

FW: DOS Fire Analysis Report - K6 1884 White Rock Lk

From: BCWS KFC Plans FLNR:EX <BCWS.KFCPlans@gov.bc.ca>
To: BCWS NORTH Okanagan Complex Plans FLNR:EX
<BCWS.NorthOkanaganComplexPlans@gov.bc.ca>
Sent: August 5, 2021 5:42:40 PM PDT
Attachments: image001.jpg, K61884_TimberValues_20210727.xls, K61884_Preliminary_Analysis.xls,
image002.png, K61884_Preliminary_Map.pdf

From: BCWS KFC RWCO FLNR:EX <BCWS.KFCRWCO@gov.bc.ca>
Sent: August 5, 2021 5:05 PM
To: BCWS KFC Plans FLNR:EX <BCWS.KFCPlans@gov.bc.ca>
Subject: FW: DOS Fire Analysis Report - K6 1884 White Rock Lk

More documents for K61884 FA

From: Cisco, Simon W FLNR:EX <Simon.Cisco@gov.bc.ca>
Sent: August 5, 2021 4:22 PM
To: BCWS KFC Operations FLNR:EX <BCWS.KFCOperations@gov.bc.ca>; BCWS KFC RWCO FLNR:EX
<BCWS.KFCRWCO@gov.bc.ca>
Cc: BCWS KFC Merritt ZWCO FLNR:EX <BCWS.KFCMerrittZWCO@gov.bc.ca>
Subject: FW: DOS Fire Analysis Report - K6 1884 White Rock Lk

From: Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>
Sent: August 5, 2021 4:12 PM
To: Cisco, Simon W FLNR:EX <Simon.Cisco@gov.bc.ca>
Subject: RE: DOS Fire Analysis Report - K6 1884 White Rock Lk

Hi Simon,

I forgot to add this stuff to the original email. I will put it all on the Incident drive.

Brent

From: Lipinski, Brent X FLNR:EX
Sent: August 5, 2021 4:00 PM
To: Cisco, Simon W FLNR:EX <Simon.Cisco@gov.bc.ca>
Subject: DOS Fire Analysis Report - K6 1884 White Rock Lk

Hi Simon,

Thanks very much for speaking with me on the phone. As a reminder, I am the lead for the Fire Analysis Reports for the District of Okanagan Shuswap (DOS).

Attached is the White Rock Lk Fire Analysis Report that was completed by DOS. We did this at the recommendation or Bob Warner due to the area the fire now has burned within our Forest District.

As a reminder, the attached Fire Analysis does not have BCWS comments. I can send you a version that is not yet signed by the DM if you guys have someone who can make comments to help complete the report.

Also, are you the person that I should talk with in the future about this fire and our Fire Analysis Reports? I am willing to bet we will be running these again in the future for this fire.

Thanks,
Brent

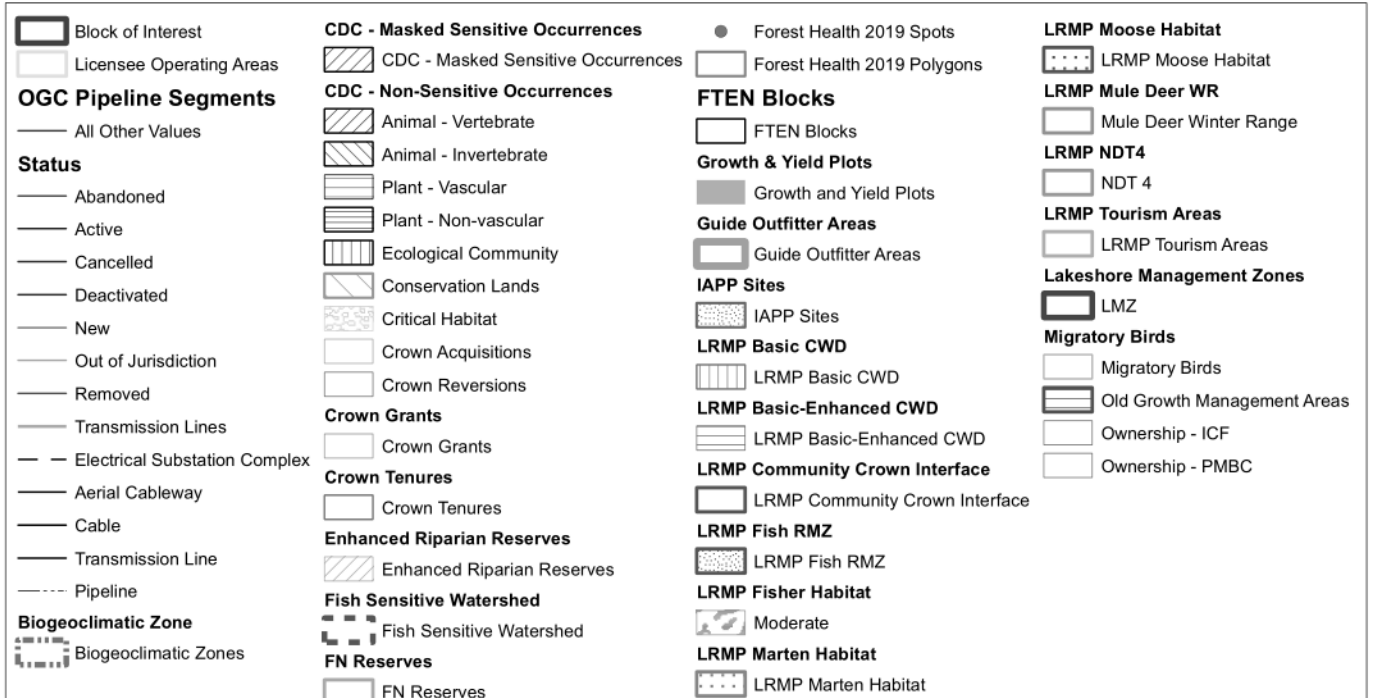
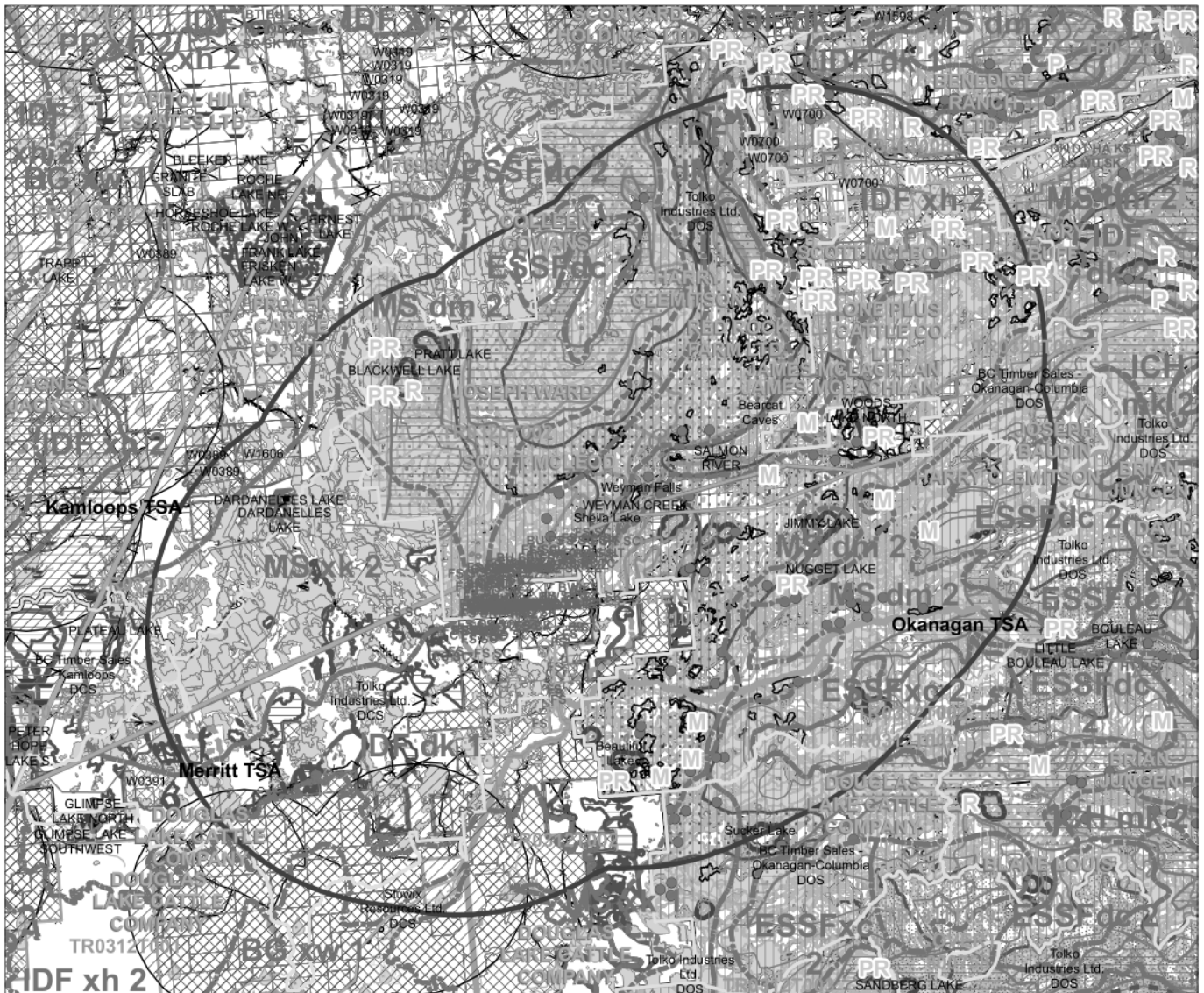


Brent Lipinski, RFT
Land and Resource Specialist

Ministry of Forests, Lands, Natural Resource Operations and Rural Development
Okanagan Shuswap Natural Resource District
2501 14th Ave | Vernon, BC V1T 8Z1
Work: (778) 943-6878
Cell: (250) 503-8135

I acknowledge with gratitude that I live and work on the territories of Indigenous Peoples who have been here since time immemorial.







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FIRE ANALYSIS

INCIDENT NO. K61884	DATE (YYYY-MM-DD) 8/10/01 <small>Click here to enter a date.</small>	TIME (24HRS) 1300	CURRENT ESTIMATED SIZE 81,000 ha	ESTIMATED SIZE AT CONTROL 100,000 ha
LATITUDE 50 ° 21'06.27	LONGITUDE 119 ° 56'37.67	FIRE LOCATION (GEOGRAPHIC) White Rock Lake		
FUEL TYPE / DESCRIPTION Fuel type is a mosaic of the following: C7, C5, M2, D1, C3, grass (O-1a, 90% curing).				
WEATHER FORECAST FOR OR NEXT OPERATIONAL PERIOD (precipitation forecasted, drying trend, wind event, etc.)				
OUTLOOK: THURSDAY-FRIDAY August 19-20 The ridge is flattened Thursday by an upper trough crossing northern BC. Temperatures will cool one or two degrees from Wednesday and winds will be light north to northwest. As the trough moves to the east, a northwest flow will be established over the region, and on Friday an upper low in the flow will move over the northwest Washington State with isolated showers in the fire centre region along the US border. Temperatures will still be in the low to mid-twenties and winds will be light north.				
MAP ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO FIRE BEHAVIOUR FORECAST ATTACHED YES <input type="checkbox"/> YES <input type="checkbox"/> NO				
LONG RANGE FIRE GROWTH PROJECTION REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Reason if No				
LONG RANGE FIRE GROWTH PROJECTION ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				
VALUES AT RISK: <input checked="" type="checkbox"/> Public Safety <input checked="" type="checkbox"/> Occupied Interface Area <input checked="" type="checkbox"/> Infrastructure/Assets - Private <input checked="" type="checkbox"/> Infrastructure -Public <input checked="" type="checkbox"/> High Environmental Values <input checked="" type="checkbox"/> High Socio Economic Values <input checked="" type="checkbox"/> Timber Resource <input checked="" type="checkbox"/> Recreation				
<input checked="" type="checkbox"/> Comments s.16; s.18				
GENERAL CONTROL OBJECTIVES				
Employ direct, indirect and parallel attack with the intent to steer the fire into the working forest and away from major travel corridor routes and homes. Firefighter and public safety is the highest priority when determining Incident Objectives, Strategies and Tactics. Provide for public safety through Evacuation Orders & Alerts and Area Closures as dictated by fire activity. Take advantage of natural barriers and weather conditions to contain fire at the smallest possible size, consistent with safety considerations.				
STRATEGIES FOR THE INCIDENT				
Full response using direct, parallel and indirect attack Trigger points are not set in a permanent location due to additional inputs from ISG. The trigger points identified on the map should be considered "floating" as they will need to move based on a number of factors. (transportation corridors, community evacuation timelines, fire behaviour predictions, and many other factors determined by members of the ISG).				



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FIRE ANALYSIS

PROBABILITY OF MEETING OBJECTIVES

Medium (HIGH, MEDIUM OR LOW)

ESTIMATED SUPPRESSION COSTS \$ 33,000,000

ESTIMATED DAILY COST TO CONTROL (from daily cost estimator) \$ 1,000,000

ESTIMATED VALUES PROTECTED \$ 1,161,004,033 AS PER LAND MANAGER

LAND MANAGER COMMENTS

Agreed to Full Response:

Prioritize the protection of and minimize the impact to:

s.16; s.18

NAME Ray Crampton

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: ☐ YES ☐ NO

SIGNATURE _____

OTHER AGENCY / STAKEHOLDER COMMENTS

NAME _____

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: ☐ YES ☐ NO

SIGNATURE _____

FIRE CENTRE REPRESENTATIVE COMMENTS

s.22

POSITION

SWO OPERATIONS

CERTIFICATION LEVEL

IC2 / PWCO
PWCO



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FIRE ANALYSIS

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LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: ☒ YES ☐ NO

SIGNATURE Ray Crampton

OTHER AGENCY / STAKEHOLDER COMMENTS

NAME _____

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: ☐ YES ☐ NO

SIGNATURE _____

FIRE CENTRE REPRESENTATIVE COMMENTS

s.22

POSITION SWO OPERATIONS

CERTIFICATION LEVEL IC2 / RUCO
AWCO



FIRE ANALYSIS

INCIDENT COMMANDER SIGNATURE:

APPROVED BY (FIRE CENTER MANAGER OR DESIGNATE) SIGNATURE:

SPECIFIC CONDITIONS (Provide specific conditions that would require a fire analysis update)

If the estimated suppression cost will be exceeded or fire control objectives change.

If the fire breaches the trigger points with a moving, organized flame front.



FIRE ANALYSIS

DETAILS ON ISSUES, CONSTRAINTS & VALUES AT RISK

Stewardship - Infrastructure & Private Lands

Municipalities include the District of Lake Country and The Corporation of the City of Vernon.
A significant amount of Private land is located diagonally from the SW to NE quadrants and around the 10km fire buffer.
Transmission lines intersect the middle of the 10km fire buffer.
OGC pipeline segments located at the Northern portion of the 10km fire buffer, near the town of Westwood.
The Regional Districts of North Okanagan, Thompson Nicola, Columbia Shuswap and the Central Okanagan are located within the 10km fire buffer.
Community Crown Interface and Scenic Areas is located in the SE and NE quadrants of the 10km fire buffer, associated with the town of Westwood, and the north arm of Okanagan Lake.
Terrain stability is potential unstable mainly in the NW and SE quadrants 10km fire perimeter. There is significant unstable terrain in the SE quadrant.
DOS: 185 PID's
Cascades: BC Hydro Infrastructure – 31km of transmission lines, 163 transmission structures, 373 poles
High Voltage transmission lines (77km) and 547km of transmission lines
Bridge(s): 42 structures with a civic address

First Nations Values

s.16; s.18

Stewardship - Forest Tenures

TOTAL TIMBER VALUES = \$1,155,450,583.
Timber values inside the 10km fire perimeter are estimated at \$4,567/ha. With the area within the 10km fire perimeter equating to 253,217 ha, the timber values equate to \$ 1,155,450,583. Efforts should be undertaken to minimize timber loss especially inside the THLB. Reforestation costs are estimated at \$2,300/ha. Timber Supply Area (TSA) - The 10km fire buffer covers the Merritt TSA, Kamloops TSA and the Okanagan Shuswap TSA.
The 10km fire perimeter buffer overlaps with the operating area of Tolko Industries Ltd. (Cascades and Okanagan Shuswap District), BC Timber Sales (Kamloops and Vernon) and Stuwix Resources Ltd. The District has reached out and notified the license holders by email.
There is one Tree Farm Licence (TFL 40) located in the centre of the fire perimeter, owned by Tolko Industries Ltd.
Woodlots - Woodlots - there are 9 woodlot owners and 22 woodlots located within the 10km fire buffer
FTEN is Forest Tenure blocks (everything from planned through to harvested). Active cutblocks exist throughout the entire 10km fire buffer.
The majority of the cutblocks are Free Growing within the 10km fire buffer (blocks that FG = 70%)
Old growth Management Areas (OGMA) area dispersed throughout the 10km fire buffer.
Many forest Health points and polygons are located to the East of the fire start point and cover the NE and SE quadrants of the 10km fire perimeter.

Ecosystems

Unless necessary for suppression actions avoid burning to consume fuels in Bighorn Sheep Winter Range (grasslands adjacent to steep, rocky escape terrain located along the southeast edge of fire perimeter along the west side of Okanagan Lake), and within American Badger Critical Habitat, located across the north half of the fire perimeter. Avoid burning and placement of freiguards within Western Rattlesnake and Gopher snake Critical Habitat along the southeast edge of fire perimeter along the west side of Okanagan Lake. Avoid burning within a 30 m buffer along mainstems and tributaries and avoid freiguards through the riparian buffer and minimize sediment input into streams especially within fisheries sensitive watershed (Shors Creek) located just south of the fire perimeter.
Values: Overall fire perimeter and buffer is high environmental conservation sensitivity due to critical habitat for American Badger, Western Rattlesnake, Gopher snake and Ungulate Winter Ranges for Mountain Goat, Moose, Bighorn Sheep and Mule Deer. Moose Winter Range is located across the western half of the fire perimeter, while Mountain Goat, Mule Deer and Bighorn Sheep Winter Ranges are located along the southeast edge of fire perimeter along the west side of Okanagan Lake. Fire suppression is recommended for high elevation winter ranges as fire can impact habitat through reduction of thermal and security cover required for winter survival. There are three Community Watersheds that are located within or very near to the fire buffer, Lambly Community Watershed, Hope Community Watershed and Norrie Community Watershed. Old Growth Management Areas (OGMA) are scattered throughout the fire buffer. Fireguard and road construction is a concern for Mountain Goat, and fish habitat.
Cascades: Legal Old Growth Management Areas (84ha)
Non-legal Old Growth Management Areas (2332ha)
Ungulate winter range (UWR) (20,281ha)
Nest trees sensitive to bucksking (154)
Critical aquatic habitat for fish (streams, wetland)
Kamloops: KLRMP critical deer winter range in northern buffer past Monte Lake
Perfired forest in northern buffer past Monte Lake

Range, Recreation, Parks

DOS
RANGE - TOTAL COST = \$3,901,000
100km Fence at \$2,500,000; 90 Callguards at \$900,000; 1 Cabin at \$40,000; 2 Enclosures at \$16,000; 9 Corrals at \$90,000; 35 Water Developments at \$350,000; 1km Stock trail at \$5,000
CASCADIES Range developments including bridges/callguards (31), gates (23), and fences (209km)
RECREATION - TOTAL COST = \$652,450
Sites:
Evelly (REC1596) 50 defined campsites. One of our most popular recreation sites in the Okanagan. \$207,900.00
Boulevard Lake (REC1597) 4 Defined campsites. Popular fishing lake and campground. \$19,700.00
Little Boulevard Lake (REC1598) 1 Defined campsite. Popular fishing lake. \$10,250.00
Bear Creek (REC1768) 40 defined campsites. Very popular with OHV and camping. Very large network of OHV Trails (Not inside buffer area). \$155,450.00
Sandberg Lake (REC4654) 1 Defined campsite. Popular fly fishing lake. \$6100.00
Dandanelles Lake (REC4747) 4 Defined campsites. Very popular fly fishing lake and campground. \$12,900.00
Blackwell Lake (REC1947) No defined campsites. Popular rustic camping. Total area 21 hectares.
Pratt Lake (REC1946) 7 Defined campsites. Popular fishing lake and campground. \$16,800
Pineus Lake North (REC1600) 8 Defined campsites. Very popular fishing lake and campground. \$39,300
Square Lake (REC1609) 3 Defined campsites. Popular fishing lake and campground. \$14,800

Stewardship - Water and Lakes

WATER:
There are three Community Watersheds that are located within or very near to the 10km fire buffer, Lambly Community Watershed, Hope Community Watershed and Norrie Community Watershed.
Lakeshore Management Zones are associated with Okanagan Lake and smaller plateau lakes dispersed throughout the 10km fire buffer
One fisheries Sensitive Watershed (Shors Creek) is located in the south half of the 10km fire buffer, along with the Fish Riparian Management Zone (RMZ)
Several points of Diversion (POD) Licenses and lines are located throughout the 10km fire perimeter; a high number is concentrated within the town of Westwood and Vernon (north and east quadrants)
A limited number of Enhanced Riparian Reserves (ERR) are located in the centre of the 10km fire perimeter
the 10km fire perimeter
Cascades: Domestic use – water point of diversion (1)
All other uses water points of diversion (57)
Groundwater wells (35)
Licensed water works (53) and lines (42,783km)
Dams (4)

Stewardship - Other Tenures

Crown Tenures: 570 crown tenures including: waste disposal, recreation residential, sand and gravel, moorage, regional parks, sewerlines, right of ways, marinas, communications sites, wharfs, electrical power lines
There are seven trappers located within the 10km fire perimeter (TR03121001, TR03121002, TR03201005, TR03201006, TR03201002, TR03201003, TR03261008)
There are two guides located in the 10km fire buffer, (310001, BENNETT and 800758, COVERT)
There are 28 Research Installations located throughout the 10km fire perimeter;
There are 39 Growth and Yield plot located at the north end of the 10km fire perimeter near the town of Westwood
Partial Retention, Retention and Moderate Visual Quality is located in the NE quadrant of the 10km Fire buffer
Cascades: Mineral and Coal (M), Sand and Gravel (S), Placer (S) Operations
M: Juniper Creek Zeolite, S: Red Rock Farms Ltd.



FIRE ANALYSIS

FIRE CONTROL OBJECTIVES, STRATEGY AND TACTICS OPTIONS	
OPTION 'A'	
OBJECTIVE: Provide for general public and responder safety. Protect public health, government infrastructure and private property.	
STRATEGY: Full response using direct, parallel and indirect attack.	
TACTICS: Utilize Structure Protection Specialists and Strike Teams to protect structures and other values using direct and indirect methods including helicopter bucketing, water tenders and crews. Utilize Structure Protection Units and Fire Department engines to protect structures and other values with engines and water delivery systems. Utilize indirect attack by establishing control lines using machine guards and fuel free lines with handguards for burning off operations. Establish 30 meter blackline using direct attack methods with water delivery, machine guard construction and hand tools. Utilize parallel attack by establishing control lines using machine guards for burning off operations.	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW) Medium	
TOTAL VALUES AT RISK 'A' \$ Unquantifiable	ESTIMATED TOTAL SUPPRESSION COSTS 'A' \$ 33 Million
OPTION 'B'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'B' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'B' \$
OPTION 'C'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'C' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'C' \$



FIRE ANALYSIS

FIRE ANALYSIS VALUES AT RISK AND TRIGGER POINTS FOR FURTHER ACTION REQUIRED		
STEP 1:	IDENTIFY POTENTIAL VALUES AT RISK ON MAP	
STEP 2:	IDENTIFY TRIGGER POINTS ON MAP WHERE A REVIEW OF THE FIRE ANALYSIS OR ACTION TO SAFEGUARD IDENTIFIED VALUES IS REQUIRED	
STEP 3:	IDENTIFY ACTIONS REQUIRED WHEN FIRE REACHES EACH TRIGGER POINT	
TRIGGERPOINT	CONDITIONS WITH POTENTIAL FOR GROWTH	ACTIONS TO BE UNDERTAKEN
Trigger Point 1 Shorts Creek	If fire crosses Shorts Creek with a continuous flaming front.	Recommend Evacuation Order South of Shorts Creek based on fire behaviour and evacuation timelines. Recommend Evacuation Alert for properties to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 2	If fire breaches Trigger Point 2 with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 3 Mt. Swanson	Spot fires developing in trigger area with an active flame front.	Recommend Evacuation Order for communities and properties adjacent to Mt. Swanson and Evacuation Alert for additional properties based on fire behaviour and evacuation timelines. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 4 Powerline	If fire breaches powerline with a continuous flaming front.	Recommend Evacuation Order for Falkland and surrounding properties based on fire behaviour and evacuation timelines. Recommend Evacuation Alert for properties to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 5	If fire breaches containment lines with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 6 Height of Land west of Fire Perimeter	If fire breaches Trigger Point 6 with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 7 South Fire Perimeter	If fire breaches south flank containment lines with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.



FIRE ANALYSIS

THIS PAGE TO BE COMPLETED WHEN ASSESSING, REVIEWING, OR MONITORING A FIRE THAT HAS A COMPLETED FIRE ANALYSIS

UPDATE#	DATE YYYY-MM-DD	NAME	COMMENTS

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FIRE ANALYSIS UPDATE # _____

DATE AND TIME OF UPDATE		FIRE #	FIRE ZONE	FIRE CENTRE
LOCATION			SIZE	GPS <input type="checkbox"/> YES <input type="checkbox"/> NO
1) ATTACH MAP SHOWING CURRENT PERIMETER			<input type="checkbox"/> YES	<input type="checkbox"/> NO
2) IDENTIFY ANY AREAS ON THE MAP WHERE THE FIRE IS ACTIVE.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
3) ATTACH PHOTOS.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
4). IS A NEW LONG RANGE FIRE GROWTH PROJECTION REQUIRED?			<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> ATTACHED
POTENTIAL THREAT (INCLUDING SMOKE ISSUES) TO ANY IDENTIFIED VALUES				
IS FIRE CLOSE TO ANY IDENTIFIED TRIGGER POINTS?				
IS THERE A CHANGE TO THE STRATEGY AND/OR TACTICS? (EXPLAIN):				
DOCUMENT ANY DISCUSSIONS WITH LANDMANGER OR STAKEHOLDERS				
DO ANY OTHER LANDMANAGERS OR STAKEHOLDERS NEED TO BE CONTACTED?				
HAS THE ESTIMATED TOTAL COST CHANGED?				



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FIRE ANALYSIS UPDATE # _____

FIRE CENTRE		
NAME	POSITION	SIGNATURE
FIRE CENTRE MANAGER COMMENTS		
s.22		
RECEIVED AT FIRE CENTRE - DATE Click here to enter a date.		
LAND MANAGER SIGNATURE REQUIRED IF VALUES AFFECTED		




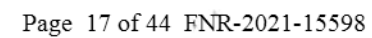
LAND MANAGER COMMENTS

LAND MANAGER

POSITION

DATE (YYYY/MM/DD)

 Ministry of Forests, Lands and Natural Resources - Wildfire Service				Fire Behaviour Forecast #		30					
				K61884 White Rock Lk.							
Issued Date	Issued Time	Prediction Date	Prediction Time	FBAN							
2021/08/17	18:00	2021/08/18	Operational period	Ben Boghean							
SAFETY											
Maintain situational awareness. Fire behaviour may be reduced from the rain but danger still lingers. Watch for overhead hazards and be aware of rolling debris.											
No Fire Behaviour Advisory for:		C3 Mature Lodge Pine		No Advisory							
		C7 Ponderosa Pine/Doug fir		No Advisory							
		O1b 90% curing		No Advisory							
WEATHER SUMMARY											
Today: A few clouds. MAX TEMP: 23° MIN RH: 30%. WINDS: Variable 5 to 15 km/h.											
0900	14°C	RH 60%	Variable 5 – 15 km/hr	% Chance of Rain	0						
1300	21°C	RH 40%	Variable 5 – 15 km/hr	% Chance of Rain	0						
1700	23°C	RH 30%	Variable 5 – 15 km/hr	% Chance of Rain	0						
OUTLOOK: THURSDAY-FRIDAY The ridge is flattened Thursday by an upper trough crossing northern BC. Temperatures will cool one or two degrees from Wednesday and winds will be light north to northwest. As the trough moves to the east, a northwest flow will be established over the region, and on Friday an upper low in the flow will move over the northwest Washington State with isolated showers in the fire centre region along the US border. Temperatures will still be in the low to mid-twenties and winds will be light north.											
Fintry Wx Station/ 1300 hrs Weather and FWI Indices for the Peak Burn Period											
Date	Temp	RH %	WD	WS	Prec.	FFMC	DMC	DC	ISI	BUI	FWI
Aug 17	16	64	SE	2	0	55	88	1033	0.5	145	1
Aug 18	21	44	NW	8	0	79	91	1040	2	149	9
Aug 19	20	40	NW	5	0	87	93	1046	3	152	17
FIRE BEHAVIOUR GENERAL											
Surface fire expected in closed fuel types. Watch for rolling debris on steep slopes and be aware of potential fires burning below.											
Fire will continue to burn out roots of standing timber. Fires burning on North aspects will have a greater potential of root burn as the fire is not burning quickly through the area resulting in a slower deeper burn.											
FIRE BEHAVIOUR SPECIFIC											
The following information is based on equilibrium fire spread at peak burn with constant forecast wind and on flat ground, with absence of suppression action.											
Fuel type				ROS (head)		Intensity Class & Fire Type					
C3 Mature Jack or Lodgepole Pine				1 m/min		I.C. 2 Surface					
C7 Ponderosa Pine/Douglas fir				1 m/min		I.C. 2 Surface					
O1b Standing grass 90% Curing				1 m/min		I.C. 2 Surface					
Be aware of localized winds, precipitation and topographical features that will affect fire behaviour.											
Use your red book to make adjustments for your particular on site conditions!											
Send weather readings and field observations to bcws.whiterockplans@gov.bc.ca or text to (250)203-9911											



Approved Fire Analysis K61884

From: BCWS KFC Plans FLNR:EX <BCWS.KFCPlans@gov.bc.ca>
To: BCWS White Rock Plans FLNR:EX <BCWS.WhiteRockPlans@gov.bc.ca>, BCWS KFC RWCO FLNR:EX <BCWS.KFCRWCO@gov.bc.ca>, BCWS KFC Merritt ZWCO FLNR:EX <BCWS.KFCMerrittZWCO@gov.bc.ca>, BCWS KFC Dispatch FLNR:EX <BCWS.KFCDispatch@gov.bc.ca>, BCWS KFC Aviation FLNR:EX <BCWS.KFCAviation@gov.bc.ca>, BCWS KFC Corporate Wildfire Services FLNR:EX <BCWS.KFCCWS@gov.bc.ca>, Litke, Brad M FLNR:EX <Brad.Litke@gov.bc.ca>, Crampton, Ray W FLNR:EX <Ray.Crampton@gov.bc.ca>, Crampton, Ray W EMBC:EX <Ray.Crampton@gov.bc.ca>
Cc: BCWS KFC Plans FLNR:EX <BCWS.KFCPlans@gov.bc.ca>
Sent: August 25, 2021 2:50:13 PM PDT
Attachments: 21 K61884 Fire Analysis - Signed by DM -APPROVED Aug 24.pdf

Hi folks,

Please find attached the signed and approved Fire Analysis for K61884. The file can also be accessed in the incident drive :

\\bcwsdata.nrs.bcgov\incident\$\K-Kamloops\2021\K6\K61884 - Wudrich - Over 20\Plans\Documentation Unit\Fire Analysis

K61884 PLANS: please forward to your IC / IMT if required. I could not find an email for them.

Thanks

Sharon Cadieux

KFC Plans

Wildfire Analysis Tool - Okanagan

K61884

OBJECTIVE: Analysis tool to provide input to Wildfire Analysis Reports prepared by the DOS Stewardship Team for the BCWS to determine allocation of fire fighting resources for a particular fire.

Biogeoclimatic Zone	IDFdk1, ESSFxc2, ESSFdc2, IDFdk2, ESSFdc2, MSdm2, MSxk1, MSxk2, IDFdk1, IDFdk2, BGxw1, MSdm2, IDFxh2		
Operating Area	Y		Tolko Industries Ltd., Stuwix Resources Ltd., BC Timber Sales - Kamloops, Tolko Industries Ltd., Tolko Industries Ltd., BC Timber Sales - Okanagan-Columbia, BC Timber Sales - Okanagan-Columbia, Tolko Industries Ltd.,

Results/Strategies	Applicable (Y/N)	Additional Assessments		Comments
		Needed (Y/N)		
Interior Western Screech-Owl	BEC Applicable			
Flammulated Owl	BEC Applicable			
Flammulated Owl (By Shapefile)	N			
Tiger Salamander	BEC Applicable			
Great Basin Spadefoot	BEC Applicable			
Great Basin Gopher Snake	BEC Applicable			
Fringed Myotis	BEC Applicable			
Spotted Bat	BEC Applicable			
Community Watersheds	N			
				PR, PR, M, PR, M, M, M, R, PR, PR, PR, PR, R, PR, R, PR, PR, PR, M, PR, M, PR, PR, PR, PR, PR, PR, PR, R, PR, R, M, M, M, M, M, PR, R, M, R, M, PR, R, M, R, M, PR,
Visual Quality	Y			
Recreation - Section 58 Lines	N			
Recreation - Section 58 Areas	N			
				Send referral to Rec Officer. REC228146, Beautiful Lake, REC1945, JIMMY LAKE, REC230076, Sheila Lake, REC1554, WOODS LAKE NORTH, REC1947, BLACKWELL LAKE, REC1946, PRATT LAKE, REC4747, DARDANELLES LAKE,
Recreation - Sites	Y			
Recreation - Trails	Y			Send referral to Rec Officer. REC230063, Weyman Falls,

Recreation - Tenure	Y		Send referral to Rec Officer. REC1775, SALMON RIVER, REC241010, Bearcat Caves, REC202993, Sucker Lake, REC1945, JIMMY LAKE, REC4532, NUGGET LAKE, REC1554, WOODS LAKE NORTH, REC4747, DARDANELLES LAKE, REC1947, BLACKWELL LAKE, REC1948, POND LAKE, REC1946, PRATT LAKE, REC230076, Sheila Lake, REC228146, Beautiful Lake, REC1988, WEYMAN CREEK, REC230151, Weyman Falls.
Recreation - Other	N		
Lakeshore Management Zones	Y		Determine classification of Lake. R, B, PR, C, R, B, R, B, M, D, R, B, R, B, R, B, PR, C, P, A, PR, C, R, B, P, A, R, B, P, A, PR, C,

		Additional Assessments	Comments
Species at Risk	Applicable (Y/N)	Needed (Y/N)	
Critical Habitat	Y		Lewis's Woodpecker,

		Additional Assessments	Comments
OSLRMP Land Use Order Results/Strategies	Applicable (Y/N)	Needed (Y/N)	
Coarse Woody Debris - Basic	Y		
Coarse Woody Debris - Basic + Enhanced	Y		
Intensive Recreation Areas	N		
Regionally Significant Trails	N		
Recreation Trails Non-Legal	N		
Tourism Areas	Y		Send referral to adjacent community and Regional District.
Elk Areas	N		
Marten Areas	Y		High, High, High, High, High,
Fisher Areas	N		
Bighorn Sheep Areas	N		
Derenzy Sheep Areas	N		
Community Crown Interface and Scenic Areas	Y		Send referral to adjacent community and Regional District.
Moose Habitat	Y		1,
Mtn Goat Habitat	N		

Mule Deer UWR	Y		Follow General Wildlife Measures. 964, 928, 932, 927, 965, 924, 926, 925, , 962, 923, 964, , 960, 961, 953, 952, 954, 944, 943, 942, 951, 941, 950, 940, 939, 968, 959.0, 969, 970, 930, 938, 935, 966, 957, 936, 929, 933, 971, 955, 967, 959.1, 956, 963, 937, 931, 934,
NDT 4a and 4b Areas	Y		
Enhanced Riparian Reserves	Y		
Fisheries Sensitive Watershed	N		
Williamsons Sapsucker (By Shapefile)	N		
Williamson Sapsucker (By BEC)	BEC Applicable		

		Comments	
OSLRMP Commitments	Applicable (Y/N)	Additional Assessments Needed (Y/N)	
Fish RMZ	N		
Joe Rich RMZ	N		
Grizzly Bear RMZ	N		

		Comments	
Measures	Applicable (Y/N)	Additional Assessments Needed (Y/N)	
Invasive Plants	Y		BW FS SC SK, BW FS SK ZZ, FS, FS SK ZZ, FS SC SK TC, FS SC, FS SC SK, FS SC SK, FS, FS, FS, FS, FS, FS, FS, FS, FS, FS, FS ZZ, FS ZZ, FS SC SK, FS SK ZZ, FS, FS, FS TC, FS SK, FS TC YH, FS SC SK, FS SK YH ZZ, BU FS SK ZZ, FS SC SK, FS SK ZZ, FS SK ZZ, FS SC SK ZZ, FS SC SK, FS SK ZZ, FS, FS SK, FS SK ZZ, BU FS SC SK ZZ, FS SK, FS SK ZZ, BU FS SC SK ZZ, FS, FS SC, FS ZZ, FS SK ZZ, FS SK ZZ, FS SK, FS SC ZZ, FS OH YH ZZ, FS SK YH ZZ, FS SK ZZ, DK FS SK, FS SC SK, FS SK ZZ, FS SC SK, CY FS HA SC, FS SK, FS SK ZZ, FS SC SK ZZ, FS HA SK YH ZZ, FS SK ZZ, FS SK, FS SK YH ZZ, FS SK ZZ, FS SK ZZ, FS SK, FS ZZ, FS SK ZZ, FS TC, FS, LS, FS, FS SK, FS SC, FS SC, FS SK, FS SC, BU FS SC SK, FS TC, FS SK TC, FS SC SK, FS SC, BW FS, BW FS HT, FS HT SC, FS, FS SK, FS SC, FS, FS SC, FS TC, FS SC, FS TC, FS, FS SK, FS SC TC, FS SC SK, FS SC, FS SC, FS, FS SK, FS, FS SK, FS SK, FS SK, FS HA SC YH, FS SC SK YH, FS SC, FS SC, FS SC, CT FS OD SC, FS SC, FS SC SK, FS

Mountain Caribou - Okanagan	N		
Grizzly Bear WHA - Okanagan - Conditional Harvest	N		
Grizzly Bear WHA - Okanagan - No Harvest	N		

Section 43.1 of the FPPR Targeted pine leading stands		Additional Assessments	Comments
	Applicable (Y/N)	Needed (Y/N)	
Overlaps with Pl leading Polygon > 5 hectares	Y		

Overlaps with:		Additional Assessments	Comments
	Applicable (Y/N)	Needed (Y/N)	
Established WTP/WTRAs	Y		
Forest Health Polygons	Y		
Forest Health Points	Y		

			Licence, Permit, Block, Status TFL49, 992, AB2028, HB, TFL49, 974, AB4118, LC, TFL49, 778, AB4143, HB, TFL49, 778, AB1091, HB, TFL49, 778, AB4129, HB, TFL49, 778, AB7031, HB, TFL49, 992, AB1032, LC, TFL49, 992, AB4107, LC, TFL49, 992, AB1033, LC, A95392, None, K7K0, LC, TFL49, 994, AB1086, LC, TFL49, 994, AB1084, LC, TFL49, 974, AB6075, LC, TFL49, 974, AB6078, LC, TFL49, 974, AB6054, LC, TFL49, 974, AB6079, LC, A95392, None, K7K1, LC, A92097, None, K715, LC, A92097, None, K6UX, LC, A92097, None, K74Z, LC, A92097, None, K4LF, LC, TFL49, 974, AB4145, LC, TFL49, 777, AB6066, HB, TFL49, 777, AB6072, HB, TFL49, 777, AB6068, HB, TFL49, 777, AB5080, HB, TFL49, 777, AB6070, HB, TFL49, 777, AB6073, HB, TFL49, 777, AB6071, HB, TFL49, 776, AB6085, HB, TFL49, 776, AB3090, HB, TFL49, 776, AB6069, HB, TFL49, 776, AB6074, HB, A70042, None, K78V, LC, A70042, None, K7JZ, LC, A95947, None, K7M5, S, A95947, None, K7M2, S, A95947, None, K7M3, S, A95947, None, K7M7, S, A95947, None, K7LY, S, A95947, None, K7M6, S, A70042, None, K7JX, LC, TFL49, 597, AB1037, LC, TFL49, 597, AB1036, LC, TFL49, 597, AB1035, LC, TFL49, 992, AB4108, LC, A95912, None, K7LS, S, A95912, None, K7LD, LC, A95912, None, K7M4, S, A95912, None, K7M8, S, TFL49, 778, AB4128, HB, TFL49, 771, AB4146, LC, TFL49, 771, AB4150, LC, TFL49, 771, AB4153, LC, TFL49, 778, AB4133, HB, TFL49, 778, AB0118, HB, TFL49, 778, AB4126, HB, TFL49, 778, AB4132, HB, TFL49, 778, AB1088, HB, TFL49, 990, AB7008, HB, TFL49, 990, AB7007, HB, TFL49, 597, AB1037, LC, TFL49, 778, AB1087, HB, TFL49, 771, AB1085, LC, TFL49, 996, AB6052, LC, TFL49, 996, AB6056, LC, TFL49, 996, AB6056, LC, TFL49, 868, AB7018, LC, TFL49, 868, AB7014, LC, TFL49, 868, AB7020, LC, TFL49, 868, AB7016, LC, TFL49, 868, AB7011, LC, TFL49, 868, AB7010, HB, TFL49, 868, AB7024, LC, TFL49, 868, AB7017, LC, TFL49, 868, AB7013, HB, TFL49, 868, AB7012, HB, TFL49, 868, AB7009, LC, TFL49, 993, AB4117, LC, TFL49, 993, AB4109, LC, TFL49, 993, AB4110, HB, TFL49, 993, AB6055, LC, TFL49,
FTEN Blocks	Y		
Goal 2 Protected Areas	N		

[illegible]

			<p>If OGMA is to be disturbed, review replacement requirements.</p> <p>KAM_TME_1211, KAM_TME_1214, KAM_TME_1282, KAM_TME_1235, KAM_TME_1247, KAM_TOK_1699, KAM_TOK_1750, KAM_TOK_1782, KAM_TOK_1593, KAM_TOK_1601, KAM_TOK_1619, KAM_TOK_1698, KAM_TOK_1697, KAM_TOK_1713, KAM_TOK_3014, KAM_TOK_1865, KAM_TOK_1869, KAM_TOK_1657, KAM_TOK_1666, KAM_TOK_1661, KAM_TOK_1679, KAM_TOK_1669, KAM_TOK_1684, KAM_TOK_1773, KAM_TOK_1915, KAM_TOK_1925, KAM_TOK_1723, KAM_TOK_1733, KAM_TOK_1741, KAM_TOK_1749, KAM_TOK_1762, KAM_TOK_1787, KAM_TOK_1815, KAM_TOK_1819, KAM_TOK_1849, KAM_TOK_1845, KAM_TOK_1866, KAM_TOK_1617, KAM_TOK_1627, KAM_TME_1221, KAM_TOK_1656, KAM_TOK_1673, KAM_TOK_1678, KAM_TOK_1694, KAM_TOK_1693, KAM_TOK_1690, KAM_TOK_1695, KAM_TOK_1875, KAM_TOK_1882, KAM_TOK_1870, KAM_TOK_1888, KAM_TOK_1871, KAM_TOK_1901, KAM_TOK_1885, KAM_TOK_1880, KAM_TOK_1905, KAM_TOK_1867, KAM_TOK_1874, KAM_TOK_1897, KAM_TOK_1900, KAM_TOK_1911, KAM_TOK_1906, KAM_TOK_1918, KAM_TME_1196, KAM_TOK_1622, KAM_TME_1203, KAM_TME_1230, KAM_TOK_1668, KAM_TOK_1670, KAM_TOK_1701, KAM_TOK_1725, KAM_TOK_1729, KAM_TOK_1801, KAM_TOK_1803, KAM_TOK_1589, KAM_TOK_1868, KAM_TME_1132, KAM_TME_1107, KAM_TME_1142, KAM_TOK_1558, KAM_TOK_1582, KAM_TOK_1607, KAM_TOK_1613, KAM_TME_1181, KAM_TME_1175, KAM_TME_1199, KAM_TME_1207, KAM_TME_1217, KAM_TME_1208, KAM_TME_1177, KAM_TME_1220, KAM_TME_1225, KAM_TME_1197, KAM_TME_1124, KAM_TME_1134, KAM_TME_1141, KAM_TME_1148, KAM_TME_1146, KAM_TME_1151, KAM_TME_1160, KAM_TME_1163, KAM_TME_1161, KAM_TME_1162, KAM_TME_1170, KAM_TME_1166, KAM_TME_1171, KAM_TOK_1830, KAM_TOK_1747, KAM_TOK_1843, KAM_TOK_1754, KAM_TOK_1764, KAM_TOK_1734, KAM_TOK_1776, KAM_TOK_1785, KAM_TOK_1790,</p>
OGMAs	Y		
Real Property Projects	N		

[illegible]

			Follow General Wildlife Measures. u-8-001, 963, u-8-001, 970, u-8-001, 971, u-8-001, 966, u-8-001, 969, u-8-001, 967, u-8-001, 956, u-8-001, 957, u-8-001, 959.0, u-8-001, 968, u-8-006, 11, u-8-001, 923, u-8-001, 927, u-3-003, 871, u-3-003, 872, u-3-003, 873, u-3-003, 188, u-3-003, 974, u-8-001, 928, u-8-001, 929, u-8-001, 924, u-3-003, 204, u-8-001, 925, u-3-003, 186, u-3-003, 973, u-8-001, 953, u-8-001, 930, u-8-001, 926, u-8-001, 931, u-3-003, 976, u-8-001, 932, u-3-003, 975, u-8-001, 933, u-8-001, 934, u-8-001, 955, u-8-001, 954, u-8-001, 959.1, u-8-001, 935, u-8-001, 960, u-8-001, 964, u-8-001, 950, u-8-001, 939, u-8-001, 951, u-8-001, 936, u-8-001, 952, u-8-001, 937, u-8-001, 962, u-8-001, 940, u-8-001, 941, u-8-001, 961, u-8-001, 942, u-8-001, 938, u-8-001, 943, u-8-001, 944, u-3-003, 152, u-3-003, 168, u-3-003, 167, u-3-003, 166, u-3-003, 202,
UWR	Y		
WHA's	N		

		Additional Assessments		Comments
Assessments:	Applicable (Y/N)	Needed (Y/N)		

[illegible]

			Comments
Administration Boundaries	Applicable (Y/N)	Additional Assessments	
		Needed (Y/N)	
Conservation Areas NGO	N		
Conservation Lands	N		

Crown Acquisitions	Y		
Crown Grants	Y		
Crown Reversions	Y		
			<p>Lands File, Tenure Type, Subpurpose</p> <p>3411441, RESERVE/NOTATION, OTHER, 3412419, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3411757, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410548, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410548, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410548, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3400508, LICENCE, RURAL RESIDENTIAL, 3405717, RESERVE/NOTATION, UREP/RECREATION RESERVE, 3403762, LICENCE, RECREATIONAL RESIDENTIAL, 3403832, LICENCE, RECREATIONAL RESIDENTIAL, 0217269, RIGHT-OF-WAY, ELECTRIC POWER LINE, 3405851, LICENCE, LOCAL/REGIONAL PARK, 3407110, LICENCE, ROADWAY, 0225901, LEASE, WASTE DISPOSAL SITE, 3412180, LICENCE, MISCELLANEOUS, 3401924, LEASE, COMMUNITY FACILITY, 3410548, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3412524, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410545, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410545, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410545, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410545, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3410545, LICENCE, INVESTIGATIVE AND MONITORING PHASE, 3400338, RIGHT-OF-WAY,</p>
Crown Tenures	Y		
First Nation Reserve	Y		CHAPPERON LAKE 5, SALMON LAKE 7,
Growth and Yield Plots	Y		36-10-30G, 36-10-31G, 36-10-32G, 36-10-33G, 36-10-35G, 36-10-36G,
Municipalities	N		

[illegible]

[illegible]

Private Land - ICF	Y	006055087, 012980897, 013007211, 014097427, 002035391, 008587515, 012983080, 012983128, 013012258, 007332505, 025094769, 013015427, 006926291, 011647795, 005315069, 024779377, 010589261, 011647442, 012980820, 008106908, 007332530, 025671499, 010596011, 013027964, 004743237, 012949655, 011647566, 004820266, 014097591, 011485990, 010596470, 013012312, 008200378, 010596976, 024567469, 013027867, 010589287, 014097648, 013269879, 005556597, 012934801, 014097290, 011648040, 009470883, 004871171, 005647878, 008361070, 009580425, 002253917, 025195751, 014098237, 013008447, 014314916, 005556627, 025201239, 013012339, 007332556, 009725849, 002888173, 013232517, 009735909, 010861564, 008507988, 010861548, 008307466, 013000691, 011647922, 013000756, 014099900, 013012231, 017586909, 005314992, 007870396, 002462486, 005556601, 024568431, 014322021, 011647833, 008307512, 003385876, 014323087, 013000608, 030816653, 010988670, 014099896, 014320568, 013367706, 010596682, 012949787, 014072459, 007332521, 011647817, 013232550, 012930920, 010431209, 014072432, 007852398, 012981575, 004850912, 030912105, 014097877, 012042251, 013012240, 010598413, 013027913, 003584631, 028748034, 001892584, 012282901, 011626666, 013027921, 011648023, 014098181, 010380094, 007488050, 007325843, 012934291, 013027841, 013375628, 012997188, 014322480, 014097303, 009626450, 012981460, 014322901, 002841045, 012949744, 011647990, 010596992, 012981737, 012997170, 012981028, 012981192, 008382441, 005556546, 010596305, 004821602, 014098024, 011647523, 007488076, 013016709, 007318308, 012139351, 025201247, 014314959, 014320843, 013012363, 011550457, 010598332, 008071802, 014072441, 004821106, 025147480, 014099667, 001685210, 012981141, 014099918, 006698450, 014320738, 004821181, 012981257, 009662324, 006383777, 013027883, 003270165, 004820517, 011693614, 012981508, 013375661, 013000641, 014099241, 008361088, 013000632, 014175223,
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			013047281, 013007246, 013027867, 007332513, 007332530, 013012355, 007332505, 013016784, 013007262, 013012223, 013008447, 012933856, 012933791, 013027964, 013000578, 013000608, 012933945, 013015427, 013012371, 013375628, 013232509, 012949639, 013375709, 012949655, 013375687, 012949744, 012949779, 013007181, 013027841, 013027913, 013000594, 012997188, 012997170, 013232550, 012981192, 010596992, 004821467, 004820517, 012981257, 004820924, 012981591, 004821602, 012981389, 012981508, 011693614, 014322048, 024186783, 003584631, 011626666, 010825754, 024186775, 010596305, 011647833, 002841045, 009499733, 009499717, 013000756, 008587540, 008123411, 024568431, 008382441, 003385876, 011647507, 011647477, 011647108, 013000721, 012980528, 003363767, 011646993, 009626450, 012980412, 010596976, 012981028, 012980871, 012981311, 014320568, 007870396, 005556627, 005556601, 010431209, 005556546, 010431250, 008677913, 010861564, 014099900, 025201239, 010412301, 014322480, 009736000, 009736026, 011047976, 014323265, 008507988, 008817847, 009735909, 009481168, 014099888, 014175134, 011550325, 014099454, 005314992, 007488050, 002253917, 008306508, 014097591, 014097290, 014098181, 014098032, 014098237, 008595950, 012282901, 002888173, 013012312, 004445562, 014072424, 014072408, 014072254, 014072238, 014072432, 014376555, 012949787, 008106860, 008106908, 014314916, 014314924, 026227789, 014097303, 011486040, 011485990, 011485965, 012042251, 028748034, 014097494, 013225359, 012983128, 012983080, 012934291, 010834982, 007621680, 010825738, 008361070, 015292827, 009461302, 008587515, 010596470, 012981290, 004820801, 014321149, 006775209, 014322021, 004743237, 010594809, 011647876, 011647868, 011647817, 011647680, 011647710, 011647752, 011647795, 011648040, 011647566, 009725849, 011647540, 009580425, 008200351, 011647442, 003816176, 011647230, 004170873, 011647124, 006349404, 011647051, 006055087, 001685210,
Private Land - PMBC	Y		
Rare Ecosystems	Y		
Regional District	Y		THOMPSON-NICOLA, NORTH OKANAGAN,
Research Installations	Y		EP0770.20.02, Sarah McArthur, ResearchInquiries@gov.bc.ca, 1250260475, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0770.20.23.05, Sarah McArthur, ResearchInquiries@gov.bc.ca, 1250260475, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None.

Timber Supply Areas	Y		Okanagan TSA, Kamloops TSA, Merritt TSA,
Transmission Lines & Pipelines	Y		
Tree Farm License	Y		TFL49,
Woodlots/Community Forest	Y		W0700, LARRY BUFF, W0700, LARRY BUFF, W0700, LARRY BUFF, W0389, FROLEK CATTLE CO. LTD., W0389, FROLEK CATTLE CO. LTD., W1606, MAXIME LEPINE,

		Additional Assessments	Comments
Miscellaneous	Applicable (Y/N)	Needed (Y/N)	
Classified Stream	N		

		Additional Assessments	Comments
Stakeholders to Contact:	Applicable (Y/N)	Needed (Y/N)	
Guide	Y		Referral required. 310001, BENNETT,
			Send referral to licenced water users. s.22
Points of Diversion - Applications	Y		

Points of Diversion - Licences	Y	Send referral to licenced water users. s.22
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			Send referral to licenced water users. None, D120233-00, None, 13EL2526, 13EL2517, 13EL2506, 13EL2507, 13EL2488, None, None, None, None, None, None, None, None, None, None, 13EL2370, None, None, None, 13EL2666, 13EL2692, 13EL2665, None, 13EL2664, 13EL2654, 13EL2653, 13EL2638, 13EL2624, None, 13EL2619, None, 13EL2610, 13EL2611, None, None, 13EL2577, 13EL2568, 13EL2567, None, 13EL2745, None, None, None, None, None, None, 13EL2711, 13EL2710, None, None, None, None, None, None, None, None, None, None, None, 13EL2882, None, None, None, None, None, None, None, None, 13EL2850, None, None, None, None, None, None, None, None, None, None, None, None, 13EL2744, 13EL2947, None, None, None, None, None, None, 13EL2903, None, None, 13EL2799, 13EL2798, None, None, 13EL2784, None, None, 13EL2759, None, 13EL2752, 13EL2751, 13EL2729, None, 13EL2709, 13EL2706, 13EL2669, None, 13EL2645, 13EL2635, 13EL2623, 13EL2618, 13EL2617, 13EL2581, None, D120281-02, D120281-01, 13EL2964, 13EL2953, 13EL2946, 13EL2942, 13EL2936, None, None, None, None, None, None, 13EL2811, 13EL2792, None, None, 13EL2778, 13EL2779, None, None, 13EL2766, None, None, 13EL2731, 13EL2720, 13EL2491, 13EL2492, 13EL2483, 13EL2482, 13EL2475, 13EL2474, 13EL2466, 13EL2444, 13EL2439, 13EL2435, 13EL2424, 13EL2423, 13EL2393, 13EL2389, 13EL2390, 13EL3118, 13EL2378, 13EL2277, 13EL2533, 13EL2603, 13EL2536, 13EL2602, 13EL2535, 13EL2534, None, 13EL2528, 13EL2629, 13EL2628, 13EL2627, 13EL2634, None, None, 13EL2410, 13EL2402, 13EL2391, 13EL3043, 13EL3045, 13EL3044, 13EL2331, 13EL2330, 13EL2284, 13EL2256, 13EL2250, None, 13EL2225, 13EL2210, 13EL2198, 13EL2196, 13EL2192, 13EL2191, 13EL2557, 13EL2553, 13EL2551, 13EL2548, 13EL2547, 13EL2545, 13EL2544, 13EL2543, 13EL2542, 13EL2527, 13EL2525, 13EL2502,
Points of Diversion - Lines	Y		
Range Tenure Holder	Y		RAN076980, RAN077161, RAN076988, RAN076989, RAN077160, RAN076960, RAN076991, RAN077350, RAN077351, RAN077349, RAN077694, RAN076989, RAN077326, RAN076990, RAN077554, RAN077326, RAN077160, RAN076981, RAN076981, RAN077305, RAN077326, RAN077569, RAN076915, RAN077471, RAN077584.
Trapper	Y		Referral required. TR0312T001, TR0312T002, TR0320T005, TR0320T006, TR0320T002, TR0320T003, TR0326T008.

s.14; s.16; s.18.1

s.14; s.16; s.18.1

OID	TSA	TFL	Ownership	Own_Sched	Own_Class
0			40 N		Private
1			40 N		Private
2			62 C		Crown - Forest Management Unit
3			62 C		Crown - Forest Management Unit
4			72 B		Crown Tenure - Tree Farm Licence, Schedule B
5		TFL49	72 B		Crown Tenure - Tree Farm Licence, Schedule B
6	Kamloops TSA		40 N		Private
7	Kamloops TSA		40 N		Private
8	Kamloops TSA		62 C		Crown - Forest Management Unit
9	Kamloops TSA		62 C		Crown - Forest Management Unit
10	Kamloops TSA		68 U		Crown - Forest Recreation Reserves
11	Kamloops TSA		68 U		Crown - Forest Recreation Reserves
12	Kamloops TSA		72 B		Crown Tenure - Tree Farm Licence, Schedule B
13	Kamloops TSA		72 B		Crown Tenure - Tree Farm Licence, Schedule B
14	Kamloops TSA		77 A		Crown Tenure - Woodlot Licence, Schedule A
15	Kamloops TSA		77 A		Crown Tenure - Woodlot Licence, Schedule A
16	Kamloops TSA		77 B		Crown Tenure - Woodlot Licence, Schedule B
17	Kamloops TSA		77 B		Crown Tenure - Woodlot Licence, Schedule B
18	Kamloops TSA	TFL49	62 C		Crown - Forest Management Unit
19	Kamloops TSA	TFL49	62 C		Crown - Forest Management Unit
20	Kamloops TSA	TFL49	72 B		Crown Tenure - Tree Farm Licence, Schedule B
21	Kamloops TSA	TFL49	72 B		Crown Tenure - Tree Farm Licence, Schedule B
22	Merritt TSA		40 N		Private
23	Merritt TSA		40 N		Private
24	Merritt TSA		52 N		Federal - Indian Reserve
25	Merritt TSA		62 C		Crown - Forest Management Unit
26	Merritt TSA		62 C		Crown - Forest Management Unit
27	Merritt TSA		68 U		Crown - Forest Recreation Reserves
28	Merritt TSA		68 U		Crown - Forest Recreation Reserves
29	Merritt TSA		72 B		Crown Tenure - Tree Farm Licence, Schedule B
30	Merritt TSA		72 B		Crown Tenure - Tree Farm Licence, Schedule B
31	Merritt TSA		99 U		Crown Lease - Misc. lease
32	Merritt TSA		99 U		Crown Lease - Misc. lease
33	Merritt TSA	TFL49	40 N		Private
34	Merritt TSA	TFL49	40 N		Private
35	Merritt TSA	TFL49	62 C		Crown - Forest Management Unit
36	Merritt TSA	TFL49	62 C		Crown - Forest Management Unit
37	Merritt TSA	TFL49	72 B		Crown Tenure - Tree Farm Licence, Schedule B
38	Merritt TSA	TFL49	72 B		Crown Tenure - Tree Farm Licence, Schedule B
39	Okanagan TSA		40 N		Private
40	Okanagan TSA		40 N		Private
41	Okanagan TSA		60 N		Crown - Conservancy Area, Ecological Reserve, Pro*
42	Okanagan TSA		60 N		Crown - Conservancy Area, Ecological Reserve, Pro*
43	Okanagan TSA		61 C		Crown - UREP (Use, Recreation and Enjoyment of th*
44	Okanagan TSA		62 C		Crown - Forest Management Unit
45	Okanagan TSA		62 C		Crown - Forest Management Unit
46	Okanagan TSA		68 U		Crown - Forest Recreation Reserves
47	Okanagan TSA		68 U		Crown - Forest Recreation Reserves
48	Okanagan TSA		69 U		Crown - Misc. Reserves
49	Okanagan TSA		69 U		Crown - Misc. Reserves
50	Okanagan TSA		72 B		Crown Tenure - Tree Farm Licence, Schedule B
51	Okanagan TSA		72 B		Crown Tenure - Tree Farm Licence, Schedule B
52	Okanagan TSA		77 B		Crown Tenure - Woodlot Licence, Schedule B
53	Okanagan TSA		77 B		Crown Tenure - Woodlot Licence, Schedule B
54	Okanagan TSA		80 N		Crown - Municipal Parcels
55	Okanagan TSA		91 U		Unknown Ownership/Exceptions
56	Okanagan TSA		99 U		Crown Lease - Misc. lease
57	Okanagan TSA		99 U		Crown Lease - Misc. lease
58	Okanagan TSA	TFL49	40 N		Private
59	Okanagan TSA	TFL49	40 N		Private
60	Okanagan TSA	TFL49	62 C		Crown - Forest Management Unit

In_THLB	Area_ha	Timber_Val
	12.8	\$25,489.00
Y	0	\$0.00
	0	\$3.00
Y	0	\$2.00
	0	\$5.00
	0	\$0.00
	137.1	\$175,820.00
Y	0.2	\$2,922.00
	960.7	\$6,701,264.00
Y	5143.6	\$13,289,986.00
	10.1	\$55,703.00
Y	77.5	\$228,048.00
	0	\$7.00
Y	0	\$1.00
	85.7	\$37,565.00
Y	119	\$344,050.00
	650	\$1,500,101.00
Y	0.2	\$858.00
	0	\$0.00
Y	0	\$0.00
	0	\$0.00
Y	0	\$0.00
	9744.6	\$15,667,695.00
Y	59.9	\$256,461.00
	372	\$300,570.00
	6062.9	\$19,710,068.00
Y	11603.7	\$44,952,177.00
	0	\$0.00
Y	0.2	\$105.00
	0	\$28.00
Y	0	\$4.00
	18.6	\$83,962.00
Y	41	\$253,689.00
	0.3	\$1,127.00
Y	0	\$3.00
	0	\$0.00
Y	0	\$0.00
	6.9	\$28,213.00
Y	7.5	\$61,114.00
	4128.9	\$4,805,671.00
Y	282.1	\$554,647.00
	4.8	\$11,521.00
Y	0	\$1.00
	3.3	\$0.00
	2613.3	\$10,649,273.00
Y	8190.8	\$30,264,140.00
	32.5	\$184,071.00
Y	37.7	\$246,729.00
	152.1	\$1,302,474.00
Y	619.1	\$1,471,636.00
	0.3	\$947.00
Y	0.1	\$153.00
	389.8	\$1,475,716.00
Y	1.3	\$3,282.00
	1.5	\$0.00
	0.1	\$2.00
	7.4	\$5,445.00
Y	0.4	\$1,794.00
	34.6	\$3,456.00
Y	0	\$0.00
	0.1	\$294.00

61 Okanagan TSA	TFL49	62 C	Crown - Forest Management Unit
62 Okanagan TSA	TFL49	68 U	Crown - Forest Recreation Reserves
63 Okanagan TSA	TFL49	68 U	Crown - Forest Recreation Reserves
64 Okanagan TSA	TFL49	69 U	Crown - Misc. Reserves
65 Okanagan TSA	TFL49	69 U	Crown - Misc. Reserves
66 Okanagan TSA	TFL49	72 B	Crown Tenure - Tree Farm Licence, Schedule B
67 Okanagan TSA	TFL49	72 B	Crown Tenure - Tree Farm Licence, Schedule B

Y	0	\$44.00
	0	\$2.00
Y	0	\$0.00
	0	\$184.00
Y	0	\$58.00
	47992.7	\$240,008,340.00
Y	25.7	\$121,033.00
	99633.1	\$394,787,953.00

\$3,962.42

K61884 August 10 update DOS

First Nation Reserves:

s.16; s.18

Range

100km Fence at \$2,500,000; 90 Cattleguards at \$900,000; 1 Cabin at \$40,000; 2 Exclosures at \$16,000; 9 Corrals at \$90,000; 35 Water Developments at \$350,000; 1Km Stock trail at \$5,000

Total Cost =. \$3,901,000

Recreation

RSTBC Okanagan Comments: Includes cost of structures as well as delivery and installation. Sites usually include tables, toilets, fire rings, various signage, and miscellaneous (kiosks, gates, fences etc.)

All sites will require Danger Tree Assessments and fallers post fire.

Total - \$492,250.00

Sites:

Evely (REC1596) *High Value* 50 defined campsites. One of our most popular recreation sites in the Okanagan. \$207,900.00

Bouleau Lakw (REC1597) 4 Defined campsites. Popular fishing lake and campground. \$19,700.00

Little Bouleau Lake (REC1598) 1 Defined campsite. Popular fishing lake. \$10,250.00

Bear Creek (REC31768) *High Value* 40 Defined campsites. Very popular with OHV and camping. Very large network of OHV Trails (Not inside buffer area). \$155,450.00

Sandberg Lake (REC4654) 1 Defined campsite. Popular fly fishing lake. \$6100.00

Dardanelles Lake (REC4747) 4 Defined campsites. Very popular fly fishing lake and campground. \$12,900.00

Blackwell Lake (REC1947) No defined campsites. Popular rustic camping. Total area 24 hectares.

Pratt Lake (REC1946) 7 Defined campsites. Popular fishing lake and campground. \$16,800

Pinaus Lake North (REC1600) 8 Defined campsites. Very popular fishing lake and campground. \$39,300

Square Lake (REC1599) 3 Defined campsites. Popular fishing lake and campground. \$14,800

Little Pinaus Lake (REC1601) 1 Defined campsite. Popular fishing lake and campsite. \$9,050

Trails:

Estekwalan Mountain (REC4734) Popular hiking trail. Total distance – 9.3km

Tuktakamin Mountain (REC240742) Popular hiking trail. Total distance – 5km

Tahaetkun Mountain (REC4733) Popular hiking trail. Total distance – 2.6km

Sugar Loaf Mountain (REC169008) Very popular hiking trail. Total distance – 3.6km

Shorts Creek Ridge (REC240515) Popular hiking trail. Total distance – 5.4km

Christie Falls (REC240367) Picturesque hiking trail. Total Distance - .36km

Recreation Reserves:

Pinaus Lake East (REC1875) Total area – 7.7 Hectares.

Pond Lake (REC1948) Total area – 8.3 Hectares.

Okanagan Sunset (REC247271) – Total area – 130 Hectares.

Sheila Lake Rec Site (REC230076) Popular with hunters and campers. 2 Sites: \$8550

Jimmy Lake Rec Site (REC1945) Very popular fishing lake and campground: 7 Sites: \$19,700

Woods Lake Rec Site (REC1554) Very popular fishing lake and campground: 17 Sites: \$114,850

Beautiful Lake Rec Site (REC228146): Small popular campground: 2 Sites: \$8550

Nugget Lake Rec Site (REC4532): Rustic Rec Site popular with anglers: \$8550

Salmon River Rec Site (REC1775): Undeveloped

Weymen Creek Rec Reserve (REC1988) Undeveloped

Bearcat Caves Rec Reserve (REC241010) Undeveloped

Sucker Lake Rec Reserve (REC202993) Undeveloped

Weyman Creek Rec Trail Reserve (REC230151) Undeveloped IM

GRAND Total: \$652,450.00

Revelstoke Rec Sites & Trails Comments:

NO new info for Columbia Shuswap recreation district. I have re-attached the 10k buffer .kmz file and Cc'd three other Recreation Officers, as the buffer is near a four-way recreation district boundary as follows:

Kamloops, Noelle Kekula: Dardanelles Lakes

Okanagan, Ian McLellan: Pratt Lake, Blackwell Lake, Pond Lake

Cascades, Tim Bennett: looks like none yet but the buffer is over the boundary line.

Ecosystems

Recommendations: Unless necessary for suppression actions avoid burning to consume fuels in Bighorn Sheep Winter Range (grasslands adjacent to steep, rocky escape terrain located along the southeast edge of fire perimeter along the west side of Okanagan Lake), and within American Badger Critical Habitat located across the north half of the fire perimeter. Avoid burning and placement of fireguards within Western Rattlesnake and Gopher snake Critical Habitat along the southeast edge of fire perimeter along the west side of Okanagan Lake. Avoid burning within a 30 m buffer along mainstems

and tributaries and avoid fireguards through the riparian buffer and minimize sediment input into streams especially within fisheries sensitive watershed (Shorts Creek) located just south of the fire perimeter.

Values. Overall fire perimeter and buffer is high environmental conservation sensitivity due to critical habitat for American Badger, Western Rattlesnake, Gopher snake and Ungulate Winter Ranges for Mountain Goat, Moose, Bighorn Sheep and Mule Deer. Moose Winter Range is located across the western half of the fire perimeter, while Mountain Goat, Mule Deer and Bighorn Sheep Winter Ranges are located along the southeast edge of fire perimeter along the west side of Okanagan Lake. Fire suppression is recommended for high elevation winter ranges as fire can impact habitat through reduction of thermal and security cover required for winter survival. There are three Community Watersheds that are located within or very near to the fire buffer, Lambly Community Watershed, Hope Community Watershed and Norris Community Watershed. Old Growth Management Areas (OGMAs) are scattered throughout the fire buffer. Fireguard and road construction is a concern for Mountain Goat, and fish habitat.

Stewardship

2021-08-11 Stewardship comments UPDATED by JB

Infrastructure and Private land:

Municipalities include the District of Lake Country and The Corporation of the City of Vernon.

A significant amount of Private land is located diagonally from the SW to NE quadrants and around the 10km fire buffer.

Transmission lines intersect the middle of the 10km fire buffer

OGC pipeline segments located at the Northern portion of the 10km fire buffer, near the town of Westwold.

The Regional Districts of North Okanagan, Thompson Nicola, Columbia Shuswap and the Central Okanagan are located within the 10km fire buffer.

Community Crown Interface and Scenic Areas is located in the SE and NE quadrants of the 10km fire buffer, associated with the town of Westwold, and the north arm of Okanagan Lake

Terrain stability is potential unstable mainly in the NW and SE quadrants 10km fire perimeter. There is significant unstable terrain in the SE quadrant.

FOREST TENURES:

Timber Supply Area (TSA) - The 10km fire buffer covers the Merritt TSA, Kamloops TSA and the Okanagan Shuswap TSA. The fire is currently burning in the Merritt and Okanagan Shuswap TSA. The 10km fire perimeter buffer overlaps with the operating area of Tolko Industries Ltd. (Cascades and Okanagan Shuswap District), BC Timber Sales (Kamloops and Vernon) and Stuwix Resources Ltd. There is one Tree Farm Licence (TFL 49) located in the centre of the fire perimeter, owned by Tolko Industries Ltd.

Woodlots - there are 9 woodlot owners and 22 woodlots located within the 10km fire buffer (W0318, s.22

FTEN is Forest Tenure blocks (everything from planned through to harvested). Active cutblocks exist throughout the entire 10km fire buffer along with Natural Disturbance Type for fire (NDT 4a and 4b).

Timber values inside the 10Km fire perimeter are estimated at \$4,567/ha. With the area within the 10km fire perimeter equating to 253,217 ha, the timber values equate to \$ 1,156,450,583. Efforts should be undertaken to minimize timber loss especially inside the THLB. Reforestation costs are estimated at \$2,300/Ha

The majority of the cutblocks are Free Growing plantations within the 10km fire buffer (blocks that FG = 70%). There are 3,300 plantations within the 10km fire buffer.

Old growth Management Areas (OGMA) area dispersed throughout the 10km fire buffer.

Many forest Health points and polygons are located throughout the entire area of the 10km fire buffer.

PARKS:

There is one Provincial Park (Monte Lake Park, FINTRY PARK, ELLISON PARK, KEKULI BAY PARK and PILLAR PARK) located adjacent to the 10km fire buffer, in the direction of the SE and NW quadrants.

There is one protected area (FINTRY PROTECTED AREA) and one ecological reserve (CAMPBELL BROWN (KALAMALKA LAKE) located adjacent to the 10km fire buffer.

WATER:

There are three Community Watersheds that are located within or very near to the 10km fire buffer, Lambly Community Watershed, Hope Community Watershed and Norris Community Watershed.

Lakeshore Management Zones are associated with Okanagan Lake and smaller plateau lakes dispersed throughout the 10km fire buffer

One fisheries Sensitive Watershed (Shorts Creek) is located in the south half of the 10km fire buffer, along with the Fish Riparian Management Zone (RMZ)

Several points of Diversion (POD) Licenses and lines are located throughout the 10km fire perimeter, a high number is concentrated within the town of Westwold and Vernon (north and east quadrants)

A limited number of Enhanced Riparian Reserves (ERR) are located in the centre of the 10km fire perimeter

OTHER TENURES and VALUES:

There are 13 trappers located within the 10km fire perimeter (TR0326T004, TR0312T003, TR0811T039, TR0312T001, TR0822T042, TR0312T002, TR0320T005, TR0320T006, TR0320T002, TR0821T077, TR0320T003, TR0326T011, TR0326T008)

There are two guides located in the 10km fire buffer, (310001, BENNETT and 800758, COVERT)

There are 28 Research Installations located to throughout the 10km fire perimeter:

EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0964.22, Jodi Axelson, ResearchInquiries@gov.bc.ca, None, EP0657.06, Nicholas Ukrainetz, ResearchInquiries@gov.bc.ca, 6045411683, EP1368, Timothy Giles, ResearchInquiries@gov.bc.ca, 2503713708, EP1368, Timothy Giles, ResearchInquiries@gov.bc.ca, 2503713708, EP1371, Sarah Crookshanks, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0770.20.02, Sarah McArthur, ResearchInquiries@gov.bc.ca, 1250260475, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0770.20.23.05, Sarah McArthur, ResearchInquiries@gov.bc.ca, 1250260475, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0770.20.23.02, Sarah McArthur, ResearchInquiries@gov.bc.ca, 1250260475, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0987.04.01, Jodi Axelson, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1371, Sarah Crookshanks, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices,

ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP0607.03, Jodi Axelson, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1360.2, Range Practices, ResearchInquiries@gov.bc.ca, None, EP1209.04, Charles Bulmer, ResearchInquiries@gov.bc.ca, 2502604765, EP1209.04, Charles Bulmer, ResearchInquiries@gov.bc.ca, 2502604765, EP1209.04, Charles Bulmer, ResearchInquiries@gov.bc.ca, 2502604765)

There are 39 Growth and Yield plot located at the north end of the 10km fire perimeter near the town of Westwold (36-4-1G, 36-4-2G, 36-4-3G, 36-4-4G, 36-4-6G, 36-4-7G, 37-5-2G, 36-10-5G, 37-5-1G, 36-10-2G, 36-10-6G, 36-10-11G, 36-10-9G, 36-4-5G, 36-10-7G, 36-10-20G, 36-1-1T, 36-1-3T, 36-1-2T, 36-2-1G, 36-2-2G, 36-2-4G, 36-2-5G, 36-10-42G, 36-10-41G, 36-10-40G, 36-10-39G, 36-10-37G, 36-10-30G, 36-10-31G, 36-10-32G, 36-10-33G, 36-10-35G, 36-10-36G, 36-10-26G, 36-10-25G, 36-10-23G, 36-10-14G, 36-10-13G)

Partial Retention, Retention and Moderate Visual Quality is located in the NW, NE and SE quadrants of the 10km Fire buffer

There are several invasive plants located in the SW and SE quadrants of the 10km fire buffer

RE: K61884 - White Rock Lk Fire Fire Analysis Report

From: Shears, Suzanne FLNR:EX <Suzanne.Shears@gov.bc.ca>
To: Woodman, Michel FLNR:EX <Michel.Woodman@gov.bc.ca>
Cc: Snetsinger, James Andrew FLNR:EX <Andrew.Snetsinger@gov.bc.ca>, Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>, Maxwell, Julie FLNR:EX <Julie.Maxwell@gov.bc.ca>
Sent: August 17, 2021 at 11:52:58 AM Pacific Daylight Time
Perfect! Thank you.

From: Woodman, Michel FLNR:EX <Michel.Woodman@gov.bc.ca>
Sent: August 17, 2021 11:52 AM
To: Shears, Suzanne FLNR:EX <Suzanne.Shears@gov.bc.ca>
Cc: Snetsinger, James Andrew FLNR:EX <Andrew.Snetsinger@gov.bc.ca>; Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>; Maxwell, Julie FLNR:EX <Julie.Maxwell@gov.bc.ca>
Subject: RE: K61884 - White Rock Lk Fire Fire Analysis Report

Hi Suzanne

Thanks for this, I spoke with Andrew last week before I completed the updated Fire Analysis, he suggested that I review Merritt's earlier FA and compare to the new analysis and add any additional info.

I just compared your info below to what was included in the updated version and it looks like everything was captured – although it was just mentioned that Reforestation costs are estimated at \$2,300/Ha, the total amount wasn't highlighted - which is a great idea!

Let me know if you have any questions.

Thanks

Michel

From: Shears, Suzanne FLNR:EX <Suzanne.Shears@gov.bc.ca>
Sent: August 17, 2021 11:26 AM
To: Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>; Maxwell, Julie FLNR:EX <Julie.Maxwell@gov.bc.ca>
Cc: Woodman, Michel FLNR:EX <Michel.Woodman@gov.bc.ca>; Snetsinger, James Andrew FLNR:EX <Andrew.Snetsinger@gov.bc.ca>
Subject: RE: K61884 - White Rock Lk Fire Fire Analysis Report

Hi Brent,

I compared our run to this one and have added a few additional comments.

Merritt TSA Timber Value (taken from your information)

THLB = 12,798ha

Value = \$51,594,689

Non-THLB = 17,147ha

Value = \$39,432,453

Total: \$91,027,142

*Did not include TFL49 in the Merritt TSA numbers

I don't see any of the plantations accounted for in the costing. Our DM likes to see the expected costs for licensee obligations that may come in as a FRPA Section 108.

1257ha X \$1400/ha = \$1,759,80

\$2300/ha

Property – Other public infrastructure

Bridges (5)

Dams (4)

Groundwater wells (35)

Non-legal spatially delineated OGMA's for the Merritt TSA = 471ha (not sure if your analysis picks up non-legal? They are on the map though).

Research Installations – 6 plots at Glimpse Lake and Cain Creek

Mineral and Coal Operations – Juniper Creek Zeolite

Sand and Gravel Operations – Red Rock Farms Ltd.

Hope that helps but please feel free to give me a call if you'd like to discuss further.

Thank you,

Suzanne

From: Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>
Sent: August 13, 2021 10:47 AM
To: Maxwell, Julie FLNR:EX <Julie.Maxwell@gov.bc.ca>; Shears, Suzanne FLNR:EX <Suzanne.Shears@gov.bc.ca>

Cc: Woodman, Michel FLNR:EX <Michel.Woodman@gov.bc.ca>; Snetsinger, James Andrew FLNR:EX <Andrew.Snetsinger@gov.bc.ca>

Subject: K61884 - White Rock Lk Fire Fire Analysis Report

Hi Julie and Suzanne,

Earlier this week I got a call from Robyn Pearcey who is working with the IC team on the White Rock Lk Fire. Robyn asked if we would be willing to complete a Fire analysis for the White Rock Fire in a joint effort with yourselves. Michel Woodman from my team has agreed to spearhead the Fire Analysis (FA) and do the bulk of the heavy lifting for the White Rock Lk Fire.

Michel is going to do the entire FA Report but will need support from you to provide information on your districts. For that reason I have put our analysis information on our ftp site in the outgoing folder. It is a different package than you normally get but I hope that you can work with the package we have given you. There may be some oversights on my behalf and we will have to work through that when the time comes. One thing I wanted to point out that has caused some confusion is that the map in the folder will need values/layers toggled off in order to make the map 'less busy'.

F:\DOS\gov_internal\outgoing\DOS Fire Analysis\K61884 White Rock Lk Fire

I understand that each district does things differently and that is completely fine. I suggest you just do what you need to do and Michel will put everything together the best that she can.

Please feel free to call Michel or myself with any questions you may have.

Thank you,

Brent

From: Snetsinger, James Andrew FLNR:EX <Andrew.Snetsinger@gov.bc.ca>

Sent: August 10, 2021 8:40 AM

To: Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>

Cc: Shears, Suzanne FLNR:EX <Suzanne.Shears@gov.bc.ca>

Subject: RE: Fire Analysis Reports

Morning Brent,

Suzanne Shears has been working on our Fire Analysis here at the District. I have attached a copy of the last FA we completed on K61884, I don't think the fire has grown much into our District so our info probably won't be much different but you can work with Suzanne on that. We have been using BCWS Geomatics staff for all of our mapping and analysis work on these FAs maybe that is something that could work on this one? I will let you and Suzanne coordinate but feel free to give me a call if you want to discuss.

Thanks,

Andrew Snetsinger, RPF

Resource Manager

Cascades Natural Resource District

Ministry of Forests, Lands, Natural Resource Operations and Rural Development

Phone: (250) 378-0520

Cell:s.17

From: Lipinski, Brent X FLNR:EX <Brent.Lipinski@gov.bc.ca>

Sent: August 10, 2021 6:45 AM

To: Snetsinger, James Andrew FLNR:EX <Andrew.Snetsinger@gov.bc.ca>

Subject: Fire Analysis Reports

Good day to you Andrew,

The IC team for the White Rock Lk Fire has submitted a request for my team to complete a Fire Analysis Report for the White Rock Lk fire which includes comments from the Kamloops and Merritt offices as well. Who in your office is completing the Fire Analysis Reports?

My plan it to complete our portion (DOS), send it to Julie Maxwell to complete Kamloops portion, and then over to your office to ensure everyone's values are captured.

We will try to do the mapping ourselves first, but if our info is insufficient in your district we may look to BCWS to meet our broad overview mapping needs.

Brent



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FIRE ANALYSIS

INCIDENT NO. K61884	DATE (YYYY-MM-DD) 8/10/01 <small>Click here to enter a date.</small>	TIME (24HRS) 1300	CURRENT ESTIMATED SIZE 81,000 ha	ESTIMATED SIZE AT CONTROL 100,000 ha
LATITUDE 50 ° 21'06.27	LONGITUDE 119 ° 56'37.67	FIRE LOCATION (GEOGRAPHIC) White Rock Lake		
FUEL TYPE / DESCRIPTION Fuel type is a mosaic of the following: C7, C5, M2, D1, C3, grass (O-1a, 90% curing).				
WEATHER FORECAST FOR OR NEXT OPERATIONAL PERIOD (precipitation forecasted, drying trend, wind event, etc.)				
OUTLOOK: THURSDAY-FRIDAY August 19-20 The ridge is flattened Thursday by an upper trough crossing northern BC. Temperatures will cool one or two degrees from Wednesday and winds will be light north to northwest. As the trough moves to the east, a northwest flow will be established over the region, and on Friday an upper low in the flow will move over the northwest Washington State with isolated showers in the fire centre region along the US border. Temperatures will still be in the low to mid-twenties and winds will be light north.				
MAP ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO FIRE BEHAVIOUR FORECAST ATTACHED YES <input type="checkbox"/> YES <input type="checkbox"/> NO				
LONG RANGE FIRE GROWTH PROJECTION REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Reason if No				
LONG RANGE FIRE GROWTH PROJECTION ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				
VALUES AT RISK: <input checked="" type="checkbox"/> Public Safety <input checked="" type="checkbox"/> Occupied Interface Area <input checked="" type="checkbox"/> Infrastructure/Assets - Private <input checked="" type="checkbox"/> Infrastructure -Public <input checked="" type="checkbox"/> High Environmental Values <input checked="" type="checkbox"/> High Socio Economic Values <input checked="" type="checkbox"/> Timber Resource <input checked="" type="checkbox"/> Recreation				
<input checked="" type="checkbox"/> Comments s.16; s.18				
GENERAL CONTROL OBJECTIVES				
Employ direct, indirect and parallel attack with the intent to steer the fire into the working forest and away from major travel corridor routes and homes. Firefighter and public safety is the highest priority when determining Incident Objectives, Strategies and Tactics. Provide for public safety through Evacuation Orders & Alerts and Area Closures as dictated by fire activity. Take advantage of natural barriers and weather conditions to contain fire at the smallest possible size, consistent with safety considerations.				
STRATEGIES FOR THE INCIDENT				
Full response using direct, parallel and indirect attack Trigger points are not set in a permanent location due to additional inputs from ISG. The trigger points identified on the map should be considered "floating" as they will need to move based on a number of factors. (transportation corridors, community evacuation timelines, fire behaviour predictions, and many other factors determined by members of the ISG).				



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FIRE ANALYSIS

PROBABILITY OF MEETING OBJECTIVES

Medium (HIGH, MEDIUM OR LOW)

ESTIMATED SUPPRESSION COSTS \$ 33,000,000

ESTIMATED DAILY COST TO CONTROL (from daily cost estimator) \$ 1,000,000

ESTIMATED VALUES PROTECTED \$ 1,161,004,033 AS PER LAND MANAGER

LAND MANAGER COMMENTS

Agreed to Full Response:

Prioritize the protection of and minimize the impact to:

s.16; s.18

NAME Ray Crampton

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: ☐ YES ☐ NO

SIGNATURE _____

OTHER AGENCY / STAKEHOLDER COMMENTS

NAME _____

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: ☐ YES ☐ NO

SIGNATURE _____

FIRE CENTRE REPRESENTATIVE COMMENTS

s.22

NAME

SIGNA

POSITION

SWO OPERATIONS

CERTIFICATION LEVEL

IC2 / PWCO
PWCO



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FIRE ANALYSIS

PROBABILITY OF MEETING OBJECTIVES <u>Medium</u> (HIGH, MEDIUM OR LOW)	ESTIMATED SUPPRESSION COSTS \$ 33,000,000 ESTIMATED DAILY COST TO CONTROL (from daily cost estimator) \$ 1,000,000 ESTIMATED VALUES PROTECTED \$ 1,161,004,033 AS PER LAND MANAGER
LAND MANAGER COMMENTS <small>Agreed to Full Response: Prioritize the protection of and minimize the impact to:</small> s.16; s.18 <div style="text-align: right;">NAME <u>Ray Crampton</u></div> <div>LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO SIGNATURE <u>Ray Crampton</u></div>	
OTHER AGENCY / STAKEHOLDER COMMENTS <div style="text-align: right;">NAME _____</div> <div>LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED: <input type="checkbox"/> YES <input type="checkbox"/> NO SIGNATURE _____</div>	
FIRE CENTRE REPRESENTATIVE COMMENTS s.22 <div><div>NAME SIGN/</div><div style="text-align: right;">POSITION <u>SWO OPERATIONS</u> CERTIFICATION LEVEL <u>IC2 / AWC</u> <u>Awco</u></div></div>	



FIRE ANALYSIS

INCIDENT COMMANDER SIGNATURE:

APPROVED BY (FIRE CENTER MANAGER OR DESIGNATE) SIGNATURE:

SPECIFIC CONDITIONS (Provide specific conditions that would require a fire analysis update)

If the estimated suppression cost will be exceeded or fire control objectives change.

If the fire breaches the trigger points with a moving, organized flame front.



DETAILS ON ISSUES, CONSTRAINTS & VALUES AT RISK

Stewardship - Infrastructure & Private Lands

Municipalities include the District of Lake Country and The Corporation of the City of Vernon.
A significant amount of Private land is located diagonally from the SW to NE quadrants and around the 10km fire buffer.
Transmission lines intersect the middle of the 10km fire buffer.
OGC pipeline segments located at the Northern portion of the 10km fire buffer, near the town of Westwood.
The Regional Districts of North Okanagan, Thompson Nicola, Columbia Shuswap and the Central Okanagan are located within the 10km fire buffer.
Community Crown Interface and Scenic Areas is located in the SE and NE quadrants of the 10km fire buffer, associated with the town of Westwood, and the north arm of Okanagan Lake.
Terrain stability is potential unstable mainly in the NW and SE quadrants 10km fire perimeter. There is significant unstable terrain in the SE quadrant.
DOS: 185 PID's
Cascades: BC Hydro Infrastructure – 31km of transmission lines, 163 transmission structures, 373 poles
High Voltage transmission lines (77km) and 547km of transmission lines
Bridge(s) 42 structures with a civic address

First Nations Values

DOS
FN Reserves:
Polygon is located within the Okanagan R1 - Okanagan Indian Band
Polygon is located within the Chapperton S1 - Salmon Lake 7 - Upper Nicola Band
The polygon is encroaching north towards Neskonlith Indian Band reserve.
s.16; s.18

Stewardship - Forest Tenures

TOTAL TIMBER VALUES = \$1,155,450,583.
Timber values inside the 10km fire perimeter are estimated at \$4,567/ha. With the area within the 10km fire perimeter equating to 253,217 ha, the timber values equate to \$ 1,155,450,583. Efforts should be undertaken to minimize timber loss especially inside the THLB. Reforestation costs are estimated at \$2,300/ha. Timber Supply Area (TSA) - The 10km fire buffer covers the Merritt TSA, Kamloops TSA and the Okanagan Shuswap TSA. The fire is currently burning in the Merritt and Okanagan Shuswap TSA.
The 10km fire perimeter buffer overlaps with the operating area of Tolko Industries Ltd. (Cascades and Okanagan Shuswap District), BC Timber Sales (Kamloops and Vernon) and Stuwix Resources Ltd. The District has reached out and notified the license holders by email.
There is one Tree Farm Licence (TFL 40) located in the centre of the fire perimeter, owned by Tolko Industries Ltd.
Woodlots - Woodlots - there are 9 woodlot owners and 22 woodlots located within the 10km fire buffer
FTEN is Forest Tenure blocks (everything from planned through to harvested). Active cutblocks exist throughout the entire 10km fire buffer.
The majority of the cutblocks are Free Growing within the 10km fire buffer (blocks that FG = 70%)
Old growth Management Areas (OGMA) are dispersed throughout the 10km fire buffer.
Many forest Health points and polygons are located to the East of the fire start point and cover the NE and SE quadrants of the 10km fire perimeter.

Ecosystems

Unless necessary for suppression actions avoid burning to consume fuels in Bighorn Sheep Winter Range (grasslands adjacent to steep, rocky escape terrain located along the southeast edge of the fire perimeter along the west side of Okanagan Lake), and within American Badger Critical Habitat, located across the north half of the fire perimeter. Avoid burning and placement of fireguards within Western Rattlesnake and Gopher snake Critical Habitat along the southeast edge of fire perimeter along the west side of Okanagan Lake. Avoid burning within a 30 m buffer along mainstems and tributaries and avoid fireguards through the riparian buffer and minimize sediment input into streams especially within fisheries sensitive watershed (Shore Creek) located just south of the fire perimeter.
Values: Overall fire perimeter and buffer is high environmental conservation sensitivity due to critical habitat for American Badger, Western Rattlesnake, Gopher snake and Ungulate Winter Ranges for Mountain Goat, Moose, Bighorn Sheep and Mule Deer. Moose Winter Range is located across the western half of the fire perimeter, while Mountain Goat, Mule Deer and Bighorn Sheep Winter Ranges are located along the southeast edge of fire perimeter along the west side of Okanagan Lake. Fire suppression is recommended for high elevation winter ranges as fire can impact habitat through reduction of thermal and security cover required for winter survival. There are three Community Watersheds that are located within or very near to the fire buffer, Lambly Community Watershed, Hope Community Watershed and Norrie Community Watershed. Old Growth Management Areas (OGMA) are scattered throughout the fire buffer. Fireguard and road construction is a concern for Mountain Goat, and fish habitat.
Cascades: Legal Old Growth Management Areas (84ha)
Non-legal Old Growth Management Areas (2332ha)
Ungulate winter range (UWR) (20,281ha)
West trees sensitive to bucksking (154)
Critical aquatic habitat for fish (streams, wetland)
Kamloops: KLRMP critical deer winter range in northern buffer past Monte Lake
Perfected forest in northern buffer past Monte Lake

Range, Recreation, Parks

DOS
RANGE - TOTAL COST = \$3,901,000
100km Fence at \$2,500,000; 90 Cattleguards at \$900,000; 1 Cabin at \$40,000; 2 Enclosures at \$16,000; 9 Corrals at \$90,000; 35 Water Developments at \$350,000; 1km Stock trail at \$5,000
CASCADIES Range developments including bridges/cattleguards (31), gates (23), and fences (209km)
RECREATION - TOTAL COST = \$652,450
Sites:
Evelly (REC1596) 50 defined campsites. One of our most popular recreation sites in the Okanagan. \$207,900.00
Boulevard Lake (REC1597) 4 Defined campsites. Popular fishing lake and campground. \$19,700.00
Little Boulevard Lake (REC1598) 1 Defined campsite. Popular fishing lake. \$10,250.00
Bear Creek (REC1768) 40 Defined campsites. Very popular with OHV and camping. Very large network of OHV Trails (Not inside buffer area). \$155,450.00
Sandberg Lake (REC4654) 1 Defined campsite. Popular fly fishing lake. \$6100.00
Dandanelles Lake (REC4747) 4 Defined campsites. Very popular fly fishing lake and campground. \$12,900.00
Blackwell Lake (REC1947) No defined campsites. Popular rustic camping. Total area 21 hectares.
Pratt Lake (REC1946) 7 Defined campsites. Popular fishing lake and campground. \$16,800
Pineus Lake North (REC1600) 8 Defined campsites. Very popular fishing lake and campground. \$39,300
Square Lake (REC1609) 3 Defined campsites. Popular fishing lake and campground. \$14,800

Stewardship - Water and Lakes

WATER:
There are three Community Watersheds that are located within or very near to the 10km fire buffer, Lambly Community Watershed, Hope Community Watershed and Norrie Community Watershed.
Lakeshore Management Zones are associated with Okanagan Lake and smaller plateau lakes dispersed throughout the 10km fire buffer
One fisheries Sensitive Watershed (Shore Creek) is located in the south half of the 10km fire buffer, along with the Fish Riparian Management Zone (RMZ)
Several points of Diversion (POD) Licenses and lines are located throughout the 10km fire perimeter; a high number is concentrated within the town of Westwood and Vernon (north and east quadrants)
A limited number of Enhanced Riparian Reserves (ERR) are located in the centre of the 10km fire perimeter
the 10km fire perimeter
Cascades: Domestic use – water point of diversion (1)
All other uses water points of diversion (57)
Groundwater wells (35)
Licensed water works (53) and lines (42,783km)
Dams (4)

Stewardship - Other Tenures

Crown Tenures: 570 crown tenures including: waste disposal, recreation residential, sand and gravel, moorage, regional parks, sewerlines, right of ways, marinas, communications sites, wharfs, electrical power lines
There are seven trappers located within the 10km fire perimeter (TR03121001, TR03121002, TR03201005, TR03201006, TR03201002, TR03201003, TR03261008)
There are two guides located in the 10km fire buffer, (310001, BENNETT and 800758, COVERT)
There are 28 Research Installations located throughout the 10km fire perimeter;
There are 39 Growth and Yield plot located at the north end of the 10km fire perimeter near the town of Westwood
Partial Retention, Retention and Moderate Visual Quality is located in the NE quadrant of the 10km Fire buffer
Cascades: Mineral and Coal (M), Sand and Gravel (S), Placer (S) Operations
M: Juniper Creek Zeolite, S: Red Rock Farms Ltd.



FIRE ANALYSIS

FIRE CONTROL OBJECTIVES, STRATEGY AND TACTICS OPTIONS	
OPTION 'A'	
OBJECTIVE: Provide for general public and responder safety. Protect public health, government infrastructure and private property.	
STRATEGY: Full response using direct, parallel and indirect attack.	
TACTICS: Utilize Structure Protection Specialists and Strike Teams to protect structures and other values using direct and indirect methods including helicopter bucketing, water tenders and crews. Utilize Structure Protection Units and Fire Department engines to protect structures and other values with engines and water delivery systems. Utilize indirect attack by establishing control lines using machine guards and fuel free lines with handguards for burning off operations. Establish 30 meter blackline using direct attack methods with water delivery, machine guard construction and hand tools. Utilize parallel attack by establishing control lines using machine guards for burning off operations.	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW) Medium	
TOTAL VALUES AT RISK 'A' \$ Unquantifiable	ESTIMATED TOTAL SUPPRESSION COSTS 'A' \$ 33 Million
OPTION 'B'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'B' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'B' \$
OPTION 'C'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'C' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'C' \$



FIRE ANALYSIS

FIRE ANALYSIS VALUES AT RISK AND TRIGGER POINTS FOR FURTHER ACTION REQUIRED		
STEP 1:	IDENTIFY POTENTIAL VALUES AT RISK ON MAP	
STEP 2:	IDENTIFY TRIGGER POINTS ON MAP WHERE A REVIEW OF THE FIRE ANALYSIS OR ACTION TO SAFEGUARD IDENTIFIED VALUES IS REQUIRED	
STEP 3:	IDENTIFY ACTIONS REQUIRED WHEN FIRE REACHES EACH TRIGGER POINT	
TRIGGERPOINT	CONDITIONS WITH POTENTIAL FOR GROWTH	ACTIONS TO BE UNDERTAKEN
Trigger Point 1 Shorts Creek	If fire crosses Shorts Creek with a continuous flaming front.	Recommend Evacuation Order South of Shorts Creek based on fire behaviour and evacuation timelines. Recommend Evacuation Alert for properties to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 2	If fire breaches Trigger Point 2 with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 3 Mt. Swanson	Spot fires developing in trigger area with an active flame front.	Recommend Evacuation Order for communities and properties adjacent to Mt. Swanson and Evacuation Alert for additional properties based on fire behaviour and evacuation timelines. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 4 Powerline	If fire breaches powerline with a continuous flaming front.	Recommend Evacuation Order for Falkland and surrounding properties based on fire behaviour and evacuation timelines. Recommend Evacuation Alert for properties to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 5	If fire breaches containment lines with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 6 Height of Land west of Fire Perimeter	If fire breaches Trigger Point 6 with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.
Trigger Point 7 South Fire Perimeter	If fire breaches south flank containment lines with a continuous flaming front.	Recommend Evacuation Order and Alert for communities and properties based on fire behaviour and evacuation timelines to ensure adequate emergency response and preparedness is achieved. Utilize strategies and tactics to slow or stop the rate of fire spread.



FIRE ANALYSIS

THIS PAGE TO BE COMPLETED WHEN ASSESSING, REVIEWING, OR MONITORING A FIRE THAT HAS A COMPLETED FIRE ANALYSIS

UPDATE#	DATE YYYY-MM-DD	NAME	COMMENTS

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FIRE ANALYSIS UPDATE # _____

DATE AND TIME OF UPDATE		FIRE #	FIRE ZONE	FIRE CENTRE
LOCATION			SIZE	GPS <input type="checkbox"/> YES <input type="checkbox"/> NO
1) ATTACH MAP SHOWING CURRENT PERIMETER			<input type="checkbox"/> YES	<input type="checkbox"/> NO
2) IDENTIFY ANY AREAS ON THE MAP WHERE THE FIRE IS ACTIVE.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
3) ATTACH PHOTOS.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
4). IS A NEW LONG RANGE FIRE GROWTH PROJECTION REQUIRED?			<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> ATTACHED
POTENTIAL THREAT (INCLUDING SMOKE ISSUES) TO ANY IDENTIFIED VALUES				
IS FIRE CLOSE TO ANY IDENTIFIED TRIGGER POINTS?				
IS THERE A CHANGE TO THE STRATEGY AND/OR TACTICS? (EXPLAIN):				
DOCUMENT ANY DISCUSSIONS WITH LANDMANGER OR STAKEHOLDERS				
DO ANY OTHER LANDMANAGERS OR STAKEHOLDERS NEED TO BE CONTACTED?				
HAS THE ESTIMATED TOTAL COST CHANGED?				



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FIRE ANALYSIS UPDATE # _____

FIRE CENTRE		
NAME	POSITION	SIGNATURE
FIRE CENTRE MANAGER COMMENTS		
s.22		
RECEIVED AT FIRE CENTRE - DATE Click here to enter a date.		
LAND MANAGER SIGNATURE REQUIRED IF VALUES AFFECTED H		




LAND MANAGER COMMENTS

LAND MANAGER

POSITION

DATE (YYYY/MM/DD)

 Ministry of Forests, Lands and Natural Resources - Wildfire Service		Fire Behaviour Forecast #		30							
		K61884 White Rock Lk.									
Issued Date	Issued Time	Prediction Date	Prediction Time	FBAN							
2021/08/17	18:00	2021/08/18	Operational period	Ben Boghean							
SAFETY											
Maintain situational awareness. Fire behaviour may be reduced from the rain but danger still lingers. Watch for overhead hazards and be aware of rolling debris.											
No Fire Behaviour Advisory for:		C3 Mature Lodge Pine		No Advisory							
		C7 Ponderosa Pine/Doug fir		No Advisory							
		O1b 90% curing		No Advisory							
WEATHER SUMMARY											
Today: A few clouds. MAX TEMP: 23° MIN RH: 30%. WINDS: Variable 5 to 15 km/h.											
0900	14°C	RH 60%	Variable 5 – 15 km/hr	% Chance of Rain	0						
1300	21°C	RH 40%	Variable 5 – 15 km/hr	% Chance of Rain	0						
1700	23°C	RH 30%	Variable 5 – 15 km/hr	% Chance of Rain	0						
OUTLOOK: THURSDAY-FRIDAY											
The ridge is flattened Thursday by an upper trough crossing northern BC. Temperatures will cool one or two degrees from Wednesday and winds will be light north to northwest. As the trough moves to the east, a northwest flow will be established over the region, and on Friday an upper low in the flow will move over the northwest Washington State with isolated showers in the fire centre region along the US border. Temperatures will still be in the low to mid-twenties and winds will be light north.											
Fintry Wx Station/ 1300 hrs Weather and FWI Indices for the Peak Burn Period											
Date	Temp	RH %	WD	WS	Prec.	FFMC	DMC	DC	ISI	BUI	FWI
Aug 17	16	64	SE	2	0	55	88	1033	0.5	145	1
Aug 18	21	44	NW	8	0	79	91	1040	2	149	9
Aug 19	20	40	NW	5	0	87	93	1046	3	152	17
FIRE BEHAVIOUR GENERAL											
Surface fire expected in closed fuel types. Watch for rolling debris on steep slopes and be aware of potential fires burning below.											
Fire will continue to burn out roots of standing timber. Fires burning on North aspects will have a greater potential of root burn as the fire is not burning quickly through the area resulting in a slower deeper burn.											
FIRE BEHAVIOUR SPECIFIC											
The following information is based on equilibrium fire spread at peak burn with constant forecast wind and on flat ground, with absence of suppression action.											
Fuel type		ROS (head)		Intensity Class & Fire Type							
C3 Mature Jack or Lodgepole Pine		1 m/min		I.C. 2 Surface							
C7 Ponderosa Pine/Douglas fir		1 m/min		I.C. 2 Surface							
O1b Standing grass 90% Curing		1 m/min		I.C. 2 Surface							
Be aware of localized winds, precipitation and topographical features that will affect fire behaviour.											
Use your red book to make adjustments for your particular on site conditions!											
Send weather readings and field observations to bcws.whiterockplans@gov.bc.ca or text to (250)203-9911											





FIRE ANALYSIS

INCIDENT NO. K61884	DATE (YYYY-MM-DD) 8/10/21 <small>Click here to enter a date.</small>	TIME (24HRS)	CURRENT ESTIMATED SIZE ha	ESTIMATED SIZE AT CONTROL ha
LATITUDE 50 ° 21'06.27	LONGITUDE 119 ° 56'37.67	FIRE LOCATION (GEOGRAPHIC) White Rock Lake		
FUEL TYPE / DESCRIPTION				
WEATHER FORECAST FOR OR NEXT OPERATIONAL PERIOD (precipitation forecasted, drying trend, wind event, etc.)				
<div>MAP ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO</div> <div>FIRE BEHAVIOUR FORECAST ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO</div> <div>LONG RANGE FIRE GROWTH PROJECTION REQUIRED <input type="checkbox"/> YES <input type="checkbox"/> NO Reason if No</div> <div>LONG RANGE FIRE GROWTH PROJECTION ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO</div>				
<div>VALUES AT RISK:</div> <div><input type="checkbox"/> Public Safety <input type="checkbox"/> Occupied Interface Area <input type="checkbox"/> Infrastructure/Assets - Private <input type="checkbox"/> Infrastructure -Public</div> <div><input type="checkbox"/> High Environmental Values <input type="checkbox"/> High Socio Economic Values <input type="checkbox"/> Timber Resource <input type="checkbox"/> Recreation</div>				
<input type="checkbox"/> Comments				
GENERAL CONTROL OBJECTIVES				
STRATEGIES FOR THE INCIDENT				



FIRE ANALYSIS

PROBABILITY OF MEETING OBJECTIVES

(HIGH, MEDIUM OR LOW)

ESTIMATED SUPPRESSION COSTS \$

ESTIMATED DAILY COST TO CONTROL (from daily cost estimator) \$

ESTIMATED VALUES PROTECTED \$ 1,161,004,033 AS PER LAND MANAGER

LAND MANAGER COMMENTS

Agreed to Full Response:

Prioritize the protection of and minimize the impact to:

Private property, crown tenures and key infrastructures including transmission lines intersecting the fire perimeter.

s.16; s.18

NAME Ray Crampton

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED:

☐ YES

☐ NO

SIGNATURE _____

OTHER AGENCY / STAKEHOLDER COMMENTS

NAME _____

LAND OR FIRE MANAGEMENT PLAN OBJECTIVES ATTACHED:

☐ YES

☐ NO

SIGNATURE _____

FIRE CENTRE REPRESENTATIVE COMMENTS

NAME _____

POSITION _____

SIGNATURE _____

CERTIFICATION LEVEL _____



FIRE ANALYSIS

INCIDENT COMMANDER SIGNATURE:

APPROVED BY (FIRE CENTER MANAGER OR DESIGNATE) SIGNATURE:

SPECIFIC CONDITIONS (Provide specific conditions that would require a fire analysis update)



DETAILS ON ISSUES, CONSTRAINTS & VALUES AT RISK

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Community Crown Interface and Scenic Areas is located in the SE and NE quadrants of the 10km fire buffer, associated with the town of Westwold, and the north arm of Okanagan Lake
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DOS: 185 PIDs
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High Voltage transmission lines (77km) and 547km of transmission lines
Bridges (5). 42 structures with a civic address

First Nations Values

s.16; s.18

Stewardship - Forest Tenures

TOTAL TIMBER VALUES = \$1,156,450,583.
Timber values inside the 10km fire perimeter are estimated at \$4,567/ha. With the area within the 10km fire perimeter equating to 253,217 ha, the timber values equate to \$ 1,156,450,583. Efforts should be undertaken to minimize timber loss especially inside the THLB. Reforestation costs are estimated at \$2,300/ha. Timber Supply Area (TSA) - The 10km fire buffer covers the Merritt TSA, Kamloops TSA and the Okanagan Shuswap TSA. The fire is currently burning in the Merritt and Okanagan Shuswap TSA.
The 10km fire perimeter buffer overlaps with the operating area of Tolko Industries Ltd. (Cascades and Okanagan Shuswap District), BC Timber Sales (Kamloops and Vernon) and Stuwix Resources Ltd. The District has reached out and notified the license holders by email.
There is one Tree Farm Licence (TFL 49) located in the centre of the fire perimeter, owned by Tolko Industries Ltd.
Woodlots - Woodlots - there are 9 woodlot owners and 22 woodlots located within the 10km fire buffer
FTEN is Forest Tenure blocks (everything from planned through to harvested).). Active cutblocks exist throughout the entire 10km fire buffer.
The majority of the cutblocks are Free Growing within the 10km fire buffer (blocks that FG = 70%)
Old growth Management Areas (OGMA) area dispersed throughout the 10km fire buffer.
Many forest Health points and polygons are located to the East of the fire start point and cover the NE and SE quadrants of the 10km fire perimeter.

Ecosystems

Unless necessary for suppression actions avoid burning to consume fuels in Bighorn Sheep Winter Range (grasslands adjacent to steep, rocky escape terrain located along the southeast edge of fire perimeter along the west side of Okanagan Lake), and within American Badger Critical Habitat located across the north half of the fire perimeter. Avoid burning and placement of fireguards within Western Rattlesnake and Gopher snake Critical Habitat along the southeast edge of fire perimeter along the west side of Okanagan Lake. Avoid burning within a 30 m buffer along mainstems and tributaries and avoid fireguards through the riparian buffer and minimize sediment input into streams especially within fisheries sensitive watershed (Shorts Creek) located just south of the fire perimeter.
Values. Overall fire perimeter and buffer is high environmental conservation sensitivity due to critical habitat for American Badger, Western Rattlesnake, Gopher snake and Ungulate Winter Ranges for Mountain Goat, Moose, Bighorn Sheep and Mule Deer. Moose Winter Range is located across the western half of the fire perimeter, while Mountain Goat, Mule Deer and Bighorn Sheep Winter Ranges are located along the southeast edge of fire perimeter along the west side of Okanagan Lake. Fire suppression is recommended for high elevation winter ranges as fire can impact habitat through reduction of thermal and security cover required for winter survival. There are three Community Watersheds that are located within or very near to the fire buffer, Lambly Community Watershed, Hope Community Watershed and Norris Community Watershed. Old Growth Management Areas (OGMA) are scattered throughout the fire buffer. Fireguard and road construction is a concern for Mountain Goat, and fish habitat.
Cascades: Legal Old Growth Management Areas (64ha)
Non-legal Old Growth Management Areas (2339ha)
Ungulate winter range (UWR) (20,281ha)
Nest trees sensitive to bucksking (154)
Critical aquatic habitat for fish (streams, wetland)
Kamloops: KL RMP critical deer winter range in northern buffer past Monte Lake
Petrified forest in northern buffer past Monte Lake

Range, Recreation, Parks

DOS
RANGE - TOTAL COST = \$3,901,000
100km Fence at \$2,500,000; 90 Cattleguards at \$900,000; 1 Cabin at \$40,000; 2 Enclosures at \$16,000; 9 Corrals at \$90,000; 35 Water Developments at \$350,000; 1Km Stock trail at \$5,000
CASCADES Range developments including bridges/cattleguards (31), gates (20), and fences (309km)
RECREATION - TOTAL COST = \$652,450
Sites:
Evelly (REC1596) 50 defined campsites. One of our most popular recreation sites in the Okanagan. \$207,900.00
Boulevard Lake (REC1597) 4 Defined campsites. Popular fishing lake and campground. \$19,700.00
Little Boulevard Lake (REC1598) 1 Defined campsite. Popular fishing lake. \$10,250.00
Bear Creek (REC31768) "High Value" 40 Defined campsites. Very popular with OHV and camping. Very large network of OHV Trails (Not inside buffer area). \$155,450.00
Sandberg Lake (REC4654) 1 Defined campsite. Popular fly fishing lake. \$6100.00
Dardanelles Lake (REC4747) 4 Defined campsites. Very popular fly fishing lake and campground. \$12,900.00
Blackwell Lake (REC1947) No defined campsites. Popular rustic camping. Total area 24 hectares.
Pratt Lake (REC1946) 7 Defined campsites. Popular fishing lake and campground. \$16,800
Pinaus Lake North (REC1600) 8 Defined campsites. Very popular fishing lake and campground. \$39,300
Square Lake (REC1599) 3 Defined campsites. Popular fishing lake and campground. \$14,800

Stewardship - Water and Lakes

WATER:
There are three Community Watersheds that are located within or very near to the 10km fire buffer, Lambly Community Watershed, Hope Community Watershed and Norris Community Watershed.
Lakeshore Management Zones are associated with Okanagan Lake and smaller plateau lakes dispersed throughout the 10km fire buffer
One fisheries Sensitive Watershed (Shorts Creek) is located in the south half of the 10km fire buffer, along with the Fish Riparian Management Zone (RMZ)
Several points of Diversion (POD) Licenses and lines are located throughout the 10km fire perimeter, a high number is concentrated within the town of Westwold and Vernon (north and east quadrants)
A limited number of Enhanced Riparian Reserves (ERR) are located in the centre of the 10km fire perimeter
the 10km fire perimeter
Cascades: Domestic use – water point of diversion (1)
All other uses water points of diversion (57)
Groundwater wells (35)
Licensed water works (53) and lines (42,783km)
Dams (4)

Stewardship - Other Tenures

Crown Tenures: 570 crown tenures including: waste disposal, recreation residential, sand and gravel, moorage, regional parks, sewerlines, right of ways, marinas, communications sites, wharfs, electrical power lines
There are seven trappers located within the 10km fire perimeter (TR0312T001, TR0312T002, TR0320T005, TR0320T006, TR0320T002, TR0320T003, TR0326T008)
There are two guides located in the 10km fire buffer, (310001, BENNETT and 800758, COVERT)
There are 28 Research Installations located to throughout the 10km fire perimeter:
There are 39 Growth and Yield plot located at the north end of the 10km fire perimeter near the town of Westwold
Partial Retention, Retention and Moderate Visual Quality is located in the NE quadrant of the 10km Fire buffer
Cascades: Mineral and Coal (M), Sand and Gravel (S), Placer (S) Operations
M: Juniper Creek Zeolite, S: Red Rock Farms Ltd.



FIRE ANALYSIS

FIRE CONTROL OBJECTIVES, STRATEGY AND TACTICS OPTIONS	
OPTION 'A'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'A' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'A' \$
OPTION 'B'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'B' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'B' \$
OPTION 'C'	
OBJECTIVE:	
STRATEGY:	
TACTICS:	
PROBABILITY OF MEETING OBJECTIVES (HIGH, MEDIUM, LOW)	
TOTAL VALUES AT RISK 'C' \$	ESTIMATED TOTAL SUPPRESSION COSTS 'C' \$



FIRE ANALYSIS

FIRE ANALYSIS VALUES AT RISK AND TRIGGER POINTS FOR FURTHER ACTION REQUIRED		
STEP 1:	IDENTIFY POTENTIAL VALUES AT RISK ON MAP	
STEP 2:	IDENTIFY TRIGGER POINTS ON MAP WHERE A REVIEW OF THE FIRE ANALYSIS OR ACTION TO SAFEGUARD IDENTIFIED VALUES IS REQUIRED	
STEP 3:	IDENTIFY ACTIONS REQUIRED WHEN FIRE REACHES EACH TRIGGER POINT	
TRIGGERPOINT	CONDITIONS WITH POTENTIAL FOR GROWTH	ACTIONS TO BE UNDERTAKEN



FIRE ANALYSIS

THIS PAGE TO BE COMPLETED WHEN ASSESSING, REVIEWING, OR MONITORING A FIRE THAT HAS A COMPLETED FIRE ANALYSIS

UPDATE#	DATE YYYY-MM-DD	NAME	COMMENTS

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FIRE ANALYSIS UPDATE # _____

DATE AND TIME OF UPDATE		FIRE #		FIRE ZONE		FIRE CENTRE	
LOCATION				SIZE		GPS <input type="checkbox"/> YES <input type="checkbox"/> NO	
1) ATTACH MAP SHOWING CURRENT PERIMETER				<input type="checkbox"/> YES <input type="checkbox"/> NO			
2) IDENTIFY ANY AREAS ON THE MAP WHERE THE FIRE IS ACTIVE.				<input type="checkbox"/> YES <input type="checkbox"/> NO			
3) ATTACH PHOTOS.				<input type="checkbox"/> YES <input type="checkbox"/> NO			
4). IS A NEW LONG RANGE FIRE GROWTH PROJECTION REQUIRED?				<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> ATTACHED	
POTENTIAL THREAT (INCLUDING SMOKE ISSUES) TO ANY IDENTIFIED VALUES							
IS FIRE CLOSE TO ANY IDENTIFIED TRIGGER POINTS?							
IS THERE A CHANGE TO THE STRATEGY AND/OR TACTICS? (EXPLAIN):							
DOCUMENT ANY DISCUSSIONS WITH LANDMANGER OR STAKEHOLDERS							
DO ANY OTHER LANDMANAGERS OR STAKEHOLDERS NEED TO BE CONTACTED?							
HAS THE ESTIMATED TOTAL COST CHANGED?							



FIRE ANALYSIS UPDATE # _____

FIRE CENTRE		
NAME	POSITION	SIGNATURE
FIRE CENTRE MANAGER COMMENTS		
RECEIVED AT FIRE CENTRE - DATE <small>Click here to enter a date.</small>		FIRE CENTRE MANAGER SIGNATURE
LAND MANAGER SIGNATURE REQUIRED IF VALUES AFFECTED HAVE OR WILL CHANGE		



LAND MANAGER COMMENTS

LAND MANAGER

POSITION

DATE (YYYY/MM/DD)

INSTRUCTIONS

The Fire Analysis (FS 1144) is the document that describes the general control objectives and strategies, and substantiates the expenditure of resources and money required to monitor, control or extinguish a wildfire, against the values at risk.

What	a document outlining the objectives, strategies, tactics, values at risk of a wildfire as agreed to by the Land Manager and specific Fire Centre Manager
Where	for all land that is managed for wildfire and post fire rehabilitation
Why	to document the actions to be taken, with regards to available resources and costs required for completing the action and the value of what is being protected; to assist in the prioritization of resources in the event of multi incidents requiring action in accordance with Resource and Strategic Wildfire Allocation Protocol (RSWAP); to assist in the communication flow between I/C>RWCO>PWCO and Fire Centre Manager>Land Manager
When	Immediately if modified response or monitor only fires or full response fire that will not be contained within 72,
Whom	filled out by Wildfire Management Branch Staff (the Incident Commander, Zone Wildfire Coordination Officer or Zone Protection Officer, Fire Centre designate, Senior Protection personnel), a representative of the applicable Land Management Agency (Forests, Parks, etc), with input from Fire Behaviour Specialist (if available), Weather Tech/forecasts, or others as required and approved by the fire centre manager or designate.

Process to be filled out as soon as possible, even if no other Agency representatives are available

Before initiating a Fire Analysis staff must read the BC Wildfire Management Branch's Provincial Standard Operating Guideline titled Fire Analysis initiation, tracking, monitoring and updating process. It can be found in BC Wildfire Management Branch's Online Library within the Provincial/Fire Operations/Operations/Standard Operating Guidelines section.

The following guideline is only for those sections that may need clarification.

Self Explanatory sections have not been included.

Page 1 and 2 of FS 1144 includes:

The WEATHER FORECAST FOR OPERATIONAL PERIOD section can be filled out by the IC or DESIGNATE but the FIRE BEHAVIOUR FORECAST and LONG TERM FIRE GROWTH ANALYSIS sections should be filled out by a Fire Behaviour Analyst.

Refer to the guideline "Considerations for Long Range Fire Growth Analysis"

After providing input into the document, it must be signed off by the appropriate Land Manager (Ministry of Forest Lands, and Natural Resource Operations, Parks, etc.) as once signed changes are limited and/or become amendment.

Must be signed by the Incident Commander, reviewed by the RWCO (or designate) and final signature by the Fire Centre Manager.

An update of the Fire Analysis will occur when specific conditions are met and or crossed, such as specific dates, anticipated/expected fire behaviour, use of geographic boundaries/locations (trigger points), costs exceeding estimated costs etc.

Use the Fs1144b Daily Cost Estimator on the forms index to determine the estimated costs.



Page 3 of FS 1144, Details on Issues, Constraints, and Values at Risk:

The intent of the Issues, Constraints and Values at Risk is to be more specific to what is actually at risk. Ensure to consult with the appropriate fire management plan and receive confirmation from the applicable land manager.

This page is to detail the concerns and potential effects of the wildfire on values at risk, to public safety issues, public concerns, infrastructure improvements, timber/ecosystems, recreational, wildlife habitat, social values, etc. It is also to identify constraints to our strategy and tactics such as slope effect on responder safety, slope stability precluding machine operations etc

There must be consistency between the Land Manager Values and the FS1144 values. It is the Land Manager who confirms the values at risk and constraints.

Resource District Fire Management Plan link:

http://www.for.gov.bc.ca/ftp/!Project/Fire_Management_Planning/

Page 4 of FS 1144 FIRE CONTROL OBJECTIVES, STRATEGIES and TACTICS Options:

Each option considered outlines a different set of fire control objectives, strategies, and tactics. Each option will have a different set of resources and likely costs/risks. The selected option will outline some Objectives and Strategies and sets general guidance for tactics to be used. Daily Tactics will generally be captured in the Incident Action Plan. The Objectives, strategies and Tactics information will be required. The only time it would not be required is if the only option is full response due to adjacent values.

Objective: what you are aiming at achieving, what is your goal? Typically this is either Full Response or Modified Response

- To prevent the fire from moving from xxxx Cr. into the adjacent reforested cut blocks and timbered areas currently under development with FL/TFL xxx
- To prevent fire from reaching 20 yr old regenerated cut block, or use of a geographic, keep fire south of FSR XXX
- Under the "Objectives/Strategies", a statement must be included on the chance of success for each option reviewed. This is expressed as High, Medium or Low likelihood.

Strategy: how do you plan to achieve your objective?

- Full response methods, direct, parallel or indirect attack
- Modified response methods may include identification of trigger points and suppression actions to be taken to keep the fire within the acceptable area. ie contingency guard, construction of burn off lines or suppression action on only one part of the fire.
- Modified response also includes monitor only incidents (observe only). If so, describe the observation method (ie air patrol), trigger points and frequency, paying particular attention to both the long and short term commitment and cost.

Tactics: what you are going to do to achieve your strategy and you may have several options.

Full Response (direct, parallel or indirect attack)

- Use of two unit crews to anchor base of fire; use two excavators to complete fuel break from A to B on east and west flanks for complete containment
- R/W support from a mix of heavy/medium/intermediate/light for bucketing, moving of equipment, fill relay tanks, personnel moves.

Modified Response

- Use of two unit crews to anchor base, burn fire out to natural barriers
- No other action anticipated.
- No action until specific boundaries/trigger point are crossed
- Monitor Only– No fire management action recommended at this time



INSTRUCTIONS

Page 5 of FS 1144 Values at Risk and Trigger Points:

As per instruction on the page, trigger points are identified on the map to indicate when another level of action or monitoring will commence.

Examples:

- When the fire reaches trigger point 1 we will commence monitoring. This may take different forms depending on fire behaviour. For example, under *Actions To Be Taken* we may write Patrol twice per week with air patrols under low potential for growth burning conditions or daily with Wildfire Management staff under conditions with high potential for growth burning conditions.
- When the fire reaches trigger point 6 under conditions with high potential for growth evacuate XXXXX community.
- Trigger points may also include weather related triggers for monitoring, cost thresholds (when approaching initial cost estimate a review should be triggered) etc.

Page 6 - 8 of FS 1144 Fire Analysis Update:

This page is used when updating a fire that currently has a completed Fire Analysis. A Fire Analysis can have multiple updates. Ensure the updated # at the top of the page is filled in and is also recorded at the end of page 1 in the UPDATE section.

If help is required with completing the Fire Analysis, please contact your supervisor first and then if required your Fire Centre.

FS 1144a Fire Classification System – utilize this form to establish the type of fire for planning and response purposes (type of Incident Commander or Incident Command Team)

FS 1144b Daily Cost Estimator – This form assists in estimating the daily and total fire costs.

The FS1144, FS1144a and FS1144b are available on the forms index at the following link:

<https://www.for.gov.bc.ca/gscripts/his/forms/forms.asp>



Resource Strategic Wildfire Allocation Process (RSWAP)

GENERAL CONSIDERATIONS

When setting priorities and allocating resources, decision makers will normally assess and consider a variety of factors, including:

- Safety of fire responders and emergency personnel
- Present and forecast weather and fire behaviour
- Availability of suitable fire suppression resources
- Guidance or information in fire management plans
- Values at risk in the immediate vicinity and surrounding area
- Potential smoke and public health impacts
- Information available from local sources
- The probability of success

PRIORITIES

It is recognized that the degree of risk to defined values (e.g., high, medium, or low), and timing of that risk (e.g., imminent within 72 hours, or longer term) is determined by many variables, and can change in a very short time. When setting objectives and allocating resources, priority will be given to protecting values on the basis of the following ranking, in descending order:

1. HUMAN LIFE AND SAFETY

- a. Evacuation
- b. Emergency protection of occupied interface areas, evacuation travel corridors, and other occupied site.

2. PROPERTY

- a. Infrastructure or assets important to public health and safety, (e.g., public buildings, drinking water sanitation systems, major communication, transmission and transportation facilities, etc.)
- b. Concentrated areas of residences and infrastructure facing imminent threat
- c. Dispersed residences and associated infrastructure facing imminent threat
- d. Communities or rural residences where threat is greater than 3 days away
- e. Other public infrastructure, including park facilities
- f. Infrastructure, installations or assets covered by client agreements, (e.g., communications and transmission infrastructure, resource extraction equipment or assets etc.)
- g. Other private and commercial property.



INSTRUCTIONS

3. HIGH ENVIRONMENTAL VALUES

- a. Community watersheds / drinking water catchment areas
- b. Known and identified species at risk critical habitat

4. RESOURCE VALUES

- a. Active resource extraction sites or timber harvesting and silviculture investment areas
- b. Timber covered by a client protection agreement
- c. Other commercially valuable timber
- d. Areas identified as a priority in BC Parks Fire Management Plans
- e. Other forest resource values