slope 10	Mid-slope continuous, > 30% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no enclosures 3	Perimeter interface, with enclosures 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha or Interface 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 17 25	Flat/Rolling >500 200–500 <200 m 1 13 25	Below >500 200–500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	40 /55
					TOTAL WILDFIRE THREAT SCORE	/295

* Proceed only if Fuel sub total is >29.

** Proceed to Structures component only if Wildfire Threat Behaviour Score is >95 for structural purposes.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–60	☐
Moderate	61–95	☐
High	96–149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 33

Photo 33-1 @ 90 degrees

34

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 34 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Valleyview Rd

Date: Apr 15/16 GPS/UTM: N50° 52' 42" W 120° 16' 47.2"

Photos: CF N #: 44 Land Ownership: ☐ Crown ☒ Private ☐ I.R. Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1 to <2 3	2—<5 Dry Zonal Wet 5 (3) 1	5—<10 Dry Zonal Wet 10 8 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	(5)
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Evergreen Bunchgrass (Pumpers) 8	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (< = 7cm) (% cover)	<1 (sparse) 0	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 (sparse) 0	Scattered, <10 coverage 3	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 1	41–60 (2)	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <10% coniferous crown closure 0	61–80 2	41–60 3	21–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5 or <20% conifer (Mount Ribble) 0	3–5 5	2—<3 7	1 and 2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or >25 Stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 20m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 35 /185*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BWBS, MS, SBPS, CWH dm1 & dm2, IMA1s, Shrub-y Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WHR Fire Zone)	G5, H1, A2, G6, P5, H9, H4, H3, H5, H8, H7 1	G3, G8, B3, H4, M6, G1, G9, H8 5	G7, E5, G4, C4, F1, C1, M8 8	K8, B5, K3, C2, C3, H5, K6, M4, K7, M2 10	M7, K4, K2, H1 15

Sub Total 23 /30

	Topography	A	B	C	D	E
14	Aspects (>25% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max. score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, numerous relief drivers 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 77 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <45% slope 10	Mid-slope continuous, >45% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no intrusions 3	Perimeter interface, with intrusions 5	Intermix > 5 structures/ha 8	Intermix < 5 structures/ha Rural structure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 (6) 20	Same/all >500 200–500 <200 m 3 (12) 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for unthreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 27 /155

TOTAL WILDFIRE THREAT SCORE 104 /395

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	
High	96–149	X
Extreme	>149	

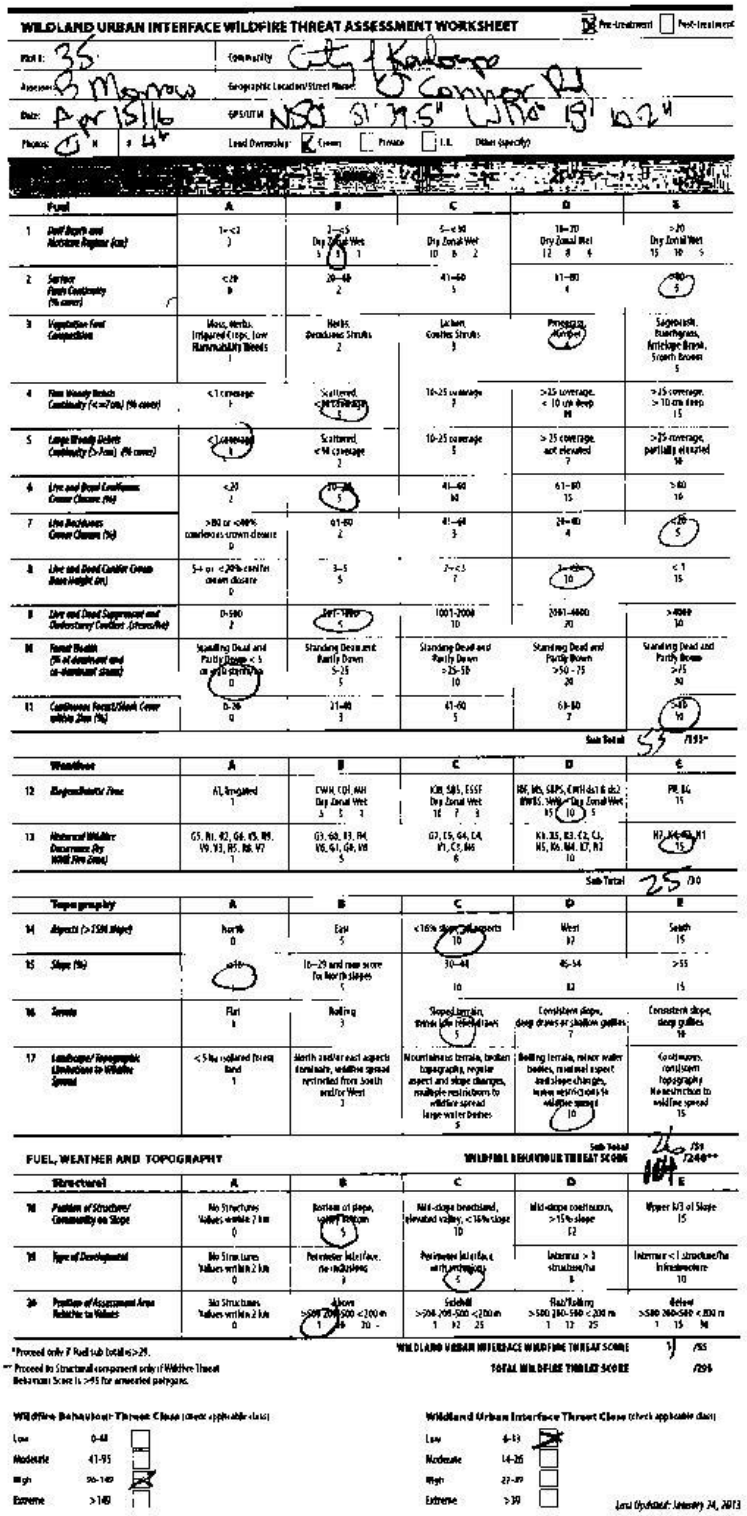
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	
Moderate	14–26	
High	27–59	X
Extreme	>59	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 34

Photo 34-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot #: 35 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Copper Pl

Date: Apr 15/16 GPS/UTM: N50 51' 29.5" W120° 19' 10.2"

Photos: Y N # 44 Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

35

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 8 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 5	61–80 8	>80 10
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Perennial, Alkaligrass 4	Sagebrush, Bluebunch, Antelope Brush, Spotted Knapweed 5
4	Fine Woody Debris Continuity (<6 cm dia) (% cover)	<1 coverage 1	Scattered, <10% coverage 3	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifer (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or >50 standing 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 55 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	IDF, SBS, ESSF Dry Zonal Wet 10 7 3	IBF, MS, SBPS, CWH dst & dc) IWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	G5, R1, R2, G6, R5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, E5, G4, E4, R7, C5, R6 6	K1, K5, R3, C2, C3, R5, R6, R4, K7, R3 10	K2, K4, K3, R1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>25% Slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–29 and rare >30 for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, some side hill slopes 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	<5 No. isolated forest land 1	North and/or east aspects favourable, wildfire spread restricted from South and/or West 3	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 40 /75

FUEL, WEATHER AND TOPOGRAPHY

WILDFIRE BEHAVIOUR THREAT SCORE 164 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no structures 3	Perimeter Interface, with structures 5	Intermix > 3 structures/ha 8	Intermix <1 structure/ha Interior 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 6 20 -	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for urbanized polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 55 /155

TOTAL WILDFIRE THREAT SCORE /395

Wildfire Behaviour Threat Class (check applicable class)

Low	0–48	☐
Moderate	47–95	☐
High	96–149	☒
Extreme	>149	☐

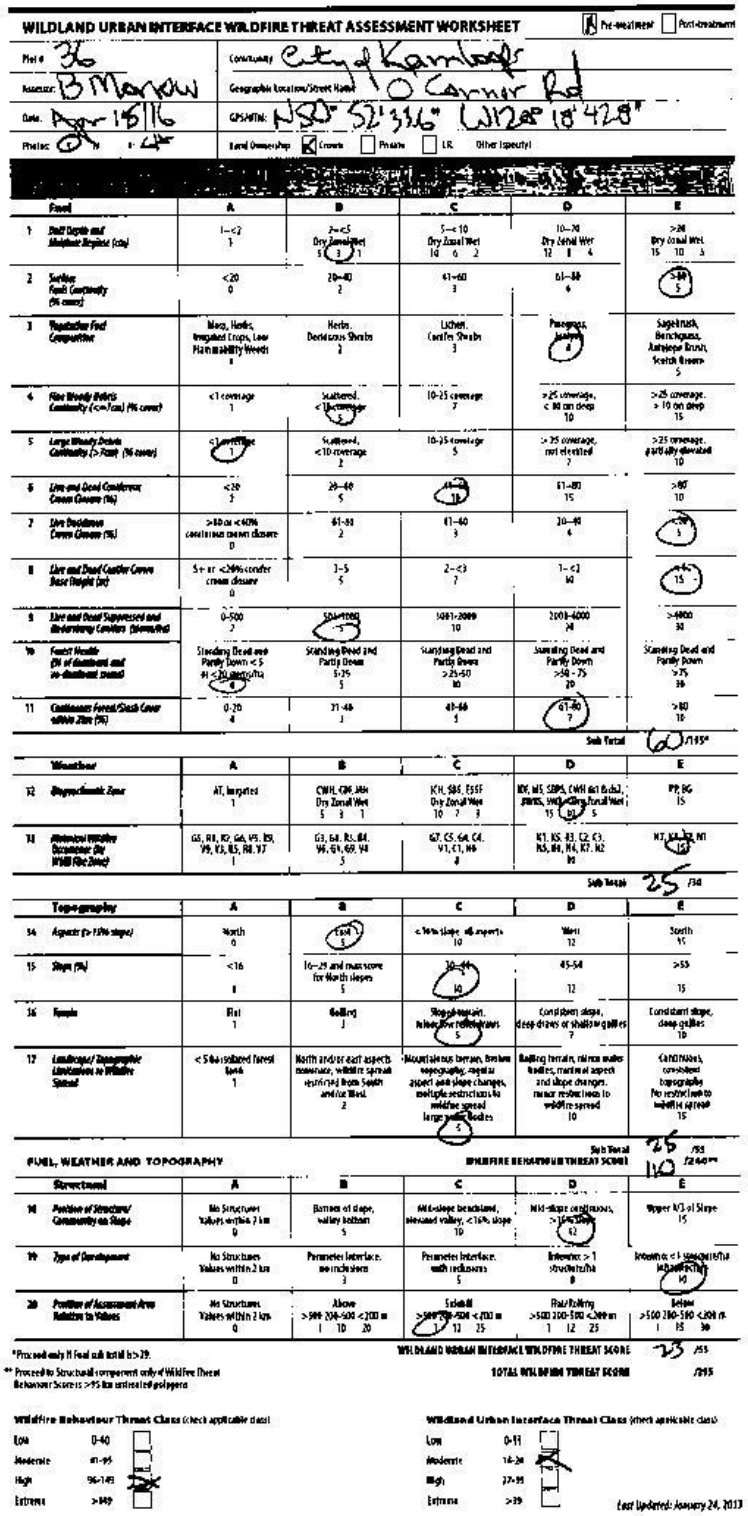
Wildland Urban Interface Threat Class (check applicable class)

Low	6–13	☒
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 35

Photo 35-1 @ 350 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☒ Post-treatment ☐

Plot # 36
Assessor: B Marlow
Date: Apr 15/16
Photos: [illegible]

Community: City of Kamloops
Geographic location/Street Name: 10 Corner Rd
GPS/MTN: N50° 52' 336" W120° 18' 428"
Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

36

	Fuel	A	B	C	D	E
1	Fuel Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pasegrass, Juniper 4	Sagebrush, Benchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<cm/cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (trees/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within Zone (%)	0-20 4	21-40 3	41-60 5	61-80 7	>80 10
					Sub Total	60 /195*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Interior 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dkt & dh1, [illegible] 15 [illegible] 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	GS, RR, RC, GA, VS, ES, PR, V3, KS, RB, V7 1	G3, GA, RS, BA, W6, G4, G9, V8 5	G7, CS, GA, CA, V1, C1, W9 8	K1, KS, A3, C2, C3, K5, B4, K4, K7, K2 10	K7, KA, K2, K1 15
					Sub Total	25 /30

	Topography	A	B	C	D	E
14	Aspect (> 15% slope)	North 0	East 5	< 16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and moss score for North slopes 5	30–44 10	45-54 12	>55 15
16	Ravine	Flat 1	Gullies 3	Steep-to-vertical, heavy fuel retentions 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuels 1	North and/or east aspects moderate, wildfire spread restricted from South and/or West. 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, mainly at aspect and slope changes, minor restrictions to wildfire spread 10	Gentle/level, consistent topography No restrictions to wildfire spread 15
					Sub Total	25 /55
					WILDFIRE BEHAVIOUR THREAT SCORE	110 /2640**

FUEL, WEATHER AND TOPOGRAPHY

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, non-inclusive 3	Perimeter interface, with inclusions 5	Interface > 1 structure/ha 8	Intermix < 1 structure/ha 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Subcrit >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	73 /55

*Proceed only if Fuel sub total is >29.

** Proceed to Structural Component only if Wildfire Threat Behaviour Score is >95 for untreated polygons

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

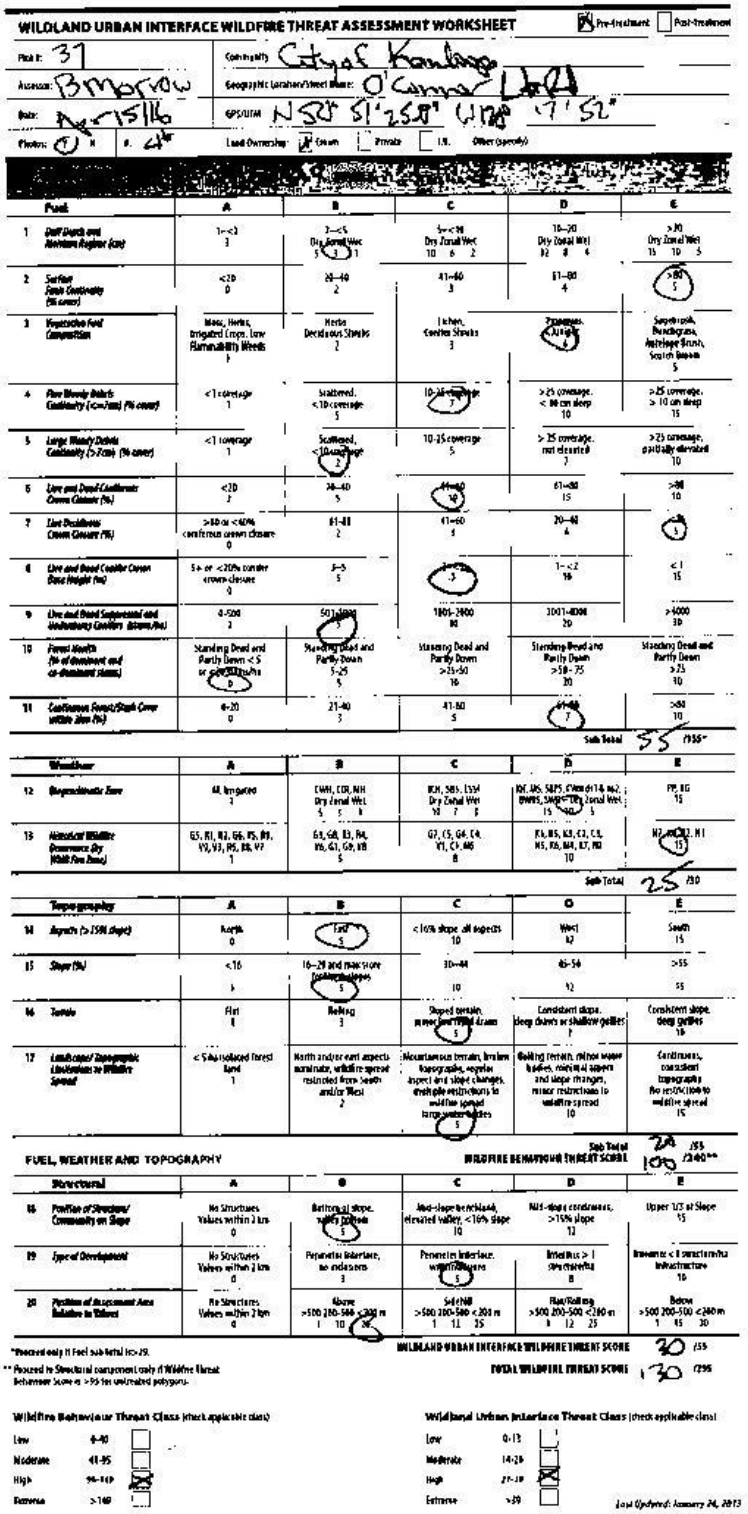
Wildland Urban Interface Threat Class (check applicable class)

Low	0-11	☐
Moderate	16-26	☐
High	27-55	☒
Extreme	>55	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 36

Photo 36-1 @ 225 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 37

Community: City of Kamloops

Assessor: Bmorrow

Geographic (Location/Street Name): O'Connor Hill

Date: Nov 15/16

GPS/UTM: N 50° 51' 25.8" W 120° 17' 52"

Photos: # 4

Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

37

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Trees 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	> 25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 5	20–40 4	1
8	Live and Dead Coniferous Crown Base Height (m)	5+ or <20% conifer crown closure 0	4–5 5	3–<4 3	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/ha)	0–500 2	501–1800 5	1801–2800 10	2801–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or slash/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 30m (%)	0–20 0	21–40 5	41–60 5	61–80 7	>80 10
					Sub Total	35 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Irrigated 2	CWH, CDF, MH Dry Zonal Wet 5 3 1	BGH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dry T & M2 (DMS), SWB, PP Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, H1, H2, G6, H5, H9, V9, V3, H6, H8, V7 1	G1, G8, I3, H4, H6, G1, G9, H8 5	G7, C5, G4, C4, V1, C9, H6 8	K1, H5, K3, C2, C3, H5, K6, H4, K7, H3 10	M2, M3, M1 15
					Sub Total	25 /30

	Topography	A	B	C	D	E
14	Aspects (> 25% Slope)	North 0	East 5	< 16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and more than 30 m between slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep terrain, numerous small drains 5	Consistent slope, deep drains or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape Topographic Obstructions to Wildfire Spread	< 5% isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, aspects, aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Gulfing terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	20 /55
					WILDFIRE BEHAVIOUR THREAT SCORE	100 /240**

FUEL, WEATHER AND TOPOGRAPHY

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope constraints, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values within 2 km 0	Perimeter/interface, no enclosures 3	Perimeter/interface, with enclosures 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Side/Hill >500 200–500 <200 m 1 11 35	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	30 /55
					TOTAL WILDFIRE THREAT SCORE	130 /295

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >99 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–38	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 37

Photo 37-1 @ 360 degrees

38

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 38 | Community: City of Kamloops

Assessor: BMarcau | Geographic Location/Sheet Name: Upper Valleyview Rd

Date: Apr 15/16 | GPS/UTM: N 50° 43' 37" W 120° 18' 34.8"

Photos: 8 N, 4 | Land Ownership: ☒ Crown ☐ Private ☐ FN ☐ Other (specify)

[redacted]

Fuel	A	B	C	D	E
1 Surface Fuel Bed and Moisture Regime (cm)	1–<2 9	2–<5 Dry Zonal/Wet 5 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinaceae, <redacted> 4	Sagebrush, Bunchgrass, Antelope Bitrsh, Smooth Brome 5
4 Fine Woody Debris Continuity (<6 cm) (% cover)	< 5 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <. 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	> 25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 1	20–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 1	41–60 3	21–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or < 20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9 Live and Dead Suppression and Understorey Conifers (Stems/ha)	0–500 2	501–1000 5	1001–3000 10	3001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down, < 5 or > 50% Dead 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 43 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	MS, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 1 5 7	ICH, SBS FESD Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB — Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WUBI Fire Zone)	G3, H4, K5, G4, H5, K8, V9, Y3, R5, W8, Y9 1	G3, 6A, R3, R4, W6, G1, G9, V8 5	G7, C5, G4, C4 V1, C1, W4 8	K1, K6, W3, C2, C3, N5, W4, W1, X7, N2 10	H3, K4, Y2, W1 15

Sub Total 25 /30

Topography	A	B	C	D	E
14 Aspects (> 35% slope)	North 0	East 2	< 36% slope, all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 and more than for North slopes 5	30–40 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Steep through, minor benches present 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, opposing aspect and slope changes, multiple restrictions to wildfire spread (topographic barriers/breaks) 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography (no restriction to wildfire spread 15

Sub Total 20 /55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 93 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <36% slope 10	Mid-slope continuous, >35% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Permeable interface, no incluvsions 3	Permeable interface, with inclusions 5	Intermix, > 1 structure/ha 8	Intermix, < 1 structure/ha Wildland Other 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above > 500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below! >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE 123 /295

* Proceed only if Fuel sub total is >20.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for protected polygons

Wildfire Behaviour Threat Class (check applicable row)

Low	0–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable row)

Low	0–13	☐
Moderate	14–26	☐
High	27–54	☒
Extreme	>54	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 38

Photo 38-1 @ 110 degrees

39

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 39 Community: City of Kamloops

Assessor: BMorrow Geographic Location/Street Name: Noble Creek

Date: Apr 15/16 GPS/UTM: N50 49' 54" W120° 19' 54"

Photos: 0 N / 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Bluff Depth and Moisture Regime (cm)	<2 3	2–<5 Dry Zonal Wet 5 5 8	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 4	20–40 3	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Ponderosa Pine 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10cm deep 10	>25 coverage, > 10cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer(s) Crown Closure (%)	<10 1	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>10 percent conifer(s) no influence 0	61–85 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <10 regardless crown closure 1	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Sapwood and Heartwood Combined (stems/ha)	<500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dead/dying and defoliated stems)	Standing Dead and Partly Down, <5 of <25cm dbh 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 20m (%)	0–20 0	21–40 2	41–60 5	>60 7	>60 10

Sub Total 2 /155*

	Weighting	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	MS, IMS, SBPS, CWH (dk) & ch.) BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMU Fire Zone)	GS, FH, R2, G6, V5, 69, V4, V3, R5, R6, V7 1	G3, G8, R3, R4, V6, 61, 68, V8 5	G7, C5, GA, C4 V1, C1, M6 8	K1, K5, K3, E2, C3, H5, H6, H4, K7, A2 10	H7, K4, K2, H1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspect (> 15% slope)	North 0	East 1	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 Add slope score for 30+% slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep/mountain, numerous restrictions 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 0	North, and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large valley bottom 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 20 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 91 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope-continuous, >15% slope 13	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no indevelopment 3	Perimeter Interface, with changes 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 7 10 20	Same/All >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is>20.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 20 /55

TOTAL WILDFIRE THREAT SCORE 91 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

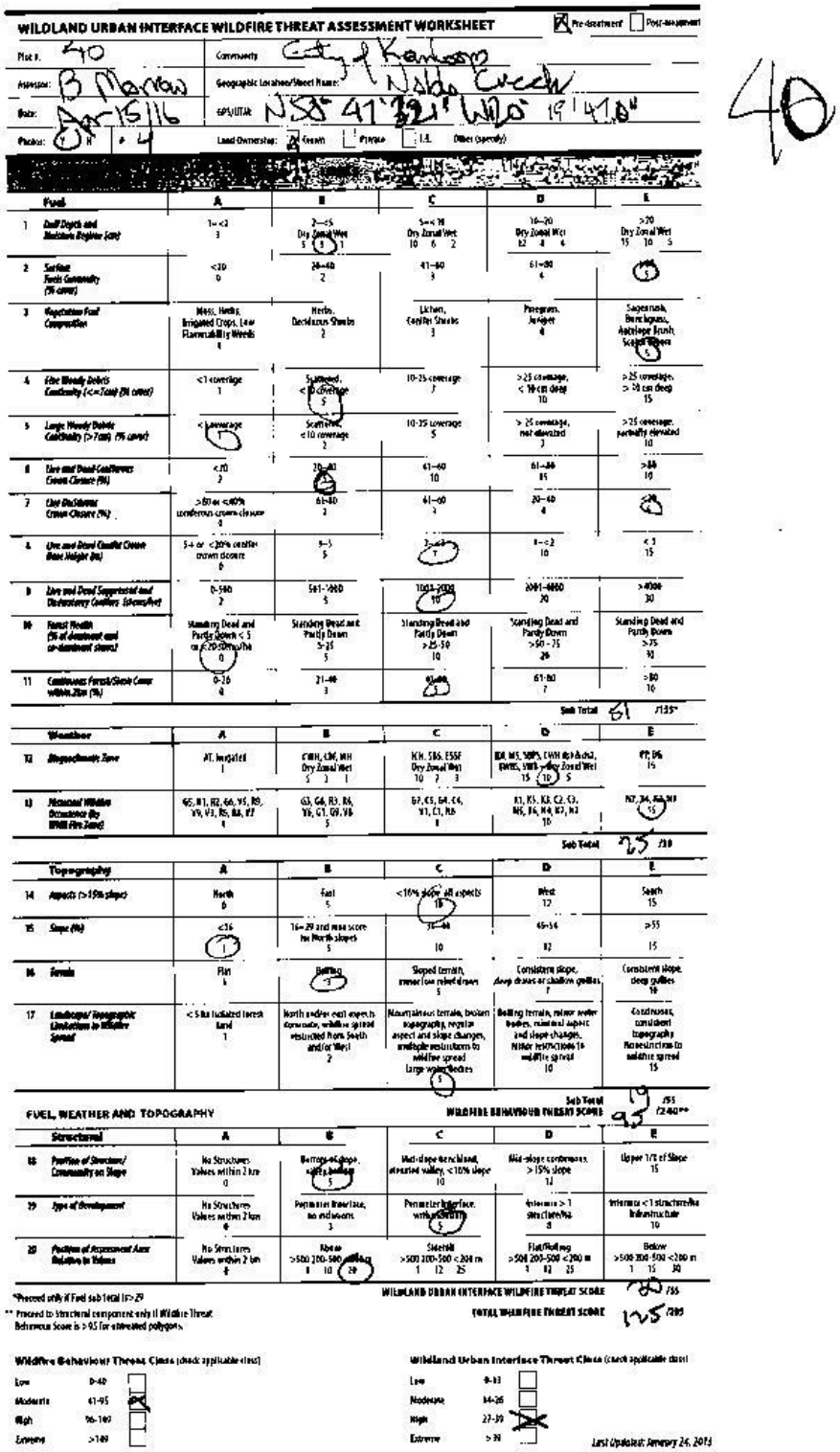
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☒
High	27-39	☐
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 39

Photo 39-1 @ 280 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 40 | Community: City of Kamloops

Assessor: B Marlow | Geographic Location/Sheet Name: Nicola Creek

Date: Apr 15/16 | UTM: N53 41 32 W120 19 41.8"

Photos: 1 N 2 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

Fuels	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1 to <2 3	2—<5 Dry Zonal Wet 5 3 1	5 to 10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	< coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Conifers Crown Closure (%)	<20 2	20—40 6	41—60 10	61—80 15	>80 10
7 Live Deciduous Crown Closure (%)	>60 or <40% coniferous crown closure 4	61-80 2	41—60 3	20—40 4	20
8 Live and Dead Conifer Crown Base Height (m)	5-6 or <20% conifer crown closure 6	4—5 5	2—<4 7	1—<2 10	< 1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or >20-25%/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 25m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 61 /135*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BG, MS, SBPS, CWH dry Ach2, IDFdk, IDFdk, Dry Zonal Wet 15 10 5	PP, PG 15
13 Historical Wildfire Occurrence (by Wildfire Zone)	G5, H1, H2, G6, Y5, R9, Y9, Y3, R5, R8, R7 1	G3, G4, R3, R4, Y8, G1, G9, Y8 5	G7, G5, G4, C4, Y1, C1, R10 8	K1, K5, K8, C2, C3, R6, R6, R4, R7, K2 10	K7, K4, K6, K9 15

Sub Total 25 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 0	East 5	<16% slope, all aspects 15	West 12	South 15
15 Slope (%)	<16 1	16—29 and most score for North slopes 5	30—40 10	45-54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, some low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects forewarded, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread. Large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes. Minor restrictions to wildfire spread 10	Continuous, consistent topography. No restrictions to wildfire spread 15

Sub Total 19 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 93 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures. Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope continuous, >15% slope 14	Upper 1/3 of Slope 15
19 Type of Development	No Structures. Values within 2 km 0	Perimeter interface, no enclosure 3	Perimeter interface, with enclosure 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures. Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 80 /155

TOTAL WILDFIRE THREAT SCORE 173 /395

*Proceed only if Fuel sub total IF>29

** Proceed to structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygon.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-180	☐
Extreme	>180	☐

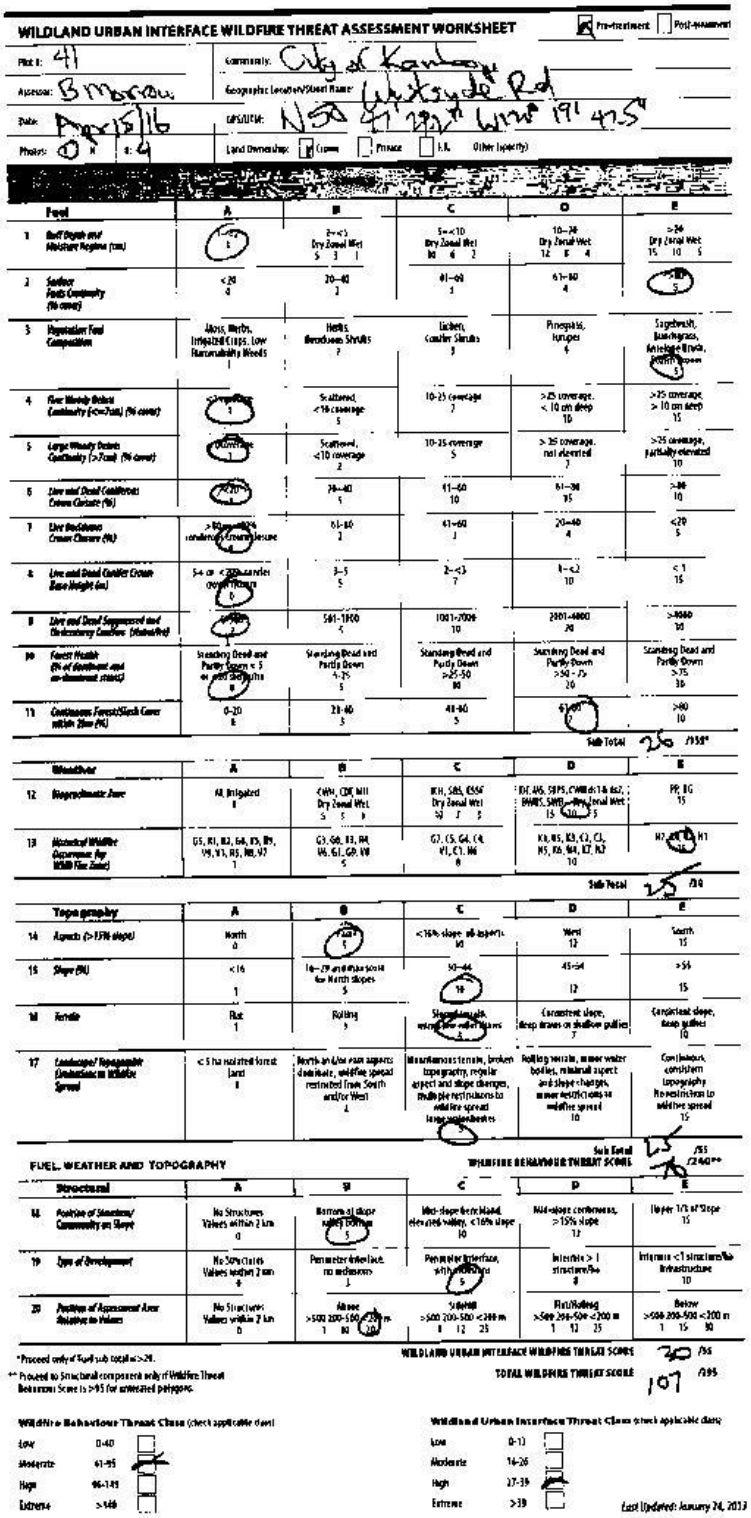
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 40

Photo 40-1 @ 360 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 41 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Whitewater Rd

Date: Apr 15/16 UTM/UTM: N50 41 29.2" W120 19' 47.5"

Photos: 0 N 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

41

	Fuel	A	B	C	D	E
1	Fuel Depth and Moisture Regime (cm)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 3	41–60 5	61–80 8	>80 10
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Junipers 4	Sagebrush, Bunchgrass, Antelope Brush, Conifer Saplings 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	Completely 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	Completely 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 1	20–40 4	41–60 10	61–80 95	>80 10
7	Live Deciduous Crown Closure (%)	>80% – 100% coverage, fire use 4	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or < 20% canopies (open) Stands 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dieoff/red and grey attack)	Standing Dead and Partly Down < 5 or less than 10 stems 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 20m (%)	0–20 0	21–40 5	41–60 5	61–80	>80 10

Sub Total 20 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AB, Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 5 5	IDF, SBS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB — Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	G5, H1, H2, G6, H3, H9, H8, H5, H6, H7 1	G3, G6, H3, H4, H6, G1, G8, H8 5	G7, G5, G4, G9, H1, C1, H6 8	K8, H5, K3, K2, K5, H5, K6, H4, K7, K2 10	H2, H3, H1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	NW, NE 5	<15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and those south for North slopes 5	30–44 10	45–54 12	>54 15
16	Terrain	Flat 1	Rolling 3	Steep simple, valley side w/ drainages 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 0	North to NW to NE aspects dominate, wildfire spread restricted from South and/or West 4	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 25 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 45 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope/ valley bottom 5	Mid-slope/ bench/ bland, elevated valley, <16% slope 10	Mid-slope/ continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values beyond 2 km 0	Perimeter/ interface, no enclosure 3	Perimeter/ Interface, with enclosure 5	Interface > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Side/Hill >500 200-500 <200 m 8 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 70 /55

TOTAL WILDFIRE THREAT SCORE 107 /295

*Proceed only if Fuel sub total is >20.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for interested polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-145	☐
Extreme	>146	☐

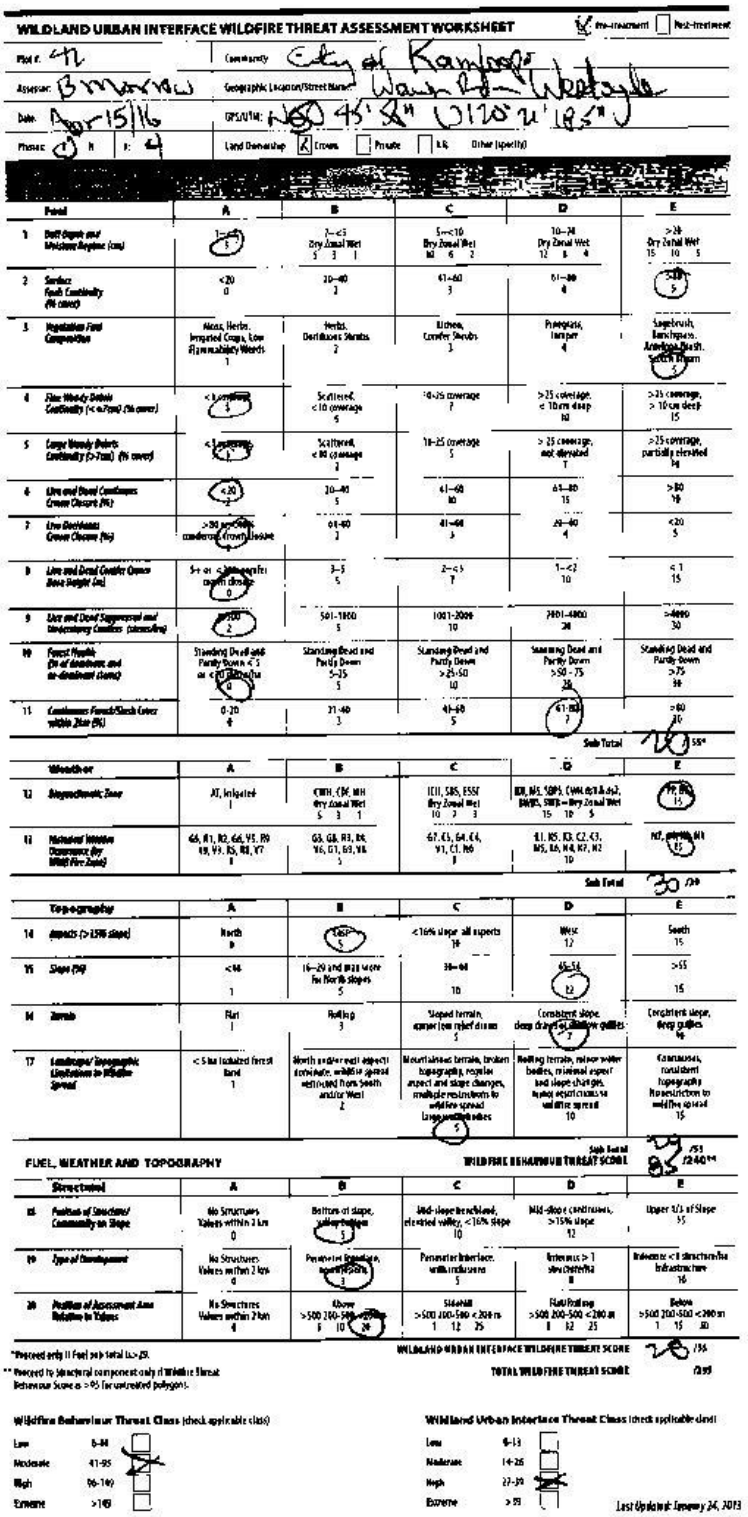
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 41

Photo 41-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot #: 42 Community: City of Kamloops

Assessor: B Marcinew Geographic Location/Street Name: Wash Rd - Westsyde

Date: Apr 15/16 GPS/UTM: N50 45' 8" W120 21' 18.5"

Phase: 3 N E 4 Land Ownership: ☒ Crown ☐ Private ☐ R.R. ☐ Other (specify)

42

	Fuel	A	B	C	D	E
1	Duff Depth and Maximum Depth (cm)	1–<3 1	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–24 Dry Zonal Wet 12 8 4	>24 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Spotted Knapweed 5
4	Fine Woody Debris Continuity (<6 cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <10cm deep 10	>25 coverage, >10cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage <1 1	Scattered, <30 coverage 3	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 9
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>30 non-flammable, crowns, trees, leaves	01–40 2	41–60 3	61–80 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <3 m regardless crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of deadwood and re-treatment stems)	Standing Dead all ages Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 30m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 70 /55*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm1 & dk2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Ignition Occurrence (by Wildfire Zone)	66, A1, N2, 66, Y5, P9 W, V9, K5, W8, Y7 1	G5, G8, H3, D5, Y6, G1, G9, Y8 5	67, C5, 64, C4, Y1, C1, P6 8	A1, K5, K3, C2, C3, M5, L6, M4, K7, M2 10	M7, [illegible], M1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>25% Slope)	North 0	SE/S/SW 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and >30 over No North Slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, some low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent steep, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects discontinuous, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread Large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 29 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 85 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, open spaces 3	Perimeter Interface, with inclusions 5	Extensive > 1 row Interface 8	Extensive <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 5 10 20	Side/Hill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 8 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 28 /75

*Proceed only if Fuel sub total is >29.

** Proceed to structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

TOTAL WILDFIRE THREAT SCORE /315

Wildfire Behaviour Threat Class (check applicable class)

Low	0-84	☐
Moderate	85-95	☒
High	96-149	☐
Extreme	>149	☐

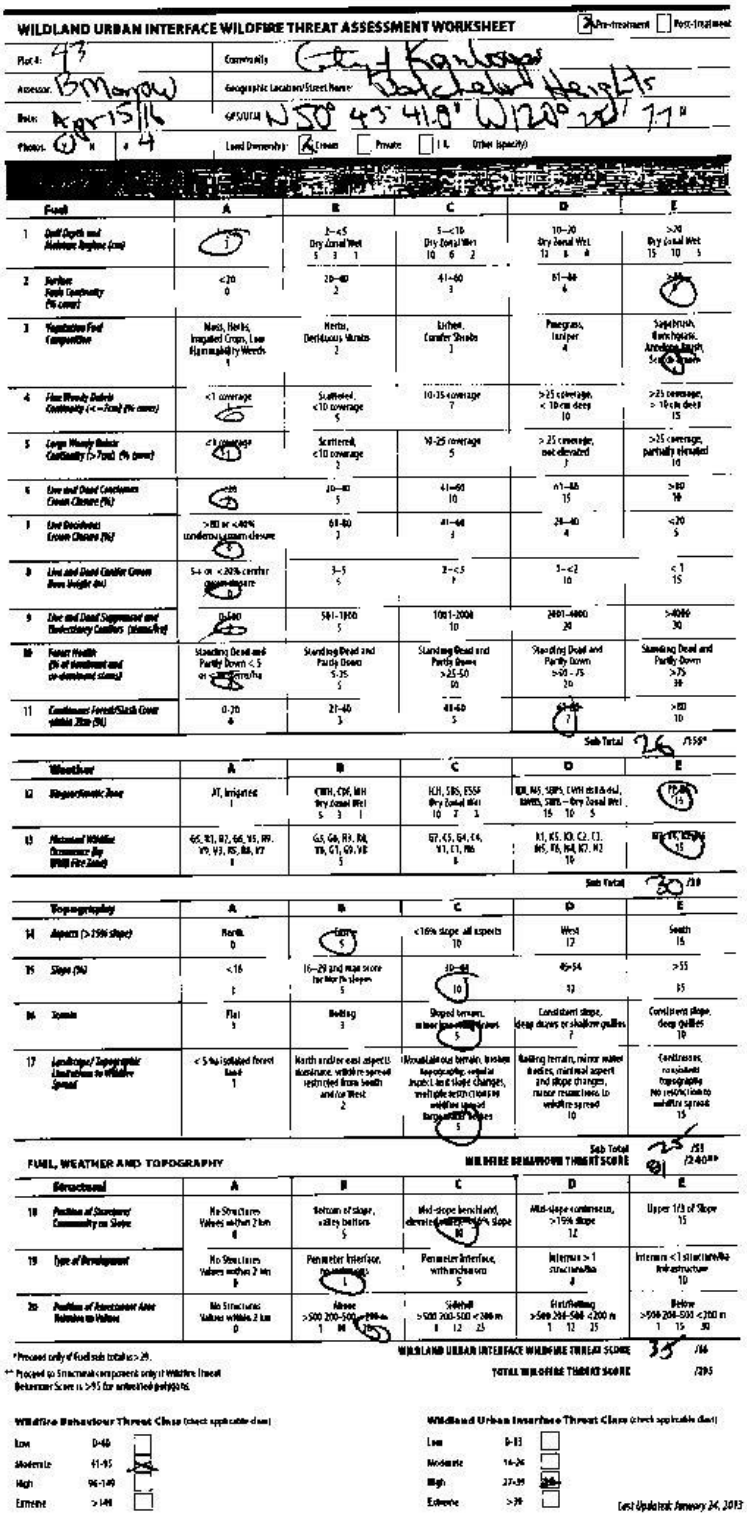
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 42

Photo 42-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot #: 43 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Batchelor Heights

Date: April 5/16 GPS/UTM N50° 43' 41.8" W120° 20' 7.1"

Photos: 0 N to 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

43

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Deciduous Slash, Coniferous Slash 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 5	10-35 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (> 7cm) (% cover)	<1 coverage 0	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61-80 2	41–60 3	26–40 4	<20 5
8 Live and Dead Conifer Crown Bum Height (m)	5+ m <20% conifer crown impact 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <~~5~~ stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 30m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 26 /150*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm & dd, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by Wildfire Zone)	65, R1, R2, 66, Y5, R9, Y9, Y3, R5, R8, R7 1	G5, G6, R9, R8, Y8, G7, G9, Y8 5	G7, K5, K4, K4, N1, C1, R6 8	N1, K5, K6, C2, C3, R45, R6, R4, K7, N2 10	R9, Y8, K5, R6 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspects (>25% Slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 5	16–29 and max score for other % slopes 5	30–45 10	46–54 13	>55 15
16 Terrain	Flat 3	Rolling 3	Sloped terrain, minor [illegible] 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects discontinuous, wildfire spread restricted from south and/or west 2	Mountainous terrain, broken topography, several aspect, and slope changes, multiple restrictions to wildfire spread Barrier(s) present 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 25 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 81 /240**

Structural	A	B	C	D	E
18 Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench and, elevated [illegible]% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, [illegible] 1	Perimeter Interface, with enclaves 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Rural structure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10	Sidehill >500 200-500 <200 m 1 12 25	Bottom/Valley >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 35 /66

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel sub total is > 29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for selected polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 43

Photo 43-1 @ 290 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☑ Pre-treatment ☐ Post-treatment

Plot #: 44 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Batchelor Heights

Date: Apr 15/16 | GPS/UTM: N50° 43' 22.2" W120° 23' 55.7"

Photos: O N # 4 | Land Ownership: ☑ Crown ☐ Private ☐ I.R. Other (specify)

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	<20 3	20–40 5	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80 or <40% coniferous crown closure 0	61-80 2	41–60 3	20–40 4	<20 5
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	<500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 26 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	[illegible] 15
13	*Historical Wildfire Occurrence (by WHB Fire Zone)*	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, [illegible] N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	*Slope (%)*	<16 1	16–29 and max score for North slopes 5	30–44 10	45-54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY Sub Total 35 /55

WILDFIRE BEHAVIOUR THREAT SCORE 91 /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 5	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 10	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

* Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 23 /55

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☒
High	27-39	☐
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 44

Photo 44-1 @ 270 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot #: 45 | Community: City of Kamloops

Assessor: B Mandlis | Geographic Location/Street Name: Ord Road

Date: April 15/16 | GPS/UTM: N50° 41' 42.3" W120° 23' 36.9"

Photos: N # 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Surface Fuel and Moisture Regime (FMs)	1	2—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3	Vegetation Fuel Composition	Mech. Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<7cm) (% cover)	>5 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 0	20—40 5	41—60 10	61—80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous mixed closure 0	61—80 2	41—60 3	20—40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3—5 5	2—<3 7	1—<2 10	<1 15
9	Live and Dead Suppressed and Overstorey Conifers (stems/ha)	<500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down, ≤ 5 or >20 Years/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 20m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 26 /155

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BG, MS, SBPS, CWH wet & dry, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WSB/Fire Zone)	GS, FR, KL, GA, KS, BV, VR, TA, RS, RB, VT 1	GS, GA, KL, RA, VR, GL, GP, VR 5	GP, CS, GA, CA, VI, CT, RA 8	KT, RS, KS, CP, CS, RS, VA, WL, KP, AZ 10	MZ, PR, CS, RT 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (> 15% slope)	North 0	East 5	< 15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16—29 and mod. score for North slopes 5	30—44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steeper terrain, numerous draws 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 3	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 33 /55

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 91 /155 /224**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, Valley Bottom 5	Mid-slope benchland, elevated valley, <15% slope 10	Mid-slope continuous, >15% slope 17	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no Subdivision 3	Perimeter Interface, with Inclusions 5	Interior > 1 structure/ha 8	Interior <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Same/Flat >500 200-500 <200 m 5 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

* Proceed only if Fuel, each total is >20

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 28 /155

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-38	☒
Extreme	>38	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 45

Photo 45-1 @ 315 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

[X] Pre-treatment [ ] Post-treatment

Plot #: 46 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Tranquille

Date: Apr 15/16 | GPS/UTM: N50 43 23.7" W120 29 43.9"

Photos: (Y) N #: 4 | Land Ownership: [ ] Crown [X] Private [ ] I.R. Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 (2)	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	(>80 5)
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds (3)	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage (A)	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage (A)	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	(<20) (2)	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure (0)	61-80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure (0)	3–5 5	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	(0-500) (0)	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha (0)	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	(0-20) (0)	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 14 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	(AT, Irrigated) (1)	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMB Fire Zone)	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, K4, K2, N1 (15)

Sub Total 16 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	(North) 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 (1)	16–29 and max score for North slopes 5	30–44 10	45-54 12	>55 15
16	Terrain	(Flat) (1)	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land (1)	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 13 /55

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 43 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, valley bottom (5)	Mid-slope bench/and, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure (10)
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m (1) 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 16 /55

TOTAL WILDFIRE THREAT SCORE /295

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	[X]
Moderate	41-95	[ ]
High	96-149	[ ]
Extreme	>149	[ ]

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	[ ]
Moderate	14-26	[X]
High	27-39	[ ]
Extreme	>39	[ ]

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 46

Photo 46-1 @ 180 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot # 47 | Community: City of Kamloops

Assessor: B Mayhew | Geographic location/Street Name: Tranquille Cr

Date: Apr 15/16 | GPS/UTM: N 50° 44' 32.8" W 120° 33' 28"

Photos: (1) N E 4 | Land Ownership: ☒ Comm ☐ Private ☐ I.R. ☐ Other (Specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	Level 3	2—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20—40 2	41—60 8	61—80 4	>80 5
3	Vegetative Fuel Composition	Mosses, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrasses, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	Continuous 3	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	Continuous 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20—40 5	41—60 10	61—80 15	>80 18
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous, deciduous 0	61-80 2	41—60 5	20—40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer Continuous 10	3—5 5	2—<3 7	1—<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-20 3	Standing Dead and Partly Down >20-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 31 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, BAH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 12 7 3	MS, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	IDF 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, R8, R2, G6, V5, B9, V9, V3, R5, R8, V7 1	G3, G8, P3, B4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, H6 8	K1, K5, K8, C2, C3, N5, K6, N4, K7, N2 10	N7, K9, K4, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 2	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16—29 average score between slopes 5	30—44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, some [illegible] 5	Consistent slope, deep draws or shallow gullies 7	Extensive slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North aspects, most aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, several aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 30 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 91 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 13	Upper 1/3 of Slope 15
19	Type of Development	No Structures Within 2km 0	Perimeter interface, no extensions 3	Perimeter interface, with extensions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Within 2km 0	Above >500 200-500 < 200 m 1 10 20	Same/all >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <100 m 1 15 30

*Proceed only if Fuel sub totals >29.

**Proceed to Structural components only if Wildfire Threat Behaviour Score is >91 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE /155

TOTAL WILDFIRE THREAT SCORE 91 /395

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-145	☐
Extreme	>145	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-33	☒
Moderate	34-56	☐
High	57-89	☐
Extreme	>89	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 47

Photo 47-1 @ 360 degrees

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

[X] Pre-treatment [ ] Post-treatment

48

Plot #: 48	Community: City of Kamloops		
Assessor: B Morrow	Geographic Location/Street Name: Pineview		
Date: Apr 18/16	GPS/UTM: N50° 38' 54" W120° 23' 54.8" 800m		
Photos: [X] N #: 4	Land Ownership: [X] Crown [ ] Private [ ] I.R. Other (specify)		

FUEL

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	1–<2 3	2–5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2 8	1–<2 10	<1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	<500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 49 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	*Historical Wildfire Occurrence (by WMB Fire Zone)*	G5, R1, R2, G6, V5, B9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, K4, K2, N1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	*Slope (%)*	<16 1	16–29 and max score for North slopes 5	30–44 10	45-54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY **Sub Total** 17 /55

WILDFIRE BEHAVIOUR THREAT SCORE 91 /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter interface, no inclusions 3	Perimeter interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 33 /55

TOTAL WILDFIRE THREAT SCORE 124 /295

* Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	[ ]
Moderate	41-95	[X]
High	96-149	[ ]
Extreme	>149	[ ]

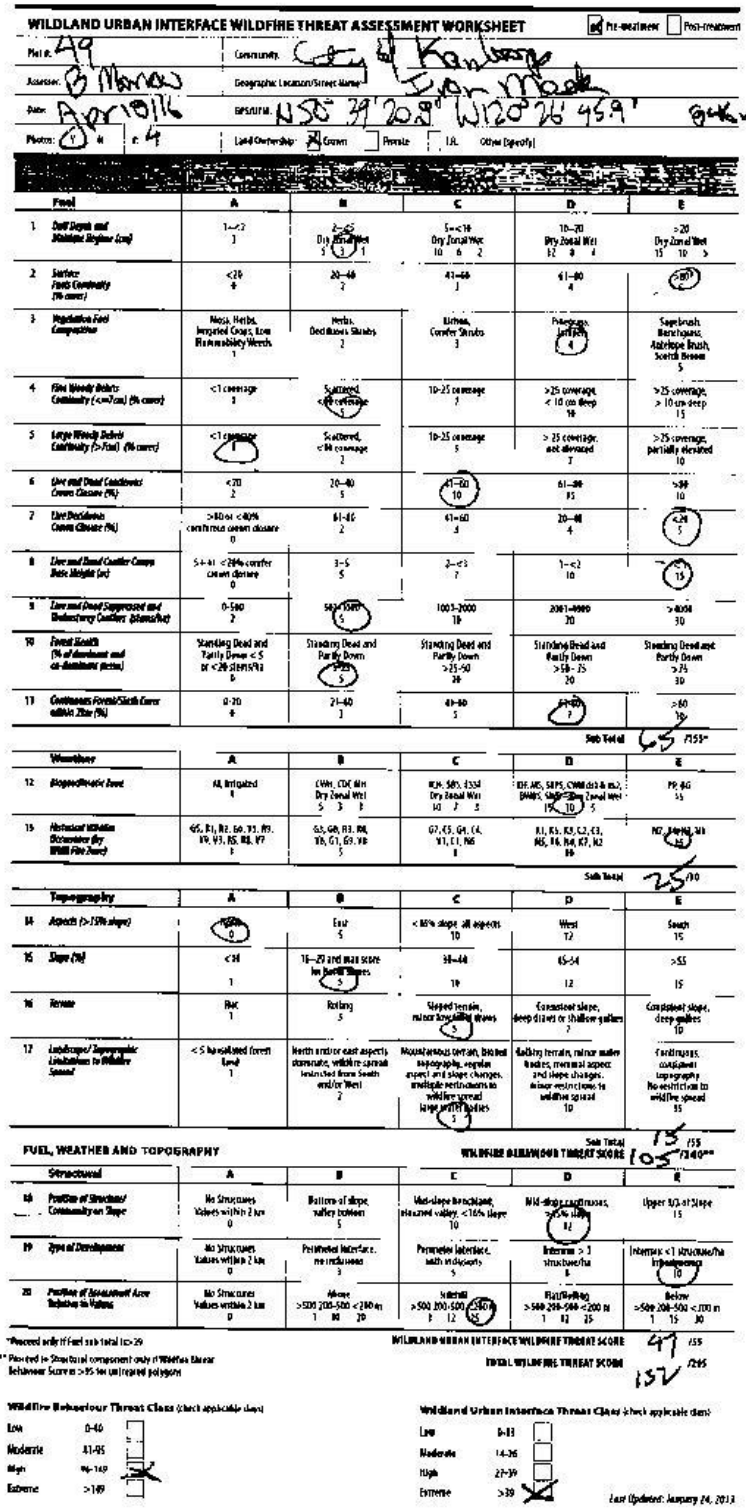
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	[ ]
Moderate	14-26	[ ]
High	27-39	[X]
Extreme	>39	[ ]

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 48

Photo 48-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot #: 49
Community: City of Kamloops
Assessor: B Mahon
Geographic Location/Street Name: Ivan Mack
Date: Apr 19/16
GPS/UTM: N50° 39' 20.8" W120° 26' 45.9"
Photos: Y N #: 4
Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

49

	Fuel	A	B	C	D	E
1	Duff Depth and Ladder Fuel Loading	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Bitrbus, Conifer Shrubs 3	Pinegrass, Lodgepole Pine 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <50 coverage 3	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <50 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Canopy Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/ha)	0-500 2	501-1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5	Standing Dead and Partly Down >25-50 20	Standing Dead and Partly Down >50- 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0-20 0	21–40 1	41–60 5	61–80 7	>60 10

Sub Total 65 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH (dk & ms), BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	65, B1, B2, 60, 93, B9, V3, B5, B8, B7 1	63, G8, B3, B4, B6, G1, G3, B8 5	G7, C5, G4, C4, V1, C1, B6 8	B1, B5, B3, C2, C3, B5, B6, B4, K7, K2 10	B7, B4, B8, B6 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	< 15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–25 and max score for Aspect/Slopes 5	26–40 10	65-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor bowl/gully draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha established forest Land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, blocked topography, riparian aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, mermal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY

WILDFIRE BEHAVIOUR THREAT SCORE 105* /140**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, terraced valley, <16% slope 10	Mid-slope ridgetops, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peripheral Interface, no reticulated 3	Perimeter Interface, with inclusions 5	Interface > 3 structures/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Development Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Informal >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub total is >=20

** Proceed if Structural component only if Wildfire Threat Behaviour Score is >=95 for an Irregular polygon

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 49 /155

TOTAL WILDFIRE THREAT SCORE 152 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

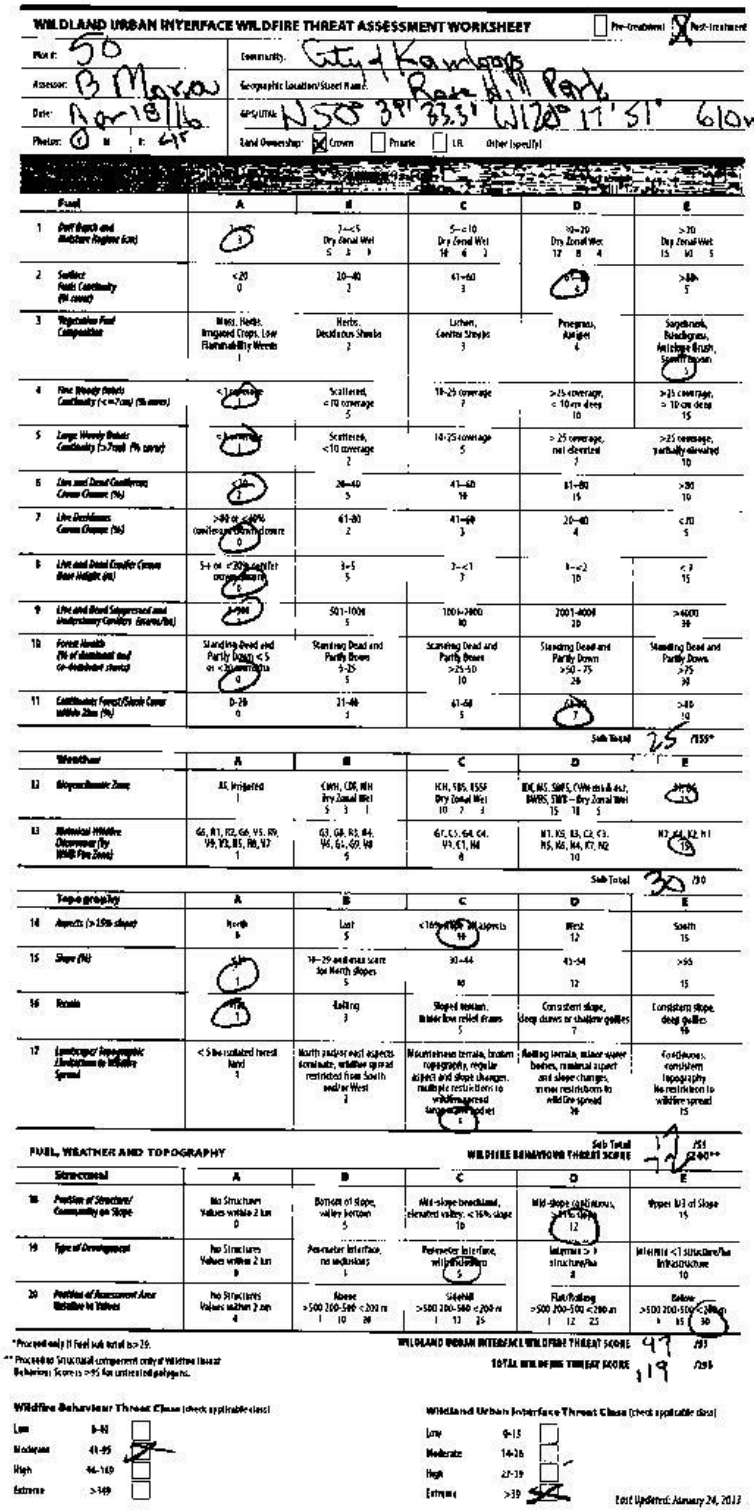
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 49

Photo 49-1 @ 270 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 50
Assessor: B Marrow
Date: Apr 18/16
Photos: 0 M I: 45F

Community: City of Kamloops
Geographic Location/Street Name: Rose Hill Park
GPS UTM: N50 39' 33.3" W120 17' 51" 610m
Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

50

	Fuel	A	B	C	D	E
1	Fuel Bed and Moisture Regime (cm)	1	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 3	Lichen, Conifer Shrubs 3	Pinegrass, Aspen 4	Sagebrush, Bunchgrass, Antelope Brush, Ponderosa 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<10 2	26–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% Coniferous/Deciduous 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown base 5	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (trees/ha)	1–500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <3 merchantable 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 25 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AR, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH wet & dry, BWBS, SWB—Dry Zonal Wet 15 11 5	20
13	Historical Wildfire Occurrence (by WMB Fire Zone)	66, A1, K2, G6, V5, R9, V9, Y2, B5, R8, V7 1	G3, G8, R3, B4, V4, G4, G9, W8 5	G7, C5, G4, G4, V3, C1, H4 8	M1, K5, E3, C2, C3, N5, K6, N4, K7, N2 10	M2, K4, K2, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<165° and >345° all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–29 and max score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, Minor low relief drains 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread and/or [illegible] 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 17 /75

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 154 /240**

	Structural	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope conditions, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no exclusions 1	Perimeter Interface, with exclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Side/Hill >500 200–500 <200 m 1 13 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 47 /95

TOTAL WILDFIRE THREAT SCORE 119 /295

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–80	☐
Moderate	81–95	☒
High	96–160	☐
Extreme	>160	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 50

Photo 50-1 @ 360 degrees

51

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☐ Pre-treatment ☒ Post-treatment

Plot #: 51
Assessor: B Marlow
Date: Apr 18/16
Photos: N: E:

Comments: City of Kamloops
Geographic location/Street Name: Rose Hill Park
GPS/UTM: N50° 39' 25.1" W120° 17' 45.3" 611m
Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

	Fuel	A	B	C	D	E
1	Leaf Depth and Moisture Regime (cm)	1	2—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 3	41–60 8	61–80 4	>80 5
3	Vegetation Fuel Composition	Grass, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Mixed, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Aerial Lichen, Birch, Alpine Shrub 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	>1 Coverage	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>=7cm) (% cover)	<2 Coverage	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	1+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1—2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1500 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 Stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down 25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	>60 7	>80 10

Sub Total 42 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigation 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, Cwh dst 4&5, BWBS, SWB—Dry Zonal Wet 15 10 5	PP, BG 10
13	Historical Wildfire Occurrence (by Wildfire Fire Zone)	G5, R1, R2, G6, Y5, R9, Y9, Y3, K5, R8, Y7 1	G1, G8, R3, B4, Y4, G7, G9, Y8 5	G2, C5, G4, C4, Y6, C1, H6 8	R1, R5, R3, C2, C3, H5, H4, H6, K7, N2 10	H7, B4, Y2, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspect (>25% slope)	N/NW 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 add max score for North Slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep/ravines, minor rock/cliff bands 5	Consistent slope, deep drains or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	<5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from south and/or West 2	Mountainous terrain, distinct topography, riparian aspect and slope changes, multiple restrictions to wildfire spread large areas of bodies 5	Rolling terrain, minor variations in slope, seasonal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No breaks/ low to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 97 /240**

	Structure	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% Slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Permanent Infrastructure, no evidences 3	Permanent Infrastructure, with evidences 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29.

** Proceed to Structural Component only if Wildfire Threat Behaviour Score is >55 for urban/rural polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 47 /90

TOTAL WILDFIRE THREAT SCORE 134 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

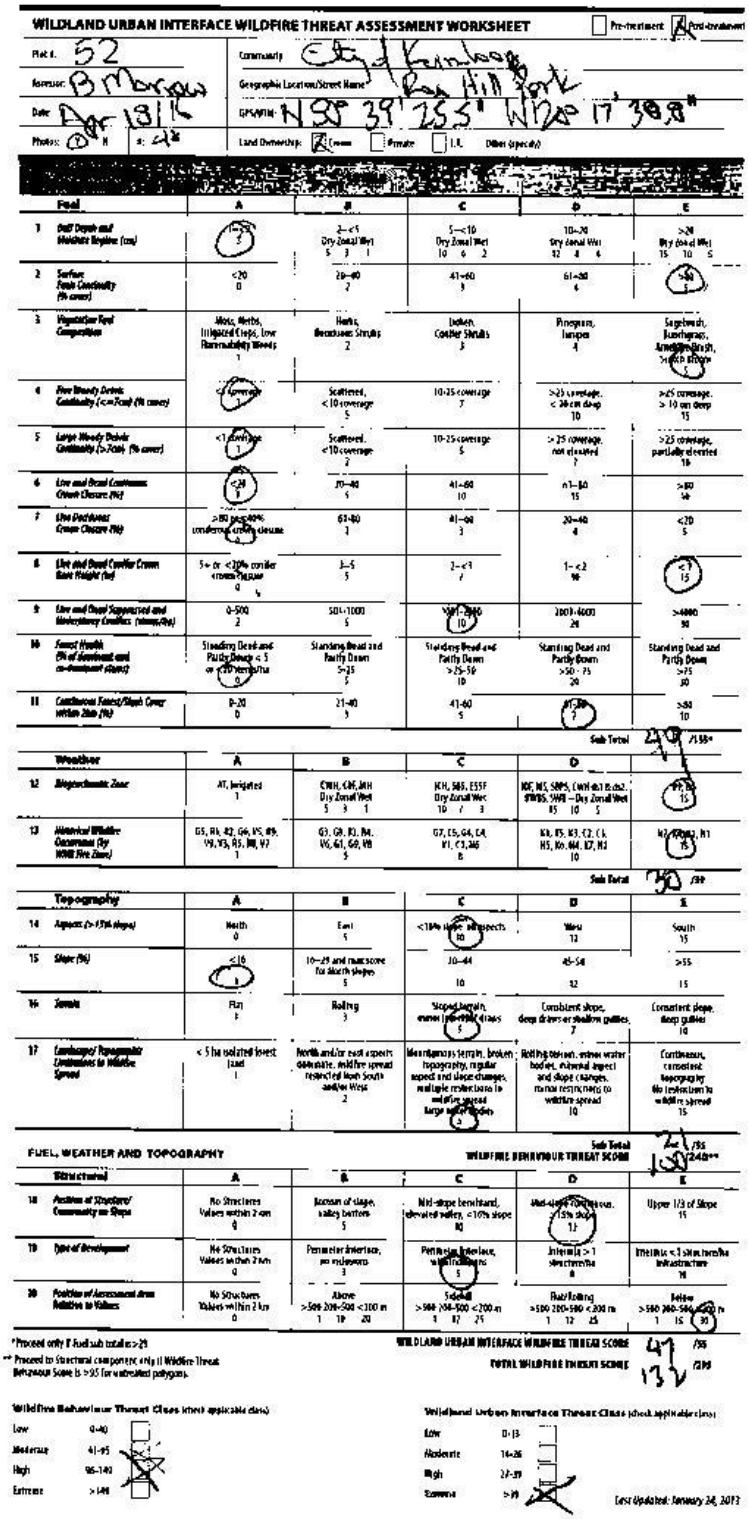
Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 29, 2015

City of Kamloops – Wildfire Threat Assessment Picture – Plot 51

Photo 51-1 @ 45 degrees

52



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 52
Assessor: B Morgan
Date: Apr 13/16
Photos: 0 N s: 28

Community: City of Kamloops
Geographic Location/Street Name: Rose Hill Park
GPS/UTM: N 50° 39' 25.5" W 120° 17' 30.8"
Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1	2–<5 Dry-Zonal Wet: 5 3 1	5–<10 Dry Zonal Wet: 10 6 2	10–20 Dry zonal Wet: 12 8 4	>20 Dry (zonal Wet): 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Woods 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Armeria-Grass, Spotted Knapw 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 Coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 30 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Continuous Crown Closure (%)	<20 1	20–40 4	41–60 10	61–80 15	>80 50
7	Live Discontinuous Crown Closure (%)	>80 pcs/40% coniferous, conifer clumps 2	61-80 3	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501-1000 5	1001-3000 10	2001-4000 20	>4000 50
10	Insect Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <200 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	/158*

	Weather	A	B	C	D
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CMA, MH Dry Zonal Wet: 5 3 1	MH, SBS, ESSF Dry Zonal Wet: 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, SWBS, SWB – Dry Zonal Wet: 15 10 5
13	Historical Wildfire Occurrence (by MNR Fire Zone)	G5, R4, R2, G6, V5, V9, V3, R5, R8, V7 1	G3, G8, R3, R6, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C3, R6 8	K4, K5, K3, C2, C4, H5, K6, K4, K7, K3 10
					Sub Total /30

	Topography	A	B	C	D	E
14	Aspect (> 45% slope)	North 0	East 5	<135° Slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for North slopes 5	30–44 10	45–58 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, uneven [illegible] trails 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Continuities to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 3	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	/75
					WILDFIRE BEHAVIOUR THREAT SCORE	240**

FUEL, WEATHER AND TOPOGRAPHY

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope/ridge top, >15% slope 13	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no subwards 3	Perimeter interface, [illegible] 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <100 m 1 10 20	Subdivision >500 200–500 <200 m 1 12 25	Rural Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	47 /155
					TOTAL WILDFIRE THREAT SCORE	137 /398

* Proceed only if fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40
Moderate	41-95
High	96-140
Extreme	>140

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13
Moderate	14-26
High	27-39
Extreme	>39

Last Updated: January 28, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 52

Photo 52-1 @ 360 degrees

53

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 53 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Rose Hill Park

Date: Apr 19/16 | GPS/UTM: N50° 39' 29.9" W120° 17' 24.9"

Photos: ☒ N #: 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	< coverage	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	> 25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	<20	20–40 5	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80 or <40% coniferous crown closure	61-80 2	41–60 3	20–40 4	<20 5
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	<500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or < 50 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	41-60 5	61-80 7	>80 10
					Sub Total	41 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	*Historical Wildfire Occurrence (by WMB Fire Zone)*	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, K4, K2, N1 15
					Sub Total	30 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	*Slope (%)*	<16	16–29 and max score for North slopes 5	30–44 10	45–54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — **Sub Total** 92 /55

WILDFIRE BEHAVIOUR THREAT SCORE 92 /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 47 /55

TOTAL WILDFIRE THREAT SCORE 139 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 53

Photo 53-1 @ 225 degrees

54

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 54 | Comments: City of Kamloops

Assessor: B McNeil | Geographic Location/Sheet Name: Rose Hill

Date: Apr 19/16 | GPS/UTM: N50 39' 20" W120 16' 39.3"

Photos: (Y) N # 4 | Land Ownership: ☒ Crown ☐ Private ☐ IR ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (DMR)	1–<3 1	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 1	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Grasses, Shrubs 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7 cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 3	>25 coverage < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous-crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Fuel Depth (% of deciduous and co-dominant stems)	Standing Dead and Partly Down < 5 or <10 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 40
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 50 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, IRIgated 1	ICHW, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, BWBS dk1 & dk2, SWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WSAR Fire Zone)	G5, H1, R2, G6, V5, R8, V9, K3, R5, F8, V7 1	G4, G8, R6, B4, V6, G9, V8 5	G7, E5, G4, C4, V4, C1, V6 8	K1, R5, K3, C2, C3, R5, R6, B4, K7, H2 10	H7, G2, H2, H1 15

Sub Total 25 /70

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	Flat 0	East 5	<10% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–29 and steep toe/bottom slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low/mid draws 5	Canyons, steep, deep drains or shallow gullies 7	Confined slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or east aspects, stream-rate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, available resistance to wildfire spread large waterbodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Confluences, consistent topography No restriction to wildfire spread 15

Sub Total 17 /75

WILDFIRE BEHAVIOUR THREAT SCORE 142 /240**

FUEL, WEATHER AND TOPOGRAPHY

	Structure(s)	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope condensed, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peninsular Riverlane, no enclosure 3	Peninsular interface, with inclusions 5	Island: > 1 structure/ha 8	Island: < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 5 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 43 /75

TOTAL WILDFIRE THREAT SCORE 142 /295

*Proceed only if Fuel sub total is > 29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–80	☐
Moderate	81–95	☐
High	96–149	☒
Extreme	>149	☐

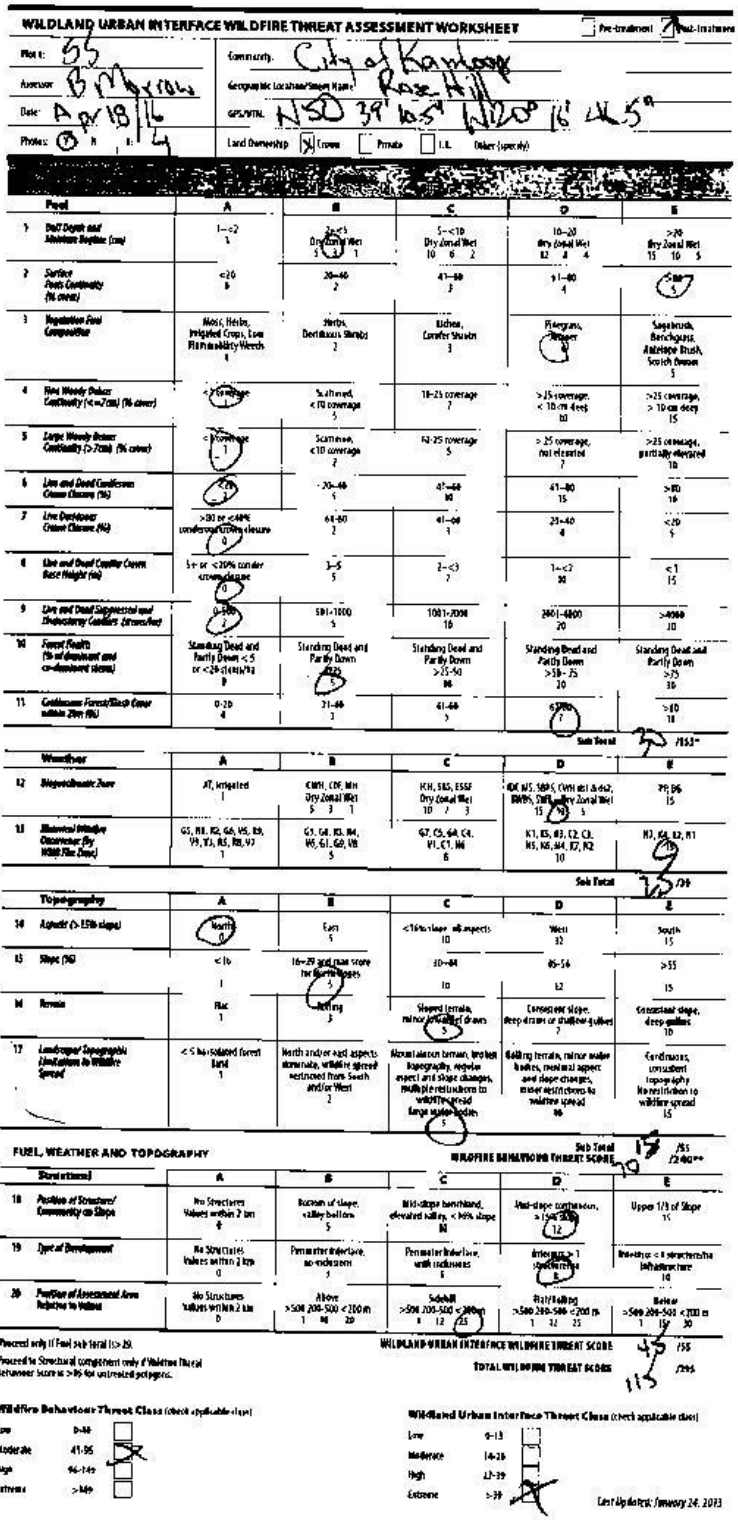
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☒
Extreme	>39	☐

Last Updated: January 28, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 54

Photo 54-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 55
Assessor: B McMorran
Date: Apr 18/16
Photos: Y N #: 4

Community: City of Kamloops
Geographic Location/Street Name: Rose Hill
GPS/UTM: N50 39' 105" W120 16' 42.5"
Land Ownership: [X] Crown [ ] Private [ ] I.R. [ ] Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Bracken 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<6 cm/7cm) (% cover)	<5% coverage 0	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 1	41–60 2	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous w/ <20% closure 0	61–80 2	41–60 1	25–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understory Conifers (trees/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <20 stems/ha 0	Standing Dead and Partly Down 5	Standing Dead and Partly Down >25–50 06	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11 Coniferous Forest/Slash Cover within 20m (%)	0–20 0	21–60 3	61–80 5	81–90 7	>90 10
					Sub Total 35 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	IDFwh, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH wet & dz2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by Wildfire Risk Zone)	G5, H1, H2, G6, H5, E9, Y9, Y3, R5, R8, V3 1	G1, G4, R3, R4, W6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, W6 6	K1, E5, H3, C2, C3, K5, K6, H4, K7, K2 10	H7, K4, K7, V1 15
					Sub Total 35 /30

Topography	A	B	C	D	E
14 Aspect (S-E5% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 and rises over the flatter slopes 5	30–54 10	55–56 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor gullies/draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape Topographic Limitations to Wildfire Spread	<5 ha isolated forest land 1	North and/or east aspects stormrate, wildfire spread restricted from South and/or West 2	Moderate terrain, broken topography, negative aspect and slope changes, MAIN NE restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, moderate aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15
					Sub Total 17 /55
					/240**

FUEL, WEATHER AND TOPOGRAPHY

WILDFIRE BEHAVIOUR THREAT SCORE 70

Structure	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <30% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Permanent interface, no exposure 5	Permanent interface, with exposures 8	Interface > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Valley >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
				WILDLAND-URBAN INTERFACE WILDFIRE THREAT SCORE	45 /155
				TOTAL WILDFIRE THREAT SCORE	115 /295

*Proceed only if Fuel sub total is > 20.

** Proceed to Structural component only if Valuation Total between scores is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	[ ]
Moderate	41–95	[X]
High	96–140	[ ]
Extreme	>140	[ ]

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	[ ]
Moderate	14–26	[ ]
High	27–39	[ ]
Extreme	>39	[X]

Last Updated: January 24, 2013

55

City of Kamloops – Wildfire Threat Assessment Picture – Plot 55

Photo 55-1 @ 90 degrees

56

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 56 | Community: City of Kamloops

Assessor: B Marrow | Geographic Location/Street Name: Rose Hill

Date: Apr 18/16 | GPS/UTM: N50 38° 55.4' W120° 16' 34.1"

Photos: ☐ N ☐ E ☐ S ☐ W | Land Ownership: ☐ Crown ☒ Private ☐ FR ☐ Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<3 1	3–<5 Dry Zonal Wet 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet X5 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Grass, Herbs, Mosses, Lichens, Non-Flammable Woody Shrubs 1	Herbs, Deciduous Shrubs 3	Mixed, Conifer Shrubs 3	Pinaceous, Conifer 4	Sagebrush, Bunchgrass, Antelope Brush, Scarce Slash 5
4 Fine Woody Debris Continuity (<=1cm) (% cover)	<1 coverage 1	Scattered, <10% coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10% coverage 2	10-25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Conifers: Crown Closure (%)	<20 1	20–40 5	61–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <80% conifer/coniferous closure 0	61-80 2	41–60 3	20–40 6	<20 5
8 Live and Dead Conifer Crown Base Height (m)	3+ or <20% conifer crown closure 0	1–3 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 5	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or >25 dead /ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Coniferous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 30 /135*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Integrated 1	CWH, CDF, Mm Dry Zonal Wet 5 2 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dry & dm2, BWBS, SWB = Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by Wildfire Zone)	G5, R1, R2, G4, K5, W9, V3, P5, B2, V7 1	G3, G6, B3, P4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, B6 8	K1, K5, K4, K2, C3, M5, R6, N4, N7, N2 10	N7, K4, K2, N1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 0	East 5	<15% slope, No aspects 10	West 13	South 15
15 Slope (%)	<16 1	16–29 and max score for North slopes 5	30–44 10	45-58 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, some low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Continuous to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mild/Various terrain, broken topography, regular aspect and slope changes, multiple (some) barriers to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography (no restrictions) to wildfire spread 15

Sub Total 1 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 79 /1340**

Structures	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, < 30% Slope 10	Mid-slope/crestwise, >30% Slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures/ Values within 2 km 0	Perimeter Interface, no enclosure 3	Perimeter Interface, with enclosure 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha, Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 m, Below >500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Valley >500 100–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 15 /55

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for interested polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

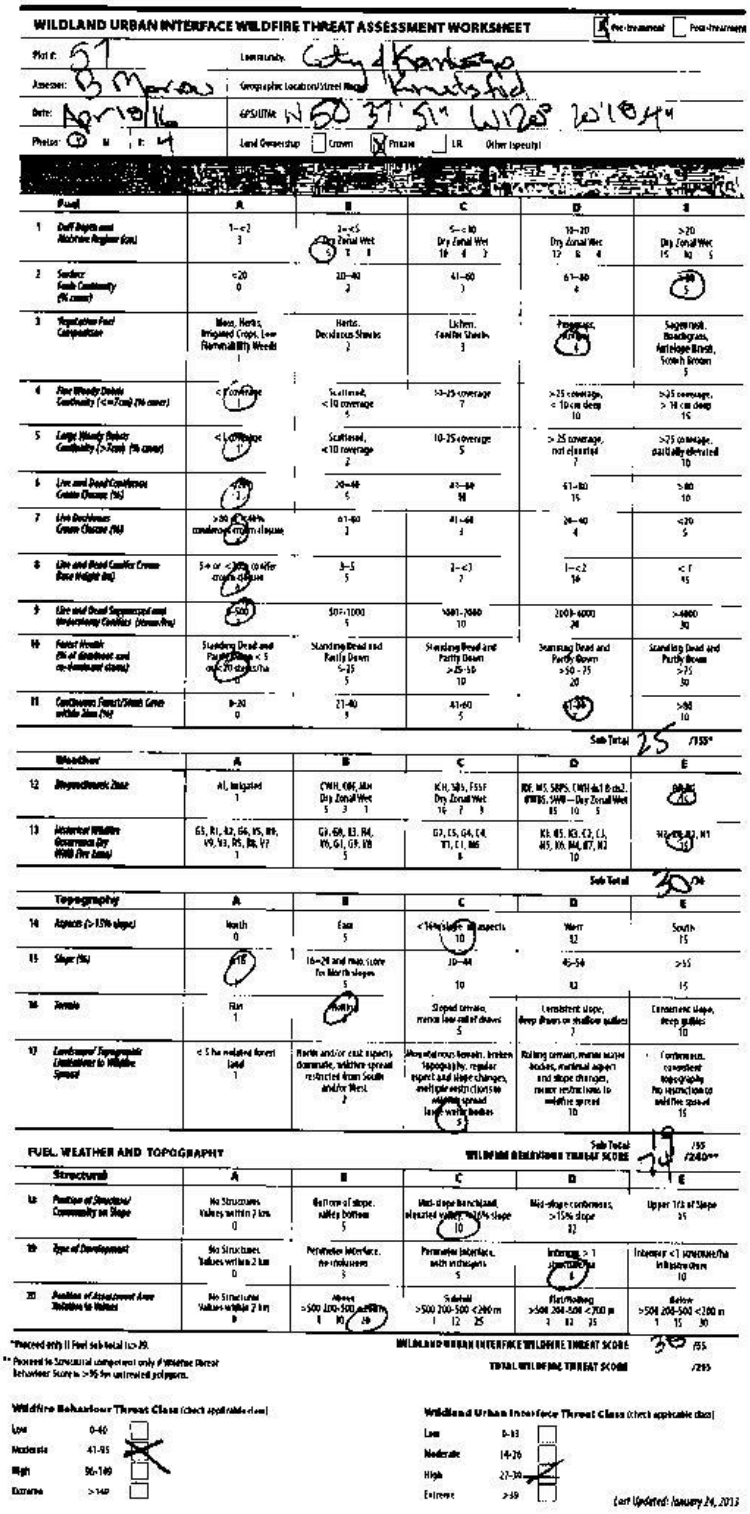
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☒
High	27-39	☐
Extreme	>39	☐

Last Updated: January 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 56

Photo 56-1 @ 90 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 57 — Community: City of Kamloops

Assessor: B Moreau — Geographic Location/Street Name: Knutsford

Date: Apr 19/16 — GPS/UTM: N 50 37 51" W120° 20' 10"

Photos: # ; # — Land Ownership: Crown / Private / LR / Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 7 8	5–<10 Dry Zonal Wet 10 4 3	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pasture, Alfalfa 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 5	50–75 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Canopy Closure (%)	<20% 1	20–40 5	41–60 M	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 % (>40% considered crown closure) 0	61–80 3	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <30% crown after crown closure 0	3–5 5	1–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dieoffs and re-forestation stems)	Standing Dead and Partly Down < 5 and < 20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Shrub Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 8	>80 10

Sub Total 25 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, FESF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB—Dry Zonal Wet 15 10 5	BAFA, PP, BG 20
13	Historical Wildfire Occurrence (by BWBS Fire Zone)	G5, R1, A2, G6, K5, W9, V9, V3, R5, B8, V7 1	G9, G8, E3, H4, W6, G1, G9, V8 5	G2, C5, G4, C8, T1, C1, B6 8	K4, K5, K3, C2, C3, M5, K6, M4, K7, N3 10	H2, G8, A2, N1 15

Sub Total 30 /70

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<14% slope, all aspects 10	West 12	South 15
15	Slope (%)	<15 1	16–29 and most, some for North slopes 5	30–44 10	45–59 12	>55 15
16	Terrain	Flat 1	Rolling	Sloped terrain, minor low and/or draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography no restriction to wildfire spread 15

Sub Total 19 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 74 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of Slope, valley bottom 5	Mid-slope benchland, elevated valley, <15% slope 10	Mid-slope conformous, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 5	Perimeter Interface, with inclusions 5	Intermix, > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structural Values within 2 km 0	Above >500 100–500 <100 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Valley Bottom >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >39.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	
Moderate	41–95	X
High	96–149	
Extreme	>149	

Wildland Urban Interface Threat Class (check applicable class)

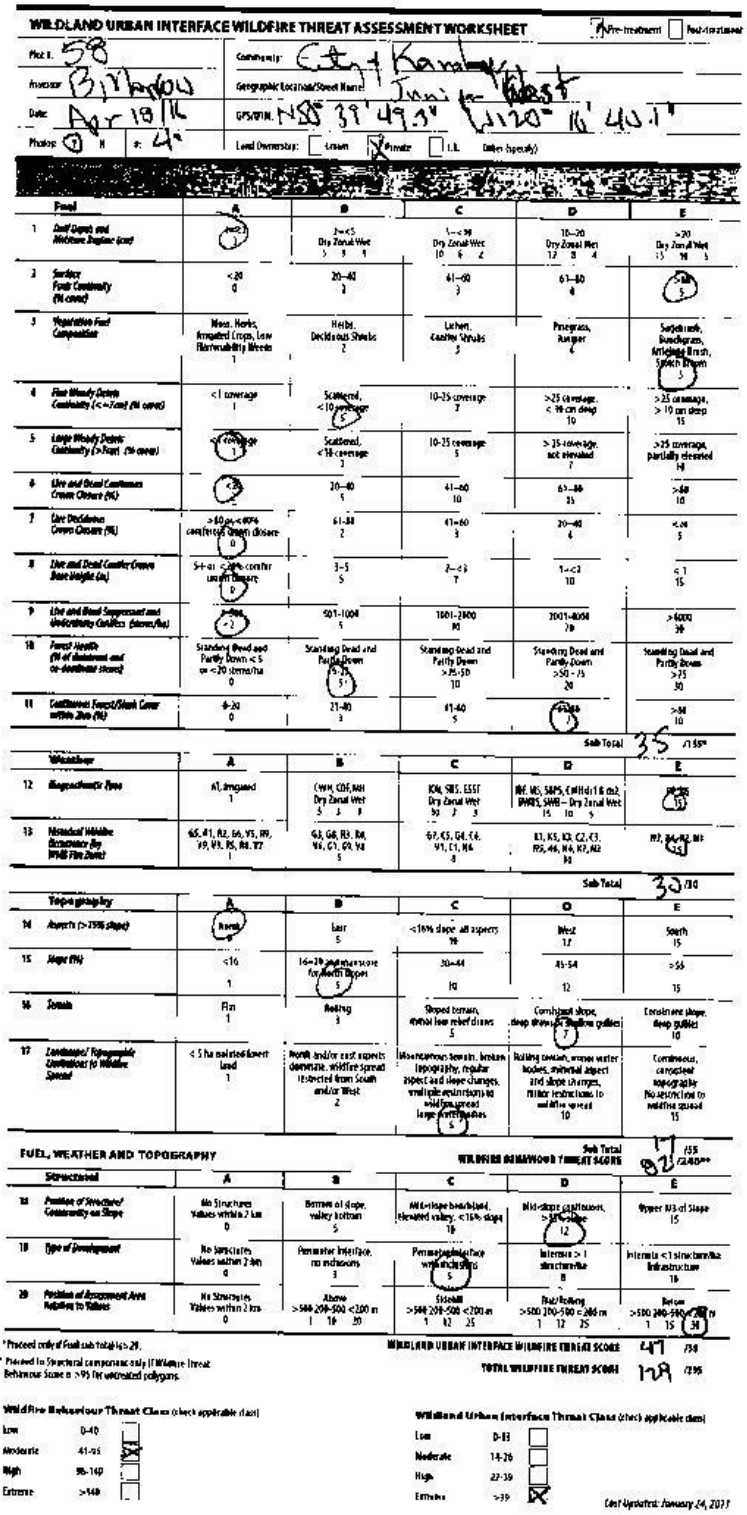
Low	0–13	
Moderate	14–26	
High	27–39	X
Extreme	>39	

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 57

Photo 57-1 @ 360 degrees

58



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 58
Assessor: B. Yandow
Date: Apr 18/16
Photos: ☐ #: 4

Community: City of Kamloops
Geographic Location/Street Name: Juniper West
GPS/UTM: N50° 39' 49.3" 1120° 16' 40.1"
Land Ownership: ☐ Crown ☒ Private ☐ I.R. ☐ Other (specify)

Fuel	A	B	C	D	E
1 Fuel Type and Moisture Regime (cw)	0	2–<5 Dry Zonal Wet 3 5 9	5–<10 Dry Zonal Wet 10 6 4	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<20 0	20–40 3	41–60 7	61–80 9	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Mixes 1	Herbs, Deciduous Shrubs 2	Lichen, Coniferous Shrubs 5	Pinegrass, Juniper 6	Sagebrush, Bunchgrass, Antelope Brush, Spotted Knapweed 5
4 Fine Woody Debris Continuity (<~7cm) (% cover)	<1 coverage 1	Scattered, <10% coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 5	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 5	20–40 6	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressant and Understory Conifers (stems/ha)	>500 <2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 35 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IMF, MS, SBPS, CWHdr1 & dh2, BWBS, SWB – Dry Zonal Wet 15 10 5	[illegible] 15
13 Historical Wildfire Occurrence (by WUI Fire Zone)	65, 41, A2, B6, Y5, H9, Y9, V8, P5, R8, T7 1	G3, G6, R3, B8, W6, C1, G9, V4 5	G7, C5, G4, C6, V1, E1, H6 8	B1, K5, K3, C2, E3, P5, 46, N4, K7, A2 10	H7, B4, B2, N8 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspects (>25% slope)	North 0	East 5	<10% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 add value score for North Slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, without low relief drains 5	Cornice/crest slope, steep draws or shallow gullies 7	Consistent slope, steep gullies 10
17 Landscape/ Topographic Continuity to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, variable aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15

Sub Total 17 /55
WILDFIRE BEHAVIOUR THREAT SCORE 82 /240**

FUEL, WEATHER AND TOPOGRAPHY

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/bowl, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no enclosures 3	Perimeter Interface with enclosures 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 250–500 <200 m 1 10 20	Sidehill >500 250–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 47 /150

TOTAL WILDFIRE THREAT SCORE 129 /295

* Proceed only if fuel sub total is > 20.

** Proceed to Structural components only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☒
High	96–140	☐
Extreme	>140	☐

Wildland Urban Interface Threat Class (check applicable class)

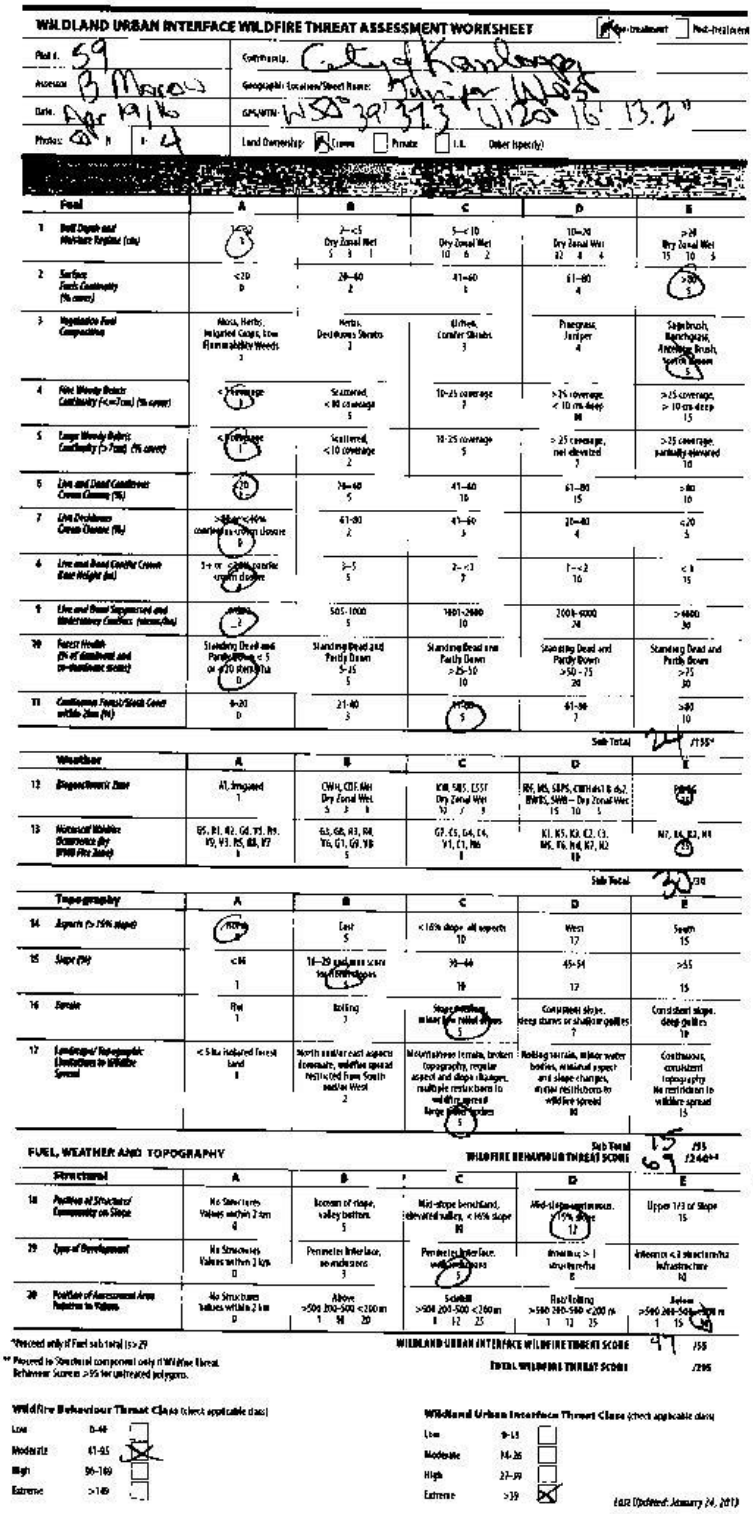
Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 58

Photo 58-1 @ 35 degrees

59



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment ☐

Plot #: 59
Community: City of Kamloops
Assessor: B Mason
Geographic Location/Street Name: Juniper Way
Date: Apr 19/16
GPS/UTM: W50° 39' 37.3" U120° 16' 13.2"
Photos: Y N #: 4
Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	0	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–60 2	61–80 4	81–90 4	>90 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 2	Herbs, Deciduous Shrubs 3	Willows, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Ponderosa, Antelope Brush, Bitterbrush 5
4	Fine Woody Debris Continuity (<6cm) (% cover)	<1% coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1% coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–60 5	61–80 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>50 and <60% coverage in crown closure 8	61–80 2	41–60 3	20–40 4	≤20 5
8	Live and Dead Conifer Crown Base Height (m)	3+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–6000 20	>6000 30
10	Forest Health (% of dieoff and re-foresting)	Standing Dead and Partly Down <5 or >20 stems/ha 0	Standing Dead and Partly Down 5–15 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within Zone (%)	0–20 0	21–40 3	>60 5	61–80 7	>80 10

Sub Total 24 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWHxm1 & dk2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP/BG 20
13	Historical Wildfire Occurrence (by BTMB Fire Zone)	G5, B1, K2, G6, Y3, R9, K9, V3, R5, K8, K7 1	G3, G8, K3, R4, Y6, G1, G9, Y8 5	G7, C5, G4, C4, Y1, C1, R6 7	K1, K5, K9, K2, C3, M5, Y6, R4, K7, K2 10	M7, R4, K3, M1 15

Sub Total 20 /30

	Topography	A	B	C	D	E
14	Aspects (>16% slope)	Flat 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and more score to the right 3	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep rolling, minor low relief gullies 5	Consistent slope, deep stories or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha Hobarred Forest Land 1	North and/or east aspects flammable, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread Large rolling grades 5	Rolling terrain, minor water bodies, variable aspect and slope changes, partial restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /95 /246*

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 69

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom. 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no enclosure 3	Perimeter Interface, with enclosure 5	Intermix, > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 98 20	Sidehill >500 200–500 <200 m 8 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is > 29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND-URBAN INTERFACE WILDFIRE THREAT SCORE 27 /155

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–48	☐
Moderate	49–95	☒
High	96–169	☐
Extreme	>169	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

EAR Updated: January 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 59

Photo 59-1 @ 360 degrees

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WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 60 Community: City of Kamloops

Assessor: B Marcon Geographic Location/Street Name: Juniper Hill

Date: Apr 19/16 GPS/UTM: N50 39' 35.9" W120° 16' 13.8"

Photos: # 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime Rank	1=<3 1	2–<5 Dry Zonal Wet 5 3 1	5=<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Mosses, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pasgrass, Juniper 6	Sagebrush, Bitterbrush, Antelope Brush, Spanish Broom 8
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 7	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifers Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>30 or <40% coniferous crown closure 4	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–3 7	1–<2 30	<1 85
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–20 5	Standing Dead and Partly Down >20–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover Within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 53 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 4	IMF, MS, SBPS, CWHdk1&dk2, BWBSmw – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMB Fire Zone)	66, R1, R2, 66, Y5, R9, W3, W5, R8, R7 1	63, G8, R3, R4, Y6, G1, G9, Y8 5	G7, C5, G4, C6, Y1, C1, R6 8	B1, K5, K3, K2, E3, N5, K8, R4, R7, N2 10	N7, N4, K2, N8 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and more level 16–29% slopes 5	30–40 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep or ledgy, shallow gullies 5	Consistent slope, deep draws/gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Obstructions to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large fuel bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous consistent topography No restriction to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 100 /240**

	Structural	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope/ridgetop, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Permeter Interface, No Industrial 3	Perimeter Interface, with Industrial 5	Intermix >1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Subalpi >500 200-500 <200m 1 12 25	Flat/Rolling >500 200-500 <200m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 40 /55

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel cell location >20.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygon.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

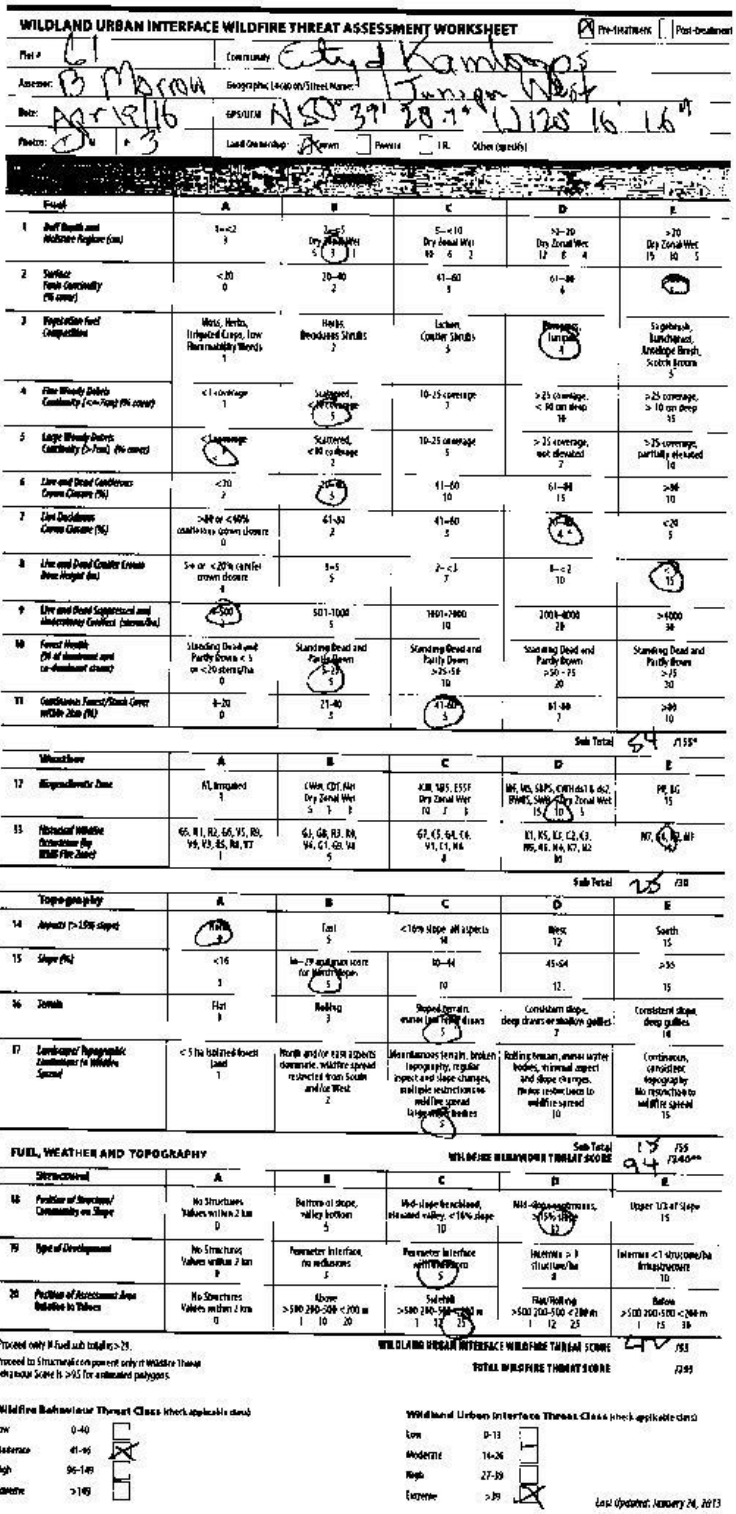
Wildland Urban Interface Threat Class (check applicable class)

Low	0-23	☐
Moderate	24-26	☐
High	27-55	☐
Extreme	>55	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 60

Photo 60-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment [X] Post-treatment [ ]

Plot # 61 Community City of Kamloops

Assessor: B Marrow Geographic Location/Street Name: Juniper West

Date: Apr 19/16 GPS/UTM N50° 39' 28.7" W120° 16' 16"

Photos: 1 to 3 Land Ownership: [X] Crown [ ] Private [ ] I.R. [ ] Other (specify)

61

Fuels	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<2 5	2–5 Dry Zonal Wet 5 (3) 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 5	61–80 8	(81–100) 10
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	(Evergreen, Juniper) 8	Sagebrush, Ponderosa, Bunchgrass, Douglas-fir, Scotch broom 10
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10% coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Conifer Crown Closure (%)	<20 2	(21–40) 3	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 5	(81–100) 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or < 20% conifer crown closure 4	3–5 5	2–<3 7	1–<2 10	(<1) 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	(<500) 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down (5–25) 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 2km (%)	1–20 0	21–40 3	(41–60) 5	61–80 7	>80 10

Sub Total 54 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, Alp Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 5	MH, MS, SBPS, CWH dks1 & dk2, IDFdk5, SWB Dry Zonal Wet 15 (10) 5	PP, BG 15
13 Historical Wildfire Occurrence (by MFLNRO Fire Zone)	65, R1, R2, 66, V5, R9, V9, V3, 85, R8, V7 1	63, G8, F3, R4, V4, C1, G9, V8 5	67, C5, 64, C6, V1, C1, M6 8	K1, K5, K6, C2, K3, M5, K8, M4, K7, M2 10	(M7, C4, M2, M5) 15

Sub Total 25 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	(N,NE) 3	East 5	<10% slope, all aspects 10	West 12	South 15
15 Slope (%)	<16 3	16–29 and gives score for North slope (5)	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, evenly spaced drains (5)	Consistent slope, deep drains or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Continuum re Wildfire Spread	< 5 ha Isolated Forest Land 1	North and/or NE/NW ASPECTS dominate, Wildfire spread restricted from South and/or West 2	Discontinuous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread (large water bodies 5	Rolling terrain, uneven water bodies, minimal aspect and slope changes. No real restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 94 /340**

Structures	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, terraced valley, <16% slope 10	Mid-slope continuous, >16% slope (12)	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no mitigation 5	Perimeter Interface with mitigation (5)	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Intermediate 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Subdivision >500 200–500 <200 m 1 (12) 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE (47) /93

TOTAL WILDFIRE THREAT SCORE /293

* Proceed only if Fuel sub totals >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for associated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	[ ]
Moderate	41-95	[X]
High	96-149	[ ]
Extreme	>149	[ ]

Wildland Urban Interface Threat Class (check applicable class)

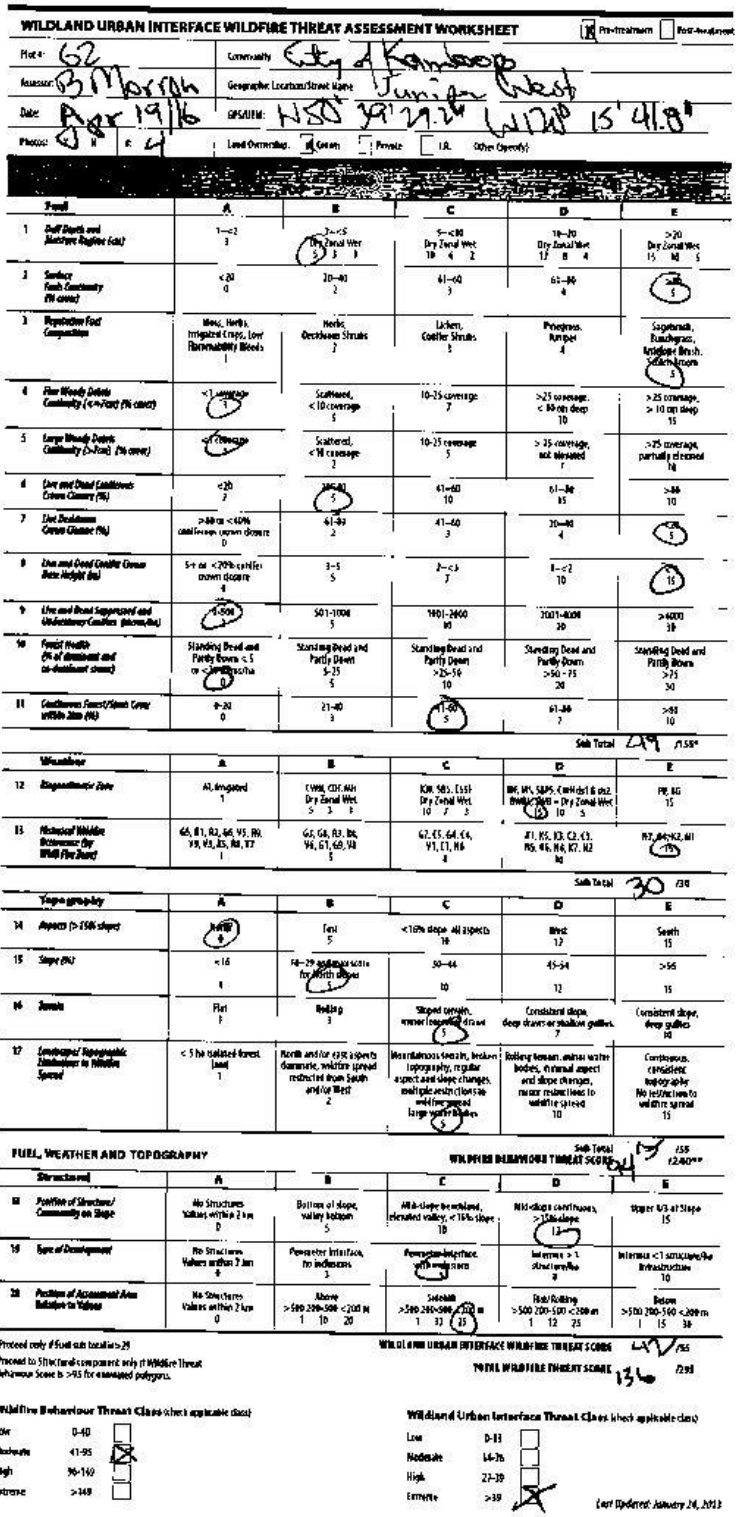
Low	0-13	[ ]
Moderate	14-26	[ ]
High	27-39	[ ]
Extreme	>39	[X]

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 61

Photo 61-1 @ 360 degrees

62



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 62 | Community: City of Kamloops

Assessor: BJ Morrow | Geographic Location/Street Name: Juniper Ridge

Date: Apr 19/16 | GPS/UTM: N50 39' 29.2" W120 15' 41.8"

Photos: ☒ N E 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (Specify)

Fuels	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1—<2 3	2—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 4 2	10—20 Dry Zonal Wet 15 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3 Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Rabbitbrush 5
4 Fine Woody Debris Continuity (<7cm/3cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 80 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<2 coverage 2	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Conifer Crown Closure (%)	<20 2	20—40 5	41—60 10	61—80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 cm <40% coniferous crown closure 0	41—60 2	41—60 3	20—40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3—5 5	2—<3 7	1—<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501-1000 5	1001-2400 10	2001-4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <200 trees/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Coniferous Forest/Stand Cover within 2km (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 29 /158*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	IDF, MS, ESSF Dry Zonal Wet 10 7 3	BWBS, SWBS, CWHdm1 & dm2, BWBSmk1 = Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by Wildfire Zone)	65, 81, R2, 65, V5, R9, V9, V8, X5, R8, X7 1	G5, G8, R3, B8, V6, G1, G9, V8 5	G2, C5, G4, C6, V1, C1, N6 8	J1, K5, K3, C2, C3, N5, N6, N6, K7, N2 10	N7, N4, N3, N1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspect (>25% slope)	North 0	East 5	<15% slope, all aspects 10	West 12	South 15
15 Slope (%)	<15 1	15—29 add one score for each 10% slope 5	30—44 10	45-54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor topographic draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Continuum to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple section to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 37 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 134 /240

Structures	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter-Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Rural/Urban Interface 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Same >500 200-500 <200 m 1 33 35	Road Building >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

Sub Total 47 /55

* Proceed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 47 /55

TOTAL WILDFIRE THREAT SCORE 136 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

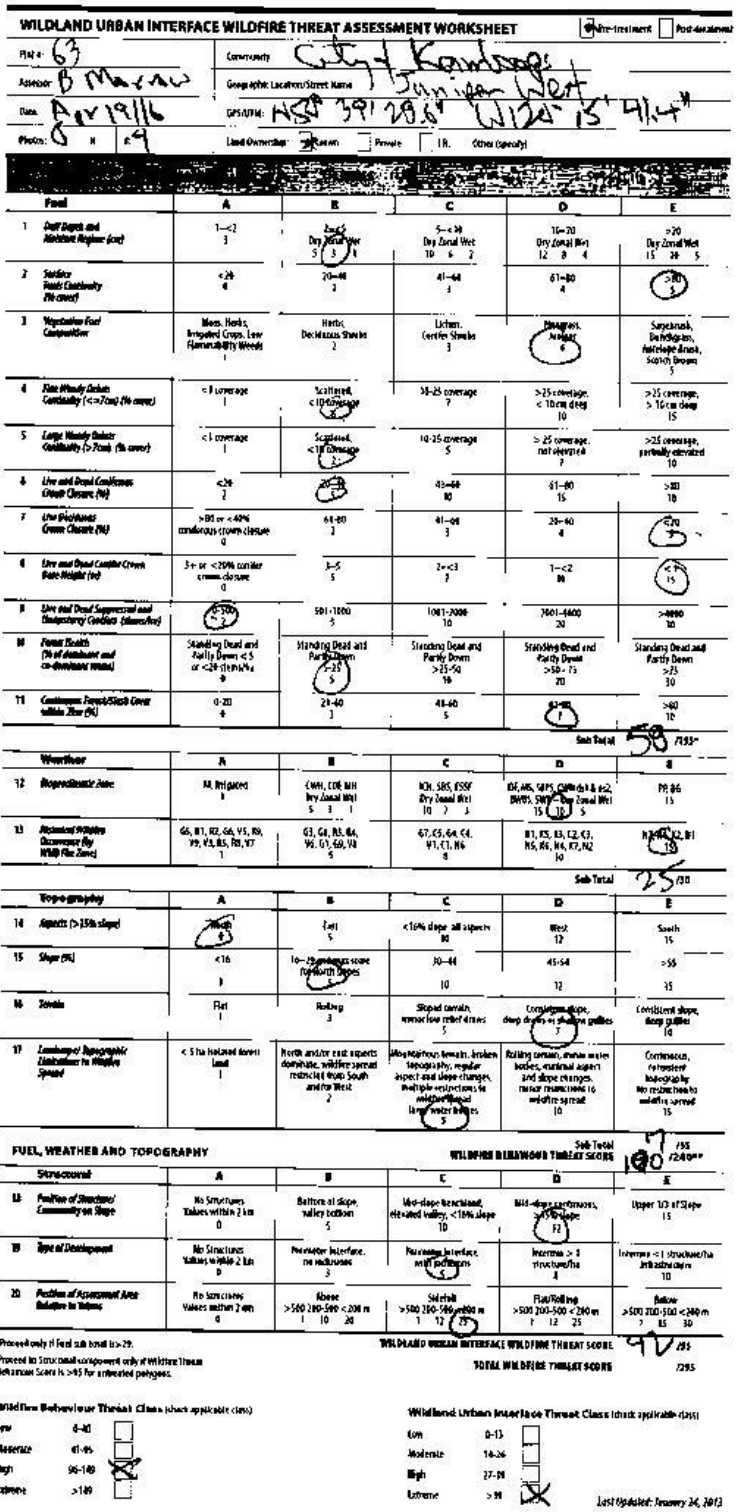
Wildland Urban Interface Threat Class (check applicable class)

Low	0-33	☐
Moderate	34-76	☐
High	77-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 62

Photo 62-1 @ 330 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 63
Community: City of Kamloops
Assessor: B Marcus
Geographic Location/Street Name: Juniper West
Date: Apr 19/16
GPS/UTM: N5[illegible] 391 28.6" W120° 15' 41.4"
Photos: 0 N E9
Land Ownership: ☐ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Draft Depth and Moisture Regime (cm)	1—<2 3	2—<5 Dry Zonal Wet 5 3 1	5—<30 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3	Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Evergreen, Arbutus 4	Sagebrush, Bitterbrush, Rabbitbrush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	< 1 coverage 1	Scattered, <10% coverage 2	10-25 coverage 3	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	< 1 coverage 1	Scattered, <10% coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20—40 4	41—60 10	61—80 15	>80 18
7	Live Deciduous Crown Closure (%)	>80 or < 40% coniferous crown closure 0	61-80 3	41—60 3	20—40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	3+ or <20% conifer crown closure 0	3—5 5	2—<3 7	1—<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down <5 or <20 stems/ha 0	Standing Dead and Partly Down ~25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50-75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 30m (%)	0-20 0	20-40 3	41-60 5	61-80 7	>80 10
					Sub Total	50 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AR, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dh1 & ds2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WHUB Fire Zone)	G6, H1, H2, G6, V5, R9, Y9, V3, R5, P21, Y7 1	G3, G4, R5, G4, Y6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, H6 8	H1, K5, E3, E2, C3, R5, R6, H4, K7, N2 10	H3, H2, H1 15
					Sub Total	25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 0	16—29 moderate score for north slopes 5	30—44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief drives 5	Complex slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Elements to Modify Spread	< 5 ha isolated down/ Level 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mog/Marshes, terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, shrub water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 190 /255 — **WILDFIRE BEHAVIOUR THREAT SCORE** 57 /240**

	Structure	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope northeast, <30% slope F2	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no structures 3	Perimeter Interface, with structures 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Intact structure 10
20	Position of Assessment Area Relative to Values	No structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for urbanized polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 92 /295

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-38	☐
Extreme	>38	☒

Last Updated: February 24, 2013

63

City of Kamloops – Wildfire Threat Assessment Picture – Plot 63

Photo 63-1 @ 200 degrees

64

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 64 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Juniper Ridge

Date: Apr 19/16 | GPS/UTM: N50 39' 30" W120° 14' 58" 2 17

Photos: Y N #: 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	1–<2 3	2–<5 Dry Zonal Wet 5 (3) 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 (5)
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper (4)	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage (5)	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage (1)	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	<20 2	20–40 (5)	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80 or <40% coniferous crown closure 0	61-80 2	41–60 3	20–40 4	<20 (5)
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2–<3 (7)	1–<2 10	<1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	0-500 (2)	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	41-60 5	61-80 (7)	>80 10

Sub Total 47 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB Dry Zonal Wet 15 (10) 5	PP, BG 15
13	*Historical Wildfire Occurrence (by WHB Fire Zone)*	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, K4, K2, N1 (15)

Sub Total 25 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	North (0)	East 5	<16% slope all aspects 10	West 12	South 15
15	*Slope (%)*	<16 1	16–29 and max score for North Slopes (5)	30–44 10	45-54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies (7)	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies (5)	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY Sub Total 89 /55

WILDFIRE BEHAVIOUR THREAT SCORE /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope (12)	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions (5)	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 (20)	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 (20) 30

*Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 37 /55

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

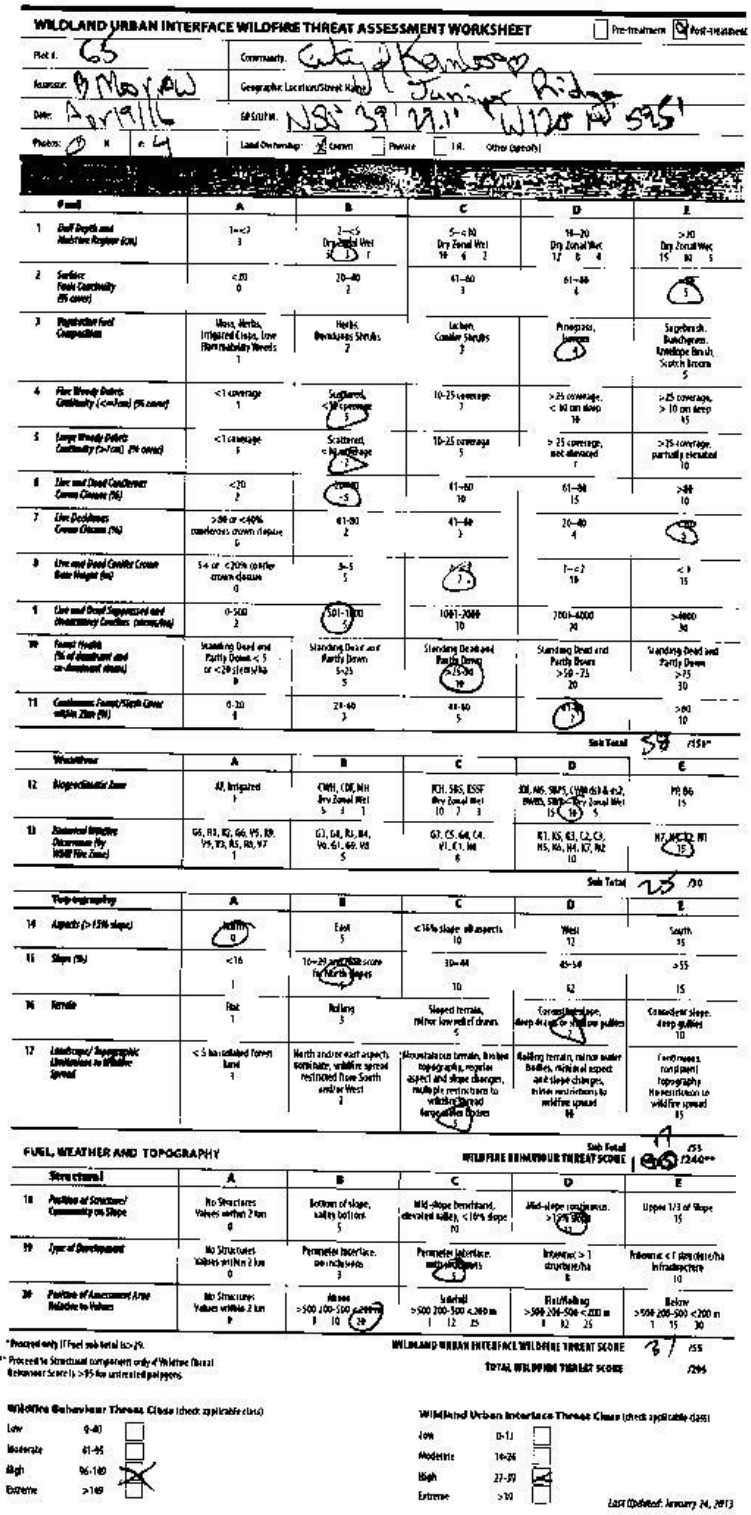
Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 64

Photo 64-1 @ 45 degrees

65



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 65 Community: City of Kamloops

Assessor: B May / AW Geographic Location/Street Name: Junior Ridge

Date: April 2016 GPS/UTM: N50 39 29.1 W120 19 59.5

Photos: Y N #: 4 Land Ownership: ☒ Comm ☐ Private ☐ I.R. ☐ Other (specify)

#		A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Shrubs 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Deadfall Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Sagebrush, <30% coverage 3	10–25 coverage 3	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, < 10 coverage 3	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>30 or <40% coniferous crown closure 0	41–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Overstorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down, < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down 25–50 10	Standing Dead and Partly Down 50–75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within Zone (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 58 /150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AP, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	MCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, (SWB dk1 & dk2, BWBS, SBPS – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WSAP Fire Zone)	G6, H3, K2, G6, V5, K9, V5, V3, K5, K8, V7 1	G1, G4, K1, K4, V6, G1, G6, V8 5	G7, C5, G4, C4, V1, C1, K6 8	K1, K5, K3, C2, C3, K5, K6, K4, K7, K2 10	K7, K6, C2, K1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<15% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and flat score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, rather low well of draws 5	Canyons/draws, deep ravines or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects, some valley, wildfire spread restricted from South and/or West 3	Mountainous terrain, limited topographic, regular aspect and slope changes, multiple restrictions to wildfire spread (large valley bottom) 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15

Sub Total 47 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 60 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no inclusions 3	Perimeter interface, with inclusions 5	Intermix: > 1 structures/ha 8	Intermix: < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 0 10 20	Same/Flat >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 0 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 87 /55

TOTAL WILDFIRE THREAT SCORE /295

* Proceed only if Fuel sub total is >9.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–140	☒
Extreme	>140	☐

Wildland Urban Interface Threat Class (check applicable class)

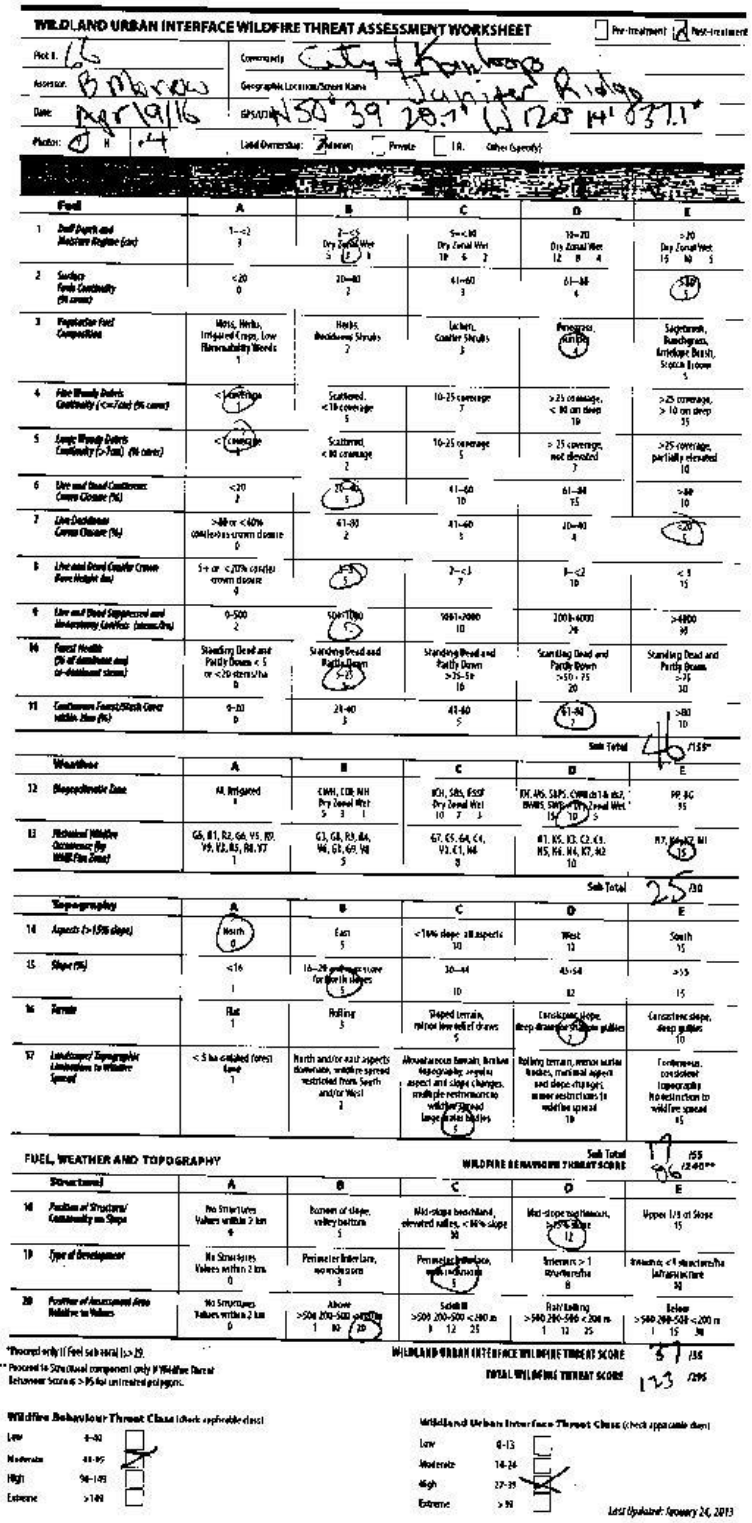
Low	0–13	☐
Moderate	14–26	☐
High	27–37	☒
Extreme	>37	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 65

Photo 65-1 @ 200 degrees

66



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment ☒

Plot #: 66 | Community: City of Kamloops

Assessor: B Marcoux | Geographic Location/Street Name: Juniper Ridge

Date: Apr 19/16 | UTM/UTM: N50° 39' 20.7" W120° 14' 837.1"

Photos: ☒ H ☐ ☐ | Land Ownership: ☒ Provincial ☐ Private ☐ I.R. ☐ Other (specify)

Fuel	A	B	C	D	E
1 Dead Fuel Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 3 2 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Perennial Grasses 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, < 10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 or < 40% coniferous crown closure 0	61-80 2	41–60 5	20–40 8	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10 Forest Health (% of deadfoot and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21-40 3	41-60 5	61-80 7	>80 10
				Sub Total	40 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	All Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WMU-Fire Zone)	G6, H1, R2, G6, V5, R9, V9, V2, R5, R8, V7 1	G3, G8, R3, R6, W6, G1, G9, W8 5	G7, C5, G4, C4, V3, C1, W6 8	H1, R5, K3, C2, C3, H5, H6, H4, K7, H2 10	H7, H4, K2, W1 15
				Sub Total	25 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 0	East 5	<10% slope: all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 percentage score for North slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 5	Sloped terrain, minor low relief draws 5	Consistent slope, steep draws/gullies 7	Consistent slope, steep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuels 1	North and/or east aspects downslope, wildfire spread restricted from South and/or West 2	Mountainous terrain, limited topographic regularity, aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor scarp bluffs, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography, no restriction to wildfire spread 15
				Sub Total	19 /55

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 96 /240**

Structure	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope benchland, elevated valley, < 30% slope 10	Mid-slope bench/saddle, >30% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures/ Values within 2 km 0	Perimeter Interface, no encroachment 3	Perimeter Interface, with encroachment 5	Intermix: > 1 structure/ha 8	Intermix: < 1 structure/ha Interface Fuel 10
20 Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Same >500 200-500 <200 m 1 12 25	Run/Rolling >500 200-500 <200 m 1 13 25	Below >500 200-500 <200 m 1 15 30
				WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	37 /135
				TOTAL WILDFIRE THREAT SCORE	133 /295

*Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–80	☐
Moderate	81–95	☒
High	96–149	☐
Extreme	>149	☐

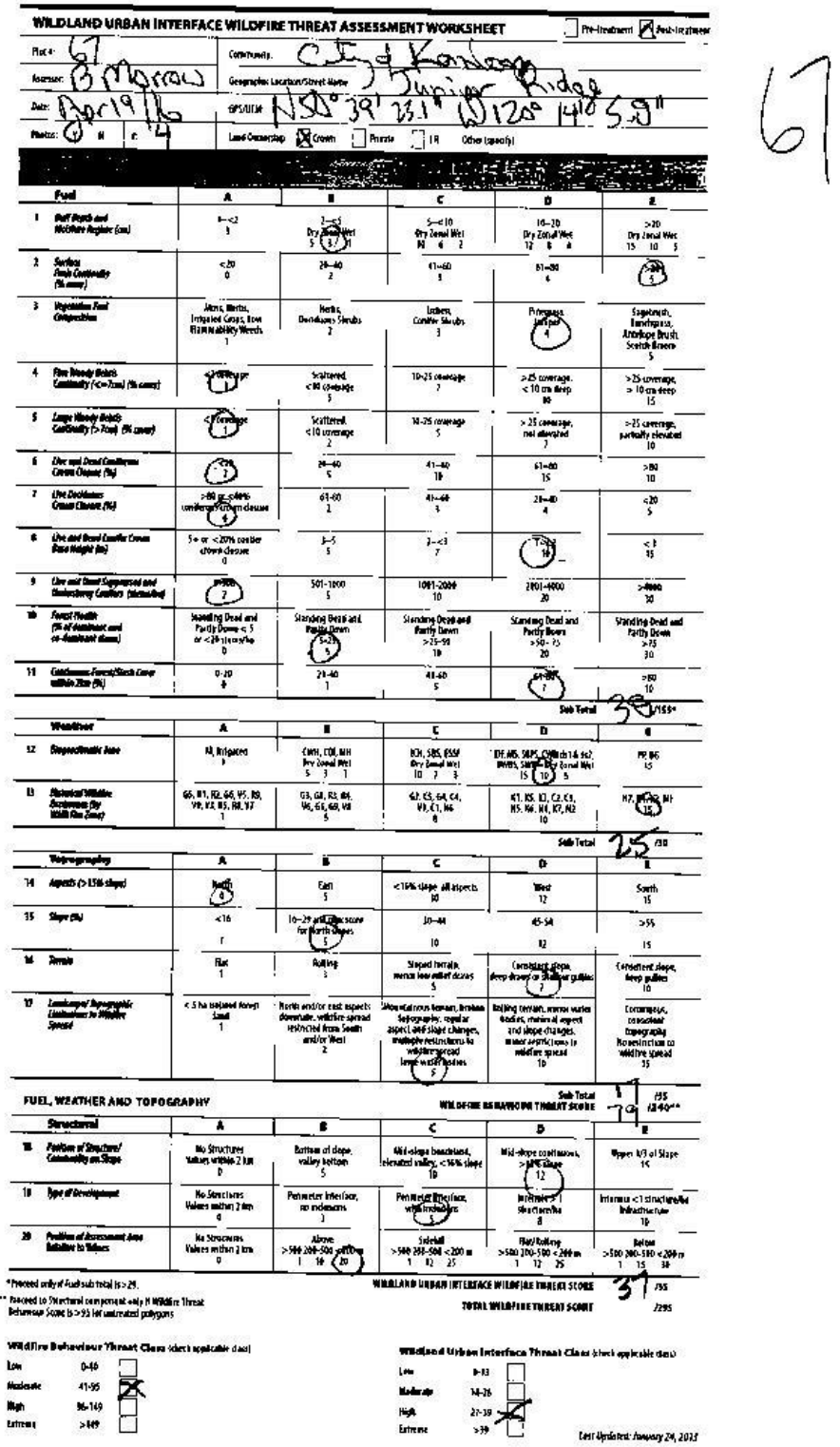
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 66

Photo 66-1 @ 200 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☒ Post-treatment

Plot #: 67
Assessor: B Morrow
Date: Apr 19/16
Photos: # 3 # 4
Community: City of Kamloops
Geographic Location/Street Name: Juniper Ridge
GPS/UTM: N50° 39' 23.1" W120° 14' 5.9"
Land Ownership: ☒ Crown ☐ Private ☐ FN Other (specify)

67

	Fuel	A	B	C	D	E
1	Duff Depth and Woody Debris (cm)	0–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet M 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Lichen 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<20% cover 1	Scattered, <80 coverage 3	10-25 coverage 7	>25 coverage, < 10 cm deep 80	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 4	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–20 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within Zone (%)	0–20 0	21–40 1	41–60 5	61–80 7	>80 10

Sub Total 30 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AB, Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ch 1 & 2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	66, W1, H2, 66, W5, H9, V9, V2, W5, H4, V7 1	G3, G8, R3, 46, W6, G5, 60, V8 5	62, K5, 64, C4, V9, K1, M6 8	K1, K5, K3, C2, K9, W5, N4, K7, H2 10	H7, W2, M1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and 1 pt/% score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects downslope, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken Sub-topographic, regular aspect, and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Contiguous, consistent topography No restriction to wildfire spread 15

Sub Total 17 /55
WILDFIRE BEHAVIOUR THREAT SCORE 72 /240**

FUEL, WEATHER AND TOPOGRAPHY

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no enclosures 3	Perimeter interface, with enclosures 5	Intermix <1 structure/ha 8	Intermix <1 structure/ha Industrial type 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above: >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 37 /55

TOTAL WILDFIRE THREAT SCORE /295

* Proceed only if Fuel sub total is > 29.
** Proceed to Structural component only if Wildfire Threat Behaviour Score is > 55 for untreated polygons

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 29, 2015

City of Kamloops – Wildfire Threat Assessment Picture – Plot 67

Photo 67-1 @ 210 degrees

68

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☐ Pre-treatment ☒ Post-treatment

Plot #: 68 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: East of Sunnyside Ridge

Date: Apr 19/16 | GPS/RTM: N50° 39' 186" W120° 13' 79

Photos: ☒ N # 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

[redacted]

	Fuel	A	B	C	D	E
1	Surface Fuel Depth and Moisture Regime (FBP)	1 = <4 3	2 = <5 IDF Dry Zonal Wet 5 3 1	5 = <10 Dry Zonal Wet MS 9 7	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Coniferous Shrubs 3	Pinegrass, [illegible] 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 sporadic 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 sporadic 1	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>10 at <40% conifer crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ at <20% conifer crown closure 0	2–<5 3	1–<2 7	1–<2 10	<1 15
9	Live and Dead Aggressive and Moderately Conifer (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of deciduous and co-dominant stems)	Standing Dead and Partly Down < 5 or <250 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 37 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Interzonal 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dry & wet, BWBS, SWB – Dry Zonal Wet 15 18 5	PP, BG 15
13	Historical Wildfire Occurrence (by Small Fire Zone)	G5, H1, H2, G6, H5, H9, Y9, Z2, H5, H8, Y7 1	G3, G8, H3, H4, W, G1, G9, V4 5	G7, C5, G4, C4 W1, C1, H6 8	K1, K9, X1, C2, C3, H5, K6, H1, K7, H2 10	[illegible] 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>/30% slope)	North 0	East 5	<10% slope all aspects 10	West 12	South 15
15	Slope (%)	<26 1	16–29 and max score for flat slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 5	Sloped terrain, minor benches and draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape Topographic Fragmentation to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Substantial non-forest, because topography, major aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, steeper water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 27 /155

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 94 /248**

	Structures	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 4	Bottom of slope, valley bottom 5	Mid-slope bench/land, elevated valley, < knoll, slope 10	Mid-slope continuous, >10% Slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 4	Perimeter/Interface, no enclosure 3	Perimeter/Interface, some enclosure 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 15
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 240–599 <200 m 1 10 20	Sidehill >500 250–599 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

* Proceed only if final sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Scores >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 29 /35

TOTAL WILDFIRE THREAT SCORE 123 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-48	☐
Moderate	49-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-38	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 68

Photo 68-1 @ 315 degrees

69

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 69 | Community: City of Kamloops

Assessor: B Marrow | Geographic Location/Street Name: East of Juniper Ridge

Date: Apr 19/16 | GPS/UTM: N52 39' 13.1" W120 13' 11.2"

Photos: [redacted] | Land Ownership: ☒ Crown ☐ Private ☐ R.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels (continuity (% cover))	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pyrophytic Shrubs 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <25 coverage 3	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	21–40 3	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>30 or <40% coniferous crown closure 0	61–80 1	41–60 3	21–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 1	41–60 5	61–80 7	>80 10
						Sub Total /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH with 1 & 02, BWBS, SBS = Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Ignition Occurrence (by WHR Fire Zone)	65, 81, 82, 66, 95, 89, 99, 93, 85, 88, 97 1	63, 68, 83, 88, 86, 91, 69, 98 5	67, 55, 64, 84, 91, 61, 86 8	83, 85, 83, 84, 87, 82 10	92, 82, 81 15
						Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 1	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and more gentle on North slopes 5	30–44 10	45–64 12	>65 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Contingent slope, deep draws or broad gullies 7	Consistent slope, deep gullies 10
17	Continuous Topographic Limitations to Wildfire Spread	< 5 ha isolated down lead 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
						Sub Total 30 /75
	FUEL, WEATHER AND TOPOGRAPHY				WILDFIRE BEHAVIOUR THREAT SCORE	120 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >25% slope 13	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peninsular Interface, bounding WHR 3	Peninsular Interface, within the WHR 5	Intermix, > 1 structure/ha 8	Island or < 1 structure/ha Infrastructure 20
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 13 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	129 /155

* Proceed only if fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for unrisketed polygons.

TOTAL WILDFIRE THREAT SCORE /395

Wildfire Behaviour Threat Class (check applicable class)

Low	0–60	☐
Moderate	61–95	☐
High	96–149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

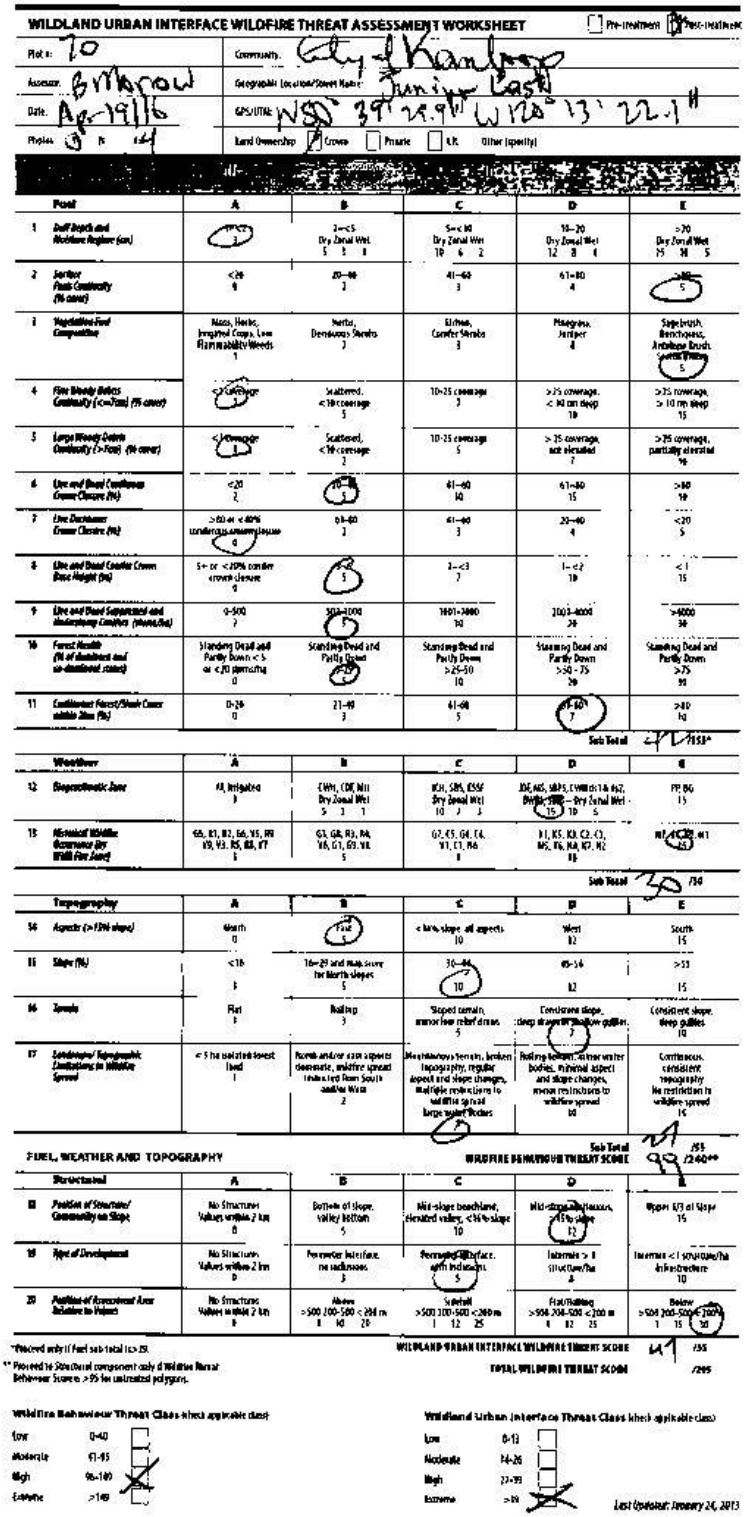
Low	0–13	☐
Moderate	14–26	☐
High	27–39	☒
Extreme	>39	☐

Last Updated: January 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 69

Photo 69-1 @ 90 degrees

10



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 70

Assessor: BMarrow

Date: Apr 19/16

Physiog: [illegible]

Community: City of Kamloops

Geographic Location/Street Name: Juniper East

GPS/UTM: NAD 39 24.9 W 120 13 22.1

Land Ownership: ☒ Crown ☐ Private ☐ N.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 3	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Forbs, Deciduous Shrubs 3	Ericas, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrasses, Antelope Brush, Conifer Shrubs 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<5 coverage 0	Scattered, <10% coverage 5	10–25 coverage 7	>25% coverage, < 10 cm deep 10	>25% coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5% coverage 1	Scattered, <10% coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	> 25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 4	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>50 or <40% coniferous admixture 0	41–80 2	61–80 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3 3	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–3000 10	2001–4000 20	>4000 30
10	Forest Health (% of deciduous and co-dominant stems)	Standing Dead and Partly Down <5 or <20 stems/ha 0	Standing Dead and Partly Down 20	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 20m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 27 /153*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AR, Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	BGH, SBPS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, IMPS, CWH dm1 & dk2, BWBS, SBS – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	65, B3, B2, E6, Y5, P9 B9, V3, R5, B8, F7 5	G3, G8, H3, R4, V6, G1, G9, V8 5	G7, E5, G4, E4, V1, C1, R6 8	I1, K5, K3, C2, C3, M5, F6, K4, K7, H2 10	M7, K10, W1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	Flat 5	< 15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 0	16–29 and max. score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 0	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	Ravine and/or east aspects dominate, wildfire spread limited from South and/or West 2	Non-continuous terrain, broken topography, regular aspect and slope changes, Multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, regional aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 27 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 99 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structure Values within 2 km 0	Bottom of Slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope plateaus, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structure Values within 2 km 0	Perimeter Interface, no subdivision 3	Perimeter Interface, with Subdivision 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha in Subdivision 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 < 200 m 8 10 20	Same/all >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 8 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 41 /155

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–149	☒
Extreme	>149	☐

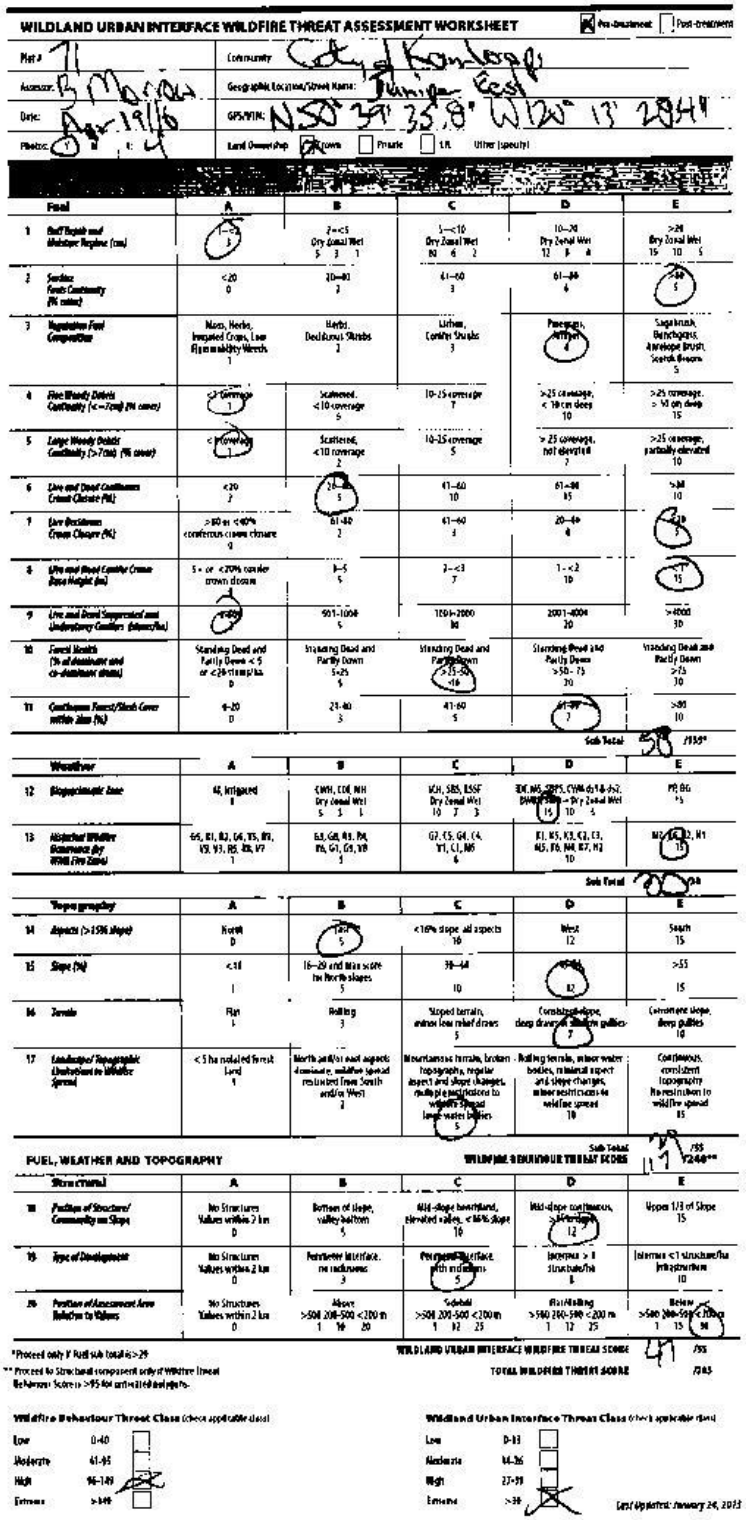
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–99	☐
Extreme	>99	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 70

Photo 70-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☒ Post-treatment ☐

Plot # 71 | Community: City of Kamloops

Assessor: B Morton | Geographic Location/Street Name: Tunkwa East

Date: Apr 19/16 | GPS/PIN: N50° 39' 35.8" W120° 13' 29.4"

Photos: Y N # | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 Dry Zonal Wet 5 3 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 8 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Willow 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<3 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	< 3 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Continuous Crown (Ladder Fuel)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Overstorey Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 8	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5 + or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	/35*
	Weather	**A**	**B**	**C**	**D**	**E**
12	Biogeoclimatic Zone	AT, Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1&ds2, BWBS mw – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WHR Fire Zone)	65, R1, R2, D6, Y5, W1, V3, V5, R5, R8, V7 1	E8, G8, R3, P8, P6, G1, G5, Y8 5	G2, E5, G4, C4, Y1, C1, M5 6	K1, M5, K3, K2, E3, M3, F6, M4, K7, M2 10	M7, M6, M2, M1 15
					Sub Total	/30
	Topography	**A**	**B**	**C**	**D**	**E**
14	Aspects (>15% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and 16 in score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Complex slope, deep draws or shallow gullies 7	Extreme slope, deep gullies 10
17	Landscape/Topographic Characteristic to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	/55
	FUEL, WEATHER AND TOPOGRAPHY				**WILDFIRE BEHAVIOUR THREAT SCORE**	/120**
	Structural	**A**	**B**	**C**	**D**	**E**
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope heartland, elevated valley, < 16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no inclusions 3	Perimeter interface, with inclusions 5	Isolated > 1 Structure/ha 8	Intermix <1 structure/ha Intermixture 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Subdivision >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	/55
					TOTAL WILDFIRE THREAT SCORE	/243

*Proceed only if Fuel sub total is >29

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for active and high plots.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 71

Photo 71-1 @ 360 degrees

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 72 | Community: City of Kamloops

Assessor: Morgan | Geographic Location/Street Name: Juniper

Date: Apr 19/16 | GPS/UTM: N50° 39' 45.4" W120° 15' 45.7"

Photos: (Y) N #: 4 | Land Ownership: (A) Crown ☐ Private ☐ I.R. ☐ Other (specify)

72

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	(<2) 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	(>80) 5
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	~~Pinegrass~~, (Juniper) 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	(<1 coverage) 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	(<1 coverage) 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	(<20) 2	20–40 5	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80 or <40% coniferous crown closure 0	61-80 2	41–60 3	20–40 4	<20 5
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	(<500) x 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	(41-60) 5	61-80 7	>80 10

Sub Total 25 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB – Dry Zonal Wet (15) 10 5	PP, BG 15
13	*Historical Wildfire Occurrence (by WMB Fire Zone)*	G5, R1, R2, G6, Y5, R9, V9, V3, R5, R8, V7 1	G3, G8, R7, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, K4, K2, N1 (15)

Sub Total 30 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	(North) 0	East 5	<16% slope all aspects 10	West 12	South 15
15	*Slope (%)*	<16 1	(16–29 and max score for North slopes) 5	30–44 10	45-54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	(Sloped terrain, minor low relief draws) 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 68 /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bencland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 49 /55

TOTAL WILDFIRE THREAT SCORE /295

* Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 72

Photo 72-1 @ 225 degrees

73

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 73 | Community: City of Kamloops

Assessor: B Morrow | Geographic Location/Street Name: Petrosanz Dr

Date: Apr 19/16 | GPS/UTM: NAD 83 51° 19.81' W120° 20' 9.2"

Photos: 3 N 4 | Land Ownership: ☒ Crown ☐ Private ☐ FN Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1—<2 3	2—<5 Dry Zonal Wet 2 1	5—<10 Dry Zonal Wet M 4 2	10—20 Dry Zonal Wet 14 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Agropyron/Bunch, Conifer Below 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <30 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, < 10 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20—40 5	41—60 10	61—80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 1	61-80 2	41—60 3	20—40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown density 6	3—5 5	2—<3 7	1—<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	1-500 2	501-1000 5	1001-2000 10	2001-4000 20	> 4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down, < 5 or >25 Standing 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50- 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 31 /158*

	Biogeoclimatic	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Ieiglated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP 20
13	Historical Wildfire Occurrence (by WUBI Fire Zone)	G5, H1, H2, G6, H5, H9, V1, V2, B5, H8, V7 1	G3, G8, R3, B4, W5, G1, G9, V8 5	G7, C5, G4, C4, V6, C1, N6 8	K1, K5, H3, C2, C3, N5, N6, N4, K7, N2 10	N3, N1, K6, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspect (> 25% slope)	Flat 0	East 5	<10% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10—29 continuous score between slopes 5	30—44 10	45—54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, steep drainages/shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple reactions to wildfire spread, large valley barriers 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 19 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/land, elevated valley, < 10% slope 10	Mid-slope continuous, >10% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values within 2 km 0	Peninsular interface, no intermix 3	Peninsular interface, with intermix 5	Island: > 1 structure/ha 8	Island: < 1 structure/ha Intermix only 10
20	Position of Assessment Area Relative to Values	No Structures/ Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 13 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 47 /70

TOTAL WILDFIRE THREAT SCORE 175 /295

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 73

Photo 73-1 @ 200 degrees

74

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☐ Pre-treatment ☒ Post-treatment

Plot #: 74 | Community: City of Kamloops

Assessor: B Mayson | Geographic Location/Sheet Name: Peterson Ck

Date: Aug 9/16 | GPS/UTM: N50° 39' 10.7" W120° 20' 7.3"

Photos: 8 M 4 | Land Ownership: ☒ Crown ☐ Private ☐ IR ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<16 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 3	41–60 5	61–80 8	>80 9
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Pinaceae, Conifers 7	Sagebrush, Bunchgrass, Arrtemisia Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=2cm) (% cover)	< 8 coverage 1	Scattered, <10 coverage 2	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<8 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Canopy (%)	<20 2	21–40 4	41–60 10	61–80 14	>80 18
7	Live Deciduous Crown Canopy (%)	>80cm <40% conifer(ous) crown closure 0	61–84 2	41–60 3	20–40 6	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <30% conifer crown closure 0	3–<5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understory Conifers (stems/ha)	0–1000 2	1001–5000 5	1001–2000 10	2001–4000 20	>4000 30
10	Insect Health (% of deadfall and co-dominant stems)	Standing Dead and Partly Down < 5	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Stem Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 8	>80 10

Sub Total /150

	Weather	A	B	C	D	E
12 *	Biogeoclimatic Zone	All irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWHdh1 & h2, BWBS, SWB Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Weather Occurrence (by Wildfire Fire Zone)	65, 81, 82, 66, 95, 99, 89, 85, 84, 97 5	62, 68, 83, 86, 94, 61, 69, 98 5	67, 63, 64, 60, 91, 01, 96 8	81, 85, 80, 02, 03, 86, 96, 87, 92 10	87, 88, 92, 00 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for North Slopes 3	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief areas 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects downwards, wildfire spread restricted from South and/or West 3	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large waterbodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 17 /35

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** 84 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated Valley, <10% slope 10	Mid-slope cornices, >15% slope 14	Upper 1/3 of slope 15
19	Type of Development	No Structures Values within 2 km 0	Peripheral Interface, Non-Wildland 5	Peripheral Interface with Structures 5	Enveloped > 1 structure/ha 8	Enveloped < 1 structure/ha Infrastructure 20
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500-700-1000 <1200 m 1 10 20	Sidehill >500-700-1000 <1200 m 1 12 25	Flat/Rolling >500-700-1000 <1200 m 1 12 25	Below >500-700-1000 <1200 m 1 15 30

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for urbanized polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE 174 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–41	☐
Moderate	42–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

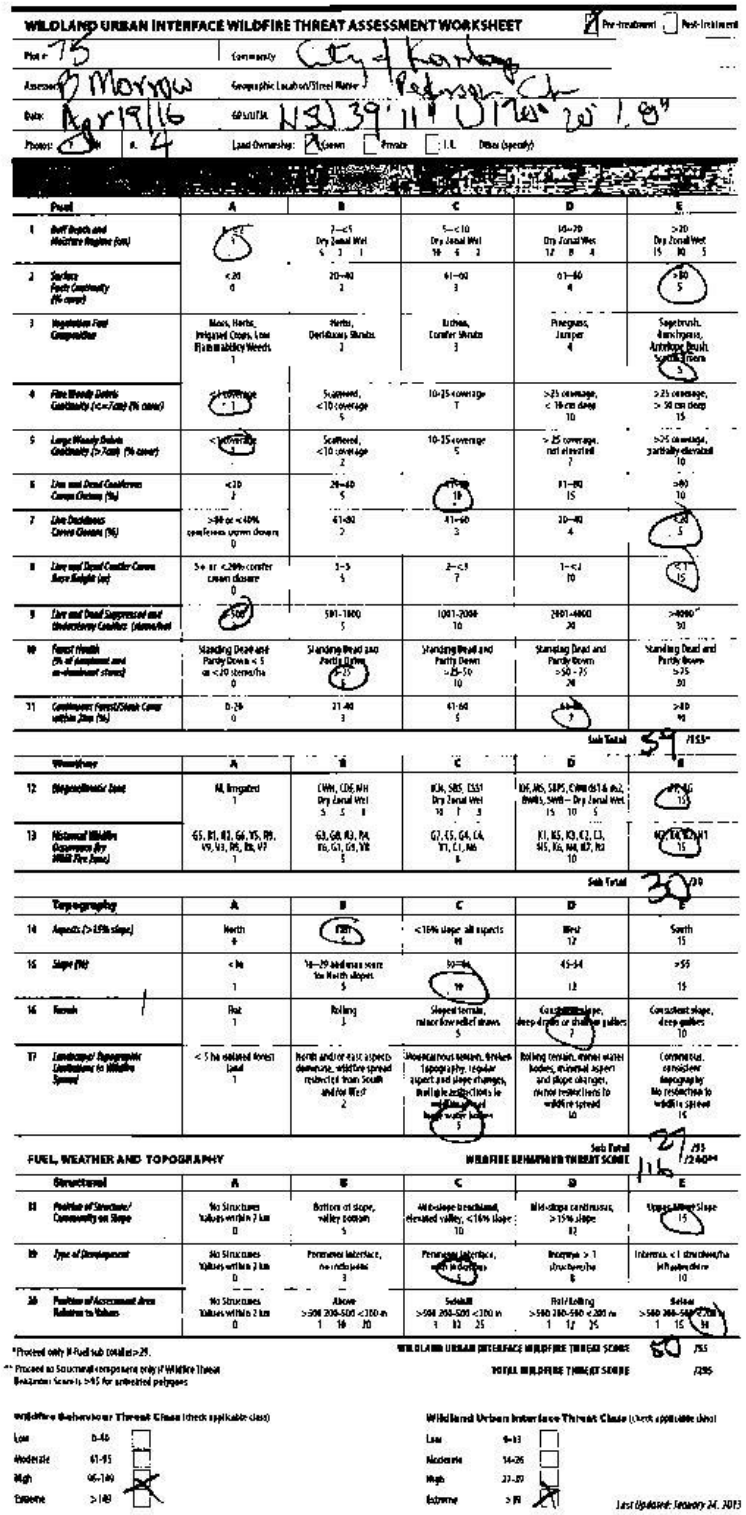
Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 14, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 74

Photo 74-1 @ 230 degrees

15



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot # 75 | Community: City of Kamloops

Assessor: D Morrow | Geographic Location/Street Name: Pelmagh Cr

Date: Apr 19/16 | GPS UTM: N 50 39' 11" UTM 20 U 1,89"

Photos: # 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Proximity	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	0	7—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Rabbitbrush, Antelope Brush, Scattered Trees 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Canopy Closure (%)	<20 2	20—40 5	41—60 10	61—80 15	>80 20
7	Live Deciduous Canopy Closure (%)	>80 or <40% coniferous crown closure 0	61—80 2	41—60 3	20—40 4	<20 5
8	Live and Dead Conifer Canopy Base Height (m)	5+ or <20% conifer crown closure 0	3—5 5	2—<3 7	1—<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10
					Sub Total	39 /155*

	Weighting	A	B	C	D	E
12	Biogeoclimatic Zone	AL Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 5 8	BGA, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB – Dry Zonal Wet 15 10 5	[illegible] 15
13	Historical Wildfire Occurrence (by Initial Fire Zone)	G5, H1, H2, G6, Y5, H9, V9, V3, H6, E6, V7 1	G3, G8, H3, P4, E6, G1, G9, Y8 5	G7, E5, G4, E4, Y1, C1, N6 8	J1, K5, K3, K2, C3, N5, K6, N4, K7, P2 10	K7, K4, K2, N1 15
					Sub Total	30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	[illegible] 2	<10% slope: all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16—29 and max score for North slopes 5	30—44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep drains or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects downwind; wildfire spread restricted from South and/or West 2	Mountainous terrain, difficult topography, regular aspect and slope changes, multiple restrictions to wildfire spread and high water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15
					Sub Total	27 /75
	FUEL, WEATHER AND TOPOGRAPHY				WILDFIRE BEHAVIOUR THREAT SCORE	116 /2400**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <15% slope 10	Mid-slope continuous, >15% slope 12	Upper/Mid Slope 15
19	Type of Development	No Structures Values within 2 km 0	Permanent interface, no restrictions 3	Permanent interface, with restrictions 5	Isolated > 1 structure/ha 8	Intermix < 1 structure/ha with restrictions 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Subdull >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	80 /155

*Proceed only if Fuel sub total is >29.

** Proceed to Structural components only if Wildfire Threat Behaviour Score is >95 for urbanized polygons

TOTAL WILDFIRE THREAT SCORE /2895

Wildfire Behaviour Threat Class (check applicable class)

Low	0-46	☐
Moderate	47-95	☐
High	96-190	☐
Extreme	>190	☒

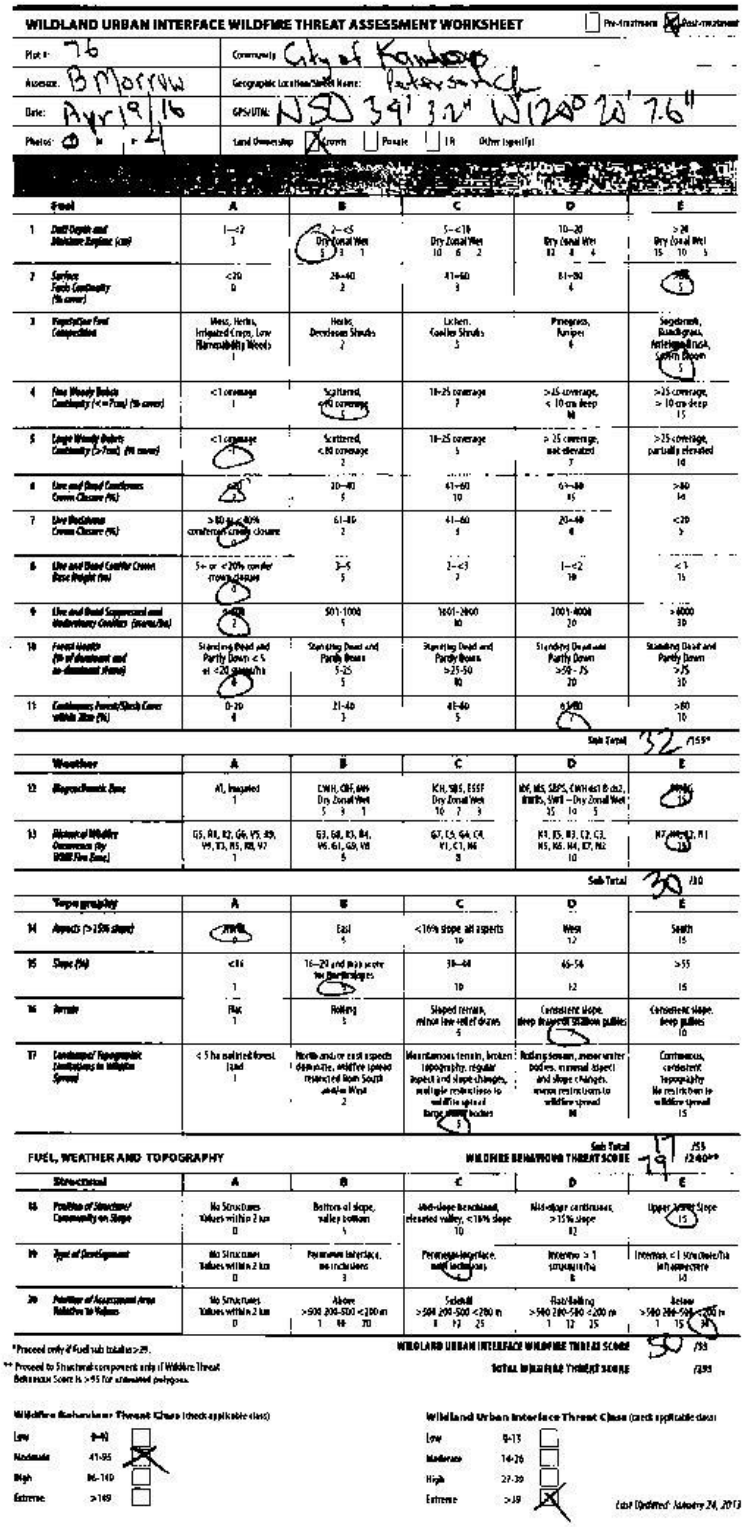
Wildland Urban Interface Threat Class (check applicable class)

Low	9-13	☐
Moderate	14-26	☐
High	27-51	☐
Extreme	>51	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 75

Photo 75-1 @ 225 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 76
Assessor: B Morrow
Date: Apr 19/16
Photos: ☒ ☐ #: 24

Community: City of Kamloops
Geographic Location/Block Name: Interior Ridge
GPS/UTM: N50 39' 32" W120° 20' 7.6"
Land Ownership: ☒ Crown ☐ Private ☐ FN ☐ Other (specify)

76

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1—<2 3	2—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 8 4 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels (coniferity (% cover))	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3 Vegetation/Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bluebunch, Antelope-Bitrush, Spotted Bloom 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <40 coverage 2	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 0	Scattered, <80 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 0	20—40 5	41—60 10	61—80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <20% coniferous crown closure 0	61-80 2	41—60 5	20—40 8	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3—5 5	2—<3 7	1—<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501-1000 4	1601-2000 10	2001-4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within Site (%)	0-20 1	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 32 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	MS, MS, SBPS, CWH dst B ds2, BWBS, SWB — Dry Zonal Wet 25 10 5	[illegible] 15
13 Historical Wildfire Occurrence (by WUI Fire Zone)	G5, A1, A2, G4, V5, A9, V9, T3, A5, V8, V7 1	G3, G8, A3, B4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, A6 8	K1, E5, A3, C2, C3, A5, K6, A4, K7, A2 10	A7, [illegible]2, A1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspect (>25% slope)	[illegible] 0	East 5	<10% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16—29 and high score for other slopes 5	30—44 10	45-54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 8	Consistent slope, deep gullies 10
17 Constraints/ Topographic Limitations to Wildfire Spread	< 5 ha natural forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, seasonal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 79 /240**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 1	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3rd Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter interface, no inclusions 3	Perimeter interface, some inclusions 5	Intermix > 1 structure/ha 8	Intermix, < 1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 [illegible] 20	Sidehill >500 200-500 <200 m 8 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 50 /355

TOTAL WILDFIRE THREAT SCORE /595

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-140	☐
Extreme	>140	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 76

Photo 76-1 @ 90 degrees

77

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☐ Pre-treatment ☒ Post-treatment

Plot #: 77 Community: Cherry Creek Ranch

Assessor: B Marcus Geographic Location/Street Name: Peterson Ln

Date: Apr 19/16 GPS/UTM: N50° 30' 59" W120° 20' 10.9"

Photos: Y N # 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify):

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	0–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 4	20–40 3	41–60 2	61–80 1	>80 0
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope-Brush, Saltbush Grass 5
4	Fine Woody Debris Continuity (<1–7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage 1	Scattered, <10 coverage 2	10–25 coverage 3	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifers Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 over 80% conifer w/ <5 deciduous closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <5 if no grass or broken canopy 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (trees/ha)	<500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <25 Standing/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within Site (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	/155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Anticipated 1	CWH, CDF, BWI Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWHdm1 & dk2 Units, SWB – Dry Zonal Wet 15 10 5	PP, BG, PGTA 20
13	Historical Wildfire Occurrence (by WUI/Fire Zone)	G5, K1, K2, G6, Y5, W1, W9, V3, R5, R8, W7 1	G3, G8, K3, R4, R6, G1, G9, V8 5	G7, E5, G4, L9, Y1, C1, M6 8	K1, R5, K3, K2, C3, M5, R8, M4, K7, R2 10	M3, K4, K5, W1 15
					Sub Total	/30

	Topography	A	B	C	D	E
14	Aspect (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–20 and max score for North slopes 5	21–40 10	40–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, some low relief draws 5	Consistent slope, deep drainages/shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape Scale Factors in Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 3	Non-forest terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread. Large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15
					Sub Total	/55

FUEL, WEATHER AND TOPOGRAPHY **WILDFIRE BEHAVIOUR THREAT SCORE** /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <40% slope 10	Mid-slope continuous, >40% slope 12	Upper 1/3rd Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 5	Perimeter Interface, with inclusions 7	Interior > 1 structure/ha 8	Interior <1 structure/ha Intermediate 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 13 25	Below >500 200–500 <200 m 1 15 30
						/95

*Proceed only if Fuel sub total is >29.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >45 for interface polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 50 /95

TOTAL WILDFIRE THREAT SCORE /285

Wildfire Behaviour Threat Class (check applicable class)

Low	0–46	☐
Moderate	47–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–49	☐
Extreme	>49	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 77

Photo 77-1 @ 225 degrees

78

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☐ Pre-treatment ☒ Post-treatment

Plot #: 78 | Community: City of Kamloops

Assessor: B Marcus | Geographic Location/Sheet Name: Juniper Ridge SA - A2

Date: Apr 19/16 | GPS/UTM: N50 30' 9.8" W120 21' 00"

Photos #: 0 to 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 4	61–80 6	>80 8
3	Vegetation Fuel Composition	Moss, Herbs, Injected Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Pinegrass, Juniper 6	Sagebrush, Bunchgrass, Antelope Brush, Squaw Brush 8
4	Fine Woody Debris Continuity (<=7.6cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7.6cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Canopy Closure (%)	1 1	20–40 4	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 of conifer, conifer less than 3 m tall 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ at <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 4	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 SWD/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
						Sub Total 46 /150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, BWBS, CWH dk1 & dk2, PARK, SBPS – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Intense Temperature (by Wildfire Fire Zone)	65, 81, N2, B6, Y5, H9, Y3, K5, B8, K7 0	63, G8, H3, B4, Y6, G1, G9, Y8 5	G7, C5, G4, C4, Y1, C1, H6 8	K1, K5, K3, C2, C3, K6, K4, H8, K7, H2 10	K9, K4, K2, H1 15
						Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>10% slope)	North 0	East 5	<10% slope, all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–29 and more gentle for short distances 3	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep ridges, minor valley areas 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Discontinuous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread and large barrier lengths 5	Rolling terrain, minor water bodies, irregular aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15
						Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 91 /245**

	Structure	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope or ridge, elevated valley, <10% slope 10	Mid-slope continuous, >10% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter/Interface, partly clustered 3	Perimeter/Interface, well clustered 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 43 /55

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for unmodified polygons.

TOTAL WILDFIRE THREAT SCORE 134 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☒
High	96–169	☐
Extreme	>169	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 78

Photo 78-1 @ 60 degrees

79

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☐ Pre-treatment ☒ Post-treatment

Plot # 79 Community City of Kamloops

Assessor: B Morrow Geographic Location/Street Name S. Flora Lake

Date: Apr 19/16 GPS/UTM: N50° 39' 26.6" W120° 21' 39.9"

Photos: 1 N 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 5 (5)	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<26 0	26–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Coyote Brush 5
4	Fine Woody Debris Continuity (<6.7cm) (% cover)	<3 percentage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <30 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<26 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous within closure 0	61–80 3	41–60 5	26–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 1	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within Zone (%)	0–20 0	21–40 3	41–60 5 (5)	61–80 7	>80 10

Sub Total 24 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BG, NS, SBPS, CWH dk & dk2, BWBS, SWB Dry Zonal Wet 15 (10) 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	65, 81, 82, 66, 95, 89, 99, 93, 85, 88, 87 1	G3, G6, R9, B6, V8, G1, 69, V6 5	67, C5, 64, C4, V1, C1, H6 8	91, K5, K3, C2, C3, N5, F8, N4, K7, K2 10	R7, 66, N2, N1 15

Sub Total 25 /30

	Topography	A	B	C	D	E
14	Aspect (> 15% slope)	North 0	East 5	<16% slope, all aspects 10	West 13	South 15
15	Slope (%)	<16 1	16–29 and most score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Valley 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, steep draws or shallow gulches 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuels 1	North and/or east aspects downslope wildfire spread restricted from South and/or West 2	Mountainous terrain, barrier topography, mainly aspect and slope changes, mod restriction to wildfire spread Large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 17 /75

FUEL, WEATHER AND TOPOGRAPHY SCORE 66 /125**

WILDFIRE BEHAVIOUR THREAT SCORE

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope, benchland, elevated plateau, <45% slope 10	Mid-slope continuous, >45% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no infill/sprawl 5	Perimeter Interface with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Interface/rural 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Switchback >500 200-500 <200m 8 12 (25)	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 39 /95

TOTAL WILDFIRE THREAT SCORE 104 /295

* Proceed only if fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygon.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 79

Photo 79-1 @ 340 degrees

80

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 80 | Community: City of Kamloops

Assessor: B Moran | Geographic Location/Street Name: Sutton Ave

Date: Apr 19/16 | GPS/UTM: N50 38' 27.6" W120° 21' 13.5"

Photos: Y N #: 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	0	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	<20 1	20–40 5	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80 or <40% coniferous crown closure 0	61-80 2	41–60 3	20–40 4	<20 5
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	41-60 5	61-80 7	>80 10

Sub Total 27 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	*Historical Wildfire Occurrence (by WMB Fire Zone)*	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, K4, K8, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	*Slope (%)*	<16 1	16–29 and max score for North slopes 5	30–44 10	45-54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large waterbodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY Sub Total 70 /55

WILDFIRE BEHAVIOUR THREAT SCORE 77 /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 40	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /55

TOTAL WILDFIRE THREAT SCORE 122 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

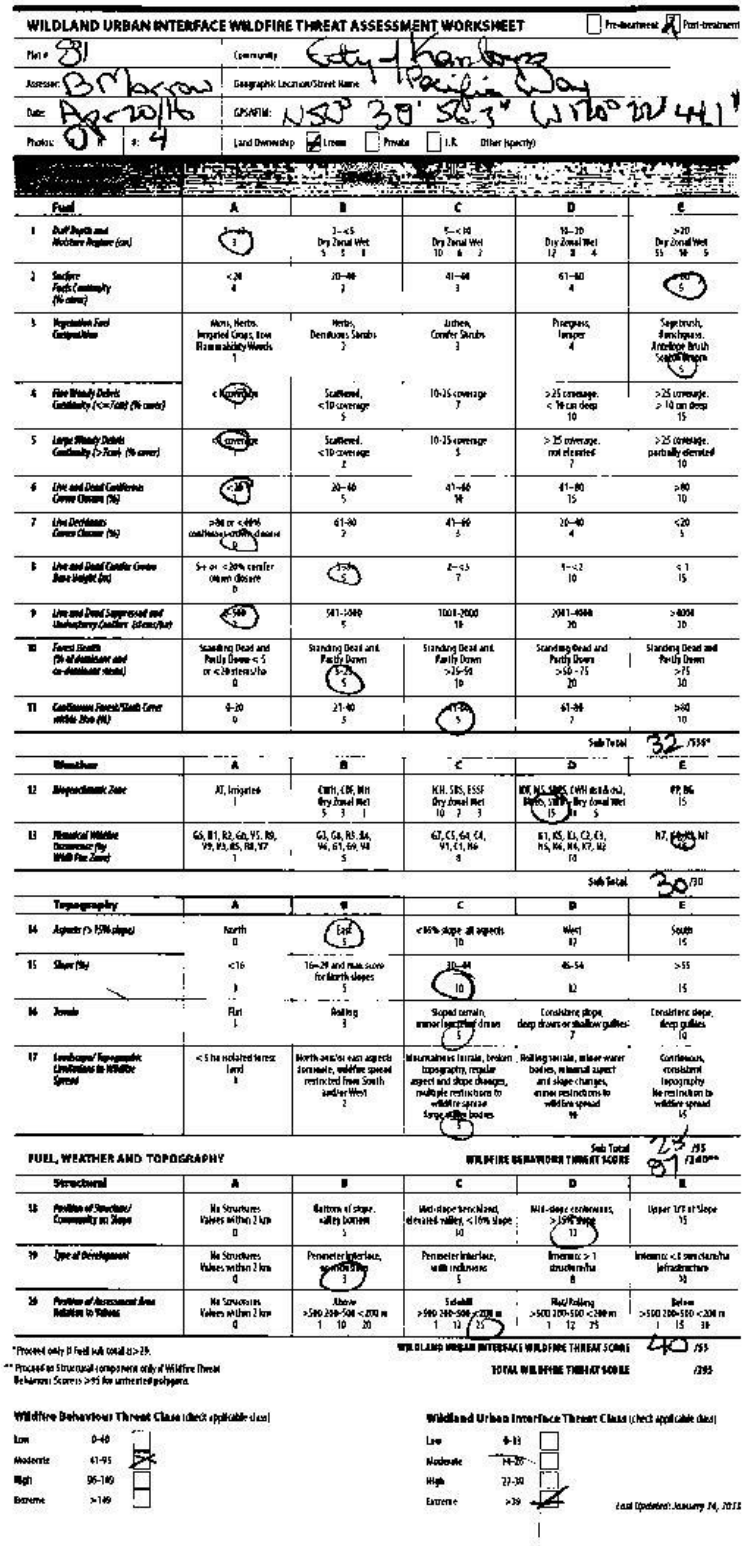
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 80

Photo 80-1 @ 45 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot # 81 | Community: City of Kamloops

Assessor: BR Morgan | Geographic Location/Street Name: Pacific Way

Date: Apr 20/16 | GPS/PTM: N50° 39' 58.3" W120° 22' 44.1"

Photos: 81 # 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

91

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	3	2 – <5 Dry Zonal Wet 5 5 1	5 – < 10 Dry Zonal Wet 10 6 2	10 – 20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels (continuity) (% cover)	<20 4	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	< 10% coverage 1	Scattered, <10% coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<10% coverage 1	Scattered, <10% coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	> 25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 3	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–<5 2	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	>2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down < 5 or <2 trees/ha 0	Standing Dead and Partly Down 5–25% 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 3m (%)	0–20 0	21–40 5	41–60 5	61–80 7	>80 10

Sub Total 32 /350*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm & cw), BWBS, SBPS Dry Zonal Wet 15 11 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G6, H1, K2, G2, Y5, R9, Y9, R3, K5, R8, Y7 1	G3, G8, R3, K6, W6, K1, G9, Y8 5	G7, C5, G4, C4, Y1, C1, H6 8	K1, K5, K3, C2, C3, H5, H6, H4, K7, H2 10	H7, G5, H3 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspect (> 15% slope)	North 0	East 3	<15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 3	16–29 and max. score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor localized draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North-east/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread Large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 23 /95

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 91 /130**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope continuous, >10% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, sparse 3	Perimeter interface, with inclusions 5	Intermix: > 1 structure/ha 8	Intermix: <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 13 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 40 /55

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Scores >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-38	☐
Extreme	>39	☒

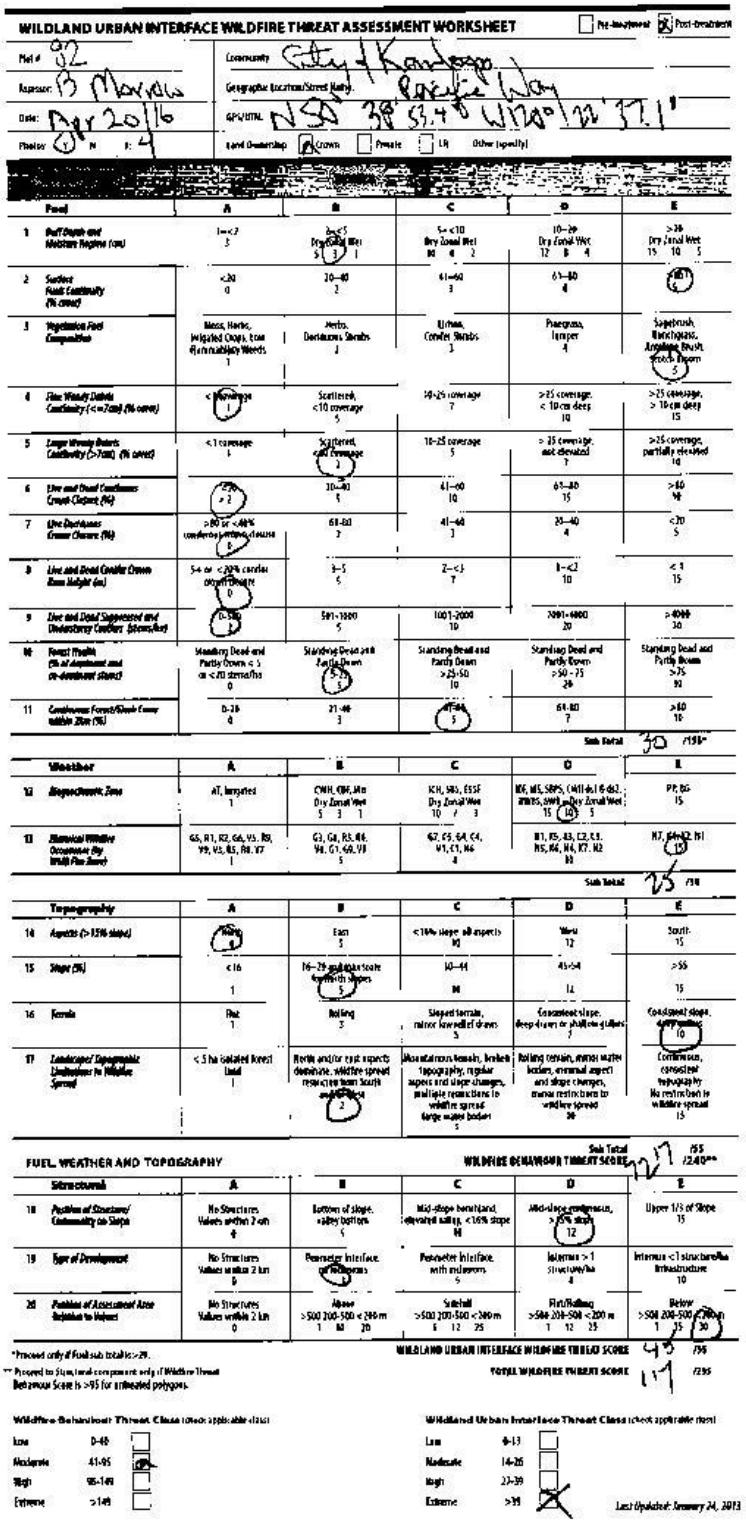
Last Updated: January 14, 2015

SYP

City of Kamloops – Wildfire Threat Assessment Picture – Plot 81

Photo 81-1 @ 190 degrees

82



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot # 82 | Assessor: B Mayville | Date: Apr 20/16 | Photos: 1) N 2: 4

Community: City of Kamloops | Geographic location/Street Name: Pacific Way | GPS/UTM: N50 38 53.4 W120° 22' 37.1" | Land Ownership: ☒ Crown ☐ Private ☐ LR ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Fuel Types and Moisture Regime (CM)	1 to <2 3	2 to 5 Dry Zonal Wet 5 3 1	5 to <10 Dry Zonal Wet M 4 2	10–29 Dry Zonal Wet 12 8 4	>29 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Non-flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Ponderosa Bush, Spruce, Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <25 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifer Crown Closure (%)	<20 >2	20–40 9	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous/grass/mosaic 0	61–80 2	41–60 3	21–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown height 0	3–5 5	2–<3 7	1–<2 10	< 1 15
9	Live and Dead Suppressed and Understorey Conifer (stems/ha)	0–500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Conifer within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	30 /150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Interpreted 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, (MH 4k,l & dk2, xWBS, SWB) Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WHR Plot Zone)	G5, R1, R2, G6, V3, R9, V9, V2, R5, R8, V7 1	G3, G8, R3, R6, V6, G1, G9, V8 5	G7, G9, G4, C4, V1, C1, M6 4	R1, R5, R3, C2, C3, R5, R6, M4, R7, M2 M	M7, M4, M2, R4 15
					Sub Total	25 /150

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	West 8	East 5	<16% slope, all aspects M	West 12	South 15
15	Slope (%)	<16 1	16–29 and bars scale from 16 with slopes 5	30–44 M	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low swell of draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Continuum to Wildfire Spread	< 5 ha isolated forest land 1	Ravine and/or east aspects moderate, wildfire spread restriction from South and West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, eventual aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	47 /75

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 127 /240**

	Structures	A	B	C	D	E
18	Position of Structures/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope M	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, no intermix 3	Perimeter Interface, with intermix 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 M 20	Subtail >500 200-500 <200 m 5 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	45 /75

*Proceed only if Fuel sub totals >=29.

** Proceed to Slope, Fuel component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

TOTAL WILDFIRE THREAT SCORE 117 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

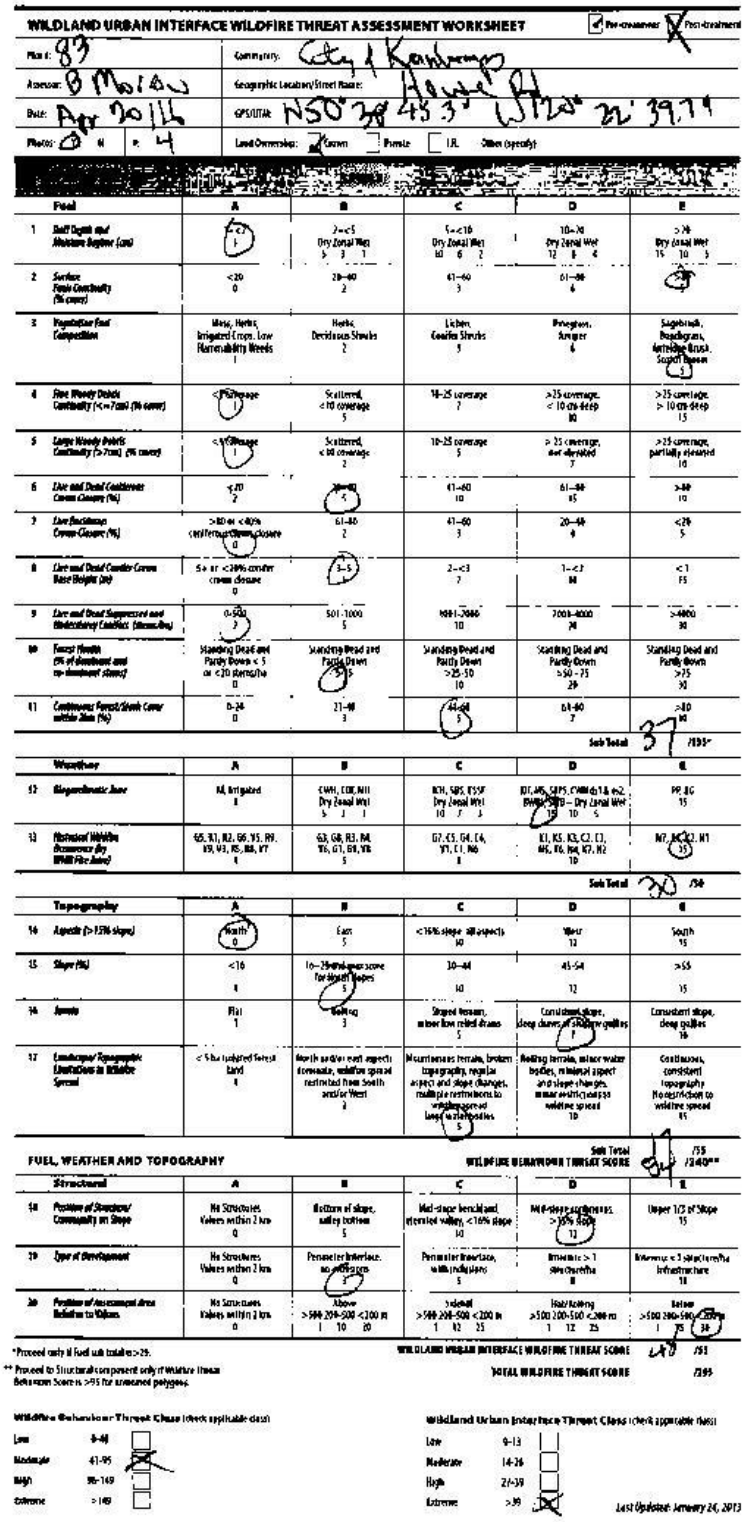
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 82

Photo 82-1 @ 360 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☑ Post-treatment ☒

Plot #: 83 Community: City of Kamloops

Assessor: B Molan Geographic Location/Street Name: Hawk Pl

Date: Apr 20/16 GPS/UTM: N50 38 45.3" W120° 21' 39.7"

Photos: Ø N P. 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Stand Density and Moisture Regime (Leni)	<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–60 2	61–80 3	81–90 6	91–100 9
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 5	Pinegrass, Juniper 6	Sagebrush, Beachgrass, Antelope Brush, Soapberry 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<10 2	10–40 4	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 9	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <30% conifer crown closure 0	3–5	2–<3 7	1–<2 14	<1 FS
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 3	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 Harvested 0	Standing Dead and Partly Down 5–15 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within Plot (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	37 /135*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWHds1 & ve2, BWBSmw – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WHR Fire Zone)	65, R1, R2, G6, Y5, R9, V3, V5, R8, V7 1	G3, G8, R3, R4, Y6, G7, E9, Y8 5	G7, C5, G4, C4, Y7, C1, R6 8	K1, K5, K3, C2, C3, M5, F6, R4, K7, K2 10	K7, K6, K2, K1 15
					Sub Total	20 /50

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<15% slope all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–25% flat-gentle slope score for steeper slopes 5	30–44 10	45–54 12	>55 15
16	Aspects	Flat 1	Gentle 3	Sloped terrain, minor low relief drains 5	Consistent slope, steep slopes, or steep gullies 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or west aspects dominate, wildfire spread restricted from South and/or West 3	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread and/or water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	14 /55
	FUEL, WEATHER AND TOPOGRAPHY				WILDFIRE BEHAVIOUR THREAT SCORE	84 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <15% slope 10	Mid-slope southerly aspects, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter/interface, no infill/gaps 5	Perimeter/interface, with infill/gaps 5	Dispersed < 1 structure/ha 8	Dispersed < 1 structure/ha Infrastructure 18
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above > 500 200–500 <200 m 1 10 20	Valley bottom > 500 200–500 <200 m 1 12 25	Mid/Valley >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 75 38
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	49 /91
					TOTAL WILDFIRE THREAT SCORE	/295

*Proceed only if Fuel sub totals >=29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

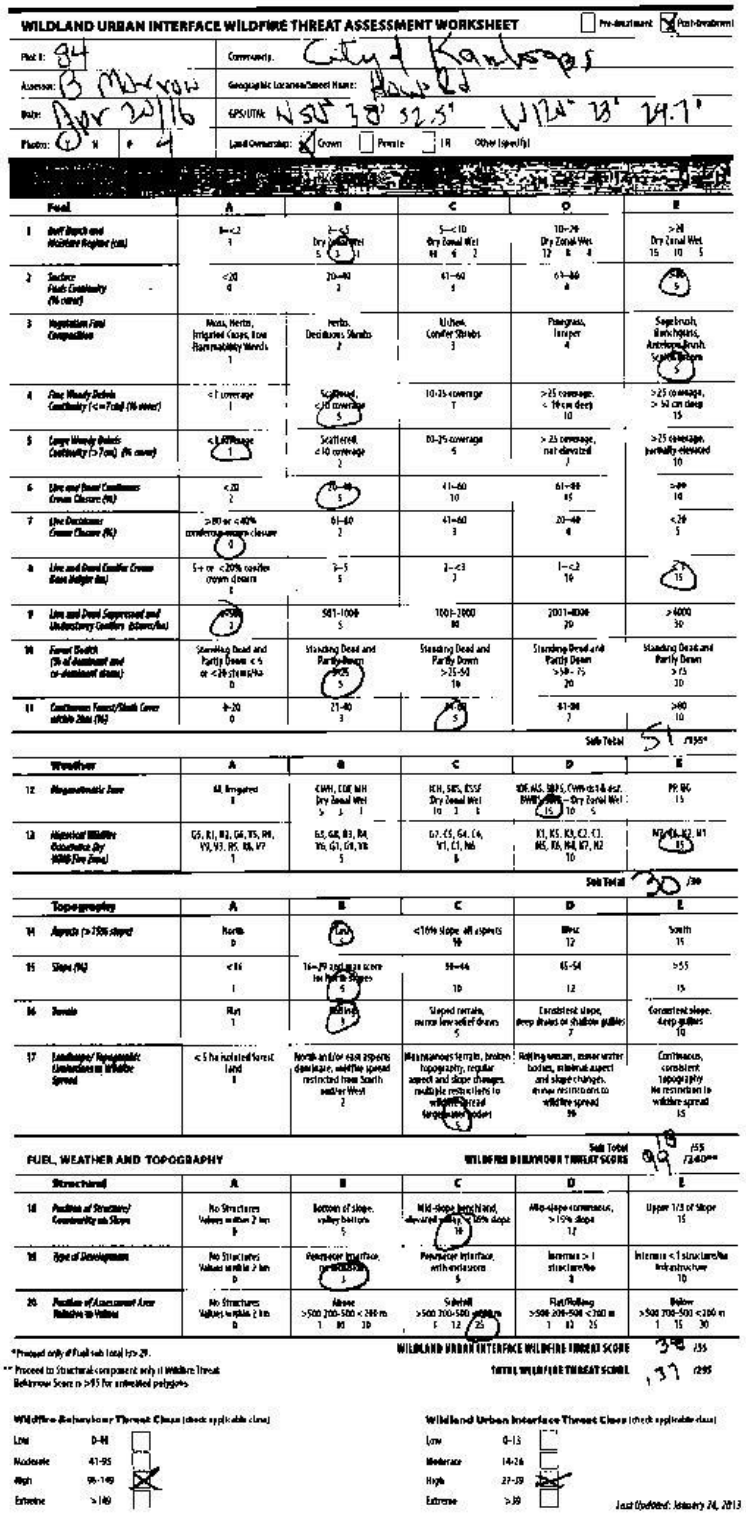
Last Updated: January 24, 2013

83

City of Kamloops – Wildfire Threat Assessment Picture – Plot 83

Photo 83-1 @ 360 degrees

84



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 84 — Community: City of Kamloops

Assessor: B Mellrow — Geographic Location/Street Name: Hawe Rd

Date: Apr 20/16 — GPS/UTM: N 50° 38' 52.5" W 120° 18' 14.7"

Photos: 1 N 4 — Land Ownership: ☒ Crown ☐ Private ☐ FR ☐ Other (specify)

Fuel	A	B	C	D	E
1 Surface Fuel Depth and Moisture Regime (cm)	1–<2 1	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 4	61–80 8	>80 10
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Non Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Mixed, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50- 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 20m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 51 /195*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AR, Irrigated 1	CWH, CDF MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 2 1	IDF, MS, IBPS, CWH dry & dry BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WUI Fire Zone)	G5, R1, R2, G4, Y5, R4, Y9, Y3, R5, R6, Y7 1	G5, GR, R3, R4, Y6, G1, G9, Y8 5	G7, G5, G4, C6, Y1, C1, N6 6	K1, K5, K9, C2, C3, N5, R8, N4, N7, N2 10	N3, N4, N2, N1 15

Sub Total 20 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 0	East 2	<10% slope, all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 slope scores for flat to slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, narrow low-elevation draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread (large lakes, rock)	Rolling terrain, numerous water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 19 /55

FUEL, WEATHER AND TOPOGRAPHY — **WILDFIRE BEHAVIOUR THREAT SCORE** 69 /130**

Structure	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/ridge, elevated valley, <15% slope 10	Mid-slope/ridge, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Peninsular Interface, perimeter 3	Peninsular Interface, with enclosures 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Island structure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 < 200 m 1 10 20	Sidehill >500 200–500 <200 m 5 12 25	Flat/Rolling >500 200–500 <200 m 1 10 25	Below >500 200–500 <200 m 1 15 30

* Proceed only if Fuel sub total is > 29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for interface polygons.

WILDLAND URBAN INTERFACE WILDFIRE HAZARD SCORE 38 /55

TOTAL WILDFIRE THREAT SCORE 137 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 84

Photo 84-1 @ 150 degrees

85

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET ☒ Pre-treatment ☐ Post-treatment

Plot #: 85 Community: City of Kamloops

Assessor: B Morrow Geographic Location/Street Name: Aberdeen Way

Date: Apr 20/16 GPS/UTM: N50° 38' 31" U11 U 51.2"

Photos: Y N #: 24 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Surface Fuel Depth and Moisture Regime (cm)	0<2 3	2—<5 Dry Zonal Wet 5 3 1	5—<10 Dry Zonal Wet 10 6 2	10—20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20—40 2	41—60 3	61—80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrasses, Antelope Brush, Scrub Oceans 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Canopy Closure (%)	<20 3	20-40 5	41—60 M	61—80 15	>80 20
7	Live Deciduous Crown Closure (%)	>30 or <=60% coniferous crown closure 0	21-30 2	41—60 5	26—40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5-6 or <20% conifer crown closure 0	3—5 5	2—<3 7	<2 10	< 1 15
9	Live and Dead Suppressed and Understory Conifers (stems/ha)	0-500 2	501-1000 4	1001-2000 10	2001-4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <200 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50- 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 30m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10
					Sub Total	32 /150*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm & dw, BWBS, SBS dw Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	65, H1, H2, 66, V5, H9, V3, K5, Ra. 17 1	G3, G6, H3, 64, V4, G1, 66, V6 5	G7, C5, G4, C4, V1, C1, H6 8	H1, K5, K3, C2, C3, N5, R6, H4, K7, H2 10	H7, K4, K6, H1 15
					Sub Total	30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	Four 5	< 30% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 5	16—29 and moderate topography 10	30—44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steeper terrain, minor low relief drains 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha Isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 3	Moderations terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	13 /55
	FUEL, WEATHER AND TOPOGRAPHY				WILDFIRE BEHAVIOUR THREAT SCORE	97 /240**

	Structures	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope/ridge/bluff, elevated valley, <15% slope 10	Mid-slope/ridge/bluff, >15% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peripheral/Fringe/Lake, Agriculture 3	Perimeter/Interface, multi-residences 5	Intermix: > 1 structure/ha 8	Intermix: < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500-200-500 <200 m 1 10 20	Saddle >500-200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub total is >29.

** Proceed to Structure/Assessment Area component only if Wildfire Threat Behaviour Score is >95 for an isolated polygon.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 49 /70

TOTAL WILDFIRE THREAT SCORE 146 /285

Wildfire Behaviour Threat Class (check applicable class)

Low	0-46	☐
Moderate	47-95	☐
High	96-189	☒
Extreme	>189	☐

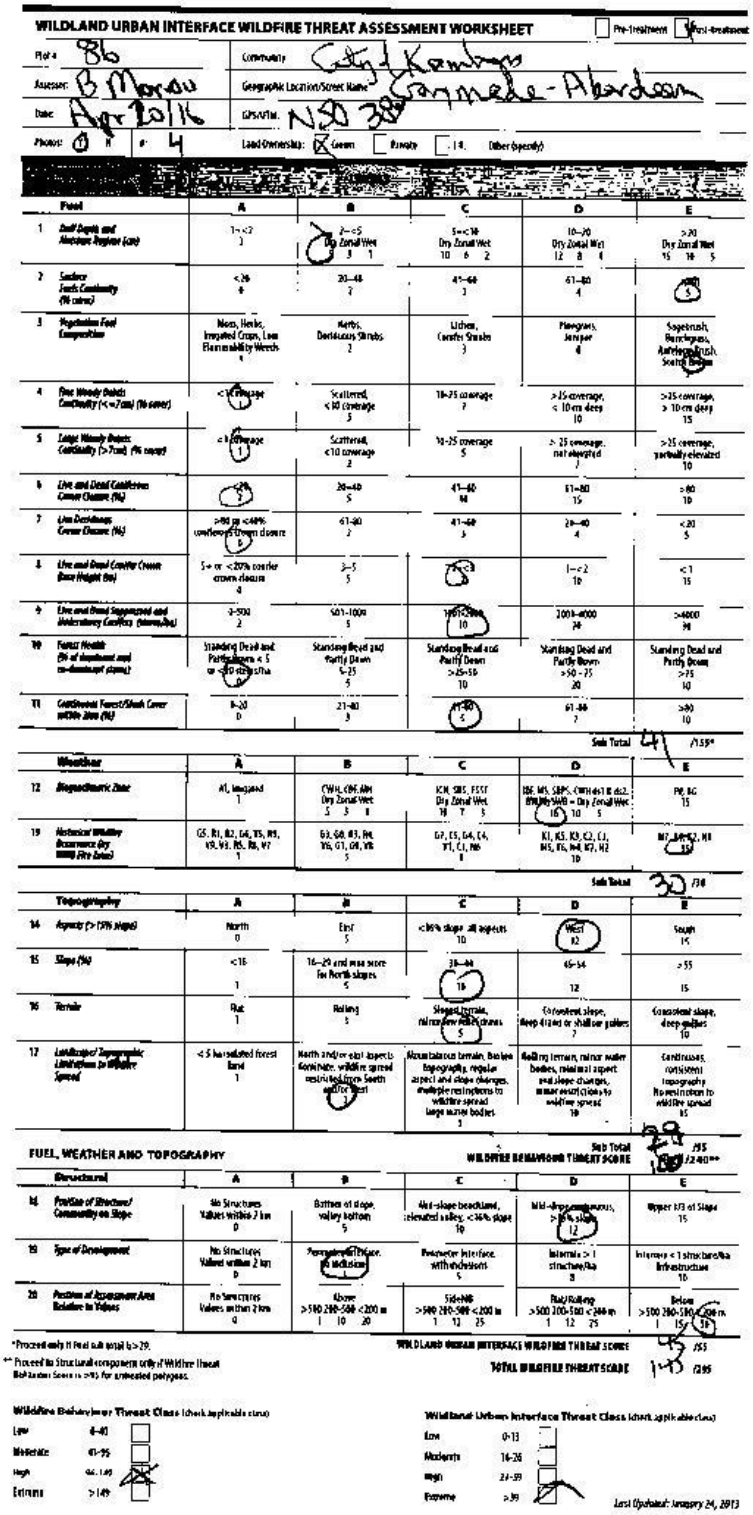
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-56	☐
Extreme	>56	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 85

Photo 85-1 @ 315 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment ☐

Plot # 86 | Community: City of Kamloops

Assessor: B Marsh | Geographic Location/Street Name: Campbell - Aberdeen

Date: Apr 20/16 | GPS/UTM: N30 38

Photos: ☑ # 4 | Land Ownership: ☒ Crown ☐ Private ☐ FN ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Fuel Types and Structure Regime (Cm)	1–<2 3	2–<5 Dry Zonal Wet 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<26 0	26–48 2	49–68 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 0	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1% coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1% coverage 1	Scattered, <10 coverage 2	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<26 5	26–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	26–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 8	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	1–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Uprooted < 5 or <250 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Coniferous Forest/Slash Cover within Zone (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10
					Sub Total	41 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Imagand 1	CWH, CDF, MH Dry Zonal Wet 2 3 1	ICH, SBS, FSCT Dry Zonal Wet 10 7 5	IDF, MS, SBPS, CWH dst 1E dc2, BWBSdk/SWB = Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	G5, R1, R2, G6, Y5, R9, V9, V8, R5, R8, V7 1	G3, G8, R3, R4, Y6, G7, G9, Y8 5	G7, E5, G4, C4, Y1, C1, R6 8	K1, K5, K3, C2, C3, R45, R6, R4, K7, K2 10	K7, K4, K2, K8 15
					Sub Total	30 /30

	Topography	A	B	C	D	E
14	Aspects (> 15% slope)	North 0	East 5	<15% slope, all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steeper terrain, minor gullies, draws 5	Convoluted slope, deep draws or shallow gullies 7	Convoluted slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	<5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 3	Mountainous terrain, Broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
					Sub Total	29 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 130 /210**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <30% slope 10	Mid-slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter of Place, Subdivision 3	Perimeter Interface, with exclusions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Side/NB >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /55

TOTAL WILDFIRE THREAT SCORE 175 /265

*Proceed only if Fuel sub total is >29.

** Proceed to Structural components only if Wildfire Threat Behaviour Score is >95 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–149	☒
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

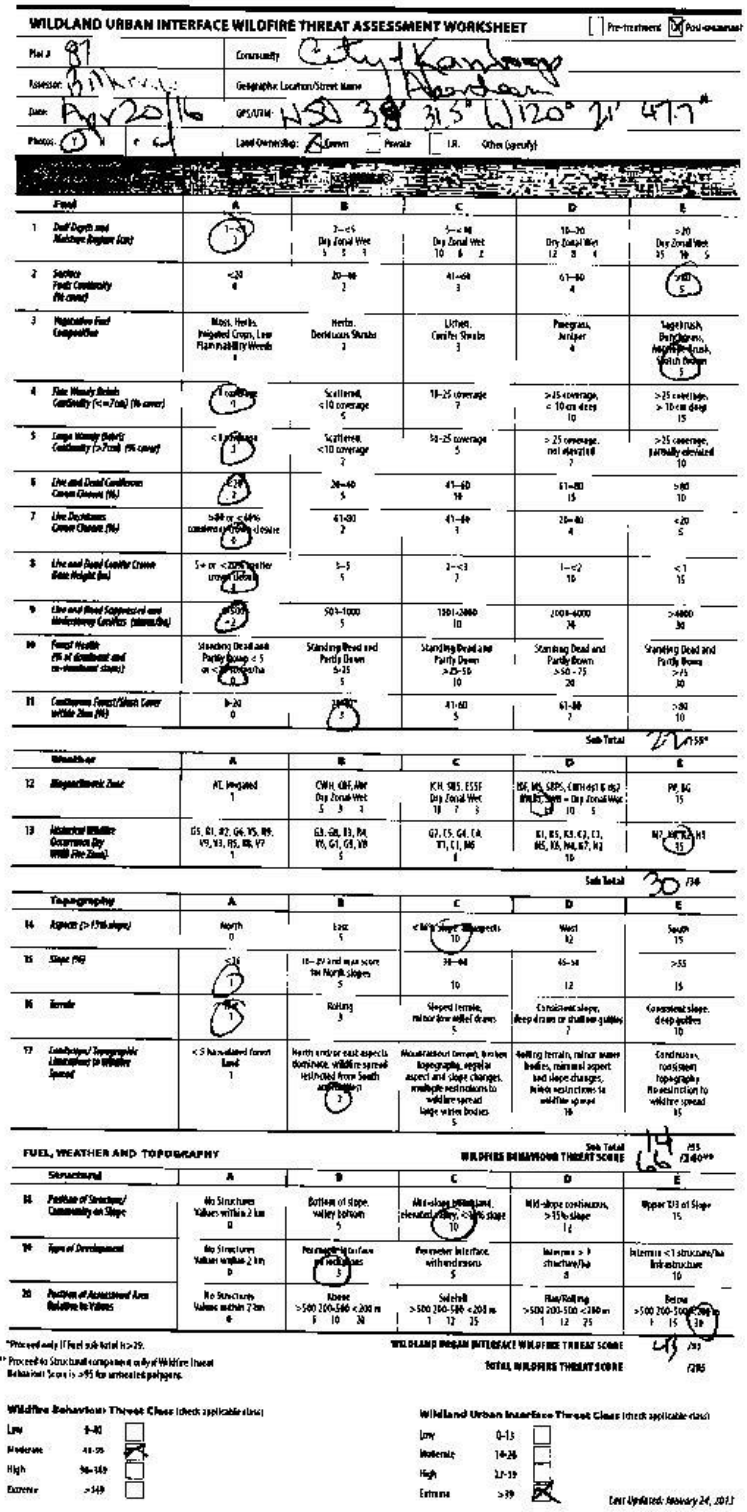
Low	0–13	☐
Moderate	14–26	☐
High	27–59	☐
Extreme	>59	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 86

Photo 86-1 @ 315 degrees

87



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

[ ] Pre-treatment [X] Post-treatment

Plot # 87

Assessor: BH K...

Date: Apr 20 16

Photos: 1 N E

Community: City of Kamloops

Geographic Location/Street Name: Aberdeen

GPS/UTM: N50 38 313" W120° 21' 49.7"

Land Ownership: [X] Crown [ ] Private [ ] I.R. [ ] Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<5 1	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<20 6	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetative Fuel Composition	Moss, Herbs, Cropped Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 3	Lichen, Conifer Shrubs 3	Pasegrass, Juniper 4	Sagebrush, Perf Grasses, Heavy Brush, Slash Debris 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 3	Scattered, <10 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80 or <60% conifers with deciduous 6	41–80 2	41–60 1	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown density 1	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 2	501–1000 5	1001–2000 10	2001–6000 20	>6000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Snag < 5 or < 2 snags/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 7 /55*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Integrated 1	CWH, CDF, Alar Dry Zonal Wet 5 3 2	ICH, SBS, ESSF Dry Zonal Wet 10 7 5	BSF, MS, SBPS, CWH dry 15 BWBS, SWB = Dry Zonal Wet 12 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WHR Fire Zone)	G5, G1, G2, G4, V5, R9, V9, V3, R5, R8, V7 1	G3, G6, B3, B4, V6, G7, G8, V8 5	G7, C5, G4, C6, V1, C1, M6 8	K1, B5, K3, K2, C3, M5, K6, M4, K7, M2 10	M7, M8, K5, M1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspect (>15% slope)	North 0	East 5	<80% Slope: All aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 and max score for North slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor draw relief draws 5	Consistent slope, deep drawn or shallow gullies 7	Consistent slope, deep gullies 10
17 Combustion/ Topographic Limitations to Wildfire Spread	<5 hectare treed forest Land 1	North and/or east aspects, Bottleneck, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, limited restrictions to wildfire spread 10	Continuous, consistent topography fire restriction to wildfire spread 15

Sub Total 14 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE /55 /140**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope [illegible] Land, elevated valley, <30% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface or Isolated 3	Perimeter Interface, with endclosures 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 5 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

*Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Hazard Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE /30

TOTAL WILDFIRE THREAT SCORE /285

Wildfire Behaviour Threat Class (check applicable class)

Low	0-80	[ ]
Moderate	81-95	[X]
High	96-140	[ ]
Extreme	>140	[ ]

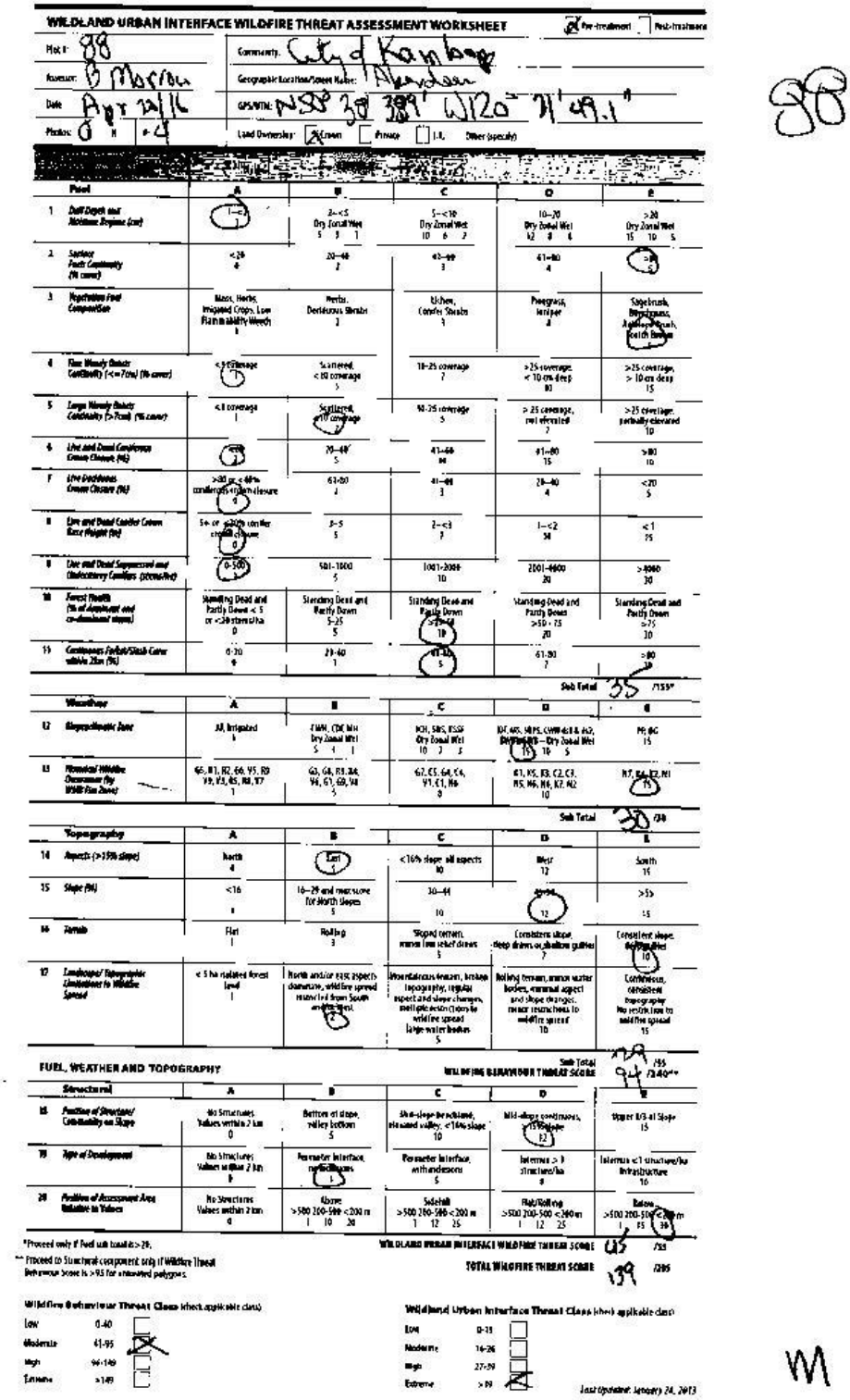
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	[ ]
Moderate	14-26	[ ]
High	27-39	[ ]
Extreme	>39	[X]

Last Updated: February 24, 2011

City of Kamloops – Wildfire Threat Assessment Picture – Plot 87

Photo 87-1 @ 160 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 88

Assessor: B Morton

Date: Apr 22/16

Photos: 0 N

Community: City of Kamloops

Geographic Location/Street Name: Aberdeen

GPS/MTN: N50° 30' 38.9" W120° 21' 49.1"

Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–2	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<25 0	25–48 2	49–69 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Preegrass, Juniper 4	Sagebrush, Bitterbrush, Antelope Brush, Conifer Regen 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<5% coverage 1	Scattered, <10 coverage 3	10–25 coverage 7	>25 coverage, <10 cm deep 80	>25 coverage, >10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<8 coverage 1	Scattered, <10 coverage 3	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<40 1	40–48 5	41–60 M	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>30 or <60% coniferous+deciduous closure 3	61–80 4	81–90 3	28–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 M	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of development and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 25m (%)	0–20 0	21–40 1	41–60 5	61–80 7	>80 10
				Sub Total	35 /155*

Vegetation	A	B	C	D	E
12 Biogeoclimatic Zone	All, Irrigated 0	IMA, CDF, MH Dry Zonal Wet 5 4 1	BCH, SBS, ESSF Dry Zonal Wet 10 7 5	IDF, MS, IMPS, CWH dk & ak2, [illegible] – Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WMB Fire Zone)	65, B1, B2, 66, Y5, B9 Y8, Y3, 45, R8, Y7 1	G3, G8, R8, 84, W4, G1, G9, W 5	G7, C5, G4, K4, Y1, C1, R6 9	A1, K5, K8, C2, C3, R5, R6, R4, K7, K2 10	R7, B4, E2, R1 15
				Sub Total	30 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 4	East 7	<16% slope all aspects 10	West 12	South 15
15 Slope (%)	<16 0	16–29 and moderate for North Slopes 5	30–44 10	Above 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, steep drainages, shallow gullies 7	Consistent slope, [illegible] gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or NW aspects, clearwater, wildfire spread restricted from South and/or West 2	Discontinuous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15
				Sub Total	28 /55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE: 94 /3,410**

Structural	A	B	C	D	E
18 Position of Structure/ Combustibility on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Flat-slope transitional, elevated valley, <16% slope 10	Mid-slope continuous, 15% slope 12	Upper 1/3 of Slope 15
19 Age of Development	No Structures Values within 2 km 0	Perimeter Interface, no structures 1	Perimeter Interface, with subdivisions 5	Interface > 1 structure/ha 8	Interface <1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Subdivision >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour score is >95 for assessed polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE: 45 /155

TOTAL WILDFIRE THREAT SCORE: 139 /295

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☐
High	96-149	☒
Extreme	>149	☐

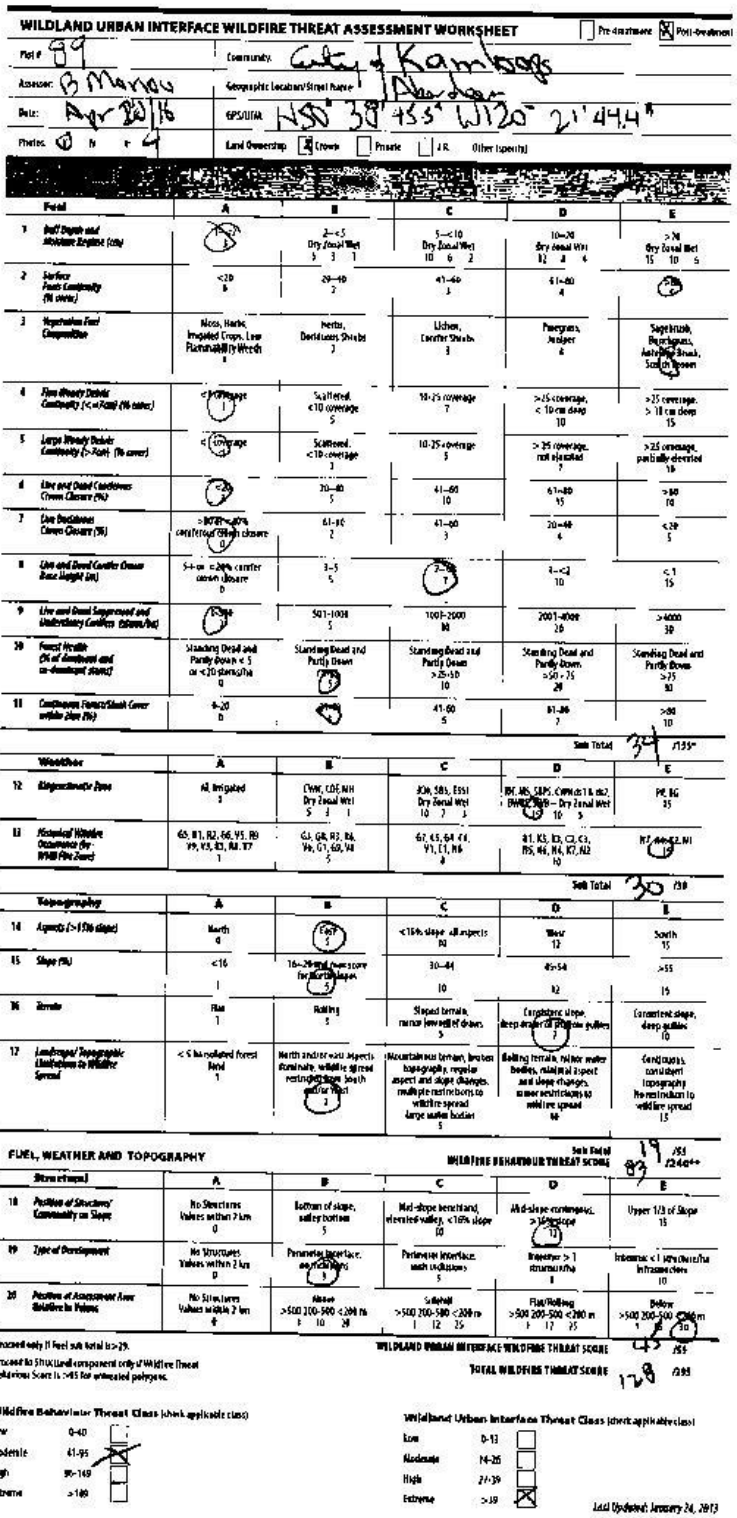
Wildland Urban Interface Threat Class (check applicable class)

Low	0-15	☐
Moderate	16-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 88

Photo 88-1 @ 290 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☒ Post-treatment

Plot # 89 | Community: City of Kamloops

Assessor: B Marnoch | Geographic location/Street Name: Nicholson

Date: Apr 20/16 | GPS/UTM: N50° 39' 45.5" W120° 21' 49.4"

Photos: ☐ N ☐ E ☐ S ☐ W | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

89

Fuel	A	B	C	D	E
1 Bluff Depth and Moisture Regime (City)		2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 0	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4 Fine Woody Debris Continuity (<~7cm) (% cover)	<10% coverage 1	Scattered, <10% coverage 5	10–25% coverage 7	>25% coverage, <10 cm deep 10	>25% coverage, >10 cm deep 15
5 Large Woody Debris Continuity (>~7cm) (% cover)	<10% coverage 0	Scattered, <10% coverage 3	10–25% coverage 5	>25% coverage, not stacked 7	>25% coverage, partially stacked 10
6 Live and Dead Coniferous Crown Closure (%)	<20 0	20–40 5	41–60 10	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80% or <20% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (Stems/ha)	None 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest Shrub Cover within 2km (ha)	0–20 0	21–40 2	41–60 5	61–80 7	>80 10

Sub Total 39 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	All Irrigated 0	CWH, CDF, MH Dry Zonal Wet 5 3 1	BGh, SBh, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, (CWHdc1 & dk2, BWBSdk1) – Dry Zonal Wet 15 10 5	PP, BG 35
13 Historical Wildfire Occurrence (for Wildfire Zone)	65, 81, B2, B6, V5, B9 V9, V3, B3, Ra, X7 1	GJ, G8, R3, R6, Va, G1, G9, V4 5	G7, K5, G4, K4, V1, E1, R6 8	B1, K3, E3, C1, C3, R5, R6, R4, K7, N2 10	N7, N6, C2, N1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspects (>~15% slope)	North 0	East 5	<15% slope, all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–29 (use max score for slope class) 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 5	Sloped terrain, minor low swales or draws 5	Complex slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha sheltered forest Bowl 1	North and/or west Aspects dominate, wildfire spread restricted on south and/or east 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography, no restriction to wildfire spread 15

Sub Total 19 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 89 /154**

Structure	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench and, elevated valley, <16% slope 10	Mid-slope-continuous, >16% slope 13	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter Interface, easy access 3	Perimeter Interface, some obstructions 5	Interface > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 5 10 20	Subhalf >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 17 35	Below >500 200–500 <200 m 1 25 50

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 43 /155

TOTAL WILDFIRE THREAT SCORE 128 /295

*Proceed only if Fuel sub total is >29.

**Proceed to STRUCTural component only if Wildfire Threat Behaviour Score is >45 for unmasked polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

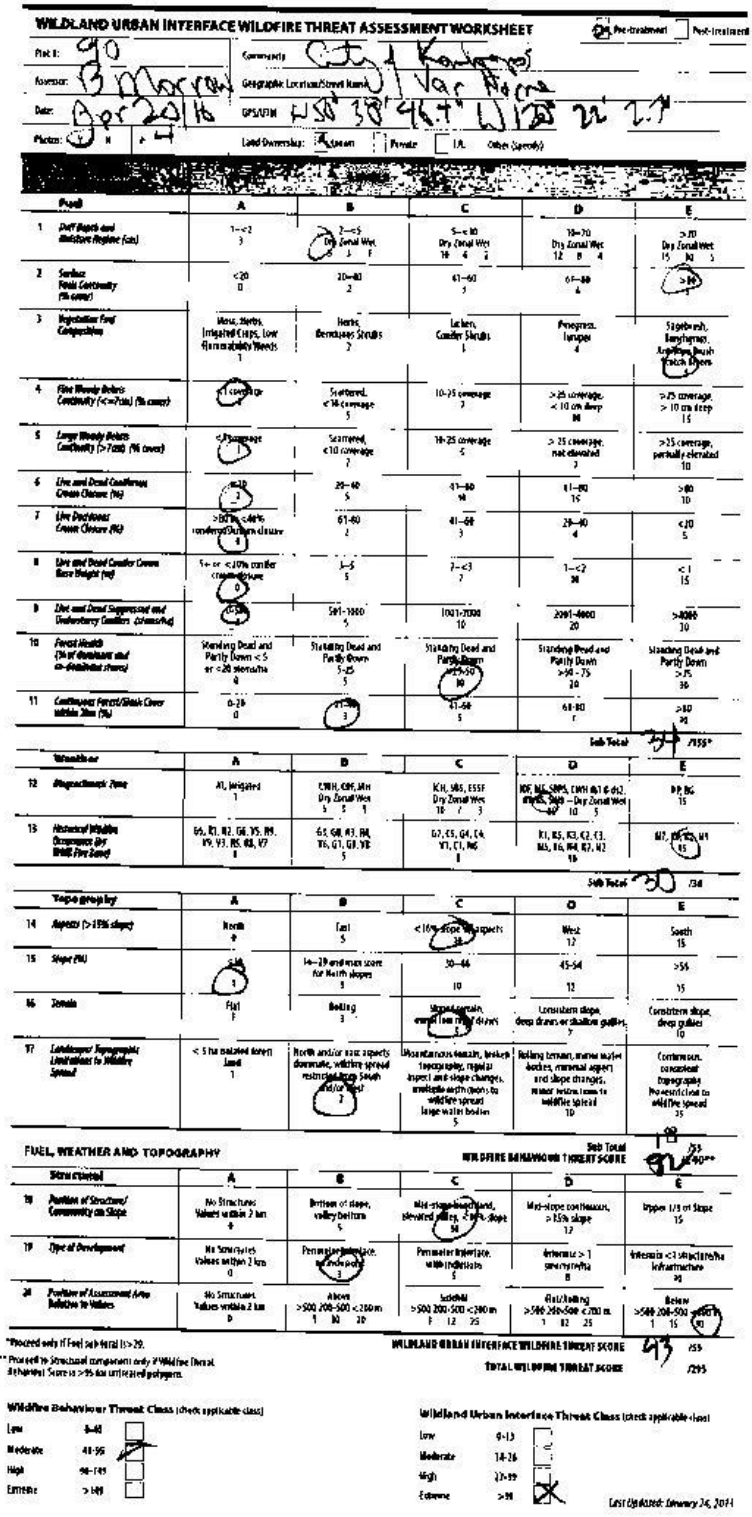
Low	0–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

M

City of Kamloops – Wildfire Threat Assessment Picture – Plot 89

Photo 89-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 90

Assessor: B Morrow

Date: Apr 20/16

Photos: ☒ N ☐ E

Community: City of Kamloops

Geographic Location/Street Name: Var Place

GPS/UTM: N50° 38' 46.7" W120° 22' 2.7"

Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

Fuel	A	B	C	D	E
1 Surface Fuels and Structure Regime (Cat)	1–<2 3	2–<5 Dry Zonal Wet 3 F	5–<10 Dry Zonal Wet 10 4 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 5	61–80 8	>80 10
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low flammability Weeds 1	Herbs, Bunchgrass Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush Patch Rivers 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage	Scattered, <10 coverage 5	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage	Scattered, <10 coverage 7	10–25 coverage 5	> 25 coverage, not elevated 2	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 1	20–40 5	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>80% <40% considered Uniform closure 1	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <10% conifer crowns/shape 0	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 0	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down 25–50 10	Standing Dead and Partly Down >50 – 75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 8	>80 10
				Sub Total	/155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dk1 & dk2, BWBS, SWB – Dry Zonal Wet 40 10 5	PP, BG 15
13 Historical Wildfire Occurrence (#) Within Five Zones	66, R1, R2, G6, Y5, R9, Y9, Y3, R5, K8, K7 0	G5, G8, K3, R4, Y6, G1, G8, Y8 5	G7, C5, G4, C4, Y1, C1, R6 8	K1, K5, K3, K2, K3, K5, K6, R4, K7, M2 10	M7, [illegible] M1 15
				Sub Total	30 /30

Topography	A	B	C	D	E
14 Aspects (>+10% slope)	North +	East 5	<10% slope, all aspects 30	West 12	South 15
15 Slope (%)	<30 3	10–29 and max score for North slopes 5	30–44 10	45–54 12	>54 15
16 Terrain	Flat F	Rolling 3	Steep terrain, several low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha matured forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, unreliable path (ways to wildfire spread large water bodies 5	Rolling terrain, many water bodies, irregular aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topographic characteristics restricted to wildfire spread 15
				Sub Total	09 /55

FUEL, WEATHER AND TOPOGRAPHY

WILDFIRE BEHAVIOUR THREAT SCORE 90**

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km +	Bottom of slope, valley bottom 5	Mid-slope/bench/flat, elevated valley, <30% slope 10	Mid-slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Perimeter/Interface, no Industrial 3	Perimeter/Interface, with Industrial 5	Extensive > 1 structure/ha 8	Intensive <1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m. 1 12 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub-total is > 29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >35 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 43 /55

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	8–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	> 149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	9–13	☐
Moderate	14–26	☐
High	27–39	☐
Extreme	>39	☒

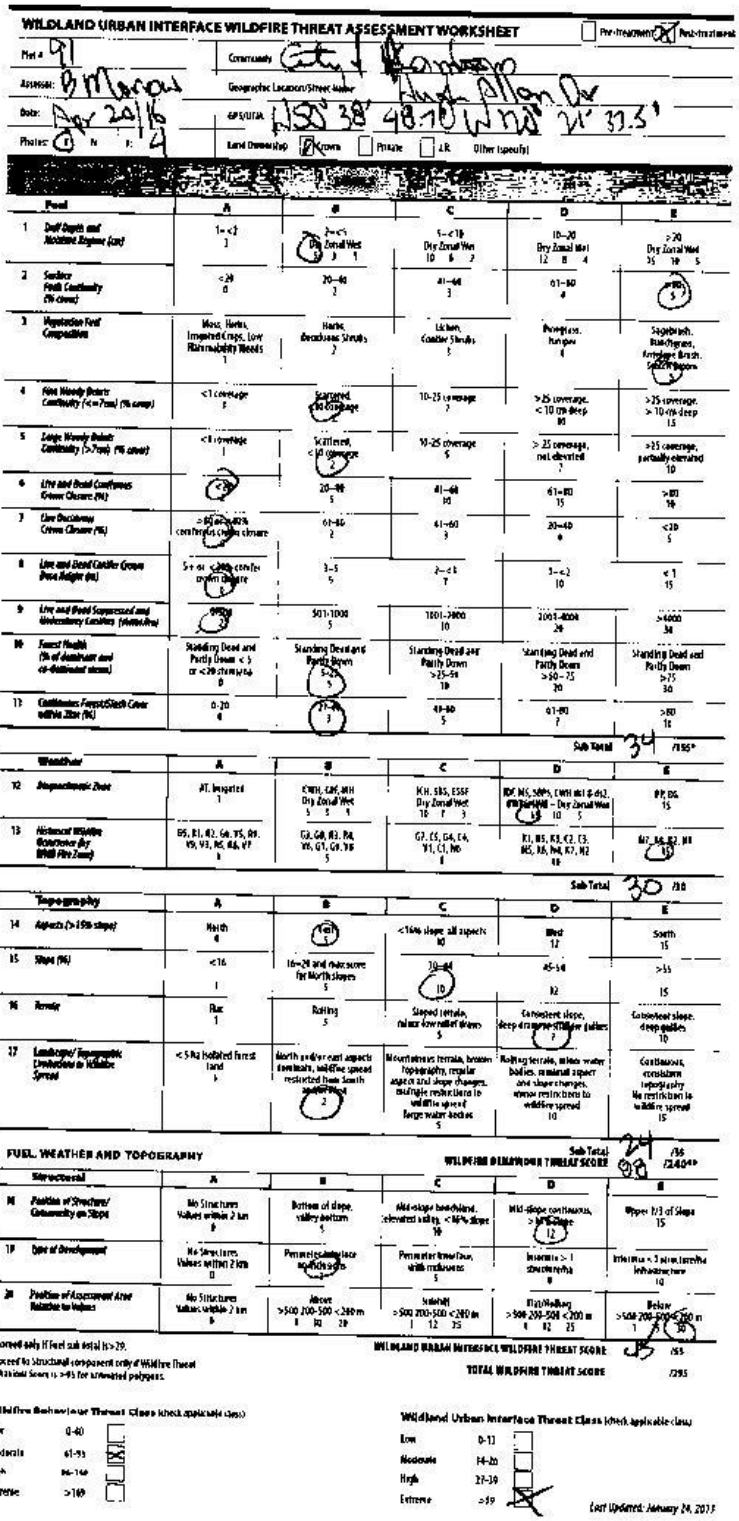
Last Updated: January 26, 2011

90

M

City of Kamloops – Wildfire Threat Assessment Picture – Plot 90

Photo 90-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment [ ] Post-treatment [X]

Plot # 91 | Community: City of Kamloops

Assessor: B Marcou | Geographic Location/Street Name: Hugh Allan Dr

Date: Apr 20/16 | GPS/UTM: N50 38' 48.1" W120 21' 37.3"

Photos: # N: # P: | Land Ownership: [X] Crown [ ] Private [ ] I.R. [ ] Other (specify)

91

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 3 2 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 35 10 5
2 Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Imported Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Bunchgrass 4	Sagebrush, Rabbitbrush, Antelope Brush, Spiraea, Bitterbrush 5
4 Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <50% coverage 2	10-25 coverage 3	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 1	20–40 2	41–60 3	61–80 15	>80 20
7 Live Deciduous Crown Closure (%)	>80 or >40% coniferous crown closure 1	61–80 2	41–60 3	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 1	3–5 5	2–<3 7	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (stems/ha)	0-500 1	501-1000 5	1001-3000 10	2001-4000 20	>4000 30
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down <5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11 Continuous Forest/Slash Cover within 30m (%)	0-20 0	21-40 3	41-60 5	61-80 7	>80 10
				Sub Total	34 /155*

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Imported 1	ICHW, CDF, MH Dry Zonal Wet 5 5 5	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	BDF, MS, SBPS, CWH wet & dry, IDF Dry Zonal Wet 15 10 5	IDF, PP 15
13 Historical Wildfire Occurrence (by Wildfire Zone)	B5, B1, B2, G6, Y5, B9, Y6, Y3, N5, N6, Y7 1	G2, G8, B3, B4, Y4, G1, G9, Y8 5	G7, C5, C6, C4, Y1, C1, N8 8	K1, K5, K3, K2, C3, N5, N8, N4, K7, N2 10	N7, N6, K2, N1 15
				Sub Total	30 /30

Topography	A	B	C	D	E
14 Aspects (>15% slope)	North 0	East 5	<16% slope, all aspects 10	West 12	South 15
15 Slope (%)	<16 1	16–24 and max score for North slopes 5	25–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 5	Sloped terrain, minor low relief drains 5	Consistent slope, deep drainages/shallow gullies 7	Consistent slope, deep gullies 10
17 Landscape/ Topographic Continuum to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total: 24 /85 — WILDFIRE BEHAVIOUR THREAT SCORE: 98 /340*

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Permanent/seasonal residences	Permanent townsite, with restrictions 5	Isolated >1 structure/ha 8	Intensive >1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 12 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE: 55 /85

TOTAL WILDFIRE THREAT SCORE: /295

*Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behavioural Score is >45 for assessed polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-60	[ ]
Moderate	61-95	[ ]
High	96-140	[ ]
Extreme	>140	[X]

Wildland Urban Interface Threat Class (check applicable class)

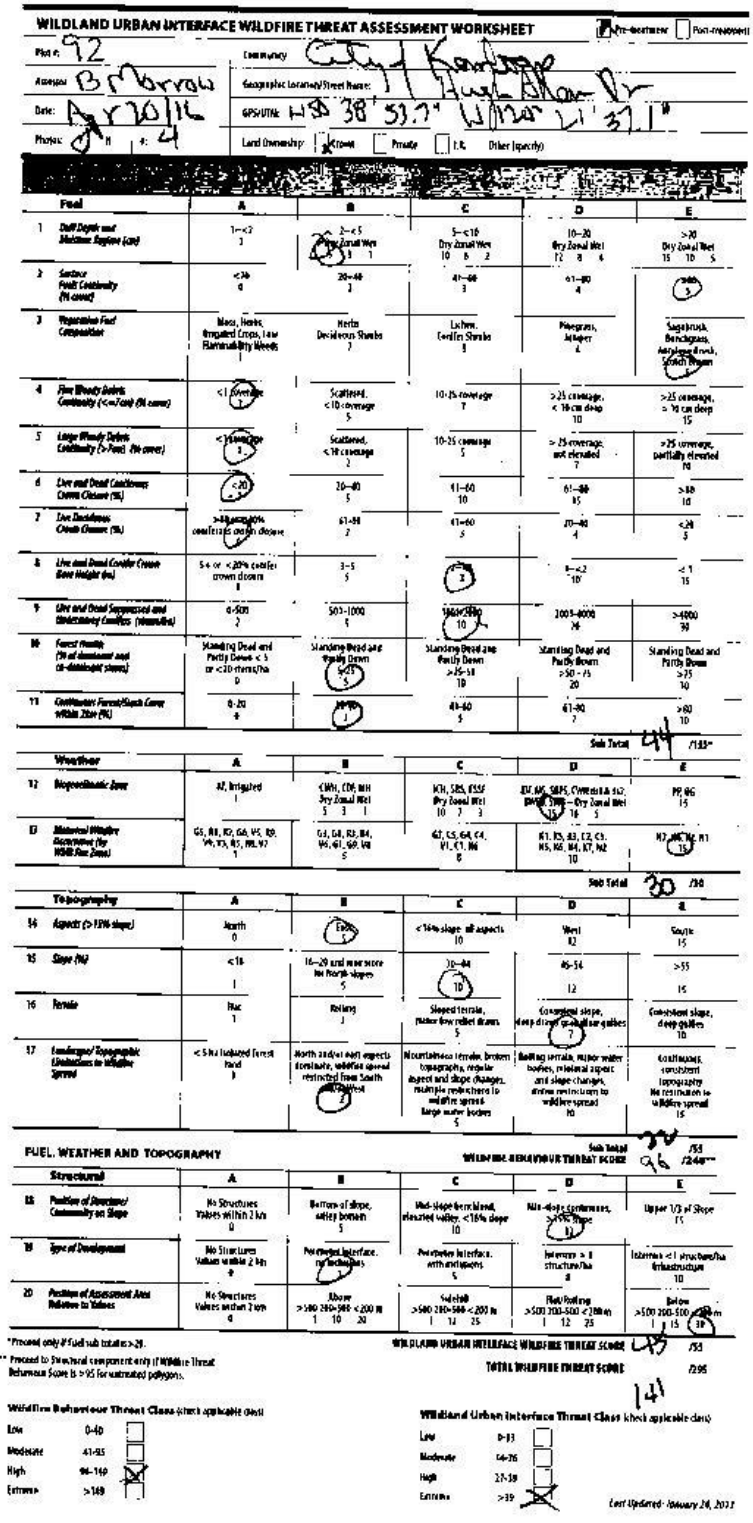
Low	0-13	[ ]
Moderate	14-20	[ ]
High	21-30	[ ]
Extreme	>30	[X]

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 91

Photo 91-1 @ 40 degrees

92



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment

Plot #: 92 Community: Kamloops

Assessor: B Morrow Geographic Location/Street Name: Tunkwa Place Dr

Date: Apr 20/16 GPS/UTM: N 50 38 51.7 W 120 21 37.1

Photos: Y N #: 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. Other (specify)

Fuel	A	B	C	D	E
1 Duff Depth and Moisture Regime (cm)	1–<2 3	2–<5 Dry Zonal Wet 3 1 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2 Surface Fuel Continuity (% cover)	<30 0	30–40 3	41–60 3	61–80 4	>80 5
3 Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds	Herbs Deciduous Shrubs 3	Lichen, Conifer Shrubs 8	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom
4 Fine Woody Debris Continuity (<=7 cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5 Large Woody Debris Continuity (>7cm) (% cover)	<5 coverage 3	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6 Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7 Live Deciduous Crown Closure (%)	>40 some 60% coniferous crown closure 6	61–80 7	41–60 5	20–40 4	<20 5
8 Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 1	3–5 5	2 2	1–<2 10	<1 15
9 Live and Dead Suppressed and Understorey Conifers (Stems/ha)	0–500 2	500–1000 5	1000–3000 10	2000–4000 10	>4000 10
10 Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5	Standing Dead and Partly Down >15–30 10	Standing Dead and Partly Down >30 – 75 20	Standing Dead and Partly Down >75 10
11 Continuous Forest/Slash Cover within 30m (%)	0–20 1	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 44 /185**

Weather	A	B	C	D	E
12 Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, Cwwet & xk, [illegible] Dry Zonal Wet 15 10 5	PP, BG 15
13 Historical Wildfire Occurrence (by WUI Fire Zone)	G5, H1, K2, G6, K5, K9, M4, K3, K7, M3, M7 1	G3, G8, K8, H4, M6, K1, K6, M8 5	G7, C5, G4, C4, K4, K1, M6 8	K1, K5, K3, C2, C3, M5, K6, M4, K7, M2 10	M1 15

Sub Total 30 /30

Topography	A	B	C	D	E
14 Aspect (> 10% slope)	North 0	East 1	<10% slope, all aspects 10	West 12	South 15
15 Slope (%)	<10 1	10–20 and more steep NE North slopes 5	30–44 10	45–54 12	>55 15
16 Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Canyonal slope, steep sloped gradual use gullies 7	Consistent slope, deep gullies 10
17 Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 0	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restriction to wildfire spread 10	Continuous, consistent topography. No restriction to wildfire spread 15

Sub Total 34 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 96 /240***

Structural	A	B	C	D	E
18 Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >16% Slope 12	Upper 1/3 of Slope 15
19 Type of Development	No Structures Values within 2 km 0	Peri-urban interface, ranchettes 3	Peri-urban interface, orchards/vineyards 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Infrastructure 10
20 Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Valley bottom >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 12 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /55

TOTAL WILDFIRE THREAT SCORE /295

141

* Proceed only if fuel sub total is >20.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–160	☒
Extreme	>160	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–33	☐
Moderate	34–76	☐
High	77–38	☐
Extreme	>39	☒

Last Updated: January 24, 2011

M

City of Kamloops – Wildfire Threat Assessment Picture – Plot 92

Photo 92-1 @ 315 degrees

WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 93 | Community: City of Kamloops

Assessor: B Moscrop | Geographic Location/Street Name: Summit Drive

Date: Apr 20/16 | GPS/UTM: N50 39 49.9 W120 20 23.6

Photos: Y N #: 4 | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

93

	Fuel	A	B	C	D	E
1	*Duff Depth and Moisture Regime (cm)*	1–<2 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	*Surface Fuels Continuity (% cover)*	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	*Vegetation Fuel Composition*	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope-brush, Scotch Broom 5
4	*Fine Woody Debris Continuity (<=7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	*Large Woody Debris Continuity (>7cm) (% cover)*	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	*Live and Dead Coniferous Crown Closure (%)*	<20% 2	20–40 5	41–60 10	61–80 15	>80 10
7	*Live Deciduous Crown Closure (%)*	>80% or <40% coniferous crown closure 0	61-80 2	41–60 3	20–40 4	<20 5
8	*Live and Dead Conifer Crown Base Height (m)*	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	*Live and Dead Suppressed and Understorey Conifers (stems/ha)*	0-500 2	501-1000 5	1001-2000 10	2001-4000 20	>4000 30
10	*Forest Health (% of dominant and co-dominant stems)*	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5-25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	*Continuous Forest/Slash Cover within 2km (%)*	0-20 0	21-40 3	41-60 5	61-80 7	>80 10
					Sub Total	30 /155*

	Weather	A	B	C	D	E
12	*Biogeoclimatic Zone*	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	*Historical Wildfire Occurrence (by WNB Fire Zone)*	G5, R1, R2, G6, V5, R9, V9, V3, R5, R8, V7 1	G3, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, N6 8	K1, K5, K3, C2, C3, N5, K6, N4, K7, N2 10	N7, N3, K2, N1 15
					Sub Total	30 /30

	Topography	A	B	C	D	E
14	*Aspects (>15% slope)*	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	*Slope (%)*	<16 1	16–29 and max score for North slopes 5	30–44 10	45-54 12	>55 15
16	*Terrain*	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	*Landscape/ Topographic Limitations to Wildfire Spread*	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — **Sub Total** 10 /55

WILDFIRE BEHAVIOUR THREAT SCORE 12 /240**

	Structural	A	B	C	D	E
18	*Position of Structure/ Community on Slope*	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <16% slope 10	Mid-slope continuous, >15% slope 12	Upper 1/3 of Slope 15
19	*Type of Development*	No Structures Values within 2 km 0	Perimeter Interface, no inclusions 3	Perimeter Interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	*Position of Assessment Area Relative to Values*	No Structures Values within 2 km 0	Above >500 200-500 <200 m 1 10 20	Sidehill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 15 /55

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel sub total is>29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

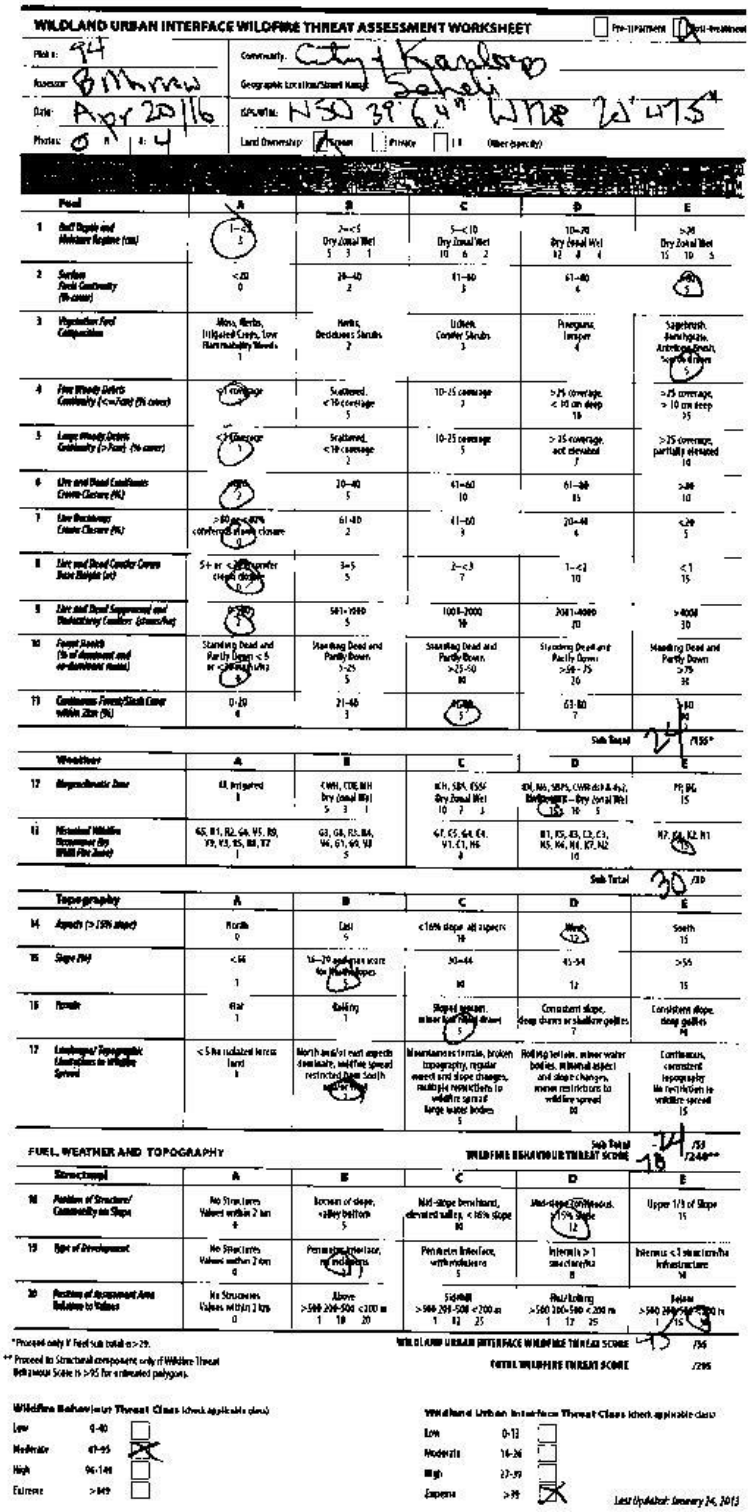
Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

M

City of Kamloops – Wildfire Threat Assessment Picture – Plot 93

Photo 93-1 @ 210 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-Treatment ☐ Post-Treatment ☒

Plot #: 94
Assessor: B Marrow
Date: Apr 20/16
Photos: 0 R | 4

Community: City of Kamloops
Geographic Location/Street Name: Sahali
GPS/UTM: N50 39' 6.9" W120° 20' 47.5"
Land Ownership: ☒ Crown ☐ Private ☐ First Nations ☐ Other (specify)

94

	Fuel	A	B	C	D	E
1	Surface Fuels and Moisture Regime (FMR)	1–<2 5	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Woods 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Sagebrush 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 3	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<25 3	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% conifers with closure 0	61-80 2	41–60 5	20–40 6	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown decidu 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	<500 3	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down <5 or <20 m3/ha 0	Standing Dead and Partly Down >5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Edge within 200m (%)	0–20 0	21–60 3	>60% 5	61–80 7	>80 10
					Sub Total	/155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	All Irrigated 1	<WH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBA, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dh1 & dk2, IMFlowpoint – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WMB Fire Zone)	G5, H1, H2, G4, V5, B9, V3, V3, B5, B8, B7 1	G3, G8, F3, B4, V6, G1, G9, V8 5	G7, C5, G4, E4, V1, C1, H6 8	H1, K5, K3, C2, C3, K5, H4, H4, K7, N2 10	H7, E6, K2, H1 15
					Sub Total	/30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 add max score for North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 7	Sloped uniform, minor hollows/draws 5	Consistent slope, steep chutes or shallow gullies 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Continuities to Wildfire Spread	<5 ha isolated forest land 1	North and/or east aspects downslope, and/or spread restricted Down South and/or West 3	Mountainous terrain, broken topography, regular ravines and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling hill-side, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15
					Sub Total	/53
					WILDFIRE BEHAVIOUR THREAT SCORE	/2340**

FUEL, WEATHER AND TOPOGRAPHY

	Structure	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated bulge, <16% slope 10	Mid-slope Continuous, >15% Slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Permanent/Interface, no enclosure 3	Perimeter Interface, with enclosure 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 17 25	Below >500 200–500 <200 m 1 15
					WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE	/56
					TOTAL WILDFIRE THREAT SCORE	/2295

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygon.

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

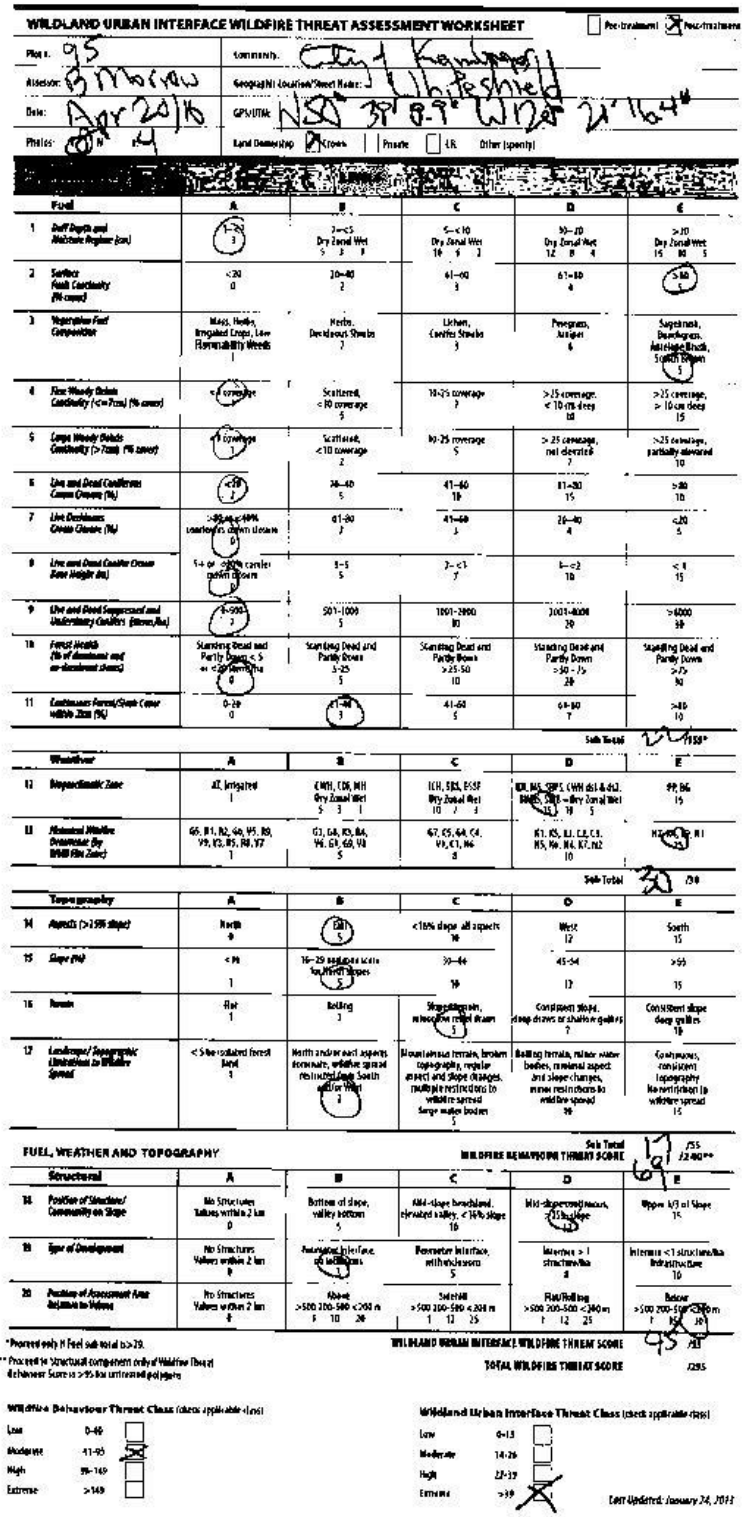
Low	0-12	☐
Moderate	13-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 94

Photo 94-1 @ 315 degrees

95



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☐ Pre-treatment ☒ Post-treatment

Plot #: 95
Community: City of Kamloops
Assessor: B Moiser
Geographic Location/Street Name: Whitefish
Date: Apr 20/16
GPS/UTM: N50° 38' 8.9" W120° 21' 16.4"
Photos: 08 N 14
Land Ownership: ☒ Crown | ☐ Private | ☐ I.R. | ☐ Other (specify)

FUEL

		A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–20 3	2–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 7 3	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<20 0	20–40 2	61–80 3	61–80 4	>80 5
3	Vegetative Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 3	Lichen, Conifer Shrubs 5	Pinegrass, Juniper 6	Sagebrush, Bunchgrass, Antelope Brush, Scotch Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<4 coverage 0	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<4 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifers Crown Closure (%)	<20 1	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 3	41–60 5	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	4 or >80% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understory Conifers (Stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or < 20 Stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25-50 10	Standing Dead and Partly Down >50 - 75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Shrub Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 22 /150*

WEATHER

		A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	IDFwh, IDFdk, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDFdk, MS, SBPS, CWH ds1 & ds2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	G5, B1, B2, G6, V5, B9, V9, V2, B5, B8, V7 1	G1, G8, K5, B6, V6, G9, G6, V8 5	G7, C5, G4, C4, V4, K1, N6 8	K1, K5, L1, L8, C3, N5, N6, N4, K7, n2 10	N2, N3, N1 15

Sub Total 30 /30

TOPOGRAPHY

		A	B	C	D	E
14	Aspect (>25% Slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 Moderate slope, South/West aspect 5	30–44 10	45-54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep mountain, moderate ridge/draw 5	Consistent steep, steep draws or shallow gullies 7	Consistent steep deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest fuel 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread Large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 17 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 69 /240**

STRUCTURAL

		A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, < 16% slope 10	Mid-slope/ridgetops, >16% slope 13	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Peri-urban Interface, no infrastructure 1	Forester Interface, with infrastructure 5	Intermix > 1 structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200-500 <200 m 5 10 20	Same Hill >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /75

TOTAL WILDFIRE THREAT SCORE /315

* Proceed only if Fuel sub-total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons

Wildfire Behaviour Threat Class (check applicable class)

Low	0-40	☐
Moderate	41-95	☒
High	96-169	☐
Extreme	>169	☐

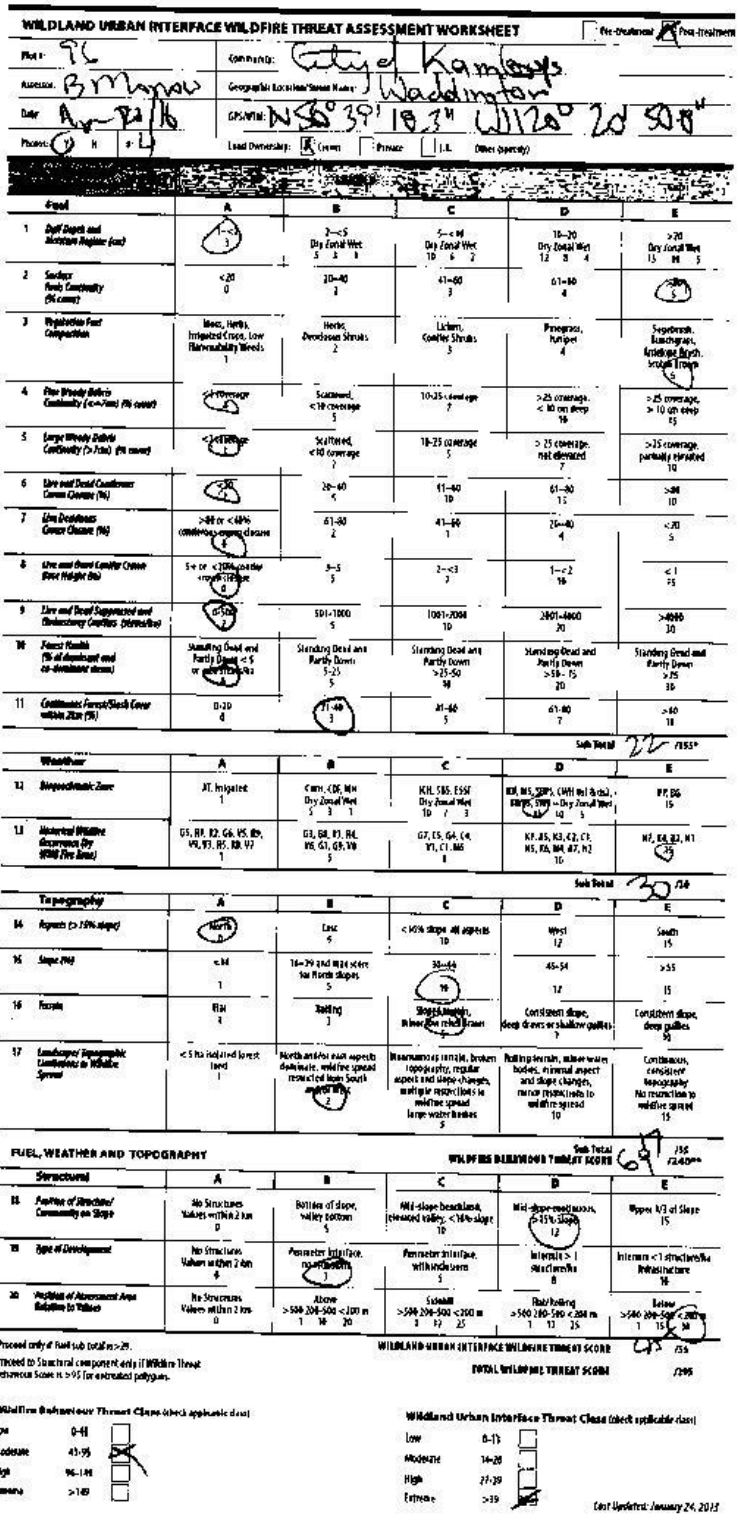
Wildland Urban Interface Threat Class (check applicable class)

Low	0-13	☐
Moderate	14-26	☐
High	27-39	☐
Extreme	>39	☒

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 95

Photo 95-1 @ 180 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment / Post-treatment

Plot #: 96 — Community: City of Kamloops

Assessor: B Mynar — Geographic Location/Street Name: Waddington

Date: Apr-22/16 — GPS/WP: N50° 39' 18.3" W120° 20' 50.8"

Photos: Y N # 4 — Land Ownership: Crown / Private / I.R. / Other (specify)

96

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herb, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Juniper 4	Sagebrush, Bunchgrass, Antelope Brush, Scrub Timber 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 7	>25 coverage, <10 cm deep 10	>25 coverage, >10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 3	10–25 coverage 5	>25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<30 5	30–60 5	61–80 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% conifer/dec. crown closure 5	61–80 2	41–60 1	26–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown height 8	3–5 5	2–<3 3	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or [illegible] 5	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 22 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	Cwm, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, BWBS, CWH (el Rocks), SBPS, SWB – Dry Zonal Wet 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by WUI Fire Zone)	G5, H9, K2, G6, K5, K9, V3, W3, H5, K8, V7 1	G3, G8, K1, H4, K6, G1, G9, V8 5	G7, E5, G4, C4, V1, C1, B6 8	K9, J5, K3, K2, C3, H5, K6, B4, J7, H2 10	H7, E4, B3, W1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<10% slope all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–29 and 10–24 where the North slopes 5	30–44 10	45–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Steep & Rugged, Minor flat relief areas 5	Consistent slope, deep draws or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	<5 ha isolated forest land 1	North and NE east aspects dominate, wildfire spread restricted from South and West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread large water bodies 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

FUEL, WEATHER AND TOPOGRAPHY — Sub Total 69 /155 /240**

WILDFIRE BEHAVIOUR THREAT SCORE

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope-ridgetops, >25% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter Interface, non-[illegible] 3	Perimeter Interface, with Wildland users 5	Intermix > 1 Structure/ha 8	Intermix < 1 structure/ha Infrastructure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sustain >500 200–500 <200 m 3 17 25	Flat/Rolling >500 200–500 <200 m 1 13 25	Below >500 200–500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 45 /75

TOTAL WILDFIRE THREAT SCORE /315

* Proceed only if Fuel sub total is >29.

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–41	
Moderate	43–95	X
High	96–189	
Extreme	>189	

Wildland Urban Interface Threat Class (check applicable class)

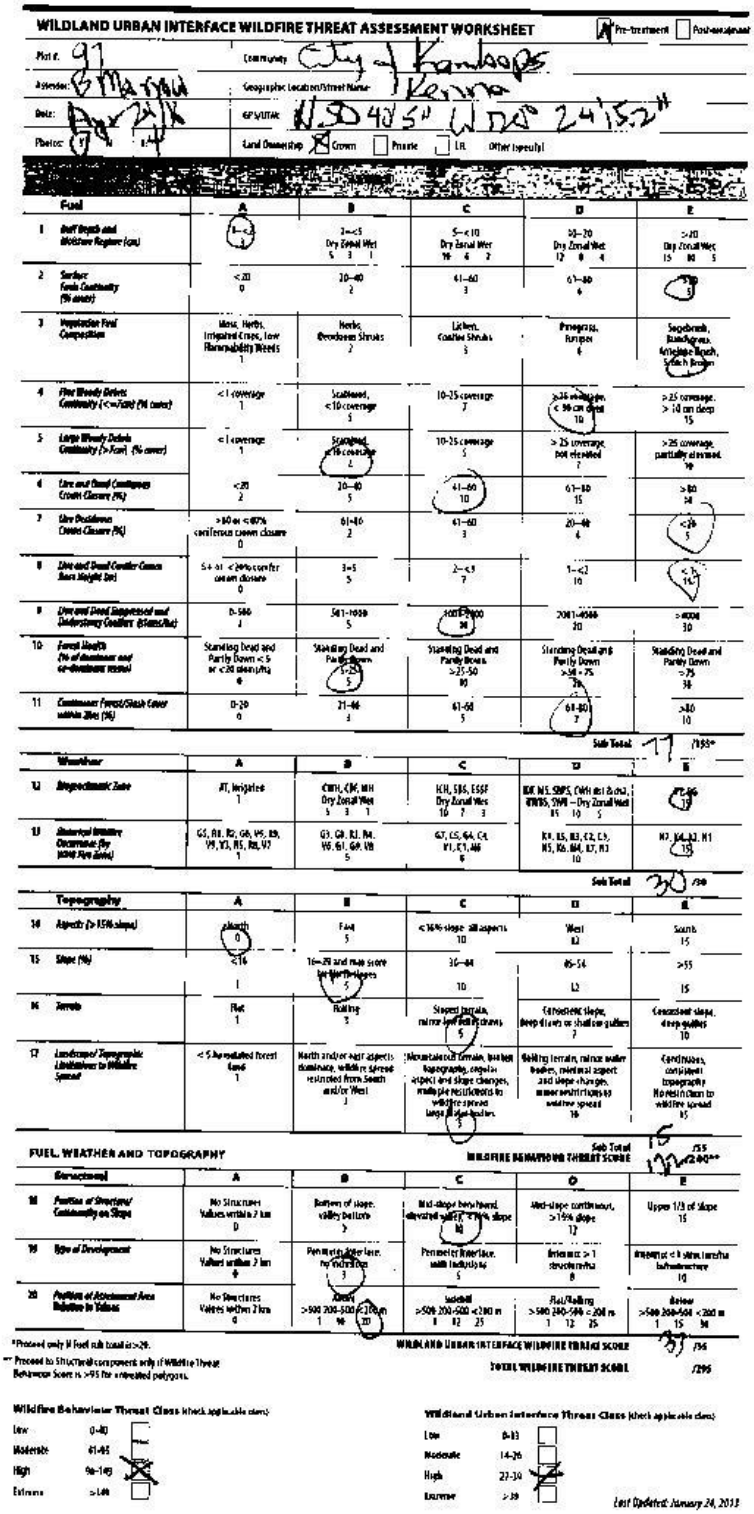
Low	0–13	
Moderate	14–28	
High	29–39	
Extreme	>39	X

Last Updated: January 24, 2013

SP

City of Kamloops – Wildfire Threat Assessment Picture – Plot 96

Photo 96-1 @ 90 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-assessment

Plot #: 97 Community: City of Kamloops

Assessor: B Marsh Geographic Location/Street Name: Kenna

Date: Apr 24/16 GPS/UTM: N 50 48' 5" W 120° 24' 15.2"

Photos: 97 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Surface Depth and Moisture Regime (cm)	1–<3 3	3–<5 Dry Zonal Wet 5 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Fescues 4	Sagebrush, Bunchgrass, Antelope Brush, Saltbush Broom 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 5	10-25 coverage 7	>25 coverage, < 50 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <10 coverage 2	10-25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 20
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 0	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (Stems/ha)	0–500 1	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant trees)	Standing Dead and Partly Down < 5 or <20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 10	Standing Dead and Partly Down >50 –75 15	Standing Dead and Partly Down >75 20
11	Continuous Forest/Slash Cover within 30m (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 17 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF MS, SBPS, CWH dm1 & dm2, BWBS, SWB – Dry Zonal Wet 15 10 5	PP, BG 20
13	Historical Ignition Occurrence (by zone/fire zone)	G5, R1, R2, G8, V5, B9, V9, V3, R5, R8, V7 1	G3, G9, R3, R4, V6, G1, G6, V8 5	G7, C5, G4, C4, V1, C9, M6 6	K4, K5, K3, C2, C3, N5, K6, K4, K7, N3 10	N2, K1, K2, N1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspect (> 15% slope)	North 0	Flat 5	<16% slope all aspects 10	West 12	South 15
15	Slope (%)	<16 1	16–29 and max score for North aspects 5	30–54 10	55–54 12	>55 15
16	Terrain	Flat 1	Rolling 5	Steeper terrain, minor ravines and draws 5	Extensive slope, Deep ravines or shallow gullies 7	Consistent slope, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha mature forest fuel 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 3	Mountainous terrain, barrier topography, regular aspect and slope changes, multiple restrictions to wildfire spread (large natural barriers) 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 15 /55

FUEL, WEATHER AND TOPOGRAPHY WILDFIRE BEHAVIOUR THREAT SCORE 132 x2.00**

	Structures	A	B	C	D	E
18	Position of Structures/ Continuity on Slope	No Structures/ Values within 2 km 0	Bottom of slope, valley bottom 3	Mid-slope benchland, elevated valley, 5-30% slope 10	Mid-slope continuous, >30% slope 12	Upper 1/3 of Slope 15
19	Type of Development	No Structures/ Values within 2 km 0	Perimeter/ Peripheral, no enclosure 3	Perimeter/ Peripheral, with enclosure 5	Intermix: > 1 structure/ha 8	Intermix: < 1 structure/ha Infrastructure 10
20	Position of Attachment Area Relative to Values	No Structures/ Values within 2 km 0	Distant >500 200-500 <200 m 1 10 20	Isolated >500 200-500 <200 m 1 12 25	Flat/Rolling >500 200-500 <200 m 1 12 25	Below >500 200-500 <200 m 1 15 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 37 /75

TOTAL WILDFIRE THREAT SCORE /295

*Proceed only if Fuel sub total is >20.

**Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for interested polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–149	☒
Extreme	>149	☐

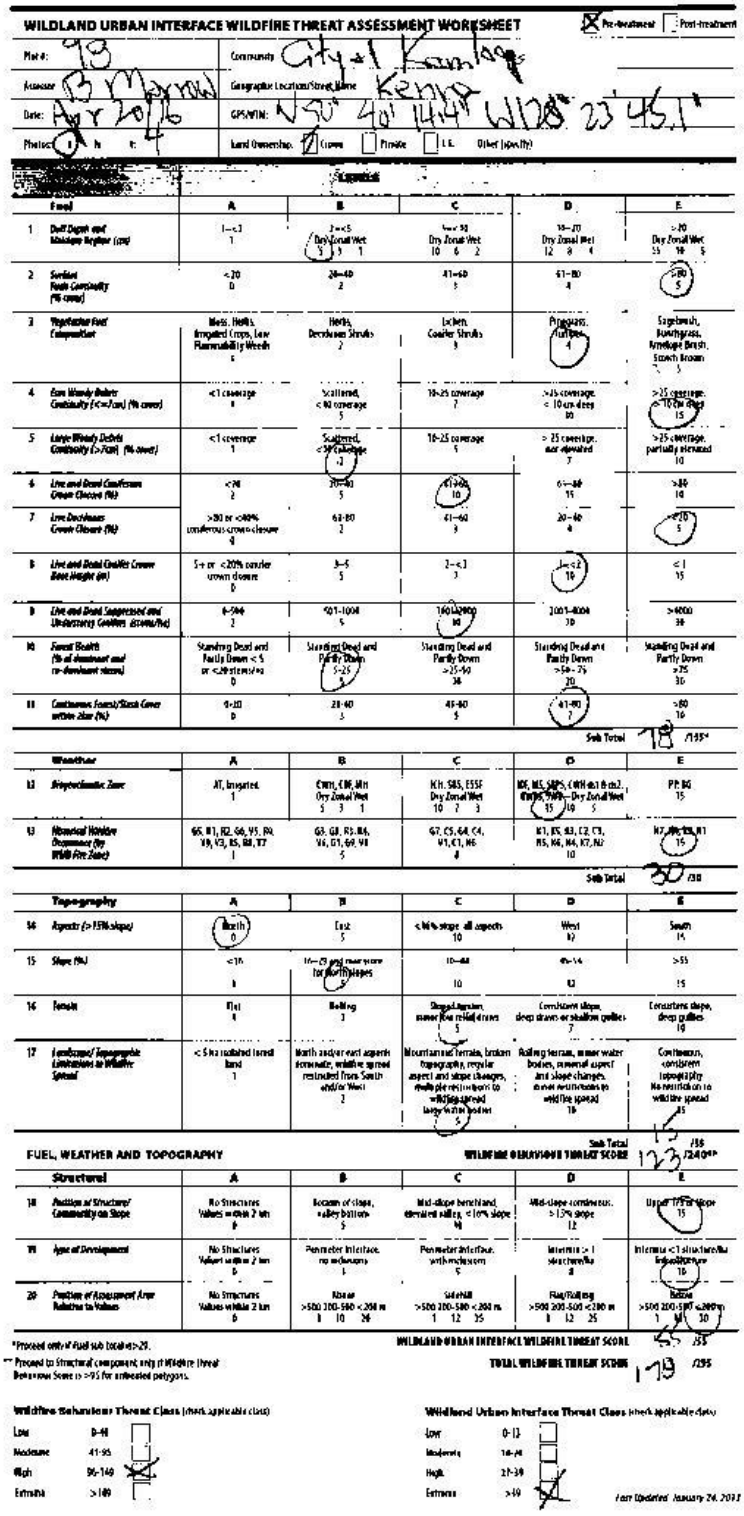
Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–38	☒
Extreme	>38	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 97

Photo 97-1 @ 200 degrees



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

☒ Pre-treatment ☐ Post-treatment

Plot #: 98 Community: City of Kamloops

Assessor: B Marriott Geographic Location/Street Name: Kenna

Date: Apr 20/16 GPS/UTM: N50° 40' 14.4" W120° 23' 45.1"

Photos: # In # 4 Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

98

Segment

	Fuel	A	B	C	D	E
1	Duff Depth and Moisture Regime (cm)	1–<3 1	3–<5 Dry Zonal Wet 3 3 1	5–<10 Dry Zonal Wet 10 6 2	10–20 Dry Zonal Wet 12 8 4	>20 Dry Zonal Wet 15 10 5
2	Surface Fuels Continuity (% cover)	<20 0	20–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 0	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Fireweed 4	Sagebrush, Bunchgrass, Antelope Brush, Snowberry 5
4	Fine Woody Debris Continuity (<=7cm) (% cover)	<1 coverage 1	Scattered, <40 coverage 5	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 1	Scattered, <30 Coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Coniferous Crown Closure (%)	<20 2	20–40 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% coniferous crown closure 4	61–80 2	41–60 3	20–40 4	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 3	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1000 5	1001–2000 10	2001–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Down < 5 or <_20 stems/ha 0	Standing Dead and Partly Down 5–25 5	Standing Dead and Partly Down >25–50 30	Standing Dead and Partly Down >50–75 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 78 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	AT, Irrigated 1	CWH, CDF, MH Dry Zonal Wet 5 3 1	ICH, SBS, ESSF Dry Zonal Wet 10 7 3	IDF, MS, SBPS, CWH dm1 & dm2, PP Dry Zonal Wet 15 10 5	PP, BG 15
13	Historical Wildfire Occurrence (by Wildfire Zone)	65, 81, R2, 66, V5, R9, V3, R5, B8, T7 1	G5, G8, R3, R4, V6, G1, G9, V8 5	G7, C5, G4, C4, V1, C1, H6 8	K1, K5, K3, C2, C3, R5, K6, K4, K7, K2 10	K7, K6, K5, K1 15

Sub Total 30 /30

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<16% slope all aspects 10	West 12	South 14
15	Slope (%)	<10 8	10–20 and more for north slopes 9	10–40 10	40–54 12	>55 15
16	Terrain	Flat 0	Rolling 3	Broad valleys, some low relief draws 5	Consistent slope, steep draws or shallow gullies 7	Consistent slope, steep gullies 10
17	Landscape/Topographic Limitations to Wildfire Spread	< 5 ha isolated forest land 1	North and/or east aspects dominate, wildfire spread restricted from South and/or West 2	Mountainous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread, large within patches 5	Rolling terrain, some water bodies, numerous aspect and slope changes, some restrictions to wildfire spread 10	Continuous, consistent topography No restriction to wildfire spread 15

Sub Total 12 /35

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 123 /240**

	Structural	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope benchland, elevated valley, <10% slope 10	Mid-slope continuous, >10% slope 12	Upper 1/3 of slope 15
19	Age of Development	No Structures Values within 2 km 0	Perimeter interface, no enclosure 1	Perimeter interface, with enclosure 5	Interface >1 structure/ha 8	Interface <1 structure/ha Isolated structure 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Base or >500 200–500 <200 m 8 10 20	Saddle or >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 8 12 25	Ridge >500 200–500 <200 m 1 [illegible] 30

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 55 /55

TOTAL WILDFIRE THREAT SCORE 178 /295

*Proceed only if Fuel sub total is >29.

**Proceed to Structural component, only if Wildfire Threat Behaviour Score is >95 for unbeaded polygons.

Wildfire Behaviour Threat Class (check applicable class)

Low	0–40	☐
Moderate	41–95	☐
High	96–140	☒
Extreme	>140	☐

Wildland Urban Interface Threat Class (check applicable class)

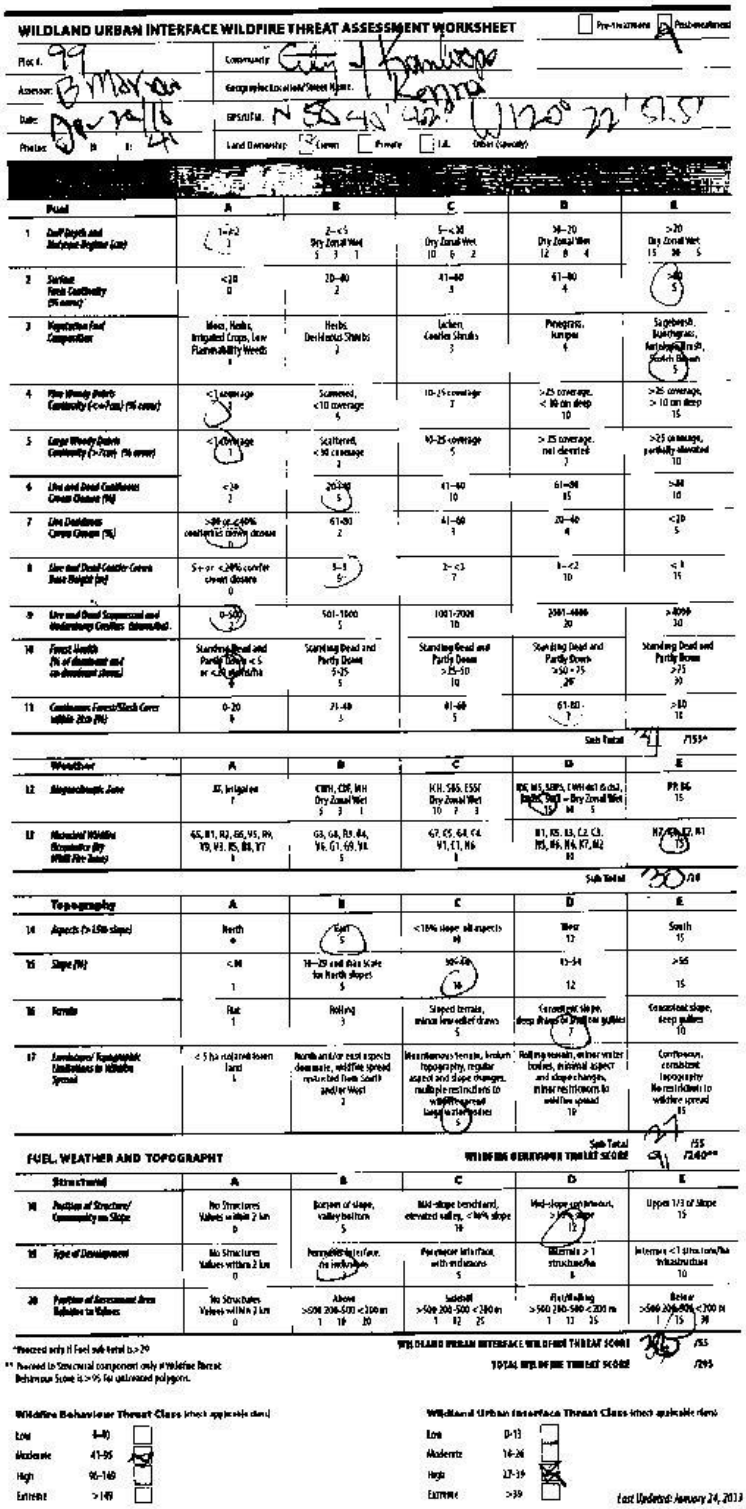
Low	0–13	☐
Moderate	14–21	☐
High	22–30	☐
Extreme	>30	☒

Form Updated January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 98

Photo 98-1 @ 45 degrees

99



WILDLAND URBAN INTERFACE WILDFIRE THREAT ASSESSMENT WORKSHEET

Pre-treatment ☐ Post-treatment ☐

Plot #: 99 | Community: City of Kamloops

Assessor: B Morgan | Geographic Location/Street Name: Kenna

Date: Dec 16/16 | UTM/Lat. N 50 40' 42" W120° 22' 51.5"

Photos: ID: | Land Ownership: ☒ Crown ☐ Private ☐ I.R. ☐ Other (specify)

	Fuel	A	B	C	D	E
1	Duff Depth and Herbaceous Register (cm)	1–<2 1	2–<5 Dry Zone/Wet 5 3 1	5–<30 Dry Zone/Wet 10 6 2	30–70 Dry Zone/Wet 12 8 4	>70 Dry Zone/Wet 15 10 5
2	Surface Fuel Continuity (% cover)	<10 0	10–40 2	41–60 3	61–80 4	>80 5
3	Vegetation Fuel Composition	Moss, Herbs, Irrigated Crops, Low Flammability Weeds 1	Herbs, Deciduous Shrubs 2	Lichen, Conifer Shrubs 3	Pinegrass, Kinnikinnick 4	Sagebrush, Bunchgrass, Antelope Bitterbrush, Conifer Saplings 5
4	Fine Woody Debris Continuity (<6cm dia) (% cover)	<1 coverage 3	Scattered, <10 coverage 6	10–25 coverage 7	>25 coverage, < 10 cm deep 10	>25 coverage, > 10 cm deep 15
5	Large Woody Debris Continuity (>7cm) (% cover)	<1 coverage 0	Scattered, <30 coverage 2	10–25 coverage 5	> 25 coverage, not elevated 7	>25 coverage, partially elevated 10
6	Live and Dead Conifers Crown Closure (%)	<10 2	20–30 5	41–60 10	61–80 15	>80 10
7	Live Deciduous Crown Closure (%)	>80 or <40% conifers crown closure 0	61–80 2	41–60 4	20–40 6	<20 5
8	Live and Dead Conifer Crown Base Height (m)	5+ or <20% conifer crown closure 0	3–5 5	2–<3 7	1–<2 10	<1 15
9	Live and Dead Suppressed and Understorey Conifers (stems/ha)	0–500 2	501–1500 5	1001–2000 10	2501–4000 20	>4000 30
10	Forest Health (% of dominant and co-dominant stems)	Standing Dead and Partly Dead < 5 or <20 stems/ha 0	Standing Dead and Partly Dead 5–25 5	Standing Dead and Partly Dead >25–50 10	Standing Dead and Partly Down >50 > 25 20	Standing Dead and Partly Down >75 30
11	Continuous Forest/Slash Cover within 2km (%)	0–20 0	21–40 3	41–60 5	61–80 7	>80 10

Sub Total 41 /155*

	Weather	A	B	C	D	E
12	Biogeoclimatic Zone	IDF, Irrigated 1	CWH, CDF, MH Dry Zone/Wet 5 3 1	ICH, SBS, ESSF Dry Zone/Wet 10 7 3	BDC, MS, SBPS, CWH (excl CDF), Boreal, SWB – Dry Zone/Wet 15 10 5	PP, BG 15
13	Historical Wildfire Ignitions (by Wildfire Zone)	65, 81, 82, 86, 95, 99, 99, 103, 105, 108, 107 1	63, 68, 89, 84, 96, 61, 69, 98 5	67, 85, 68, 94, 91, 61, 86 8	81, 85, 83, 82, 83, 105, 106, 104, 107, 102 10	102, 103, 102, 101 15

Sub Total 30 /70

	Topography	A	B	C	D	E
14	Aspects (>15% slope)	North 0	East 5	<10% slope all aspects 10	West 12	South 15
15	Slope (%)	<10 1	10–29 and flat Rate for North slopes 5	30–40 10	41–54 12	>55 15
16	Terrain	Flat 1	Rolling 3	Sloped terrain, minor low relief draws 5	Canyon/ridge top, deep draws or steep gullies 7	Canyon/ridge, deep gullies 10
17	Landscape/ Topographic Limitations to Wildfire Spread	< 5 ha relatively open land 1	North and/or east aspects deer mate, wildfire spread restricted from South and/or West 3	Discontinuous terrain, broken topography, regular aspect and slope changes, multiple restrictions to wildfire spread (large water bodies) 5	Rolling terrain, minor water bodies, minimal aspect and slope changes, minor restrictions to wildfire spread 10	Continuous, consistent topography No restrictions to wildfire spread 15

Sub Total 27 /55

FUEL, WEATHER AND TOPOGRAPHY — WILDFIRE BEHAVIOUR THREAT SCORE 57 /240**

	Structure/	A	B	C	D	E
18	Position of Structure/ Community on Slope	No Structures Values within 2 km 0	Bottom of slope, valley bottom 5	Mid-slope bench/ant, elevated valley, <10% slope 10	Mid-slope on bench, >10% slope 12	Upper 1/3 of slope 15
19	Type of Development	No Structures Values within 2 km 0	Perimeter interface, no inclusions	Perimeter interface, with inclusions 5	Intermix > 1 structure/ha 8	Intermix <1 structure/ha Wildland/Urban 10
20	Position of Assessment Area Relative to Values	No Structures Values within 2 km 0	Above >500 200–500 <200 m 1 10 20	Sidehill >500 200–500 <200 m 1 12 25	Flat/Rolling >500 200–500 <200 m 1 13 25	Below >500 200–500 <200 m 1 15 30

*Proceed only if Fuel sub-total is >20

** Proceed to Structural component only if Wildfire Threat Behaviour Score is >95 for untreated polygons.

WILDLAND URBAN INTERFACE WILDFIRE THREAT SCORE 30 /55

TOTAL WILDFIRE THREAT SCORE /295

Wildfire Behaviour Threat Class (check applicable class)

Low	5–40	☐
Moderate	41–95	☒
High	96–149	☐
Extreme	>149	☐

Wildland Urban Interface Threat Class (check applicable class)

Low	0–13	☐
Moderate	14–26	☐
High	27–39	☒
Extreme	>39	☐

Last Updated: January 24, 2013

City of Kamloops – Wildfire Threat Assessment Picture – Plot 99

Photo 99-1 @ 80 degrees

Appendix C

Fire Weather Data

Fire Weather System

Danger History in the Forest

Year	Danger Class	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total days
20 AFTON														
Average	Extreme	0.00	0.00	0.00	0.10	2.00	2.00	8.20	6.30	1.30	0.10	0.10	0.00	20.10
Average	High	0.00	0.00	0.00	0.80	9.40	7.20	12.80	17.90	11.20	4.00	0.10	0.00	63.40
Average	Moderate	0.50	0.00	0.40	10.50	10.10	8.60	5.40	4.00	7.00	8.80	3.70	0.30	59.30
2006	Extreme					1	3	14	8					26
	High				3	10	5	15	17	8				58
	Moderate				13	13	11		5	2				44
2007	Extreme					10	5	9	3	1				28
	High				1	17	11	14	21	13				77
	Moderate				17	4	9	4	6	5	1	1		47
2008	Extreme						3	16	11	2				32
	High				2	10	12	14	18	23	5			84
	Moderate				16	17	10	1	2	5	20	6		77
2009	Extreme					1	9	16	18	1				45
	High					8	17	10	13	15	14			77
	Moderate				9	12	4	3		10	3	7		48
2010	Extreme							3	2					5
	High					6	1	17	19	1				44
	Moderate			1	14	11	8	7	6	3	7	1		58
2011	Extreme							5	2	5		1		13
	High					2	2	6	28	23	4	1		66
	Moderate				8	14	13	8	1	2	25	21	3	95
2012	Extreme					4		1	2	1	1			9
	High					14	4	4	19	18	17			76
	Moderate	5		3	8	10	3	11	8	8	7			63
2013	Extreme					2		5	5					12
	High					6		13	18	6				43
	Moderate				2	12	4	12	6	15	1			52
2014	Extreme							7	6					13
	High						8	14	6					28
	Moderate				4		12	5	3	5	6			35
2015	Extreme				1	2		6	6	3				18
	High				2	21	12	21	20	5				81
	Moderate				14	8	12	3	3	15	18	1		74

Fire Weather System

Danger History in the Forest

Year	Danger Class	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total days
20 LEIGHTON LAKE														
Average	Extreme	0.00	0.00	0.00	0.00	0.00	0.20	0.80	2.70	1.80	0.10	0.00	0.00	5.60
Average	High	0.00	0.00	0.00	0.00	1.80	1.70	10.20	15.00	8.30	3.00	0.10	0.00	40.10
Average	Moderate	0.00	0.00	0.00	1.30	7.20	5.30	13.00	8.50	8.40	6.90	2.60	0.00	53.20
2006	Extreme								4	1				5
	High							18	12					30
	Moderate				7	9	4	11	10	7				48
2007	Extreme							3						3
	High					4		15	16	6				41
	Moderate					16	10	7	10	10				53
2008	Extreme								3	3				6
	High						2	12	17	15	3			49
	Moderate				2	5	6	13	10	9	7			52
2009	Extreme							2	6	2				10
	High						5	12	25	8	2			52
	Moderate					3	10	12		13	13			51
2010	Extreme													0
	High							2	6					8
	Moderate					2	5	17	13	1	2	3		43
2011	Extreme								1	9				10
	High							2	13	17	6	1		39
	Moderate						4	14	14	4	16	21		73
2012	Extreme								2	2	1			5
	High					4	2	1	18	18	18			61
	Moderate				1	11	2	17	8	7	2			48
2013	Extreme								3					3
	High					3		16	17	9				45
	Moderate					11		14	11	10				46
2014	Extreme							3	2					5
	High							8	10					18
	Moderate							15	5	10	10			40
2015	Extreme						2		6	1				9
	High					7	8	16	16	10	1			58
	Moderate				3	15	12	10	4	13	19	2		78

Fire Weather System

Danger History in the Forest

Year	Danger Class	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total days
20 PASKA LAKE														
Average	Extreme	0.00	0.00	0.00	0.00	0.00	0.10	0.10	1.40	1.30	0.00	0.00	0.00	2.90
Average	High	0.00	0.00	0.00	0.00	0.00	0.40	6.60	10.10	4.40	1.10	0.00	0.00	22.60
Average	Moderate	0.00	0.00	0.00	0.00	2.10	3.10	12.50	10.80	8.20	4.90	0.10	0.00	41.70
2006	Extreme								2					2
	High							10	13					23
	Moderate						4	16	8	7	1			36
2007	Extreme													0
	High							4	2					6
	Moderate					6	3	16	12	6				43
2008	Extreme								2	5				7
	High							13	20	7	2			42
	Moderate						3	11	7	11	2			34
2009	Extreme								3	2				5
	High							9	20	12	2			43
	Moderate						9	16	8	8	14			55
2010	Extreme													0
	High													0
	Moderate							5	17					22
2011	Extreme									4				4
	High								5	17				22
	Moderate							5	18	9	9	1		42
2012	Extreme									2				2
	High								5	6	7			18
	Moderate					5		11	15	18	14			63
2013	Extreme								1					1
	High							9	17	2				28
	Moderate						1	16	9	12	2			40
2014	Extreme													0
	High							6	12					18
	Moderate							16	3	7	4			30
2015	Extreme						1	1	6					8
	High						4	15	7					26
	Moderate					10	11	13	11	4	3			52

Fire Weather System

Danger History in the Forest

Year	Danger Class	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total days
20 SPARKS LAKE														
Average	Extreme	0.00	0.00	0.00	0.00	0.00	0.30	1.60	2.00	0.40	0.00	0.00	0.00	4.30
Average	High	0.00	0.00	0.00	0.00	3.50	2.50	12.20	15.00	8.50	2.20	0.00	0.00	43.90
Average	Moderate	0.00	0.00	0.00	1.40	8.40	5.80	9.60	10.20	6.90	3.00	0.60	0.00	45.90
2006	Extreme							3	3					6
	High					2	3	17	15	7				44
	Moderate				4	11	4	9	11	2				41
2007	Extreme						1	3						4
	High					17	2	17	14	4				54
	Moderate				2	9	9	5	10	6				41
2008	Extreme							1	1					2
	High						3	15	12	16	3			49
	Moderate				1	4	9	10	16	13	8	3		64
2009	Extreme						2	2	6					10
	High					1	11	20	12	16	1			61
	Moderate					10	10	5	11	10	14			60
2010	Extreme													0
	High							4	8					12
	Moderate				7	9	1	17	10	1	1	1		47
2011	Extreme									3				3
	High							3	15	16				34
	Moderate					5	2	5	16	10	5	2		45
2012	Extreme								4	1				5
	High							2	21	24	18			65
	Moderate					12	3	14	6	3	1			39
2013	Extreme							1						1
	High					5		13	26	2				46
	Moderate					12		12	5	6				35
2014	Extreme							3	1					4
	High							14	13					27
	Moderate						6	9	9	13	1			38
2015	Extreme							3	5					8
	High					10	6	17	14					47
	Moderate					12	14	10	8	5				49

Appendix D
City of Kamloops Overview Map 1

Appendix E
City of Kamloops Wildfire Threat Map 2

Appendix F
City of Kamloops PSTA, Fire History, Critical Infrastructure Map 3

Appendix G
City of Kamloops PSTA Fuel Types Map 4

Appendix H
City of Kamloops CWPP Fuel Types Map 5