BRITISH COLUMBIA FireSmart

City of West Kelowna
COMMUNITY WILDFIRE RESILIENCY PLAN
2025

Figure 1. McDougall Creek Wildfire. Photo Credit: Jason Brolund, August 16th, 2023

CITY OF WEST KELOWNA

WEST KELOWNA FIRE RESCUE

CABIN

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Executive Summary

Community Wildfire Resiliency Plans (CWRP) are the primary wildfire risk reduction planning mechanism for British Columbia communities. The City of West Kelowna's (CWK) 2025 CWRP builds on the recommendations of the 2018 Community Wildfire Preparedness Plan (CWPP). Recommendations within the CWRP are strongly linked to the Government of BC's Community Resiliency Investment (CRI) Program, which the Union of BC Municipalities (UBCM) administers on their behalf.

The plan includes four key guiding document maps:

- The Area of Interest (AOI) Map describes the area of interest and defines the 1.0 km Wildland Urban Interface for the City of West Kelowna (**Appendix F: Area of Interest Map**);
- The Wildfire History Map details fire burn perimeters from 1922 to 2023 that have impacted the community (**Appendix G: Wildfire History Map**);
- The Wildfire Threat Map details the wildfire threat of forested areas around and within the community. This analysis is limited to Crown land and municipal parcels assessed under this plan for fuel treatment (**Appendix H: Wildfire Threat Map**); and
- The Fuel Treatment Maps detail fuel treatment areas identified in this plan and the priority of those fuel treatments (**Appendix I: Fuel Treatment Maps**).

The primary objective of the plan is to develop achievable and strategic action items which are summarized below in Table 1. Brief Summary of Action Items (see Section 5. CWRP Action Plan for specific details of each action item). These action items are centered around the seven key FireSmart disciplines:

- Education
- Legislation and Planning
- Development Considerations
- Interagency Cooperation
- Cross-Training
- Emergency Planning
- Vegetation Management

An additional category for Innovation was added to highlight the importance of incorporating new and developing technologies.

The 28 action items were developed through consultation with the City of West Kelowna staff.

Public engagement focused on seeking feedback on vegetation management (fuel treatment areas) and FireSmart Program engagement (see Appendix J: Engagement Summary for details).

Table 1. Brief Summary of Action Items

No.	Action	Priority	Timeframe	Responsible Party
	Education			
1	Increase the capacity of the FireSmart Program current offerings (assessments, events, etc.), increase collaboration with other local FireSmart Coordinators, and hire a second full-time Wildfire Mitigation specialist.	High	1-2 years	FireSmart Coordinator
2	Increase public communications for FireSmart Programming and wildfire risk reduction initiatives by a) developing a communications and engagement strategy and b) sufficiently resourcing outreach channels (website, newspapers and online media, etc.).	High	Ongoing	FireSmart Coordinator and CWK communications team
3	Improve upon existing Home Partners Program (FireSmart BC Wildfire Mitigation Program in 2025) by a) prioritizing at risk neighborhoods, b) increase program offerings to more neighbourhoods, and c) continue to increase capacity of individual property assessments.	Moderate	1-10 years	FireSmart Coordinator
4	Continue and improve the Plant Program. Re-engage existing growers in the community. Target non-participating nurseries/retailers with education to secure their participation.	Low	Every 5 years	FireSmart Coordinator
5	Implement a FireSmart education curriculum with the School District (SD23).	Moderate	Annually	BC Wildfire Service (BCWS) / West Kelowna Fire Rescue (WKFR)
6	Evaluate the effectiveness of continuing to offer FireSmart Rebate program and explore additional funding opportunities.	Moderate	2-3 years	FireSmart Coordinator and Consultant
	Legislation and Planning			
7	Continue to integrate FireSmart into other CWK Departments (Parks, Public Works, Engineering, and Planning, etc.).	Low	1-5 years	WKFR; CWK staff
8	Develop a multi-prong approach to tackle legacy landscaping, including enforcement programs, and conduct a review of existing and potential new bylaws.	Moderate	2-5 years	Development Services; Planning; Legislative Services

No.	Action	Priority	Timeframe	Responsible Party
Development Considerations				
9	Review and revise Wildfire Interface Development Permit requirements and processes.	Moderate	2-5 years	Development Services; Planning
10	Review existing covenant processes.	Moderate	2-5 years	Development Services; Planning
Interagency Cooperation				
11	WKFR/CWK should continue to campaign for increased funding and streamlined processes/increased ease of funding applications, including but not limited to UBCM-CRI.	High	Ongoing	Mayor and Council; Fire Chief
12	WKFR/CWK should continue to advocate for full cost recovery for deployment of staff.	High	Ongoing	Mayor and Council; Fire Chief
13	Engage with Westbank First Nation and Regional District of Central Okanagan (RDCO) to treat high priority areas within municipal limits that fall under the RDCO's CWRP.	High	1-2 years	Fire Chief, FireSmart Coordinator
14	Engage with other landholders within the AOI to reduce wildfire risk on their properties, Province of BC (DOS WRR), Fortis, Hydro, SD-23, etc.	High	1-2 years	Fire Chief, FireSmart Coordinator
15	Establish working group with Ministry of Forests District of Okanagan Shuswap Wildfire Risk Reduction Program, Westbank First Nation, and Ntityix Resources to strategically leverage funding for equipment, training, and vegetation management.	High	1-2 years	FireSmart Coordinator
Cross-Training				
16	Establish a controlled fire and cultural burning program.	Moderate	1-5 years	WKFR
17	Continue Wildfire specific cross-training with city partners (e.g., RCMP, BC Emergency Health Services, etc.) and identify new training opportunities including those for key city staff.	High	Annually	WKFR
Emergency Planning				
18	Undertake further fire suppression access planning and access/egress for one-way out communities.	Moderate	1-10 years	WKFR
19	Conduct tactical fireshed planning outside of the municipal boundaries (values other than human health and safety, e.g., drinking water, ecosystem restoration).	Moderate	2-5 years	WKFR

No.	Action	Priority	Timeframe	Responsible Party
20	Develop fire department “Major Incident Plan” specific to Urban Interface Wildfires.	High	1-5 years	WKFR
21	Continue strategic equipment acquisition and purchasing.	High	1-10 years	WKFR
	Vegetation Management			
22	Conduct further assessments of the Critical Infrastructure (CI) and develop a plan for CI treatment maintenance plan.	High	1-5 years	FireSmart Coordinator
23	Develop five-year plan to complete proposed fuel treatments (FTUs). The plan should include a) development of budget, b) coordination with Ntityix and Westbank First Nation, c) coordination with RDCO, and d) develop a schedule to complete FTUs and maintain transmission powerline right of ways.	High	6-12 months	FireSmart Coordinator
24	Enhance Park’s Fuel Modification program to improve effectiveness and complete more FireSmart activities on areas identified for fuels management.	High	1-5 years	Parks and FireSmart Coordinator
25	Develop prescriptions and implement fuel treatments and prescribed burning of high and moderate priority FTUs.	High	1-10 years	Consultant
26	Develop plan for watershed protection with and implement fuel management in and around the reservoirs.	High	2-5 years	Water Utility Manager
27	Develop an Assess and Monitor Program for established Assessed Monitor Units (AMUs) and Parks.	Moderate	1-10 years	FireSmart Coordinator
	Innovation			
28	Sharing West Kelowna’s experience, work with external organisations (including universities, regional, provincial and federal governments, and industry) to evaluate identify challenges, opportunities and develop new and innovative response and prevention technologies.	Moderate	2-5 years	WKFR

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Tables and Figures

Frequently Used Acronyms

AMU	Assess Monitor Unit
AOI	Area of Interest
BC	British Columbia
BCWS	British Columbia Wildfire Service
BEC	Biogeoclimatic Ecosystem Classification
CI	Critical infrastructure
CLWRR	Crown Land Wildfire Risk Reduction
CRI	Community Resiliency Investment
CWK	City of West Kelowna
CWRP	Community Wildfire Resiliency Plans
DPA	Development Permit Area
FBP	Fire Behavior Prediction System
FESBC	Forest Enhancement Society of British Columbia
FTU	Fuel Treatment Unit
GIS	Geographic Information Systems
HIZ	Home Ignition Zone
HPP	Home Partners Program
IDF	Interior Douglas-fir BEC Zone
MS	Montane Spruce BEC Zone
OCP	Official Community Plan
PP	Ponderosa Pine BEC Zone
PSTA	Provincial Strategic Threat Assessment
RDCO	Regional District of Central Okanagan
RPF	Registered Forestry Professional
SD23	Schoold District 23
SPU	Structure Protection Units
UBCM	Union of British Columbia Municipalities
WKFR	West Kelowna Fire Rescue
WRR	Wildfire Risk Reduction
WUI	Wildland-Urban Interface

1. Introduction

Community Wildfire Resiliency Plans (CWRP) are the primary wildfire risk reduction planning mechanism for British Columbia communities. This plan builds upon the 2018 Community Wildfire Preparedness Plan (CWPP). These plans are linked to the Union of British Columbia Municipalities Community Resiliency Investment Program (UBCM-CRI) and are required to be updated every five years to be eligible for funding. The **UBCM-CRI FireSmart Community Funding and Supports Program** provides funding to local governments and First Nations in BC to increase community resiliency by undertaking community-based FireSmart planning and activities that reduce the community's risk from wildfire.

This CWRP is intended to:

- Describe the community and values at risk
- Conduct a risk assessment utilizing provincial data and field ground truthing
- Assess critical infrastructure and provide recommendations for protection
- Identify and prioritize areas for fuel treatment
- Provide recommendations based on wildfire risk, community values, and demographics
- Develop achievable action items that can be implemented within the next five years and beyond

Developing achievable and strategic action items is a primary objective of the plan. These action items are centered around the seven key FireSmart disciplines and the UBCM-CRI funding program:

- Education;
- Legislation and Planning;
- Development;
- Interagency Cooperation;
- Cross-Training;
- Emergency Planning; and
- Vegetation Management.

The action items were developed through consultation with the City of West Kelowna's staff. Public engagement focused on seeking feedback on vegetation management (fuel treatment areas) and FireSmart Program engagement (see Appendix J: Engagement Summary for details).

The plan includes four key guiding document maps:

- The Area of Interest (AOI) Map describes the area of interest and defines the 1.0 km Wildland Urban Interface for the City of West Kelowna (**Appendix F: Area of Interest Map**);
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1.1. Community Description

The City of West Kelowna (CWK) is a municipality located within the Okanagan Valley. Incorporated in 2007, the municipality is relatively young. Prior to 2007, the community was part of a rural electoral area governed by the Regional District of Central Okanagan.

The community is located on the western hillsides of Okanagan Lake and downslope of the Thompson Plateau farther to the west. The 2023 McDougall Creek Wildfire impacted large areas within the Area of Interest (AOI), primarily in the northwest. The area has also been impacted by numerous other wildfire events including the Glenrosa Wildfire, 2009; Rose Valley Wildfire, 2009; Terrace Mountain Wildfire, 2009; and the Mount Law Wildfire, 2021[1], [2], [3].

Nearby communities include: The City of Kelowna to the east (across Lake Okanagan via the W. R. Bennett Bridge); the District of Peachland, immediately to the south, and Westbank First Nation Tsinstikeptum Reserves 9 and 10. Other jurisdictions include the Regional District of Central Okanagan (RDCO), which encompasses and includes several parks within the CWK's boundaries. The municipality is relatively large, encompassing 123.52 km^2 (12,352 ha). Considerably larger than adjacent neighbouring communities on the west side of Okanagan Lake, such as Peachland (16.12 km^2) and Summerland (73.57 km^2).

There are 14 distinct neighbourhoods within the City: Casa Loma; Boucherie Centre; Bartley North; South Bartley North, Boucherie Centre; Casa Loma, Glenrosa; Goats Peak/Gellatly; Lakeview Heights; Shannon Lake; Smith Creek; Westbank; Westbank Centre; West Kelowna Estates/Rose Valley; West Kelowna Business Park; and Westside Road/Bear Creek.

According to Statistics BC (2023), West Kelowna's population is 40,715 and is the third- most populous municipality in the Okanagan. West Kelowna's economy is diverse, encompassing sectors such as agriculture, construction, finance, food and retail services, light industry, lumber manufacturing, technology, tourism, and world-renowned wineries [4].

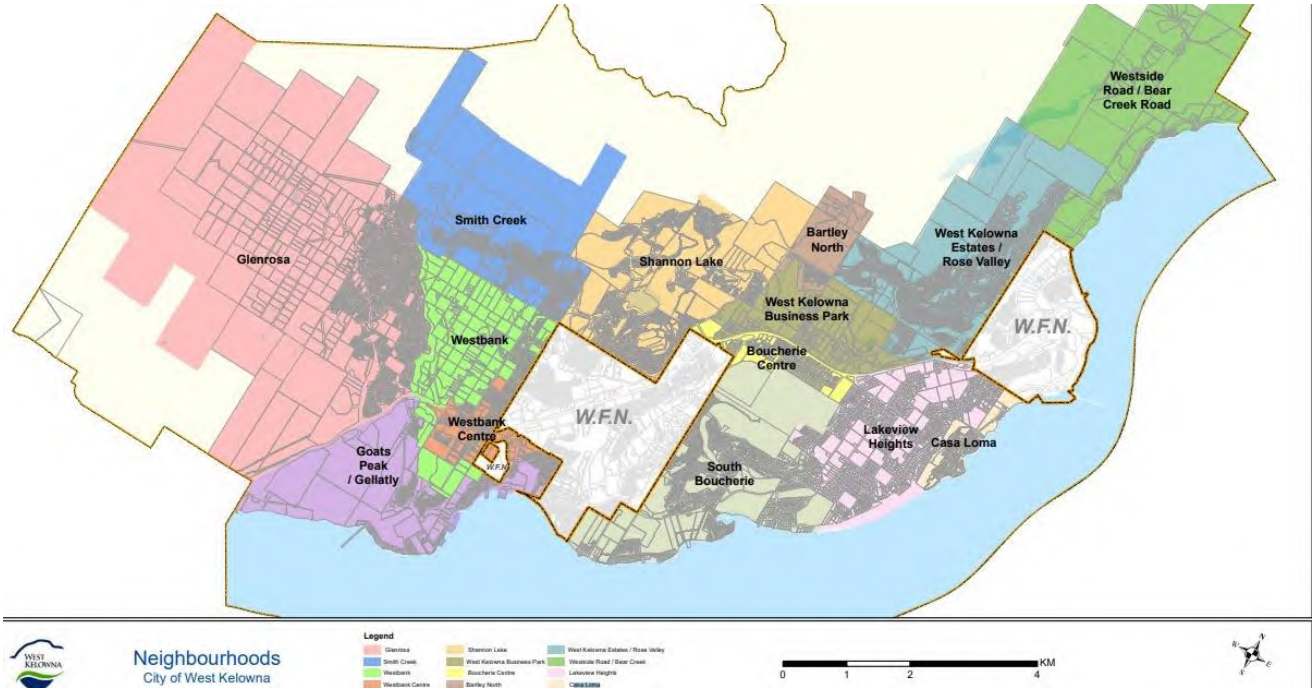

Figure 2. Neighbourhoods Map

Area of Interest

Area of interest (AOI) refers to the area under analysis for the CWRP. It encompasses the Wildland Urban Interface (WUI) within the extent of West Kelowna's municipal boundaries. The WUI is the area where the forest meets homes and structures. It is a 1.0 km buffered area of forested lands within municipal boundaries. The FireSmart Community Funding and Supports Program provides funding within the 1.0 km WUI. A map showing the WUI and AOI is provided in Appendix F: Area of Interest .

Our analysis also considered areas for potential fuel treatment (e.g., landscape level fuel break) that extend beyond the 1.0 km WUI. These areas would require funding from alternative sources, such as the Forest Enhancement Society of BC (FESBC), and were included due to spotting potential of up to 2.0 km for the predominant fuel type (C-7) [5].

The total WUI area is 10,889 ha (Table 2). This is primarily comprised of privately owned land parcels (78%). The remaining areas within the AOI include municipal ownership (the City of West Kelowna, and Regional District of Central Okanagan), 4%; First Nations Reserve and Federal Lands, 6%, Crown Provincial, 5%; Untitled Provincial, 5%; and Unclassified, 2% [6], [7].

Table 2. WUI Land Ownership Summary Data [6], [7]

WUI SUMMARY INFORMATION							
WUI	**Total WUI area (ha)**	**Private Land**	**Municipal Land (CWK and RDCO)**	**First Nation Reserve Land and Federal**	**Crown Provincial, Crown Agency Land**	**Untitled Provincial**	**Unclassified**
1 km	10889 Ha	10194 Ha	508 Ha	779 Ha	707 Ha	646 Ha	238 Ha
		78%	4%	6%	5%	5%	2%
Note parcel boundaries that extend outside of the WUI buffer area result in a total land ownership of 13072 ha. This is larger than the WUI AOI size, 10889 ha. Percentages are calculated based on the sum of total land ownership (13072 ha).							

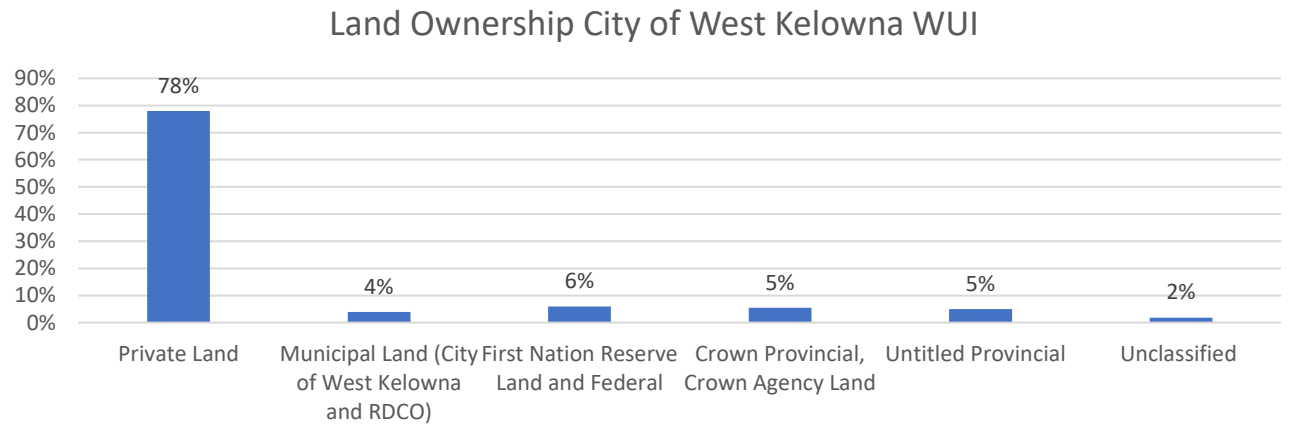

Figure 3. Land Ownership within the City of West Kelowna's WUI [6], [7]

West Kelowna is the third most populous municipality in the Okanagan Valley and the 25th in British Columbia. It has an estimated population of 40,715 [8] and 22,000 homes spread across 123.52 square kilometers [8].

It is a growing community with a population increase of 21.9 % since 2014 [9]. Current projections for 2030 estimate the total number of households will be just over 18,000 [8], which is an increase of 22% from 2021 when there were 14,746 private dwellings [8].

Table 3. Community Demographics

COMMUNITY INFORMATION			
	2016 [10]	2021 [9]	2023 [8]
Total population	32,655	36,078	40,715
Population density (people per sq. km)	264.4	295.5	No data
Median age (years)	45.2	44	No data
Total private dwellings	13,190	14,746	No data
Single-detached house	8,730	9,505	No data
Semi-detached house	475	525	No data
Row house	385	465	No data
Apartment	2,315	2,975	No data
Other	535	500	No data
Owner	10,430	11,540	No data
Renter	2,015	2,430	No data
Median home value	$480,818.00	$750,000.00	No data
Median household income	$83,942 .00	$99,000.00	No data
Low-income households	32,065	35,750	No data
Unemployment rate (%)	6.4	7.5	No data

More than 14,746 private dwellings are located in the community [8]. Most of these are single-family homes (9,505 structures in 2021), while apartments are the second largest and growing housing type (2,975 structures in 2021) [9].

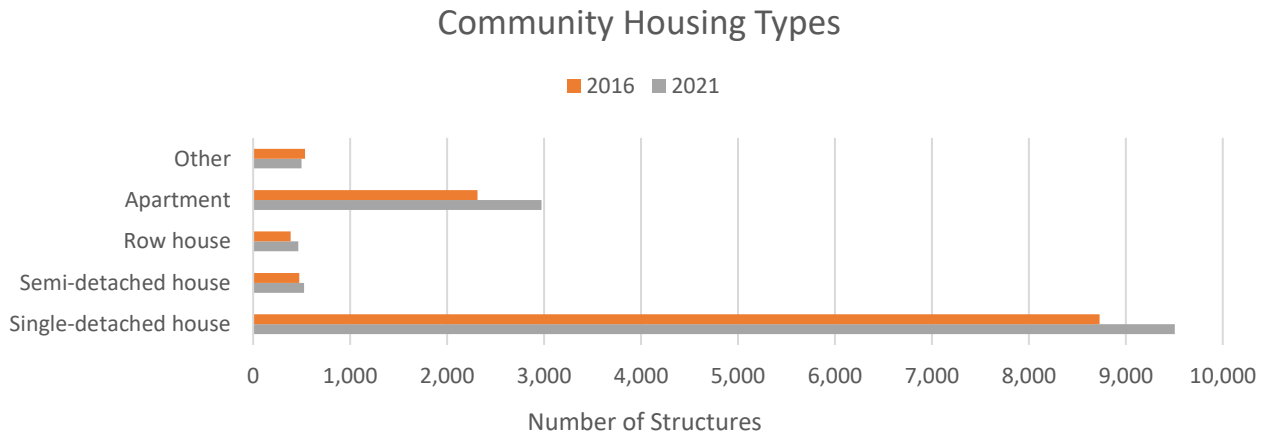

Figure 4. Community Structure Types 2016 and 2021 [9], [10]

2. Values at Risk

Values at risk are the community structures and components that communities value, which can include social, cultural, economic, or environmental. Wildfires impact how these values function or may even result in the loss of these values. Wildfire management strategies should consider the unique values at risk within a community. The values at risk considered in this plan for CWK include human life, critical infrastructure, habitats and species, and local Indigenous values.

2.1. Human Life

Human life is the priority in the event of a wildfire. Therefore, having established evacuation routes with safe egress is imperative, not only for the safety of community members but also for first responders to safely enter a community.

Critical Infrastructure

Identifying Critical Infrastructure (CI) is important to wildfire planning and preparedness. Information can then be provided to emergency responders during a wildfire, and these essential services and structures can be prioritized for protection.

The CWK provided a CI list, as a spatial database, which included the City's and adjacent jurisdictions' infrastructure.

The CWK has 107 mapped structures that are considered critical infrastructure. An assessment of 18 structures was completed during the development of this CWRP. Completing a review of outstanding CI including water utility infrastructure should be considered when applying for future grant funding.

The full list of the critical infrastructure and assessment status is provided in Appendix C: Critical Infrastructure Assessment Summary.

Municipal Buildings

Municipal buildings should be leading examples of the FireSmart Program. FireSmarting of these buildings is important due to their essential functions and impact/value to the community.

Critical municipal buildings:

- West Kelowna Fire Rescue (WKFR) Fire House #30 is the new centralized location for staff and administration, located at 2406 Drought Road. No firefighting equipment or heavy apparatus is stored at this location. WKFR is dedicated to providing emergency response, fire prevention and protection, and rescue services for CWK and Westbank First Nation residents [11].
- West Kelowna Fire Rescue Station #31 is strategically located at 3651 Old Okanagan Highway and is central to firefighting operations. It houses firefighting staff, equipment and heavy apparatus, and serves as a command center during wildfire emergencies, requiring robust protection to ensure uninterrupted services and swift response capabilities.
- Three other fire halls exist within West Kelowna's municipal boundaries:
    - Fire Station #32, 2708 Olalla Road (built in 1971, replacement is currently underway with new construction anticipated to be completed in fall 2025);
    - Fire Station #33, 1805 Westlake Road; and
    - Fire Station #34, 3399 Gates Road.

- West Kelowna's Operations Center is located at 2515 Bartley Court and plays a crucial role in emergency coordination and communication. During wildfires, it serves as a hub for emergency management personnel to coordinate response efforts, disseminate critical information to the public, and allocate resources effectively, necessitating additional protection to maintain operational continuity.
- Royal LePage Place is the community's primary emergency reception center and designated emergency shelter at 2760 Cameron Road. Royal LePage Place becomes a vital evacuation hub during wildfire events. It requires extra protection to ensure the safety and well-being of evacuees, provide essential services, and support emergency response operations effectively.
- Westbank Lions Community Centre located at 2466 Main Street, serves as a gathering point for community meetings and emergency services coordination. It requires heightened protection to sustain its role in facilitating community support services, volunteer efforts, and emergency communications during wildfire emergencies.
- Municipal City Hall, located at Old Okanagan Hwy, is crucial to keeping the community running during an emergency. It serves as a central location for community information and services.

Figure 5. West Kelowna Fire Rescue Facilities. From West Kelowna Fire Rescue Facilities Report, March 2022

Electrical Power Supply

The CWK's power supply is a single source, supplied via BC Hydro. The power supply is a single 138-kilovolt transmission line running from the Nicola Substation (near Merritt) to the east, and continuing west across the Thompson Plateau, along approximately 80 km of heavily forested terrain. This single source of power serves Peachland, Summerland, Westbank First Nation, and West Kelowna. The infrastructure has wooden poles, during a wildfire event protection of this infrastructure is critical to maintain power for the community [12]. During the Brenda Creek and Mount Law Wildfires in 2021, resources were deployed to maintain power and protect this critical infrastructure. A 2019 Wildfire Risk assessment of the transmission line identified high and extreme wildfire probability risk to this infrastructure within the WUI near West Kelowna and Peachland. The last 15 km of the transmission line, as it approaches West Kelowna, has the highest relative probability of ignition due to fuels, complex terrain, and limited access. The report notes that "it is expected that fire control in this area could be difficult even though there is very good suppression capability" [13].

Electrical infrastructure is crucial to supporting wildfire suppression efforts through several key mechanisms:

- Power Supply for Emergency Services: Electrical infrastructure ensures continuous power supply to essential services, including emergency response centres, communication networks, and water pumping stations to help maintain fire flows. This reliable electricity supply is crucial for coordinating and supporting firefighting efforts, ensuring orderly evacuations and accommodating evacuees, maintaining communication during wildfire emergencies, and delivering essential daily services to emergency personnel and the public.
- Emergency Response Coordination: Electrical facilities, such as substations and distribution centers, are equipped with emergency response plans. These plans include protocols for prioritizing power restoration to critical areas, supporting firefighting operations with uninterrupted power supply, and managing grid operations during heightened demand periods.
- Public Safety and Support: Maintaining operational electrical infrastructure during wildfires is essential for public safety. It ensures that evacuation centers, hospitals, and shelters have reliable power for lighting, heating or cooling, medical equipment, and communication systems.
- Fire Detection and Prevention: Electrical infrastructure incorporates fire detection and prevention measures. This includes monitoring equipment and protocols to minimize the risk of electrical fires, which can exacerbate wildfire conditions, especially during periods of high heat or strong winds.
- Infrastructure Resilience and Restoration: Enhancing the resilience of electrical infrastructure through upgrades and maintenance supports quick recovery and restoration efforts after wildfire events. This includes rapid assessment of damages, prioritized repair of critical infrastructure, and coordination with emergency services to ensure communities can recover swiftly.

Water

The CWK manages two water systems – Powers Creek and Rose Valley. Several private systems, such as the Casa Loma and Jennens Systems, are also located in the City.

Water facilities are crucial to providing a reliable and safe water supply throughout the community and integral to supporting firefighting suppression efforts. The systems include vast upland watersheds, two water treatment plants, reservoirs, pumping stations, pressure reducing valves, and a widespread distribution network.

Water treatment plants provide potable water to the community. The Powers Creek Water Treatment Plant, located at 3184 Shetler Drive, is a critical facility for treating raw water from Powers Creek. It utilizes advanced filtration and disinfection processes to meet drinking water standards. The Rose Valley Water Treatment Plant, situated at 1500 Rosewood Drive, serves another essential role in treating water sourced from Rose Valley Reservoir. It also employs state-of-the-art technologies for comprehensive water purification.

Reservoirs, pumping stations, and pressure reducing valves throughout the distribution network maintain water pressure and provide efficient conveyance. Maintaining water pressure is essential for rapid response of firefighting operations. Rose Valley Reservoir is a key storage facility, ensuring a continuous water supply to the community. Firefighting Operations in 2023 were hampered by a failure of the water supply in the West Kelowna Estates neighbourhood. WKFR has a limited tender capability that needs expanding through the acquisition of more Tactical Tenders. The privately run, Casa Loma and Jennens Systems also have pump stations and reservoirs, and these systems are also important to fire protection and suppression.

The distribution network includes watermains that span across the city) to deliver treated water to residential, commercial, and industrial customers. This network includes booster stations, pressure reducing valves, pumpstations, and fire hydrants. A comprehensive emergency response plan and regular maintenance schedules ensure the reliability and safety of the water supply system. These efforts are coordinated from facilities such as the Operations Centre at 2515 Bartley Court.

Water sources from the community are provided through four primary watersheds, Lambly Community Watershed, Rose Valley Community Watershed, Powers Creek Community Watershed, and Nicola Community Watershed.

- The Lambly community watershed is an upland water source to the Rose Valley Reservoir, located primarily outside of the City limits.
- The Rose Valley community watershed is entirely within the CWK's municipal boundary and feeds the Rose Valley Reservoir. This reservoir supplies the Rose Valley Water Service Area.
- Most water drawn by the Power Creek Water Service Area is from the Powers Creek Community Watershed, which is located both within and outside of CWK's municipal boundary. This system is fed from upland sources outside of the City boundary.
- Minor amounts of water are also drawn from the Nicola Community Watershed. This source is connected to the Powers Creek Community Watershed.

Gas Pipelines

In West Kelowna, the FortisBC gas pipelines are critical infrastructure requiring careful consideration and protection during wildfire events due to their potential hazards and essential role in community energy supply and temperature regulation:

- FortisBC Natural Gas Pipelines is the network of natural gas pipelines that runs through West Kelowna and across Okanagan Lake to Kelowna (FortisBC, 2009). FortisBC has a corporate emergency response plan for pipeline and electrical emergencies (FortisBC, 2016) as it delivers essential energy for heating, cooling, and powering residential, commercial, and industrial facilities across West Kelowna. These pipelines require robust protection to maintain service reliability and safety, as interruptions could impact firefighting operations and community resilience.

Enhanced monitoring and maintenance practices are crucial for detecting potential risks, such as wildfire-induced damage or vegetation encroachment near pipelines. Implementation of firebreaks and vegetation management around pipeline corridors helps mitigate fire hazards and reduce the likelihood of accidental ignitions.

Integrated emergency response plans include protocols for pipeline safety and response coordination during wildfire emergencies. Collaborative efforts among pipeline operators, emergency responders, and local authorities ensure prompt detection, assessment, and mitigation of pipeline-related risks to safeguard public safety and minimize environmental impact.

By prioritizing the protection of gas pipelines in West Kelowna, the community enhances its ability to maintain essential energy services, support effective wildfire suppression efforts, and ensure the safety and well-being of residents during emergencies.

Communications

In West Kelowna, communication infrastructure, including cell towers and other vital facilities, plays a crucial role in emergency response and community safety during wildfire events.

While the maintenance and protection of these communication structures is the responsibility of the service providers (Telus and Rogers), the CWK does have a vested interest in protecting this infrastructure. Maintenance of communication towers is important during a wildfire event to: coordinate emergency services, ensure timely communication that is essential for protecting lives and property, and allow information about evacuation alerts and orders to be communicated to the community. Additionally, other infrastructure may also rely on communication towers for remote monitoring, for example, water infrastructure (flow volumes, turbidity, etc.) may utilize communication towers.

2.2. Habitat and Species Values at Risk

Increasing wildfire resiliency through fuel mitigation and prescribed fire can protect and sometimes enhance habitats and species at risk. Consideration of habitats and species is integral to the fuel management prescription process. Specific considerations for the CWK include: ungulate winter range, old growth management, and species at risk.

Ungulate Winter Range

Ungulate winter range considerations include conditional harvest zones to protect mule deer as per Government Action Regulation (GAR) Order U-8-001 [14]. Special management conditions and General Wildlife Measures (GWMs) must be implemented when conducting fuel management treatments in areas with ungulate winter range.

Old Growth Management

Considerations for fuel treatments within the Old Growth Management Areas (OGMA) and Old Growth Deferral Areas (OGDA) may include limiting treatments to surface fuel removal and pruning.

- Conservation Impact: The presence of old-growth management areas within West Kelowna highlights the importance of preserving biodiversity and ecological resilience. These areas are critical for maintaining habitat diversity and supporting native species, necessitating careful wildfire management to minimize impact.
- Fire Risk Management: Old Growth Management areas can pose heightened fire risks due to accumulated biomass and unique ecosystem characteristics. Effective wildfire management strategies include prescribed burns, vegetation management, and strategic firebreaks to reduce fuel loads and mitigate fire spread into sensitive areas.
- Community Protection: Protecting Old Growth Management areas from wildfires is crucial not only for conservation but also for safeguarding nearby communities. Collaborative efforts between conservation agencies, local authorities, and residents aim to balance ecological preservation with fire risk reduction strategies.
- Emergency Preparedness: Integrated emergency response plans incorporate measures to protect Old Growth Management areas during wildfire events. This includes early detection systems, rapid response protocols, and public awareness campaigns to promote responsible behavior and prevent human-caused fires in sensitive environments.

Species At Risk

Protecting habitats is essential as these species often inhabit sensitive ecosystems. Implementing firebreaks and controlled burns may increase habitat resilience and reduce fire impacts to species. Understanding their presence helps predict fire behavior and guides ecosystem management to maintain resilience. Collaborative efforts involving conservation agencies, Indigenous People's representatives, and local communities ensure balanced responses that prioritize both wildfire management, species conservation and cultural values preservation.

Table 4. Mapped known occurrences of SAR within the AOI

SPECIES At Risk within the AOI	
Common Name	Latin
Lewis Woodpecker	*Melanerpes lewis*
Great Basin Gopher snake	*Pituophis catenifer deserticola*
Gypsy Cuckoo Bumble Bee	*Bombus bohemicus*
Western Screech Owl	*Megascops kennicottii*
Rocky Mountain Painted Turtle	*Chrysemys picta bellii*
Rocky Mountain Ridged Mussel	*Gonidea angulata*
North American Racer	*Coluber constrictor*
Common Cattail Marsh	*Typha latofolia marsh*
Hard-stemmed Bulrush Deep Marsh	*Schoenoplectus actus deep marsh*
Black Cottonwood – Douglas-fir / Common Snowberry – Red-osier Dogwood	*Populus trichocarpa – psuedosuga menziesii / symphoricarpos albus – cornus stoloneifera*
Lewis Woodpecker	*Melanerpes lewis*

Biogeoclimatic Ecosystem Classification

The Biogeoclimatic Ecosystem Classification (BEC) system integrates climate, vegetation, and soil data to categorize the landscape into distinct ecological zones [15], [16].

West Kelowna is situated in the Southern Interior of British Columbia. It encompasses the Interior Douglas-fir (IDF) Zone, with some areas also extending into the Ponderosa Pine (PP) and the Montane Spruce (MS) zones at higher elevations (Figure 6) [17].

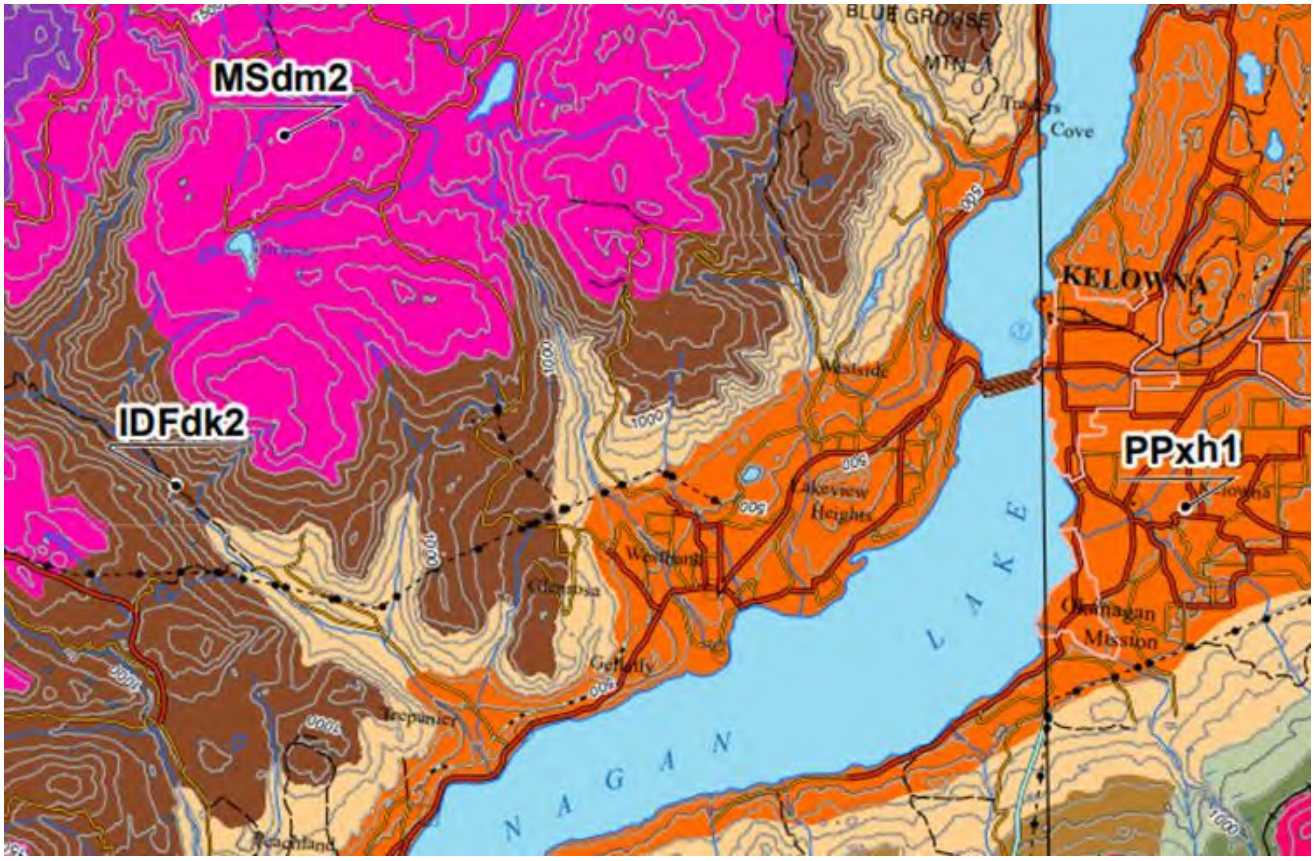

Figure 6. BEC Map 2022 Government of Canada, the orange area is a PP variant (PPxh1), the tan area is an IDF variant (IDFxh1), the brown area is an IDF variant (IDFdk2), and the pink area is an MS variant (MSdm2).

The IDF zone is characterized by dry, warm summers and cool, moist winters [17]. The dominant tree species are Douglas-fir, with some areas containing ponderosa pine and lodgepole pine. The dry summers and dense forests create conditions conducive to wildfires. High fuel loads from fallen branches, dry grass, and dense underbrush increase fire risk.

The (PP) zone is found at lower elevations and is characterized by very dry, warm summers and mild winters. Ponderosa pine is the dominant tree species, often accompanied by bunchgrasses and shrubs [17]. The open canopy and grassy understory in the PP can lead to fast-spreading ground fires. The dry climate exacerbates fire risk.

The MS zone occurs at higher elevations and is marked by cooler temperatures and higher precipitation compared to the IDF and PP Zones [17]. The dominant tree species include Engelmann spruce and subalpine fir. While the MS zone has a lower fire frequency due to higher moisture levels, when fires do occur, they can be severe due to the accumulation of fuels over longer periods without fire.

2.3. First Nations and Cultural Values

West Kelowna is situated on the ancestral traditional territory of the syilx/Okanagan Peoples, who have been living in the Okanagan Valley for thousands of years. We also acknowledge all Indigenous Peoples located in West Kelowna, including Inuit and Métis Peoples.

"The *Syilx* People of the Okanagan Nation is a transboundary tribe separated at the 49th parallel by the border between Canada and the United States. The Nation is comprised of seven member communities in the Southern Interior of British Columbia: Okanagan Indian Band, Osoyoos Indian Band, Penticton Indian Band, Upper Nicola Band, Upper and Lower Similkameen Indian Bands, and Westbank First Nation; and in Northern Washington State, the Colville Confederated Tribes [18]".

"Today the Syilx Okanagan People continue to assert their jurisdiction and responsibility over the stewarding of their land, resources and quality of life of their citizens"[18].

Indigenous cultures are complex, diverse, and only partially represented in the archaeological record, which is limited to physical expressions of cultural behaviors. syilx culture is vibrant and dynamic, it has been expressed upon the landscape since time immemorial. syilx communities maintain strong connections to their rich histories and the diverse physical and cultural landscape found throughout their territories.

Westbank First Nation

The Tsinstikeptum Reserves 9 and 10 are part of the Westbank First Nation, which borders Okanagan Lake and the CWK (Figure 7). Westbank First Nation's land base includes five reserves, totaling approximately 5,340 acres, with Reserves 9 and 10 being the most developed and populated [19].

Westbank First Nation has been self-governing since 2005, following the enactment of their self-government agreement. This agreement allows Westbank First Nation to exercise jurisdiction over their lands, resources, and people, and to enact their own laws and policies. The Westbank First Nation constitution outlines the governance structure, election processes, financial management, and land use rules, ensuring accountability and democratic governance [20].

Fire Support and Safety

West Kelowna Fire Rescue provides fire and emergency services to Westbank First Nation, ensuring the safety and well-being of its members and residents. This collaboration is part of a broader intergovernmental relationship that includes various support services and infrastructure projects aimed at improving the quality of life on Westbank First Nation lands [21].

Community Forest

Ntityix Resources LP manages Westbank First Nation's community forest (Figure 8). The Westbank block extends from Sunset Lake in the east to Bear Creek in the west, south to Peachland, and Northwest of Trepanier Park, encompassing 43,174 ha [22], [23]. Several of the fuel treatments proposed in this plan are located within Westbank First Nation's Community Forest. Considerations for fuel treatment will require close coordination with Ntityix. Furthermore, fuel treatment specifications should align with the Westbank First Nation Forestry Seven Generation Plan; Ntityix Resources Ltd. Wildfire Risk Management Plan, 2020; A Syilx strategy to protect and restore siwɬkʷ 2021; Westbank First Nation Forest Stewardship Plan Amendment Schedule, 2023. A summary of these plans is provided in Appendix B: Relationship to Other Plans.

Archaeological values protected by the Heritage Conservation Act [24] and the Westbank First Nation On-Reserve Archaeology Directive [25] are situated within the Area of Interest and the Westbank Reserve Lands that are adjacent. Currently, t26 HCA-protected archaeological sites are located within the AOI and an additional 63 are contained within Westbank lands [26]. Further, per the provincial Okanagan Timber Supply Area Archaeological Overview Assessment [27] – a regional GIS-based model used to predict areas of archaeological potential – the majority of the AOI is predicted to have moderate to high potential for as-yet unidentified archaeological values.

Fuel management activities should consider and provide measures to protect and manage registered archaeological sites, including:

- Cultural heritage and archaeological values have different legal definitions and not all cultural heritage values are afforded legal protection. Engage early with Westbank First Nation to identify these values and how to apply respectful management practices in these areas.
- In some instances, support from WKFR may be required to protect these values, dedicated structure protection resources may be acquired for deployment to these sites as required.
- Cultural Heritage and Resource Assessments (CHRA) may be requested by Westbank First Nation prior to conducting fuel treatments and should be factored into the potential prescription cost.
- Cultural heritage values should be incorporated early and throughout the planning process.
- Be respectful of cultural heritage values. Access to Cultural Heritage is a fundamental human right and this must be always upheld.
- Modified operations within and/or near areas of archaeological potential.
- Consideration for advance protection of Cultural Heritage Resource Values (e.g., SPU).
- All operations within or near areas of high cultural heritage value (including archaeology) should have a representative of the Westbank First Nation present for all earth- or vegetation-disturbing activities.
- Mitigative solutions must be considered on a site-by-site basis in coordination with the provincial Archaeology Branch and interested First Nations.

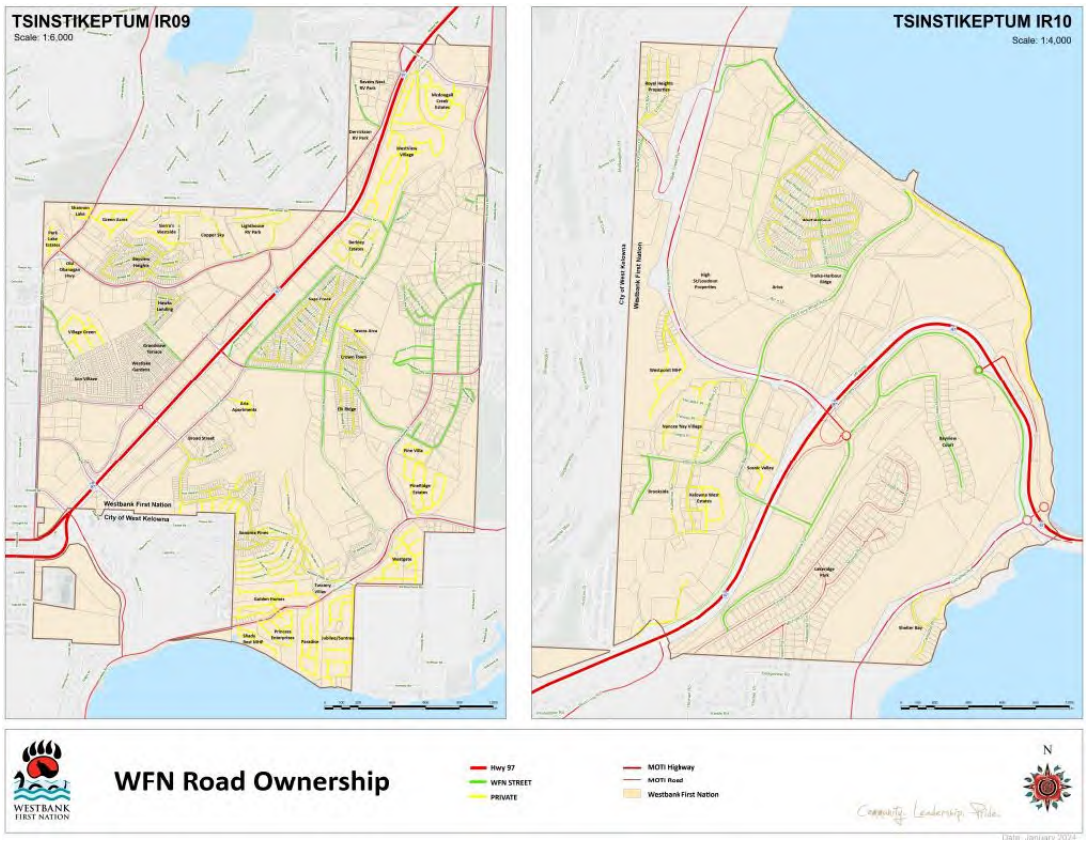

Figure 7. Westbank First Nation Reserves 9 and 10 Map [28]

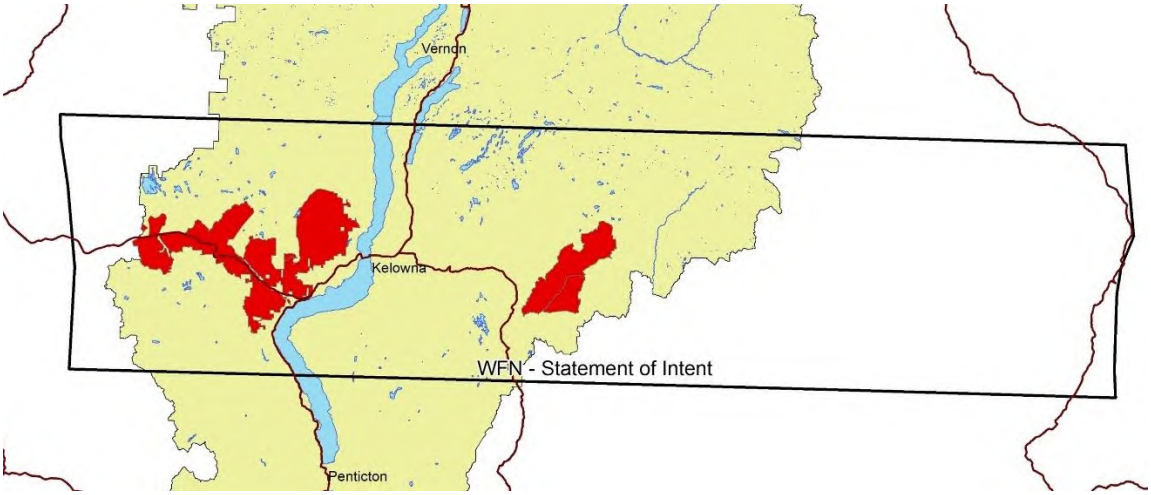

Figure 8. Westbank First Nation Community Forest (AOI of Community Forest is denoted in Red) [23]

3. Wildfire Risk Assessment

3.1. Wildfire History

The CWK has been significantly impacted by wildfire events. Although fire history data (Table 5) indicates the median fire size is relatively small (<20 ha), it is not uncommon for the community to be impacted by large wildfire events.

In 2009, fires broke out in the Glenrosa and Rose Valley communities of West Kelowna, garnishing huge public and media attention. These two fires, combined with the Terrace Mountain Wildfire west of Fintry, led to multiple evacuation orders and alerts. The Glenrosa Wildfire was 400 ha, and three structures were lost. The Rose Valley Wildfire burned 200 ha, and the Terrace Mountain Wildfire, west of Fintry, burned over 9,277 ha [1].

The next major fires to impact the community would occur a little over a decade later when in August of 2021 the Mount Law Wildfire burned 976 ha [2].

The 2023 wildfire season was one of the most destructive in British Columbia's recorded history. Of note, the McDougall Creek Wildfire burned a total of 13,970 ha in 2023 [3]. It was the largest wildfire to burn within the existing municipal boundary area since 1922. The fire started 10 km north of the City on August 15, 2023, and a local state of emergency was declared the following day, August 16. Over 10,000 residents in the City were evacuated in phases over three days, in addition to evacuation orders implemented in the neighbouring communities of Westbank First Nation and Regional District of Central Okanagan West Electoral Area. The BC Wildfire Service, together with more than 500 firefighters from municipalities across British Columbia and the U.S., were battling the blaze from the ground and air for several weeks [29]. The cause of the McDougall Creek Wildfire is still unknown [3].

Figure 9. McDougall Creek Wildfire as viewed from Kelowna, August 17, 2023. Photo Credit: Winston Szeto, CBC

The potential for other rapidly burning fires is still a concern for areas that were not impacted by the McDougall Creek and Mount Law Wildfires. Much of the southeastern forested land has not been burned. Furthermore, management of fire-impacted areas may be required as slash fuel types and dense regeneration have the potential to become high-risk values within the fire burn perimeter.

Another special concern for the community is the number of human-caused wildfires within the municipal boundary; 50 of the 58 recorded fires recorded between 1922 to 2023 were human-caused (see Table 5. Historical Wildfire Data 1922-2023 Data BC, BC Wildfire Fire Perimeters). Ignition sources may include private residences along the WUI, along roadways, or within the surrounding forested Crown land [30].

A Fire history map is provided in Appendix G: Wildfire History Map.

Table 5. Historical Wildfire Data 1922-2023 Data BC, BC Wildfire Fire Perimeters

WILDFIRE HISTORY STATISTICS 1922-2023	
Average Size (Ha)	431
Median Size (Ha)	19
Maximum Size (Ha)	13,970
Total Number of Hectares Burned	25,000
Total Number of Fires	58
Number of Human-Caused	50
Number of Natural-Caused	6

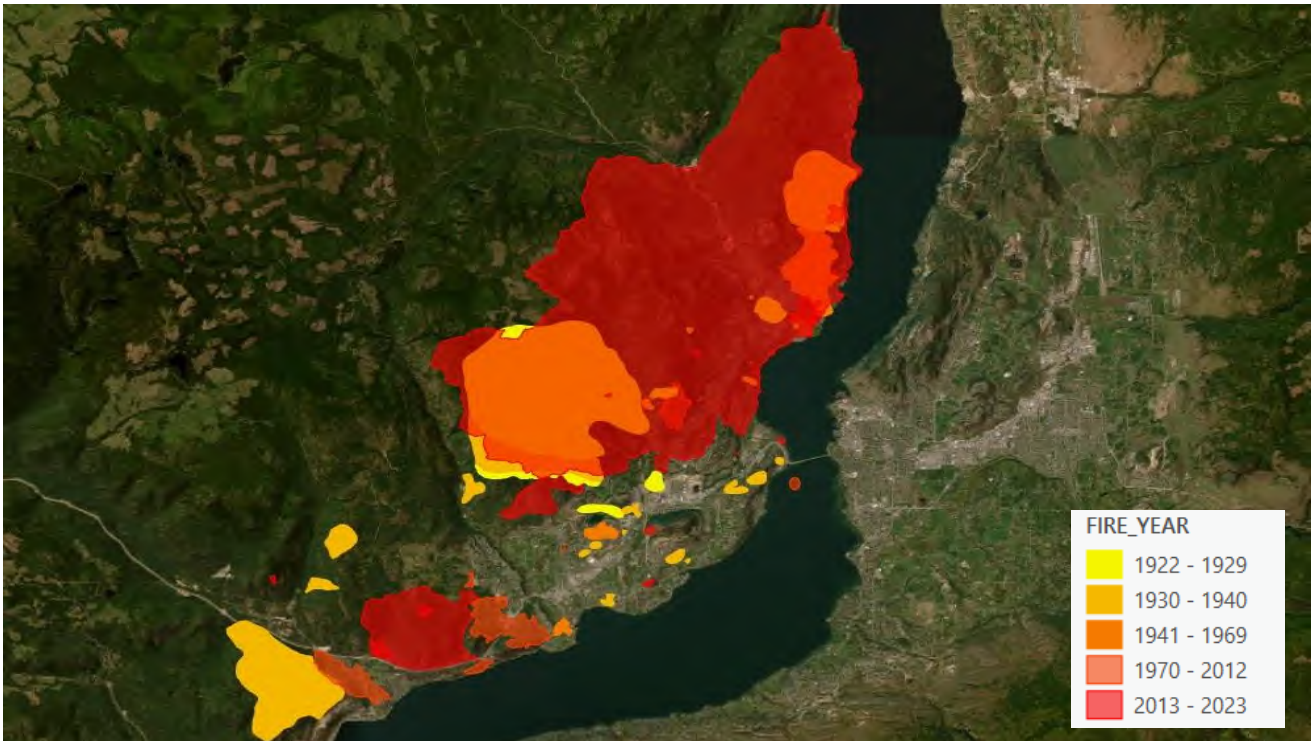

Figure 10. Local Fire History from 1922-2023, Data BC, BC Wildfire Fire Perimeters

3.2. Wildfire Intensity Factors

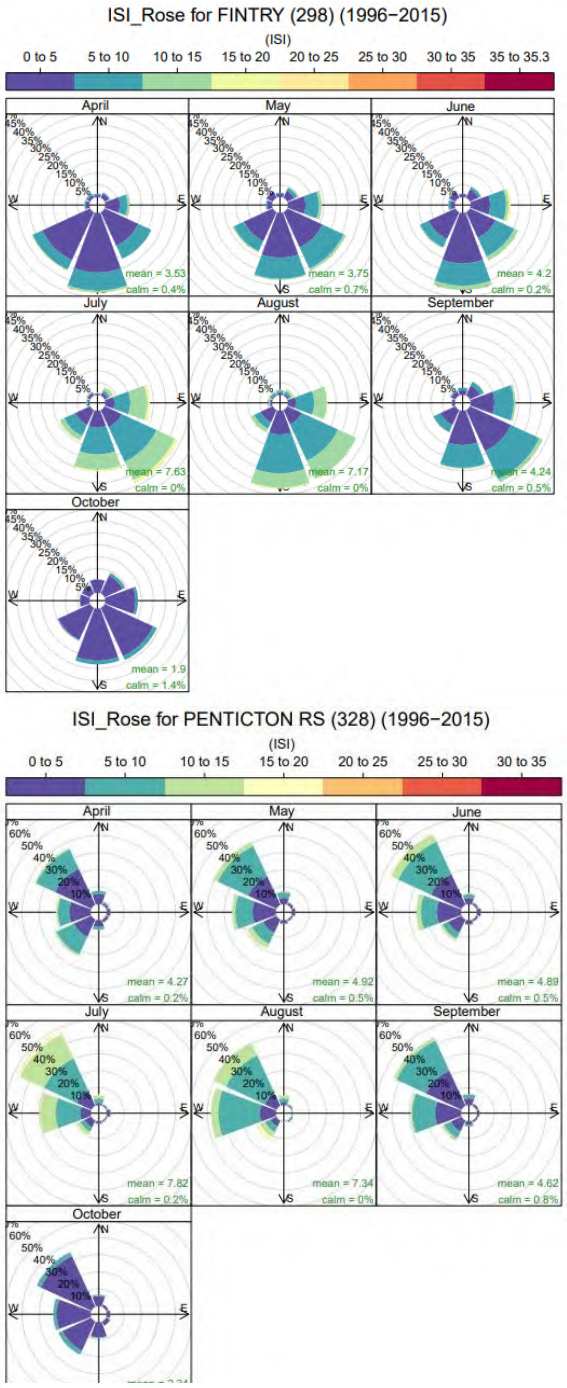

Figure 11. Prevailing wind directions from nearest representative weather stations (Fintry and Penticton). No data available for West Kelowna (Station ID 40).

Climate and Weather

West Kelowna, located in British Columbia's Okanagan Valley, experiences a semi-arid climate characterized by hot, dry summers and relatively mild winters [31].

Spring brings warming temperatures, with averages ranging from 5°C to 15°C in March, gradually warming up [17]. Increased precipitation, including rain showers, greens up vegetation and reduces fire risk. Fire risk begins to increase as vegetation dries out and becomes more susceptible to ignition from human activities and occasional lightning strikes towards late spring. A wet June can promote vegetation growth and result in greater accumulations of fuels. This results in higher potential wildfire intensity during dry/drought conditions (July-September).

Summers are hot, with average temperatures ranging from 25°C to 35°C, occasionally exceeding 40°C during heatwaves [17]. Rainfall is minimal during these months, with July and August being the driest, receiving only occasional thunderstorms. The combination of high temperatures, low humidity levels, and dry vegetation creates ideal conditions for the rapid spread of wildfires. Lightning strikes and human activities can trigger fire starts, which can quickly escalate due to the dry conditions.

Fall temperatures begin to cool, averaging between 10°C to 20°C in September and gradually dropping. There is increased precipitation, with occasional rain showers, and morning dew [17]. Fire activity typically decreases compared to summer, the lingering dry conditions and occasional windy periods can still pose a risk of wildfires until significant rainfall occurs.

Winters are relatively mild, with average temperatures ranging from -5°C to 5°C. Snowfall is common in higher elevations and in lower areas, though it generally melts quickly [17]. Fire activity is minimal during winter due to cooler temperatures and higher moisture content in the vegetation. Snow cover further reduces fire risk.

West Kelowna can experience variable wind patterns, which can influence fire behavior by affecting fire spread direction and intensity (Figure 11). Representative wind direction is not available for West Kelowna (Station ID 40) because this station data is newer than the Initial Spread Index Rose analysis which uses station data up until 2015 [32]. Based on the nearest weather station data (Fintry and Penticton), West Kelowna may be mostly influenced by winds from the south, west, and northwest. This places much of the municipal limits downwind from potential WUI wildfires.

Topography

Topography influences the direction and speed of wildfires and significantly impacts wildfire suppression and prevention efforts. West Kelowna's complex topography requires a multifaceted approach to wildfire suppression and prevention, focusing on accessibility, fuel management, wind dynamics, water resources, and community engagement to mitigate the impact of wildfires.

The terrain within the AOI is variable, with rolling hills on the plateau and benchlands, and steep side valley walls and drainages. The terrain makes access challenging for firefighting crews and equipment. Steep terrain can slow down firefighters and increase the difficulty of establishing fire lines. The terrain also influences fire behavior, intensity of wildfires is substantially influenced by changes in topography such as slope. In general areas with steep slopes experience faster and more intense fire behavior, with faster rates of spread, higher flame heights, and higher scorch heights, whereas flat topography generally has slower rates of spread, lower flame heights, and scorch heights (Figure 12).

Forested areas are a primary vegetative fuel within the community. Managing vegetation through prescribed burns, clearing of brush, pruning, and thinning of trees to create and maintain defensible spaces around properties and the community is crucial for reducing fire intensity and spread.

Proximity to Okanagan Lake influences local wind patterns. Winds can either help or hinder firefighting efforts by affecting the direction and speed at which fires spread. Fire behavior analysts closely monitor wind conditions to predict fire behavior and plan suppression strategies accordingly.

Okanagan Lake and other smaller lakes, ponds, and creeks provide essential water sources for firefighting operations. Access to water for helicopters, water bombers, and ground crews is critical during wildfire suppression efforts.

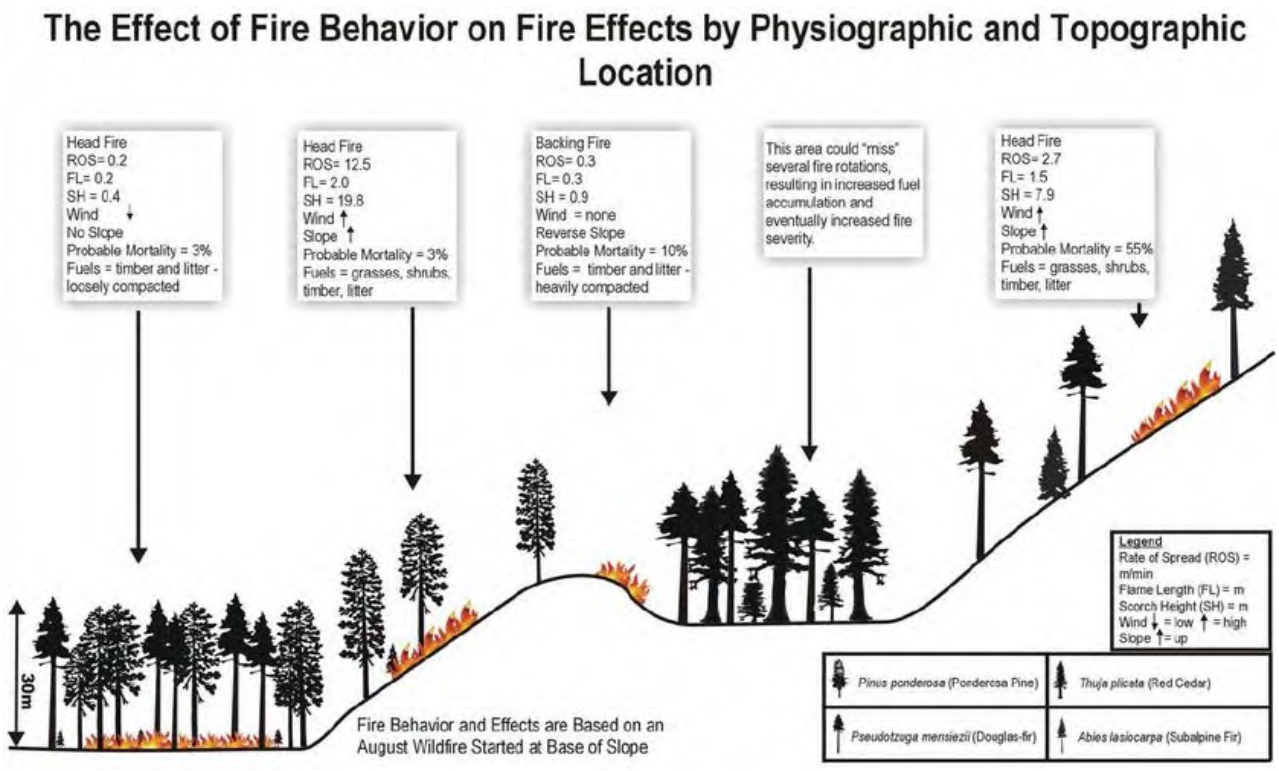

Figure 12. From Gray, Robert & Andrew, Banafamu & Blackwell, Bruce & Needoba, Amelia & Steele, F. The Effect of Physiography and Topography on Fire Regimes and Forest Communities.

Fuel Types and Vegetation

Fuel type refers to the categorization of vegetation and other combustible materials in an area based on their physical properties, such as moisture content, size, shape, and arrangement. These characteristics influence how these materials ignite, how fires spread, and how intense they burn. Fuel types are utilized for fire behavior modeling and are described in the Canadian Forest Fire Behavior Predictions (FBP) System.

Fuel Types within the AOI

C-3 Closed Canopy

In the drier interior, a C-3 fuel type (although species composition varies) is the most representative of closed canopy forest with needle accumulations [33]. This fuel type is characterized by pure, fully stocked (1000–2000 stems/ha) stands that have matured at least to the stage of complete crown closure [33]. In this fuel type, continuous crown fire initiation can occur. A C-3 fuel type is more challenging to manage and can produce more embers than the other fuel types [31].

C-3 fuels occur on cooler aspects, northern slopes, and along drainages. This fuel type is scattered throughout the AOI's WUI and in some CWK parks.

C-7 Ponderosa Pine and Douglas-fir

The C-7 fuel type is dominated by ponderosa pine and is typically found in dry, lower-elevation forests [33]. Canopy closure is less than 50% overall, although thickets are closed and often dense. The fuel load primarily consists of pine needles, grasses, and small shrubs. A C-7 fuel type can support surface fires that spread through the understory. Fire spread is usually moderate but can become intense under dry and windy conditions. Surface fires are common, with occasional torching of individual trees. Fires in this fuel type can be easier to manage compared to denser forest types but still require careful monitoring and suppression efforts.

The C-7 fuel is the dominant fuel type within the AOI's WUI and park areas. It occurs on drier aspects, south and west-facing slopes.

M-1/2 Mixed Wood

The M-1/2 fuel type are a mix of deciduous and coniferous trees, such as a combination of aspen, birch, spruce, and pine. The fuel load includes a mix of leaf litter, needles, branches, and underbrush. M-1/2 fuel type is found in transitional zones between pure coniferous and deciduous forests. Fire behavior is highly variable and influenced by the proportion of deciduous to coniferous trees. Surface fires can spread through the understory, with the potential for more intense fires if coniferous trees are predominant. This can present challenges for suppression due to the mixed nature of the fuels, requiring adaptable strategies.

The M-1/2 fuel type is less common in the AOI's WUI and park areas. It occurs in Westbank First Nation's Community Forest in previously harvested and fuel treated areas, cooler aspects, and within drainages.

D-1/2 Deciduous

The D-1/2 fuel type is comprised primarily of deciduous trees, such as aspen, birch, and maple. Leaf litter and fallen branches contribute to the fuel load [33]. This fuel type is found primarily in moisture-receiving sites. Fire spread is generally slower due to higher moisture content in the vegetation. Fires in deciduous forests are less intense and easier to control compared to coniferous forests. The leaf litter can support surface fires, but crown fires are rare.

The D-1/2 fuel type are also less common in the AOI's WUI and park areas. There are some isolated patches within Westbank First Nation's Community Forest in previously harvested and fuel treated areas, and on cooler aspects and within drainages.

O-1 a/b Grass Fuel Types

The O-1 a/b fuel types is characterized by continuous grass cover, with no more than occasional trees or shrub clumps that do not appreciably affect fire behavior [33]. These are the grass fuel types, represented by two designations in the FBP system; one is the matted grass condition common after snowmelt or in the spring (O1-a) and the other is standing dead grass common in late summer to early fall (O1-b). Crown fires do not occur due to the lack of crown, however, spotting potential may be increased or enhanced where standing timber is present [31].

The O-1a/b fuel types are common within the AOI's WUI and CWK park areas. It occurs on drier sites where tree growth is limited by moisture. This type is common along the southwestern end of the WUI (e.g., grassland area above Gellatly in the Goats Peak area).

S-1/2 Slash Fuel Types

The S-1/2 fuel types are characterized by slash resulting from tractor or skidder clear-cut logging [33]. The slash is typically one or two seasons old, retaining up to 50% of the foliage, particularly on branches closest to the ground. No post-logging treatment has been applied, and slash fuels are continuous. Tops and branches left on site result in moderate fuel loads and depths. Crown fires do not occur due to the lack of crown, however, spotting potential may be increased or enhanced where standing timber is present [31].

The S-1/2 Fuel types are not common within the AOI and are generally associated with logging activities or develop as a result of wildfire. Areas impacted by the McDougall Creek Wildfire could become S-1/2 fuel types when standing dead trees begin to fall in the next 5-10 years. This fuel type is very hazardous and challenging to action and crews cannot often action on foot.

A summary of common fuel types within the AOI is provided in Table 6. Common Fuel Types in the AOI. Note, this table does not include non-fuel types or private land (which comprise >60% of the AOI WUI). The percent cover of the dominant fuel types in the AOI WUI will not equal 100%.

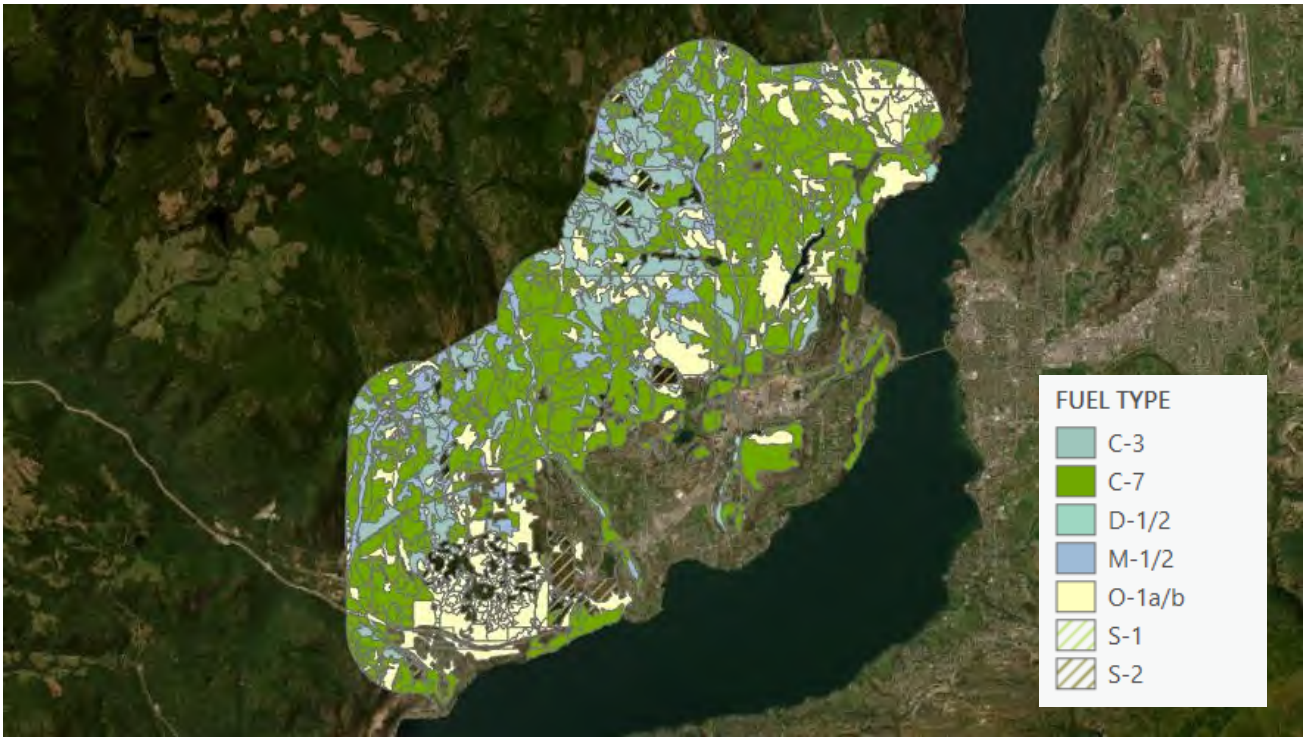

Figure 13. Mapped Fuel Types within the CWK WUI, Data BC Fuel Types.

Table 6. Common Fuel Types in the AOI

FUEL TYPES OF THE AOI				
Crown Fuel	Ladder Fuel	Surface Fuel	**Crown Fire/** Spotting Potential [31]	% Cover of AOI
C - 3				
			Moderate <500 m: Very Likely 0.5-1 km: Likely 1-2 km: Possible	2%
C - 7				
			Moderate <500 m: Very Likely 0.5-1 km: Likely 1-2 km: Possible	24%
M - 1/2 (50-75% conifer)				
			Moderate <500 m: Very Likely 0.5-1 km: Likely 1-2 km: Possible	1%
D - 1/2				
			Very Low <300 m: Very Likely 0.3-0.6 km: Likely 0.6-1 km: Possible	1%

FUEL TYPES OF THE AOI					
Crown Fuel	Ladder Fuel	Surface Fuel	**Crown Fire/** Spotting Potential [31]		% Cover of AOI
O - 1 a/b					
N/A	N/A		N/A		10%
			<300 m	Very Likely	
			0.3-0.6 km	Likely	
			0.6-1 km	Possible	
S - 1/2					
N/A	N/A		Low		3% Note spotting behavior dependent on standing timber
			<300 m	Very Likely	
			0.3-0.6 km	Likely	
			0.6-1 km	Possible	

3.3. Wildfire Risk

Wildfire risk is the sum of the:

- Likelihood of a fire occurring
- Associated fire behavior (intensity)
- Impacts of the fire (sum of the exposure and susceptibility)

WILDFIRE THREAT			VULNERABILITY (CONSEQUENCE)	
Likelihood	Intensity		Exposure	Susceptibility
Probability that any area may experience wildfire in any given year.	Wildfire intensity as result of wildfire factors: weather, topography, and fuels.	**X**	Any community located where there is a chance of wildfire to occur is considered to be exposed.	Vulnerability of a home or community to be damaged if a wildfire occurs.

Understanding these factors is important to wildfire risk reduction and planning.

The objective of wildfire risk reduction is to reduce wildfire intensity, create defensible space for fire suppression, and reduce the susceptibility of structures and communities.

3.4. Risk Framework and Risk Class

Local Wildfire Threat Assessment

The mandatory 2020 Wildfire Threat Assessment (WTA) determines the local wildfire risk rating. This rating considers the local threat due to fuel type characteristics (surface fuels, ladder fuels, stand structure and composition) and the non-fuel factors that influence community vulnerability (proximity, slope position of values at risk) and fire spread patterns and potential intensity (slope percent). These factors are then weighted, and the resultant Local Wildfire Risk Rating is determined (See Figure 14. Local Wildfire Risk Rating Factors).

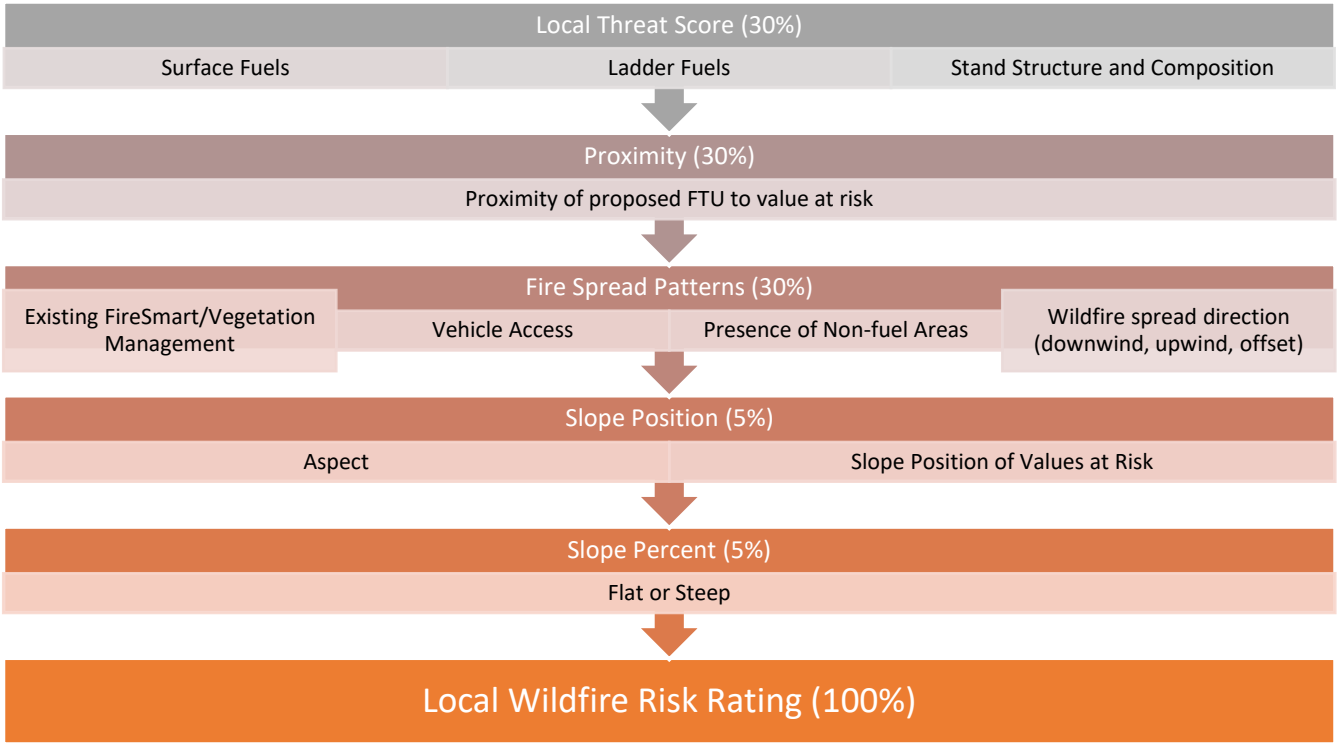

Figure 14. Local Wildfire Risk Rating Factors

The Local Wildfire Threat Assessment process is used to refine the Provincial Strategic Threat Assessment 2021 (PSTA) data to better reflect local wildfire threats and risks. Updates to the PSTA are required to reflect inaccuracies of mapped fuel types, and changes within the landscape. In the context of West Kelowna, the McDougall Creek Wildfire has altered the potential threat of forest fuels to varying degrees. The updated wildfire threat for West Kelowna is provided in Appendix H: Wildfire Threat Map.

The PSTA is a publicly available data set that characterizes wildfire threats on public forested lands [5]. This data is not available for private lands. The PSTA data utilized for this analysis was from the most recent analysis, the 2021 data set. PSTA was analyzed within 1.0 km WUI of the AOI. Note changes threat class were only conducted in areas that were ground truthed (potential fuel treatment areas) and is limited to the area of analysis (1 km WUI).

The WUI within the municipal boundaries is primarily moderate to high Fire Threat Class. Fuel treatment activities should be conducted to lower the local threat class within the WUI. A summary of the total hectares by local threat class is provided in Table 7.

Table 7. Wildfire Threat Class for the CWK's 1 km WUI

Within 1.0 km WUI	
Local Fire Threat Class	**Hectares**
Extreme	301
High	2063
Moderate	1578
Low	17
No Threat	4921
No Data	2005

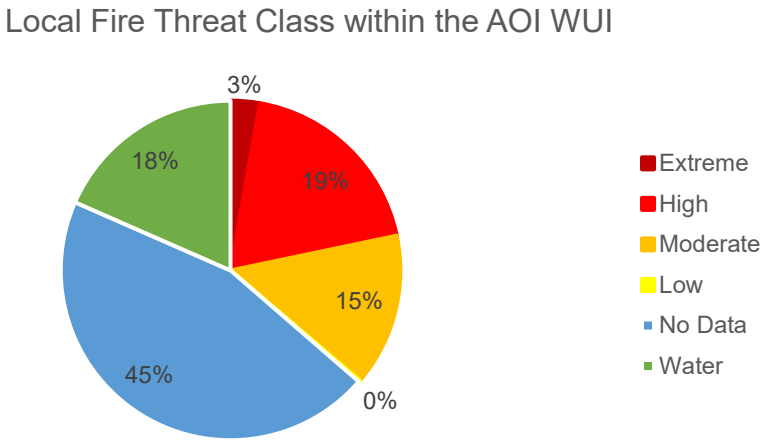

Figure 15. Summary of Composition of Local Fire Threat

4. FireSmart Disciplines

FireSmart is a provincial and national program that supports community wildfire resiliency through education programs, training, tools and resources.

The program has seven key **disciplines**:

- Education
- Legislation and Planning
- Development Considerations
- Interagency Cooperation
- Cross-Training
- Emergency Planning
- Vegetation Management

Recommendations of this report are organized by FireSmart discipline to assist with program funding applications for activities that can be funded through the UBCM-CRI program. Please note some of the recommendations provided in the following sections are not currently eligible for funding through the UBCM-CRI program and may require municipal budget allocations or alternative funding sources.

4.1. Education

Public **education** and outreach efforts help community members learn about wildfire and its potential impacts to their communities. In addition, these efforts should be designed to help individuals understand their role in taking action to reduce risk. Education and outreach activities are designed for all groups to benefit, including elected officials, community planners, residents, visitors, businesses, land managers, first responders, and more.

The CWK has an established FireSmart program that is gaining momentum. Success stories from the program include FireSmart Family Day, which was well attended with over 1,000 visitors in 2024. The community's continued growth and expansion into the WUI warrant a rigorous education program. Fuel treatments within the WUI will be ineffective without individual community members' involvement. CWK has invested significant time and effort into public education and has leveraged available UBCM-CRI funding to assist in these efforts. The greatest barriers to the educational program are staff time and capacity, and community buy-in to the program.

Recommendations

Increase the capacity of the FireSmart Program and hire a second full-time Wildfire Mitigation Specialist. • The current demand for FireSmart Program delivery exceeds the capacity of the current FireSmart Coordinator. FireSmart staff are currently prioritizing more than 100 requests already in the queue and the 2024 FireSmart homeowners grant program is fully subscribed, due to ongoing high interest and carry-over inquiries from 2023. • In order to increase the capacity of the FireSmart Program it is recommended to hire a second full-time position, as a Wildfire Mitigation Specialist. This will allow for an increase in the number of **Home Ignition Zone** (HIZ), **Home Partners Program** (HPP) (renamed FireSmart BC Wildfire Mitigation Program in 2025), and **Green Space Assessments**. • Additionally, efforts between FireSmart Coordinators could be collaborated to increase the efficiency of program delivery. An example of collaboration could include co-hosting and sharing the cost of FireSmart events between the RDCO and CWK.	**Action Item No 1**
Continue and increase public communication and engagement of FireSmart Programing and wildfire risk reduction initiatives. • Public education and communication are important to keep people engaged as the CWK works towards building a community that is more FireSmart aware and proactive. This includes developing a communications strategy that simplifies FireSmart programing and messaging to the public. Objectives should include a streamlined process to reduce FireSmart inbox inquiries (currently managed by West Kelowna Fire Rescue) and help navigation to which services best fit the community/public needs. Consider a flow chart, standardized emails, auto-responses to commonly asked questions, and highlighting success stories through media and videos. Leverage existing campaigns, for example the seasonal recreation guide could be used to advertise FireSmart activities and highlight action in parks to mitigate fuels. • FireSmart messaging varies between neighboring municipalities and the surrounding Regional District. The communications plan should include increased collaboration effort between other FireSmart Coordinators within the Okanagan FireSmart Regional Group to align messaging	**Action Item No 2**

and be more consistent. An example of confusion includes the amount of eligible funding for homeowner rebates. Each municipal government has decided on different amounts and has different priorities for how to allocate it. • Reiterating to the community the CWK's FireSmart web page as a go-to landing page for up-to-date information and resources. This includes providing continuous information to reflect the current program offerings, the latest FireSmart initiatives, information about evacuations, etc. Adding recognized neighbourhoods to the website in an interactive web map, profiling community champions, offering more information on community events, and making the CWRP publicly available are recommended. • The website should be a landing page for all FireSmart media campaigns. Media campaigns should educate homeowners on the effectiveness of implementing FireSmart on their property and build on the information and success stories communicated through videos/interviews and material from the McDougall Creek Wildfire.	
Improve upon existing Home Partners Program (FireSmart BC Wildfire Mitigation Program in 2025). • The FireSmart BC Wildfire Mitigation Program (formerly operated under the Home Partners Program) is currently oversubscribed for the 2024 season and is currently only offered to recognized neighbourhoods. • Demand could increase if insurance requires this or offers significant discounts in the future. Improvements to the FireSmart BC Wildfire Mitigation Program include prioritizing at-risk neighbourhoods for FireSmart programing/waitlists (rather than first come first served). The program should prioritize and consider targeting communities near the high-priority fuel treatment units as fuel treatments are completed. Neighborhoods that are older, are heavily vegetated, and have one method of egress could be considered next. For example, Glenrosa and Smith Creek, including areas that back onto Glen Canyon. • Should a second Wildfire Mitigation Specialist position be implemented, the BC Wildfire Mitigation Program can be offered to more neighbourhoods.	**Action Item No 3**
Continue and improve the Plant Program. • The **Plant Program** offers resources for nurseries and garden centers to promote FireSmart. • The program should re-engage existing growers in addition to targeting new and non-participating nurseries/garden centers. • One of the primary barriers to this program is that nurseries and garden centers still sell plants that are high-risk (e.g., junipers, and cedars). • Providing education to nursery/garden centre staff is recommended to improve the effectiveness of the program and also to recruit new nurseries/garden centres. • The program should also include retailers in Westbank First Nation.	**Action Item No 4**

Implement a FireSmart education curriculum with School District 23 (SD23).z • Education of students and children is an effective way to promote community change. It is recommended that WKFR staff coordinate and participate in a FireSmart education curriculum with the SD23. • SD23 should integrate and utilize the current curriculum available through the FireSmart BC Education Program. • The effectiveness of the program could be enhanced through WKFR staff attending and presenting at each school on an annual or biannual basis (eight elementary schools, two middle schools, and one high school, and a second high school opening within the next five years). Currently, WKFR staff does not have the capacity to undertake an education program. Increasing WKFR capacity would be required to implement this program.	Action Item No 5
Evaluate the effectiveness of continuing to offer FireSmart Rebate Program and explore additional funding. • The CWK FireSmart Rebate Program offers cost-sharing (up to $500) for eligible landscape and home improvements to reduce wildfire risk on private property. • The program currently has more than 100 requests already in the queue and as a result, the 2024 FireSmart Homeowners Grant Program may be fully subscribed. The program requires substantial input/time from staff who undertake assessments and complete paperwork. The program provides rebates to a limited number of homes each season. In a community with over 10,000 single-family, semidetached, and rows houses, it is unlikely the program will be able to meet demands. The CWK should evaluate the effectiveness of continuing to offer a FireSmart Rebate Program, and also explore additional funding opportunities.	Action Item No 6

4.2. Legislation and Planning

Legislation and Regulation can be a very effective tool for reducing wildfire risk on provincial crown lands and within the administrative boundaries of a local government. Provincial acts and regulations provide the means for local governments to implement wildfire risk reduction actions through bylaws.

Legislation and Planning at the municipal level for CWK should include plans to continue to lead by example on municipal property, reduce barriers to completing vegetation management and fuel treatments, and invest in the potential for bylaws to improve the community's wildfire resiliency.

Recommendations

Continue to integrate FireSmart into other CWK Departments (Parks, Public Works, Engineering, Planning, etc.) and applicable CWK plans. • Progress should also continue integrating FireSmart into other departments within CWK (Parks, Water, Waste Management, and Planning). • Internal guidance documents and CWK plans should be updated to incorporate FireSmart best practices. • Reports for consideration include: o The Recreational Trails Master Plan, 2024. This plan has several measures for wildfire risk reduction. A review of this plan should assess whether new measures should be included and if the FireSmart measures in the plan are being implemented. o The Parks Master Plan, 2024. This plan includes operational recommendations for environmental management. However, no specific guidance is provided for wildfire risk reduction in parks. o The Communications and Engagement Plan, 2024. This plan should partner with West Kelowna Fire Rescue's FireSmart Program to further inform and engage the community with the goal of increased FireSmart engagement and participation. • Ensuring all new municipal construction and landscaping meet FireSmart specifications.	Action Item No 7
Develop a multi-prong approach to tackle legacy landscaping, including enforcement programs, and conduct a review of existing and potential new bylaws. • This multi-prong approach should include reviewing other municipal programs, consideration of an enforcement program, and review of existing and potential new bylaws. Development of the multi-prong approach could include conducting a needs assessment, reviewing other municipalities' approaches, a literature review, and development of a plan. • This CWRP did not provide a comprehensive review of municipal bylaws. It is recommended that current bylaws with the potential to impact or enhance wildfire risk reduction within the community be assessed and specific recommendations be developed. Potential bylaws to review include, but are not limited to: Parks and Public Spaces Bylaw No. 0184, and Zoning Bylaw No. 0320. • Smoke and burning bylaws can make completing fuel treatments and prescribed burning challenging. Under the RDCO Smoke Control Bylaw, nuisance smoke from open burning is not	Action Item No 8

allowed in the City of Kelowna, District of Lake Country, CWK, and the Central Okanagan East and West Electoral Areas, or under the bylaws of the District of Peachland. Yard waste such as leaves, pine needles, grass clippings, weeds and other garden waste are not allowed to be burned. Burning of debris generated from fuel management is often the most cost-efficient method. For large-scale projects, burning windows may make completing fuel treatments challenging and may result in unburnt fuel piles remaining on site and presenting a risk during the following wildfire season. It is recommended a review of the smoke and burning bylaws should be completed in coordination with the RDCO with the objective of simplifying and allowing burning as a method of fuel reduction.

- Cedar hedges and other flammable plants continue to be used within the community landscaping. Cedar hedges and juniper were commonly present in the structures (homes) lost during the McDougall Creek Wildfire and were identified as likely mechanisms of structure ignition [34]. Education programs alone are not sufficient to prevent poor choices with landscaping. The CWK should assess the feasibility of a restricted plant list bylaw. Enforcement would be one challenge that should be considered if implementing a restricted plant list bylaw. Additional considerations of the bylaw would be coordination with RDCO, and Westbank First Nation.

4.3. Development Considerations

Development decisions, such as land use types, structure density, road patterns, and other considerations, shape the built and natural environments. These decisions can bring lasting impacts to the WUI and wildfire risk by affecting public and first responder safety and survivability of homes, critical infrastructure, and other community features. Considering these factors early in the development process can reduce wildfire risk to life safety and property.

For the CWK development considerations are particularly important given the region's population growth and substantial number of single-family homes. Although the City has made changes to manage new development through the establishment of a Wildfire Interface Development Permit Area, with a growing population of 40,715 residents [8], and a total of 14,746 private dwellings [9] rebate programs funded through the UBCM-CRI program are unable to provide support to all residents. Additional legislative measures should be explored.

Recommendations

Review and revise Wildfire Interface Development Permit requirements and processes. • CWK currently has a process to guide building and development through a Wildfire Interface Development Permit. • It is recommended this program continues. The community is still growing, and wildfire-resilient building costs are generally less than retrofitting existing structures [35]. • The current Wildfire Interface Development Permit requirements and process should be reviewed. • FireSmart BC has updated and revised the priority zones. The new zones are now designated as the extended zone 10-30 m, the intermediate zone 1.5 – 10 m, and the immediate zone 0-1.5 m. The **Official Community Plan** and covenant templates should be updated to match the current FireSmart BC guidance and the **FireSmart Development Permit Guidance Document** [36]. • Training for planning staff, to help them determine the level of risk and degree of assessment/oversight, is required.	**Action Item No 9**
Review existing covenant processes. • Review the existing covenant process to ensure it aligns with current FireSmart BC recommendations. Engage with other municipalities and review their covenant templates and how they address enforcement.	**Action Item No 10**

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4.4. Interagency Cooperation

Interagency Cooperation is fundamental to the program. It takes the collaborative efforts of multiple stakeholders working together to achieve a fire resilient community. These people include the local fire departments, local government staff, elected officials, First Nations representatives, industry representatives and provincial government representatives in your area. Individually they are responsible to their own organizations, but all of the stakeholder organizations are dependent upon each other to develop an effective Community Wildfire Resiliency Plan and undertake a successful wildfire response.

The CWK has several potential partners ranging from provincial and local government, First Nations, and industry. These partners include the members of the Emergency Mutual Aid Agreement: the City of Kelowna, District of Lake Country, District of Peachland, and Regional District of Central Okanagan. West Kelowna Fire Rescue also provides fire protection for Westbank First Nation under a 15-year agreement signed in 2016.

Recommendations

WKFR/CWK should continue to campaign for increased funding and streamlined processes/increased ease of funding applications, including but not limited UBCM-CRI. • The Premier's Expert Task Force on Emergencies 2023 Report recommended improving accessibility, streamlining administrative requirements, and providing more year-over-year certainty for communities applying for FireSmart funding. Additionally, the report recommends the government continue to streamline administrative processes, remove policy obstacles, and build capacity to expedite wildfire risk reduction projects, including prescribed burning, increased utilization, and other risk reduction and resilience practices [37]. WKFR/CWK should continue to campaign for increased funding and streamlined processes/increased ease of funding applications, including but not limited to UBCM-CRI. Current funding allocations will not cover all the recommendations of this report.	Action Item No 11
WKFR/CWK should continue to advocate for full cost recovery for the deployment of staff. • The Premier's Expert Task Force on Emergencies 2023 Report recommended continuing to improve the Inter-Agency Agreement (IAA) between the BC Wildfire Service and the Fire Chiefs' Association of BC, based on learnings identified through joint pre-season preparedness and post-season debrief processes [37]. WKFR/CWK should continue to advocate for full cost recovery for the deployment of staff.	Action Item No 12
Engage with RDCO and Westbank First Nation to discuss plans to treat high-priority areas within the municipal boundary that fall under RDCO's CWRP. • Engage with RDCO and Westbank First Nation to discuss plans to treat high-priority areas within the city limits that fall under RDCO's CWRP or jurisdiction. • For example, Glen Canyon should be prioritized for further treatments.	Action Item No 13

Engage with other landholders within the AOI to reduce wildfire risk on their properties.	
• Other landowners and managers in the municipal boundaries are responsible for operationalizing FireSmart disciplines on their respective lands. They have an obligation to the CWK to complete these activities and WKFR can encourage these FireSmart activities. • Additional landholders within the AOI who have an impact on community wildfire resiliency include the Province of BC (DOS WRR), Westbank First Nation, FortisBC, BC Hydro, and SD23.	Action Item No 14
Establish a working group with the Ministry of Forests District of Okanagan Shuswap Wildfire Risk Reduction Program (DOS CLWRR Program), Westbank First Nation, and Ntityix Resources.	
• There are several overlapping tenures, land managers, and interests to balance within the WUI. Collaboration of these groups is integral to shaping a wildfire-resilient community. • It is recommended the CWK establish a WRR working group with the DOS CLWRR Program, Westbank First Nation, and Ntityix Resources. This group will allow for improved resource sharing and to strategically leverage funding for equipment, training, and vegetation management. • Work from Ntityix and Westbank First Nation combined with harvest operations on the Community Forest and existing fuel breaks (old burns) will form the foundation for the Landscape Level Fuel Break. Discussions with Ntityix on silviculture practices and stocking need to occur for the efficacy and longevity of fuel treatments within their tenured areas. Consideration of ecosystem restoration and the Westbank First Nation's Forestry Seven Generation Plan should also be incorporated.	Action Item No 15

4.5. Cross-Training

Wildland-Urban Interface resiliency planning and incident response draw on many different professions who do not typically work in wildfire environment. Cross-training of fire fighters, public works staff, utility workers, local government and First Nations administration, planning and logistics staff, and other key positions will help support the development of comprehensive and effective wildfire risk reduction planning and activities, as well as a safe and effective response.

With the number of wildland fires experienced within the municipality, WKFR staff are experienced in wildfire operations. They are in a great position to receive more advanced training and to provide cross-training to other staff.

Recommendations

Establish a controlled fire and cultural burning program.

- The C-7 fuel types within the AOI often have grass surface fuel loading that is not managed through a typical prescription. Additional maintenance and management of assess monitor units and some of the proposed fuel treatment areas should be completed through prescribed and cultural burning.
- The CWK should develop a plan with Ntityix Resources and Westbank First Nation (First Nations partners) on the future of prescribed fire and cultural burning projects around the community. CWK should also continue to attend annual prescribed fires. Develop a plan to support and conduct cultural prescribed fire and to support local knowledge keepers.
- Obtain controlled fire and cultural training with Third Party Education for Fire Hall staff and Westbank First Nation. This third-party training could be similar to what is being done in Kimberley and Cranbrook with their Fire Departments.
- Establish an on-staff Burn Boss and build the capacity to draft and implement the burn plans. This training is mandated by the National Wildfire Coordination Group (NWCG) and is available through a number of provincial and (in the U.S.) state and federal agencies. Suppression crews would also require task-specific training to support the burn, which is available through the BC Wildfire Service (i.e. Basic Fire Behavior and Engine Boss).
- Burn plans should include permanent plot establishment to assess and monitor burned areas and determine if a maintenance burn is required.
- Currently, WKFR staff does not have the capacity to undertake a controlled fire and cultural burning program. Increasing WKFR capacity would be required to implement this program.

Action Item No 16

Continue wildfire specific cross-training with city partners (e.g., RCMP, BCEHS, etc.) and identify new training opportunities, including those for of key city staff.	
• CWK already conducts and coordinates wildfire cross-training with city partners (e.g., RCMP, etc.). This program should be expanded to identify new training opportunities, including training of key city staff. An assessment of current training and meeting with managerial staff should identify any training gaps and opportunities. • Training for staff should be prioritized in municipal budgets and supplemented with UBCM-CRI and other funding when available. • Examples of potential cross-training options for the CWK include, but are not limited to: o Mock response scenarios in the watershed, around critical infrastructure, variable interface conditions and fire size, etc. o Water utility and parks staff to receive S-100 training. o Fire department training on water system demand/flows, how hydrants work, etc. • Parks staff to learn FireSmart green space assessments and Wildfire Threat Assessments of parks infrastructure.	**Action Item No 17**

4.6. Emergency Planning

Emergency planning requires a multi-pronged approach. Individuals and agencies need to be ready to react by developing plans, mutual-aid agreements, resource inventories, training and emergency communication systems. All of these make it possible for a community to respond effectively to the threat of wildfires as a whole.

Rapid extinguishment and/or containment of a fire while it is still small is the best way to protect life and property, and to prevent fires from growing and necessitating large-scale evacuations and other undesirable downstream impacts.

As a community that is wedged between a lake and surrounded on three sides by high-risk forested fuel types — approximately 3,942 ha of extreme to moderate threat class — an enhanced level of tactical response and planning is required.

Recommendations

Undertake further fire suppression access planning and access/egress for one-way out communities.	
• CWK has several one-way out communities, while fuel treatment was identified for some of these areas, additional planning for these one-way out neighbourhoods should include Fire Suppression Access Planning. Some fuel treatment areas should include public egress routes that may require gates to limit public access. Jackpine evacuation route (49 km alternative route for the Glenrosa neighbourhood via Jackpine and Bear Creek FSR) should continue to be assessed and maintained as necessary to be a suitable emergency egress for evacuees. Maintenance of this alternative route includes road grading, signage, and right-of-way brushing.	Action Item No 18
Conduct Tactical Pre-Incident Planning outside of the municipal boundaries and delineate the fireshed.	
• Tactical Pre-Incident \Planning outside of the municipal boundaries should be completed. This planning would delineate the fireshed, the geographical area where fires ignite and are likely to spread to communities. This is completed through fire behavior modeling and includes the proposed management of other values (other than human health and safety) such as drinking water, ecosystem restoration, and cultural values.	Action Item No 19
Develop a fire department “Major Incident Plan” specific to Urban Interface Wildfires.	
• This internal plan would guide fire department operations during a major wildfire incident including ongoing (unrelated) operations and management, communications with on-duty crews, types of calls that are stopped and how to manage limited resources, staging and staffing oversight, logistical supports, scheduling and payroll, staff wellness and wellbeing, evacuation and family support, shift change procedures and protocols, information for out of town crews, etc. This plan should include a graduated enhanced staffing plan, similar to the BCWS system. Staffing requirements (Preparedness Level), is directly linked to the Wildfire Danger Rating, on a scale of 1 to 5. Using data from the West Kelowna Fire Hazard	Action Item No 20

Monitoring (Weather) Station, additional initial attack resources (engines) could be staffed during periods of greatest risk. This approach was a recommendation of the 2018 CWPP.

Preparedness Level	Preparedness Conditions
1	Normal staffing
2	Consider staffing spare engine if warranted
3	Staff spare engine from 1000 to 2000
4	Staff spare engine from 0800 to 2200. Consider 24 hour staffing of spare engine. Consider staffing a second spare engine. Consider mutual aid requirements.
5	24 hour staffing of spare engine(s). Mutual aid. Formation of dedicated wildland engine strike teams.

Figure 16. Example of Enhanced Staffing Based on Wildfire Danger Risk Rating

Continue to undertake additional equipment acquisition and purchasing for WKFR.

- Equipment upgrades and additional staffing are recommended to improve response capabilities and safety during wildland fire response. The following items are recommended:
  - Marine Water Delivery Platform: The recent McDougall Creek Wildfire burned right down to the water's edge in many areas, destroying structures and threatening critical infrastructure (i.e. pumphouses/intakes). Access to water supply can be challenging in these areas. Other communities have addressed this deficiency with Marine Water Delivery Platforms, aka fire boats, capable of utilizing master streams to suppress fires along the shore, or to supply engines operating in the area with water drawn directly from the lake and supplied via large diameter lines.
  - Task-tailored, optimized personal protective equipment (PPE) to keep firefighters safe and to perform their suppression and prescribed burn duties. This would include: Proper NFPA-compliant wildland firefighting boot; "Brush gear" for initial attack crews (similar to CAL Fire-spec) to provide enhanced protection during WUI interface fires that is better than the standard nomex pant shirt combination, but lighter than structural protection turnout gear; replace bandana face wraps with elastomeric respirators (fine particulate matter filtration).
  - Innovative equipment solutions, beyond Structure Protection Units, should be explored.

Action Item No 21

4.7. Vegetation Management

The goal of **vegetation management** is to reduce the potential wildfire intensity and ember exposure to people, infrastructure, structures and other values through manipulation of both the natural and cultivated vegetation that is within or adjacent to a community. A well-planned vegetation management strategy that is coordinated with development, planning, legislation and emergency response wildfire risk reduction objectives can greatly increase fire suppression effectiveness and reduce damage and losses to structure and infrastructure.

Vegetation management has been ongoing within the CWK and adjacent forested lands. The CWK currently has a Fuel Modification program that includes pruning work within park areas throughout the summer months. Extensive areas of the adjacent Crown land within 1.0 km have also been fuel treated (by Ntityix). The focus of the vegetation management will include critical infrastructure, parks, and looking beyond the 1.0 km WUI to create a larger landscape level break.

FireSmart Landscaping Critical Infrastructure

Recommendations for infrastructure upgrades and management of fuels for CI was assessed using the FireSmart BC Score Card. The assessment reviews building materials, potential areas of weakness, and surrounding vegetated areas.

The assessment of CI included 18 high-priority infrastructure within the community. The results of the assessments are provided in Table 8. Critical Infrastructure Assessment Score. The focus for CI improvements includes improvements to the infrastructure itself and within 10 m of the structures. Of the 18 assessed CI, 14 require updates to infrastructure and 14 require fuel management.

Note, the assessment score card is very conservative, one or two deficiencies can push the score into high. Examples of deficiencies noted during the assessment include: Upgrading vents with a 3.0 mm non-combustible mesh (Figure 18), HVAC remote shut-down capability, storage of materials (e.g., garbage cans) within the Non-combustible Zone, storage of flammable materials within 10.0 m of structures, conifers within 10.0 m of structures (Figure 18), and unpruned branches. Some parameters of the assessment will not be practical to correct. For example, building location (e.g., location at the top of a hill) will automatically push the score into high. In these cases, improvements should focus on the Non-combustible Zone and Zones 1 and 2 (Figure 17).

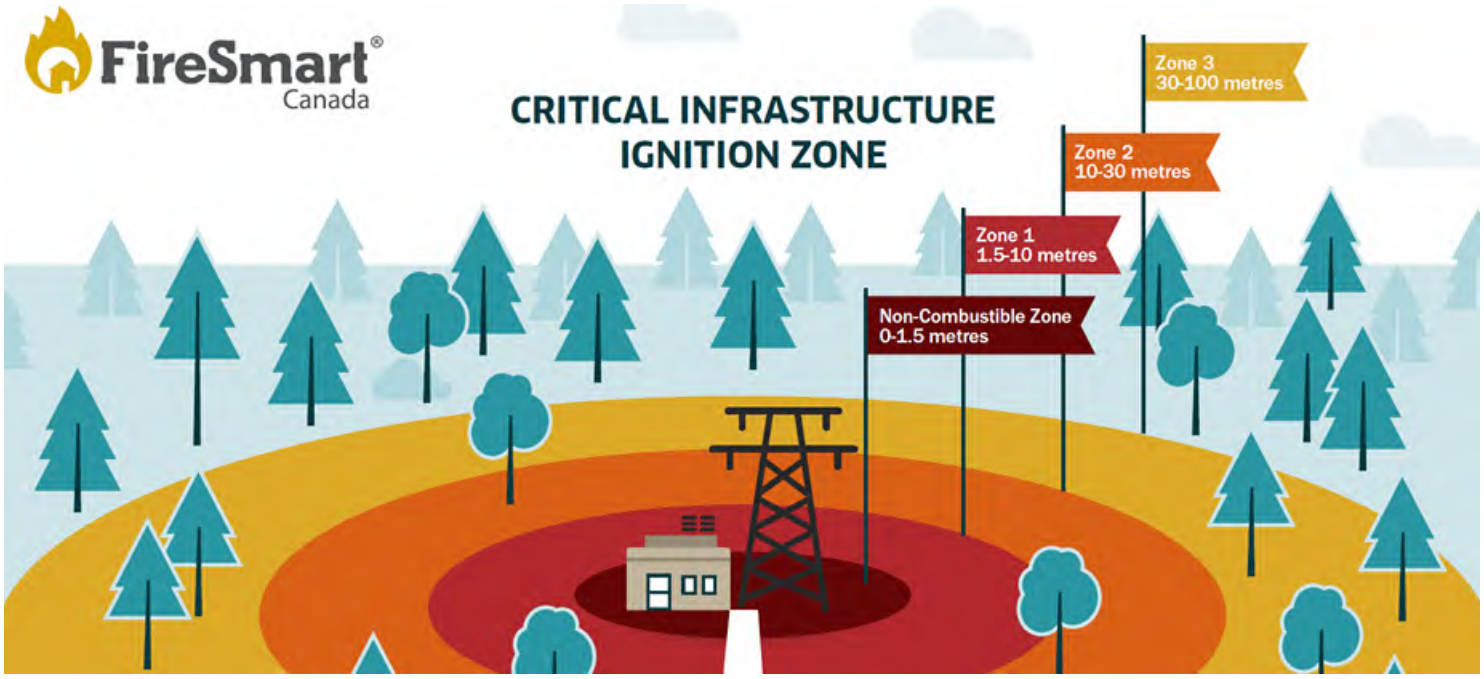

Figure 17.Critical Infrastructure Ignition Zone

Figure 18. Common deficiencies noted during CI assessment, (left) flammable landscaping within Non-Combustible Zone of the Community Centre, (right) ventilation screening that is > 3 mm at the Johnson Bentley Memorial Aquatic Centre.

Table 8. Critical Infrastructure Assessment Score

CRITICAL INFRASTRUCTURE SCORECARD ASSESSMENTS					
Critical Infrastructure	**Critical Building Score**	**Critical Structure Score**	**Non Combustible Zone Score (0-1.5 m)**	**Zone 1 (1.5-10 m)**	**Zone 2 (10 - 30 m)**
BC Hydro Sub Station	N/A	High	Low	High	High
City Hall	Low	N/A	High	Low	Low
Fire Hall #30	High	N/A	High	High	Low
Fire Hall #31	High	N/A	Low	Low	Low
Fire Hall #32	Low	N/A	High	High	Low
Fire Hall #33	High	N/A	High	High	Low
Fire Hall #34	High	N/A	High	High	Moderate
Fortis BC - Natural Gas Station	Low	N/A	High	High	High
Johnson Bentley Memorial Aquatic Centre	High	Low	High	High	Low
Mt. Boucherie Recreation Centre	High	High	High	High	Moderate
Powers Creek Intake & Water Treatment Plant	High	Low	High	High	Moderate
RCMP	Low	N/A	Low	Low	Low
Rose Valley Reservoir Dam & Intake	High	Low	High	High	Low
Smith Creek Reservoir	High	High	High	High	High
Webber Elementary & Community Centre	High	N/A	High	High	Low
West Kelowna Seniors Centre	High	N/A	High	Low	Low
Westbank Lions Club	High	N/A	High	High	Low
Westbank Museum	High	N/A	High	High	High

Rose Valley Water Treatment Plant was not assessed. A full list of outstanding infrastructure for assessment is included in Appendix C.

*N/A – where there was no critical building or structure present (e.g. utility pole, communications tower, bridges, etc.)

Fuel Management Treatment Units

Identification of Fuel Treatment Units (FTUs) is an important part of the CWRP process. Fuel treatment units are within the municipal boundary (parks, green spaces, and other areas) and adjacent forested Crown land that present a potential threat to the community. Risk reduction activities will be planned within these FTUs to reduce potential wildfire intensity and increase the safety and effectiveness of fire suppression activities.

72 FTUs were identified, encompassing 995 ha. The CWRP process generally limits FTU planning to the 1.0 km WUI; however, due to the potential ember spotting distance of 1.0-2.0 km for the surrounding fuel types (C-7 and C-3), fuel treatment identification was extended beyond the 1.0 km WUI.

- Fuel treatment unit identification included reviewing the incomplete units from the previous 2018 CWPP, and potential maintenance areas for treatments completed before 2015.
- Post-wildfire salvage opportunities were assessed and 3 FTUs were identified in Bear Creek FSR, Turnbull Road, and McDougall Creek. The fuel treatment objective will be removing dead or damaged trees.
- Municipal-owned properties with trees or critical infrastructure were reviewed and 37 FTUs were identified. Smaller parks (<5 ha in size) were noted as potentially suitable for the UBCM-CRI Green Space funding and do not require a prescription. Fuel treatment in these areas ensures these public spaces are less likely to contribute to wildfire spread into adjacent neighbourhoods.
- Egress routes assessment included a review of one-way out neighbourhoods and 3 FTUs were identified.
- Assess monitor units (AMUs) were identified for areas that were previously treated or should be considered for prescribed burning.

See Appendix I: Fuel Treatment Maps for details and locations of FTUS.

Figure 19. Locations of the proposed FTUs denoted in purple

Fuel Treatment Area Identification Process

Identification FTUs include a desktop review, initial area identification, ground-truthing, public engagement, and priority setting. The initial desktop assessment identified a total of 164 potential FTUs. These units were then ground-truthed to determine the wildfire hazard and risk. FTU boundaries were further refined based on field observations. Public engagement identified 1 additional area of forested crown land, which was later added to the plan.

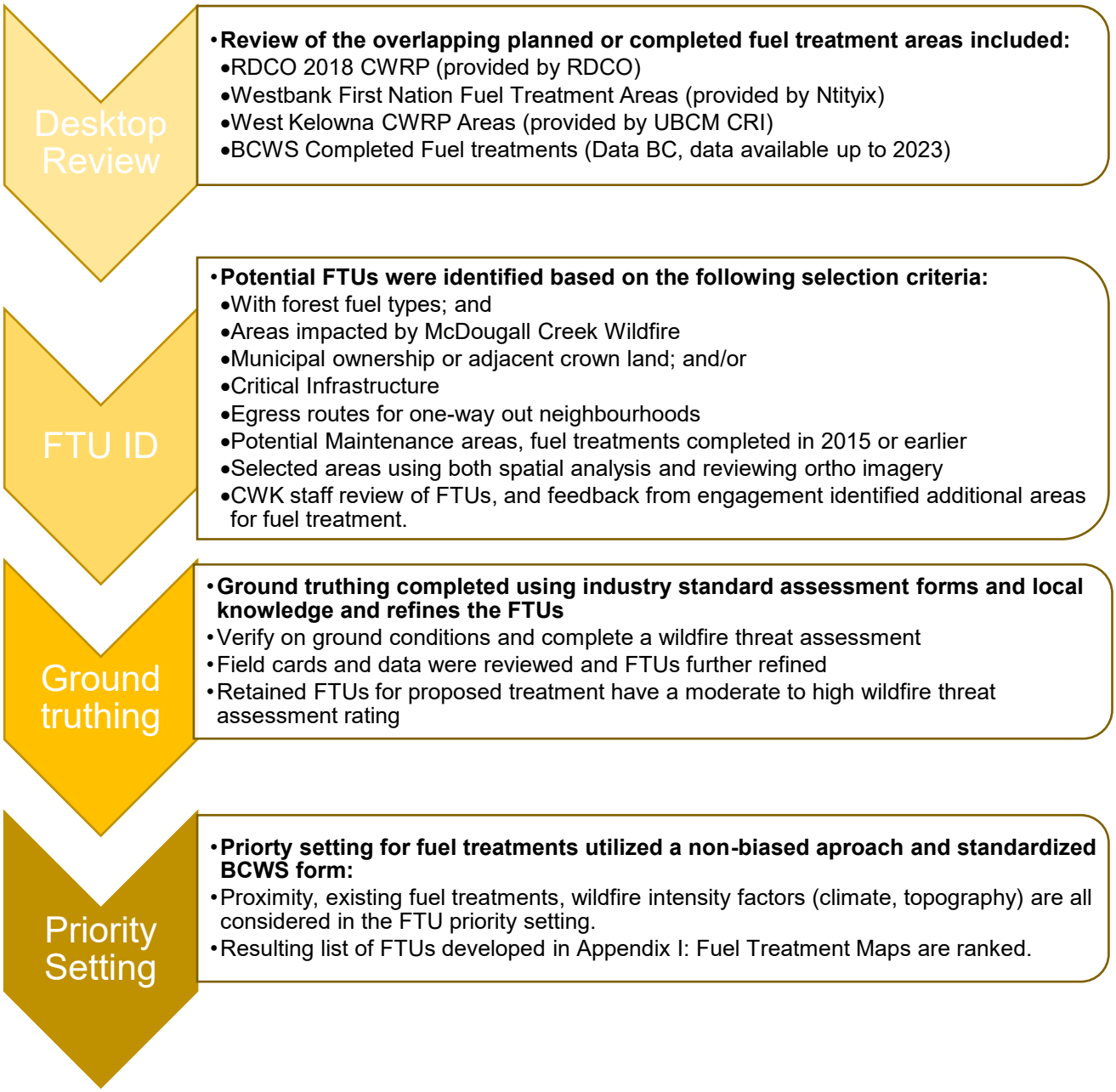

Figure 20. Fuel Treatment Identification Process.

Fuel Treatment Priority

Establishing a ranking of treatments by priority will guide the fuel treatment plan. Priority setting of the FTUs was determined using the BCWS Priority Setting Field Card's Local Risk Rating score in combination with an internal review.

The priority setting card results in a Local Wildfire Risk Rating weighted score from 0 to 10: Areas with a relatively low-risk score (<4); and areas with relatively high or extreme risk rating score higher (>7) (Table 9). The factors considered in this assessment are fully described in section 3.4 Local Wildfire Threat Assessment and Figure 14. Local Wildfire Risk Rating Factors (note this is the same methodology that is used to adjust wildfire threat of WUI).

All potential FTUs were assessed using this method and a summary and associated priority setting are provided in Appendix D: FTU Summary Table and the locations are provided in Appendix I: Fuel Treatment Maps. The priority setting identified 44 high-priority fuel treatment units (in total ~ 667.4 ha), 28 moderate-priority fuel treatment units (in total ~ 327.6 ha), and 2 new AMUs (in total ~ 139.9 ha). In total 72 FTUs were identified, encompassing 995 ha.

Table 9. Priority Setting Card Local Wildfire Risk Weighting

LOCAL WILDFIRE RISK RATING WEIGHTING	
Relative Risk	Weighted Score
Low	0-3.9
Moderate	4-6.9
High	7-8.9
Extreme	9-10

The BCWS Priority setting method is useful for categorizing fuel treatments by wildfire risk (high vs. moderate risk); however, there are limitations on relying solely on the risk score for planning the order to complete fuel treatments. Some of these limitations include:

- There is no categorization of the potential increased risk of human caused ignitions;
- The amount of use of an area by the public is not quantified;
- The potential cost of re-building lost infrastructure is not accounted for;
- The logistics of budget constraints or funding sources is not considered; and
- The potential increased efficiencies achieved by treating smaller units at the same time, or mixing high-cost areas with lower-cost areas to maximize the total number of hectares treated per year, etc.

Additional planning is required to develop a five-year plan to complete fuel treatments. Development of the five-year plan to conduct fuel treatments is beyond the scope of this plan. Considerations for development of this plan will include:

- The FTU priority setting;
- Other community factors;
- The development of a budget; and
- Strategically grouping fuel treatments based on funding, land tenure, size, cost, and complexity (Figure 21).

Considerations for the development of a five-year plan to complete fuel treatments are detailed further in the recommendations section on the following pages.

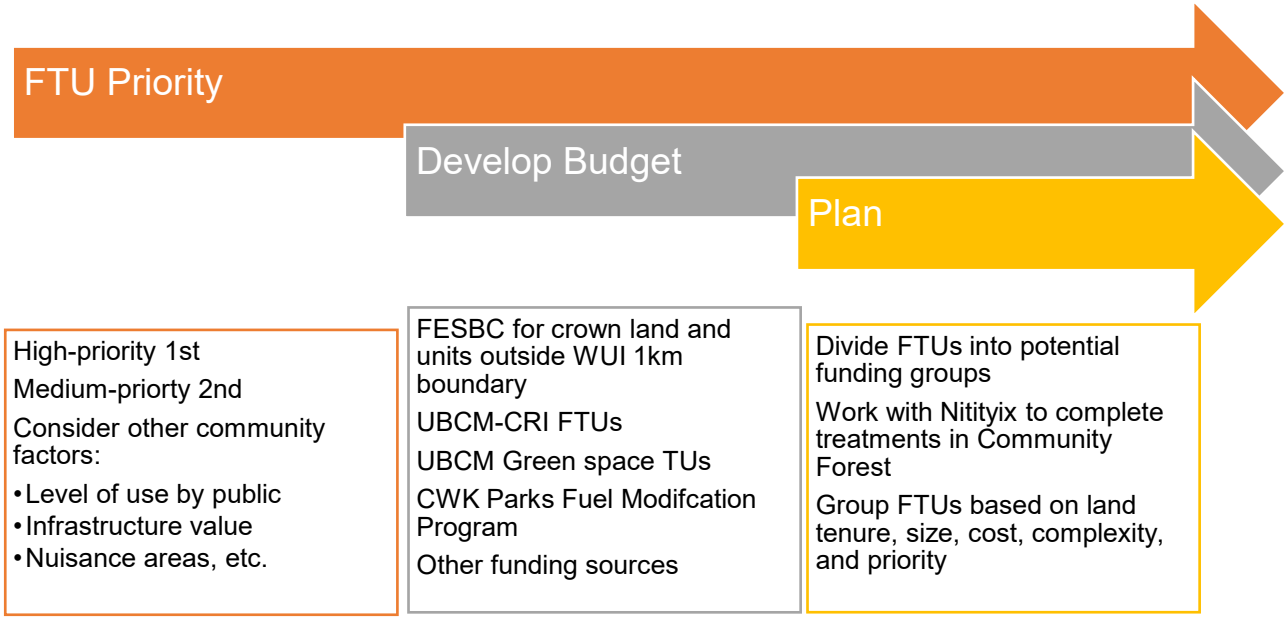

Figure 21. Steps to Develop a Five-year Fuel Treatment Plan

Recommendations

Develop a plan for CI treatment maintenance and further assessments of CI.	
• Conduct CI assessments of schools and water utility infrastructure. Work with the water utility manager to identify which infrastructure should be assessed from the existing list (Appendix C: Critical Infrastructure Assessment Summary, which was developed from a regional GIS database). Inground infrastructure such as pressure-reducing valves inside of ground vaults likely do not require an assessment. The list of outstanding CI to assess should be on infrastructure with potential fuels nearby or that could be vulnerable to ember showers. • Updates to CI should prioritize infrastructure with high scores for vegetation management in the Non-combustible Zone and Zone 1. See Appendix C: Critical Infrastructure Assessment Summary for more details.	Action Item No 22
Develop five-year plan to complete proposed fuel treatments.	
• Develop a plan to complete the FTUs proposed in Appendix D: FTU Summary Table. Considerations of the plan should include the following: o Utilize other funding sources (e.g., FESBC) for fuel treatments on Crown land and those that are >1.0 km from the WUI buffer. o Combine smaller units (<5.0 ha) in size to implement at the same time. o Smaller areas, <1.0-2.0 ha in size that do not require removal of trees >2.0 m in height can be covered under the Green Space funded activities of the UBCM-CRI funding program. o Logical/practical grouping of projects based on tenure, location, complexity, etc. • Several parks within the community fall under the RDCO's CWRP. Some of these areas were excluded from the CWK CWRP; however, they should be prioritized for treatment, e.g., Glen Canyon Park. While these are the responsibility of the RDCO, CWK should work with them to discuss their plans to complete fuel treatments in RDCO parks that are within CWK's municipal boundary. • Much of the forested WUI overlaps with Community Forest and falls within Westbank First Nation's traditional territory, it will be important to coordinate with Ntityix Community Forest management in the WUI. The CWK or consulting registered forest professional (RPF) should work with Ntityix to develop a plan to complete fuel treatments within the Community Forest. See section 2.4 First Nations and Cultural Values for further details on considerations for fuel management. Prescriptions should incorporate the following plans: o Westbank First Nation Forestry Seven Generation Plan o Westbank First Nation Forest Stewardship Plan Amendment Schedule, 2023 o A syilx strategy to protect and restore siwɬkʷ, 2021 • Some of the FTUs are suitable for prescribed fire and cultural fire opportunities. See Appendix D: FTU Summary Table for areas that were identified. The CWK should work with Ntityix and Westbank First Nation to refine this list and to identify other areas. • Transmission powerline management should be a part of this plan. Much of the area of this right of way bisects FTUs or private property. Rights of way that bisect the FTUs	Action Item No 23

should be brushed and cleared of shrubs and conifers. Rights of way that overlap private property are the responsibility of the power service provider. The CWK should engage with the power provider to ensure these areas remain fuel-free.	
Enhance Park's Fuel Modification Program to improve effectiveness and complete more FireSmart works on areas identified on the Fuels Management Table and complete the work to required specifications.	
• The CWK manages more than 139 green spaces, parks, trails, and boat launches. Currently, several park areas have been managed through the Park's Fuel Modification Program. However, the program currently does not include thinning and is limited to pruning and surface fuel cleanup. Skilled labour is required to complete thinning. WorkSafe BC guidelines require training for falling trees greater than 15 cm in diameter. A review of the current program should be completed to assess if the program is meeting wildfire risk reduction objectives. • FireSmart BC has guidelines for completing green space assessments and funding is available for this through UBCM-CRI. Many of the CWK parks and green spaces may be eligible for this program. (Note parks that require removal of trees >2.0 m will not be eligible for this program and will likely require a prescription). • Work completed under this program should be completed to meet the standards of the UBCM-CRI Green Space program and/or blanket treatment specifications.	Action Item No 24
Develop prescriptions and implement fuel treatments as recommended in the 2025 CWRP, in ranked order where funding is available.	
• Fuel treatment works identified in the CWRP are anticipated to require more than five years to complete. • To complete this work, prescriptions (the plan that guides the work) are developed, in coordination with First Nations engagement, and consultation with tenure holders. Following the prescriptions phase, the fuel mitigation work is implemented; this includes pruning, thinning, and surface fuel management and is completed by skilled contractors. • Because there are several small parks identified as requiring fuel mitigation work, it is recommended that blanket prescription specifications be developed by fuel type. These specifications would guide the thinning, surface fuel removal, and pruning for several of the smaller park areas and would reduce costs to develop prescriptions. These specifications could be used for smaller parks and smaller fuel treatment areas (we recommend those parks that are <5.0 ha in size). Note the UBCM-CRI funded Green Spaces Program does not cover tree removal of trees >2.0 m in height. A prescription is required for any overstory thinning and understory thinning. • Prescriptions for high-priority FTUs should be completed first. 44 high-priority FTUs were identified, a total of 667 ha to be treated in the next five years. Prescriptions should be prepared one to two years in advance of anticipated fuel treatment implementation. To complete all identified high-priority FTUs will require completing 100-150 ha of mitigation work per year. • Prescriptions for moderate-priority FTUs should be completed after most of the implementation work in the high-priority FTUs has been completed. Prescriptions that are older than five years should be updated. It is anticipated that moderate-priority fuel treatment work (prescriptions and implementation) will take 5 to 10 years, and additional	Action Item No 25

areas may be added during the next CWRP update. Currently, 28 FTUs were identified as moderate-priority, a total of 328 ha.

- A landscape level fuel break ~200 ha was identified (TU ID 36 Landscape Fuel Break West). This FTU connects several previously fuel-treated areas and creates a loop around the City, providing protection from an approaching wildfire from the south.
- Implement prescribed burning and cultural burning on select FTUs and AMUs (including AMU-Gorman, AMU-Glenrosa South, and Maintenance (251). The CWK or consulting RPF should work with Ntityix and Westbank First Nation to refine this list.
- It is recommended to hire a qualified contractor (RPF, or Wildfire Mitigation Specialist to project manage and oversee the FTU projects. The scope of work could include applying for funding, developing prescriptions, overseeing and supervising the treatments, completing the treatments or hiring contractor(s) to complete treatments, and managing funding reporting and requirements.
- Prescriptions should include a maintenance plan/schedule. Fuel treatment may be required within 10-20 years depending on site characteristics.

Develop a plan for watershed protection and implement fuel management in and around the reservoirs.

- Fuel management should be extended beyond the WUI and include watershed protection. At this time no fuel treatments have been planned or proposed for this area. The next step would be to develop a Watershed Protection Plan and identify areas for fuel treatment. This will require coordination with the Ministry of Forests and tenure holders.

Action Item No 26

Assess and Monitor Program for established AMUs and Parks.

- Create a maintenance schedule and system to monitor and evaluate the Assess Monitor Units (AMUs) and wildfire-affected areas.
- AMUs were provided for continued program tracking and future treatment consideration. Most AMUs include previously treated areas, however, two units (AMU - Glenrosa South and AMU - Gorman) encompass areas that have not been treated and were included as potential prescribed burn areas for consideration in the next three to five years.
- AMUs for previously treated areas should be re-evaluated in five years. This maintenance should include prescribed and cultural burning.
- The McDougall Creek Wildfire had varying burn severity. Some areas within the burn have been identified for treatment. Over time, as standing trees fall and regeneration occurs, areas with low risk will become a greater fire threat. In five years the burn areas that are not treated or those that were excluded from this plan should be re-evaluated.

Action Item No 27

5. CWRP Action Plan

The CWRP Action Plan includes 28 items to be completed within the next five to 10 years. These action items were developed from the recommendations provided for each FireSmart Discipline, see Section 4 FireSmart Disciplines. For ease of use with the UBCM-CRI program funding, the action plan is organized by the FireSmart disciplines.

An additional category has also been developed, which is Innovation. Adapting to changing climate, wildfire weather, a growing community and technological improvements should be a consideration of a CWRP. CWK continues to be a leader in adopting new technologies and working with researchers and external organizations to develop and implement new technologies.

The plan table can be used for reporting and tracking program progress. Program tracking creates accountability, through the recording keeping of accomplishments and successes.

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Education								
1	Increase the capacity of the FireSmart Program and hire a second full-time Wildfire Mitigation Specialist.	CWK to fund additional full-time staff to support FireSmart Coordinator	High	1-2 years	Funding (taxation or grant)	Hire a second full-time Wildfire Mitigation Specialist (WMS)	Staffing is a limitation to program growth due to high demand for home assessments and program development.	
	a) Increase the number of HIZ, HPP, and Green Space Assessments, and increase programs (Neighborhood Recognition, Home Partners, etc.).	FireSmart Coordinator	Moderate	Annually	Current staffing is limiting growth due to high demand for home assessments and program development	Increase assessment capacity by 50%	Home Partners Assessments are completed in place of Home Ignition Zone Assessments. Homeowners receive more in-depth specific advice on FireSmarting their homes. Add online offerings that advertise the program with a Q and A, or hold an in-person event once in a newly recognized community.	
	b) Increase the number of FireSmart events throughout the year.	FireSmart Coordinator and WKFD	Low	Annually	FireSmart Coordinator and City Communications Team time, possible funding for additional display materials	2 events/year	As staffing capacity increases, increase to 3 events/year	
	c) Increase collaboration efforts between other FireSmart Coordinators within the Okanagan FireSmart Regional Group.	FireSmart Coordinator	Moderate	Annually	FireSmart Coordinator time	Meet 3-4 times per year	Align messaging in order to be more consistent across a broader area for homeowners. Plan, coordinate, and share resources for events.	
2	Increase public communications of FireSmart Programing and wildfire risk reduction initiatives.	FireSmart Coordinator and CWK Communications Team	High	Ongoing	FireSmart Coordinator and City Communications Team time, possible funding for additional display materials	4 public service announcements and 12 social media posts per year	Offer workshops to advertise the program including a Q and A session.	
	a) Develop a communications strategy that simplifies FireSmart programing and messaging to the public.	CWK Communications Team	High	6-12 months	FireSmart Coordinator and City Communications Team time, possible funding for additional display materials	FireSmart Coordinator admin/correspondence time answering inquiries reduced to 1-2 hours per week.	Consider a flow chart, standardized emails, and auto-responses to commonly asked questions. Increase collaboration with other local regional FireSmart Coordinators. Leverage existing communication campaigns (e.g., the seasonal recreation guide, etc.)	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Education								
	b) Continued resources towards updating the CWK's FireSmart webpage to reflect the current program offerings, latest FireSmart initiatives, etc. Media campaigns to include highlight program progress and success stories. E.g. adding recognized neighborhoods to website, profiling community champions, offering more information on community events, and making the CWRP publicly available.	FireSmart Coordinator and CWK Communications Team	Low	Ongoing	FireSmart Coordinator and City Communications Team time	More engagement from the community regarding FireSmart program offerings within CWK.	Objectives should include a streamlined process to reduce FireSmart inbox inquiries and help navigation to which services best fit the community/public needs.	
3	Improve upon Existing Home Partners Program (re-named FireSmart BC Wildfire Mitigation Program in 2025).	FireSmart Coordinator	Moderate	Spring through summer annually	Additional WMS staff member		Host Neighbourhood Recognition Workshops to enlisted neighborhoods.	
	a) Prioritize at-risk neighborhoods for FireSmart programing/waitlists. Target communities near high-priority FTUs and as fuel treatments are completed. Then move into the older neighbourhoods, one-way out, and heavily vegetated neighborhoods.	FireSmart Coordinator	Moderate	1-3 years	Additional WMS staff member	2-3 new neighbourhoods added to the program/year	Priority neighbourhoods to include Glenrosa and Smith Creek and other areas that back onto Glen Canyon.	
	b) Increase program offerings to more neighbourhoods. Target older neighbourhoods, one-way out, and those near FTUs. Currently only offered to recognized neighborhoods. Demand could increase if insurance requires this or offers significant discounts in the future.	FireSmart Coordinator	Low	3-10 years	Additional WMS staff member	2-3 new neighbourhoods added to the program/year	As program capacity and awareness of the program increase. If interest does not match program funding/capacity, a targeted approach may be required.	
	c) Continue to complete and increase capacity for individual property assessments (HIZ and HPP).	FireSmart Coordinator	Moderate	2-3 years	Additional WMS staff member	Increase annual assessments completed by 10%	Demand currently exceeds the current FireSmart Coordinator capacity. An additional WMS staff member needed to increase the number of assessments.	
4	Continue and improve the Plant Program. Re-engage existing growers in the community. Target non-participating nurseries/retailers with education to secure their participation.	FireSmart Coordinator	Low	Repeat every 5 years	Plant program promotional materials available from FireSmart	Nurseries and garden centres within CWK promote FireSmart plants and landscape practices	Re-engage with existing growers in the community and target non-participating nurseries with education. Consider hosting staff training program to share principles of the FireSmart Landscape Guide and the science behind fire resistant plants. Program should include retailers within Westbank First Nation.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Education								
5	Implement a FireSmart education curriculum with SD23.	BCWS/WKFR	Moderate	1-2 years to develop the program, repeated annually in spring	FireSmart educational materials, coordination with SD23	Presentations to students completed annually	WKFR staff capacity currently cannot accommodate this program. Part of the program initiation would be allocating WKFR resources or hiring a second Wildfire Mitigation Specialist. Eight elementary schools, two middle schools, one high school and a second high school opening within five years.	
6	Evaluate the effectiveness of continuing to offer FireSmart Rebate Program and explore additional funding opportunities.	FireSmart Coordinator and Consultant	Moderate	2-3 years	Time for FireSmart Coordinator and Fire Chief to analyze past program successes and failures, time to research other funding sources	Completed evaluation and decision to continue or cancel the program	Challenging to run this program and the funding available does not meet community needs in larger municipalities with many single-family homes. The funding may be best utilized elsewhere.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Legislation and Planning								
7	Continue to integrate FireSmart into other CWK Departments (Parks, Public Works, Engineering, Planning, etc.) and City plans.	WKFR and CWK staff	Low	1-5 years	Communications with CWK	FireSmart Program is consulted during any new plan development	Updates to applicable city plans should include current FireSmart terminology and best practices. Plans for consideration include, but are not limited to: Recreational Trails Master Plan, 2024; Parks Master Plan 2024; and Communications and Engagement Plan, 2024.	
8	Develop a multi-pronged approach to tackle legacy landscaping, including enforcement programs, and review of existing and potential new bylaws.	CWK Staff, consultant, in consultation with WKFR, and FireSmart Coordinator	Moderate	2-5 years		Action item completed	Conduct a needs assessment, review other municipalities' approaches, condcut a literature review, and develop the plan.	
	a) Review existing bylaws and investigate changes.	CWK Staff, Legislative Services, Bylaw Services	Moderate	2-3 years	Staff to review existing bylaws and review other municipalities' strategies.	Action item completed	This CWRP did not provide a comprehensive review of municipal bylaws. It is recommended current bylaws with the potential to impact or enhance wildfire risk reduction within the community be assessed and specific recommendations be developed. Potential bylaws to review include, but are not limited to: Parks and Public Spaces Bylaw No. 0184, and Zoning Bylaw No. 0320.	
	b) Review smoke and burning bylaws and investigate the potential to allow for less restrictions for fuel reduction or hazard abatement projects.	RPF consultant and WKFR and RDCO	Moderate	2-3 years	FireSmart Committee and Planning Department time to review other municipal bylaws, e.g., City of Kelowna	Action item completed	Under the RDCO Smoke Control Bylaw, nuisance smoke from open burning is not allowed in the CWK. Consider allowing burning for the purpose of fuel reduction or hazard abatement.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Legislation and Planning								
	c) Investigate the feasibility of a restricted plant list bylaw.	CWK staff, Legislative Services, Bylaw Services, and contractor/consultant	Moderate	3-5 years	FireSmart Committee and Planning Department time to review other municipal bylaws, e.g., City of Kelowna	Action item completed	To include prohibiting the planting of cedars. Enforcement would need to be a key consideration.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Development Considerations								
9	Review and revise Wildfire Interface Development Permit requirements and process.	RPF contractor and Planning and Development Services Staff	Moderate	2-3 years	FireSmart Committee and Planning Department time, retain a consultant to assist with the revisions. Amending the OCP, zoning and development permit documents are eligible for UBCM-CRI funding	Action item completed	Should align with the FireSmart BC Wildfire Development Permit Areas Guidance Document.	
10	Review the existing covenant documents and process.	RPF contractor, lawyer, and Planning and Development Services Department staff	Moderate	2-3 years	FireSmart Committee and Planning Department time	Action item completed	Enforcement and effectiveness need to be a key consideration. Review any templates and guidance.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Interagency Cooperation								
11	WKFR/CWK should continue to campaign for increased funding and streamlined processes/increased ease of funding applications, including but not limited to UBCM-CRI.	Mayor and Council/Fire Chief	High	Ongoing	Staff time for Advocacy and ongoing support from Mayor and Council	CRI administrative process becomes more streamlined	The Premier's Expert Task Force on Emergencies 2023 Report recommended improving accessibility, streamlining administrative requirements, and providing more year-over-year certainty for communities applying for FireSmart funding. Additionally, the report recommends the government continue to streamline administrative processes, remove policy obstacles and build capacity to expedite wildfire risk reduction projects, including prescribed burning, increased utilization, and other risk reduction and resilience practices.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Interagency Cooperation								
12	WKFR/CWK should continue to advocate for full cost recovery for deployment of staff.	Mayor and Council/Fire Chief	High	Ongoing	CWK capital budget and time for WKFR to advocate	Full cost recovery for staff deployments	The Premier's Expert Task Force on Emergencies 2023 Report recommended continuing to improve the Inter-Agency Agreement (IAA) between the BC Wildfire Service and the Fire Chiefs' Association of BC, based on learnings identified through joint pre-season preparedness and post-season debrief processes.	
13	Engage with RDCO and Westbank First Nation to discuss plans to treat high-priority areas within the city limits that fall under RDCO's and or Westbank First Nation's CWRP.	Fire Chief, FireSmart Coordinator	High	1-2 years	CWK capital budget and time for WKFR staff	RDCO and Westbank First Nation complete actions on land parcels and fuel management is implemented	For example, Glen Canyon FTUs of RDCO's CWRP should be prioritized for further treatments.	
14	Engage with other landholders within the AOI to reduce wildfire risk on their properties e.g. Province of BC (DOS WRR), Westbank First Nation FortisBC, BC Hydro, SD23, etc.	Fire Chief, FireSmart Coordinator	High	1-2 years	CWK capital budget and time for WKFR staff	R/W's treated, FireSmarting of SD23 buildings and grounds, WRR FTUs completed on crown lands	Other landowners and managers within the municipal boundary are responsible for operationalizing FireSmart disciplines on their respective lands. They have an obligation to CWK to complete these activities and WKFR can encourage these FireSmart activities.	
15	Establish a working group with Ministry of Forests District of Okanagan Shuswap Wildfire Risk Reduction Program, Westbank First Nation, and Ntityix Resources to strategically leverage funding for equipment, training, and vegetation management.	FireSmart Coordinator	High	1-2 years	CWK capital budget and time for WKFR staff	The landscape-level fuel breaks west and south of the community are planned and implemented	Work from Ntityix and Westbank First Nation combined with harvest operations on the Community Forest and existing fuel breaks (old burns) will form the foundation for the Landscape Level Fuel Break. Discussions with Ntityix on silviculture practices and stocking need to occur for the efficacy and longevity of fuel treatments within their tenured areas. Consideration to ecosystem restoration, Westbank First Nation Forest Stewardship Plan Amendment Schedule, 2023, Westbank First Nation Forestry Seven Generation Plan, A syilx strategy to protect and restore siwɬkʷ 2021, and other overlapping plans should also be incorporated.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
	Cross-Training							
16	Establish a controlled fire and cultural burning program.	WKFR	Moderate	1-5 years			Note, CWK staff currently does not have capacity to undertake this program. Additional staff resources/time would be required.	
	a) Work with Ntityix Resources and Westbank First Nation on the future of prescribed fire and cultural burning projects around the community.	WKFR	Moderate	2-5 years	Resource sharing partnership with Westbank First Nation	Cultural controlled fire is used for FTU maintenance treatments	Continue to attend annual prescribed fires. Develop a plan to support and conduct of cultural prescribed fire and to support local knowledge keepers.	
	b) Controlled fire and cultural training with Third Party Education for WKFR and Westbank First Nation staff.	WKFR	Moderate	2-5 years	Funding to retain the service of a third party service provider	WKFR staff receive controlled fire training	Third party training similar to what is being done in Kimberley's and Cranbrook's Fire Rescue Departments.	
	c) Have an on-staff Burn Boss and build capacity to draft and implement the burn plans.	WKFR Assistant Chiefs and qualified third-arty educator	High	1-5 years	Training budget for WKFR	Trained Burn Boss on staff at WKFR	This training is mandated by the National Wildfire Coordination Group (NWCG) and is available through a number of provincial and (in the U.S.), state, and federal agencies. Suppression Crews would also require task-specific training to support the burn, which is available through the BC Wildfire Service (i.e. Basic Fire Behavior and Engine Boss).	
17	Continue Wildfire specific cross-training with city partners (e.g., RCMP, BCEHS, etc.) and identify new training opportunities, including training of key city staff. Cross training exercises could include, but are not limited to:	WKFR	High	Annually	Needs assessment and review of existing training programs	2-3 training exercises completed per year	Needs assessment and review of existing training programs.	
	a) Mock response scenarios in the watershed, around critical infrastructure, variable interface conditions and fire size, etc.	WKFR and Water Utility Operators and Managers					Water utility and select park staff may be first onsite to a wildfire or could be actively working during a wildfire event to manage the water system and strategically close parks.	
	b) Water utility or park staff to receive S-100 training.	WKFR and Water Utility Operators and Managers						
	c) Fire department training on water system demand/flows and how hydrants work.	WKFR and Water Utility Operators						
	d) Parks staff to learn FireSmart, green space assessments, wildfire threat assessments.	FireSmart Coordinator and Parks Department staff					Increase Parks Deparmtent staff's capacity to monitor conditions in parks and re-prioritize areas for treatment as conditions change. For example, forest health changes.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
				Emergency Planning				
18	Undertake further fire suppression access planning and access/egress for one-way out communities.	WKFR and Consultant	Moderate	1-10 years	Include in all larger FTU development costs	4x4 access in all larger FTUs	Jackpine evacuation route should continue to be assessed and maintained as necessary to be a suitable egress for evacuees. Larger FTUs need access for BCWS crews, access restrictions and gates will be required to limit public access.	
19	Tactical fireshed planning outside of the municipal boundaries (values other than human health and safety, e.g., drinking water, ecosystem restoration).	WKFR / Consultant	Moderate	2-5 years	CLWRR or FESBC funding	Completion of tactical suppression plan	Incorporate fire behavior modeling of fire path patterns.	
20	Develop fire department "Major Incident Plan" specific to Urban Interface Wildfires.	WKFR / Consultant	High	1-5 years	Capital and time from City for Fire Hall staff	Completion of plan	This internal plan would guide fire department operations during a major wildfire incident including ongoing (unrelated) operations and management, communications with on duty crews, types of calls that are stopped and how to manage limited resources, staging and staffing oversight, logistical supports, scheduling and payroll, staff wellness and wellbeing, evacuation and family support, shift change procedures and protocols, information for out of town crews, etc.	
21	Undertake additional equipment acquisition and purchasing for WKFR.	WKFR	High	1-10 years	Funding or increased budget allocation	Equipment purchased		
	a) Marine Water Delivery Platform/Boat.	WKFR	Moderate	5-10 years	Funding or increased budget allocation	Equipment purchased	Purchase and equip a boat with 500 GPM Darley pump skid, monitor, hose connections and a large diameter shore connection.	
	b) Enhance PPE for wildland fire suppression.	WKFR	High	1-2 years	Funding or increased budget allocation	Equipment purchased	To include NFPA-1977 compliant wildland firefighting boot, CAL Fire-spec Brush coat and pants, and elastomeric respirators.	
	c) Innovative equipment solutions, beyond Structure Protection Units.	WKFR	Moderate	1-3 years	Funding or increased budget allocation	Equipment purchased		

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Vegetation Management								
22	Undertake CI maintenance/upgrades and complete additional assessments.							
	a) Conduct CI assessments on outstanding infrastructure (e.g., water utility infrastructure, and schools).	FireSmart Coordinator and WMS	Moderate	2-5 years	CRI funding; GIS	Utilize list from CWRP appendix	GIS to maintain up to date list and incorporate which infrastructure has been assessed.	
	b) Maintenance and improvements to CI	CWK staff and contractors	High	1-5 years	CRI funding	Utilize table of assessment scores from CWRP	Prioritize water utility infrastructure, schools, gas, and government buildings with "High" vulnerability scores.	
23	Develop five-year plan to complete proposed fuel treatments. The plan should include:	FireSmart Coordinator and Consultant	High	6-12 months	CRI funding		FTUs treated based on priority and other community factors.	
	a) Develop/Increase budget	FireSmart Coordinator and CWK staff	High	6-12 months	Funding (taxation or grant)	Funding allocated for all High and Moderate FTUs	Fuel treatment costs locally range from $8,000-10,000/ha to implement and prescriptions range from $15,000-$30,000/plan.	
	b) Coordination with Ntityix Community Forest and Westbank First Nation	FireSmart Coordinator and Consultant	High	Annually	Time for FireSmart Coordinator	Project schedule completed in partnership with Ntityix and Westbank First Nation	Work with Ntityix to develop a plan to complete fuel treatments within the Community Forest and identify areas for prescribed/cultural burning. See Section 2.4 First Nations and Cultural Values of CWRP further details on considerations for fuel management.	
	c) Coordination with RDCO	FireSmart Coordinator and Consultant	High	6 months	Funding (taxation or grant)	Attend meeting	RDCO parks within CWK's municipal boundary, such as Glen Cayon, should be discussed to determine if RDCO's plan for fuel treatment meets the needs of CWK.	
	d) Schedule to complete all proposed fuel treatments and maintain transmission powerline rights of way.	FireSmart Coordinator and Consultant	High	6-12 months	Funding (taxation or grant), GIS database management	Completed plan schedule	Consider both FTU priority ranking, other community values, logical grouping of projects, and funding sources. Keep track of fuel treatment progress using GIS.	
24	Enhance Park's Fuel Modification Program to improve effectiveness and complete more FireSmart works on areas identified in the Fuels Management Table and complete the work to the required specifications.	FireSmart Coordinator and Parks Manager	High	1-5 years	Funding (the summer student grant program, and/or CRI funding)		Some of the work may be eligible for funding through UBCM-CRI Green Spaces Program (note parks that require removal of trees >2.0 m will not be eligible for this program and will likely require a prescription). Review the FTU summary table to see which parks require thinning.	
	a) Review the current standard for fuels management for parks and green spaces.	FireSmart Coordinator	High	1 year	CRI funding	FireSmart BC Green Spaces Resources and current park management policies		

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
Vegetation Management								
	b) Complete Green Space Assessments for parks that were identified as priority FTUs.	FireSmart Coordinator and Parks Staff	High	1-5 years	CRI funding	Complete assessments for all parks with forested fuel types	Focus on parks that have had fuel treatment completed. FireSmart Coordinator can train Parks Department staff to complete these assessments.	
	c) Work to be completed to meet standards of the blanket fuel treatment specifications for green spaces.	Parks Manager	High	1-5 years	Requires skilled labour	Complete work within parks identified in the Fuel Treatment Summary Table	To be verified by FireSmart Coordinator (Green Spaces Projects) or project supervisor (projects requiring a fuel management prescription).	
	Develop prescriptions and implement fuel treatments and prescribed burning of high and moderate-priority FTUs.	FireSmart Coordinator, consultant, Ntityix Resources	High	1-10 years	GIS staff, consultant, RPF		Continue to update and maintain the fuel treatment layer in CWK GIS. Ensure this data is accessible for all operational staff. Prescriptions should incorporate Ntityix Seven Generation Plan and Forest Stewardship Plan. Consider reduced stocking standards in approved and future cutting permits. Cultural Heritage Resource Assessments (CHRA) should also be a consideration.	
	a) Develop blanket treatment specifications (harvesting, sph, fuel loading targets, and pruning heights) for municipal and Crown land.	FireSmart Coordinator and Consultant	High	1-2 years	Contract RPF	Blanket specifications by fuel type and treatment regime	To be used for smaller/less complex projects and may be implemented by Parks Department staff, or contractors for city funded treatments in smaller FTUs and green spaces.	
25	b) Prescriptions and implementation of fuel modifications for high-priority FTUs.	Consultant	High	1-5 years	Contract RPF	100-150 ha treated per year	~ 600 ha of high-priority FTUs identified. Areas for prescribed burn to be identified during the prescription development phase.	
	c) Prescriptions and implementation fuel modification of moderate-priority FTUs.	Consultant	Moderate	5-10 years	Contract RPF	50-100 ha treated per year, May include maintenance and/or controlled fire for surface fuel management	~ 250 ha of moderate-priority FTUs identified.	
	d) Landscape level break around the south-west end of the community.	Consultant	High	1-5 years	Contract RPF	~200 ha treated	Incorporates much of Ntityix Community Forest and previously harvested blocks. Harvested areas that are included need to be assessed for potential prescribed/cultural fire.	
	e) Implement prescribed fire in select FTUs and AMUs.	Consultant	High	3-5 years	Burn boss and crew	3 prescribed burning projects completed	AMU - Gorman, AMU – Glenrosa, Maintenance (251). Work with Ntityix and Westbank First Nation to refine/adjust list.	
26	Develop a plan for watershed protection and implement fuel management in and around the reservoirs.	FireSmart Coordinator and Consultant	High	2-5 years	FESBC funding	Tactical plan completed for the upland watershed and FTUs identified	Protection of watershed values.	
27	Assess and Monitor Program for established AMUs and parks:	Consultant	Moderate	1-10 years			Create a maintenance schedule and reminder system. Track progress. Refer to CWRP maps and spatial data.	

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
	Vegetation Management							
	a) McDougall Creek Wildfire FTUs.	Consultant	Moderate	5-10 years	Cost recovery	Salvage logging	Give consideration to fibre recovery in these FTUs to reduce future wildfire hazard and restore the ecosystems.	
	b) Previously treated areas that have been classified as AMUs.	CWK Parks Department staff	Low	5-10 years	Cost of monitoring	Permanent plots and remeasurement	Monitor the response to the McDougall Creek Wildfire on the previous CWRPs FTUs.	
	c) Monitor forest health, including the IDB outbreaks in parks, drought stress, and fire impacted areas. Conduct effectiveness monitoring of fuel management treatment activities.	Consultant and CWK Parks staff	Moderate	Bi-annually	Funding (taxation or grant), CRI funding	Permanent sample plot creation and monitoring program		

No.	Action	Lead	Priority	Time Frame	Resources Required	Metric for Success	Notes	Status/Completed/Date
	Emergency Planning							
28	Work with external organizations, universities, regional, provincial and federal governments, and industry to develop new and innovative response and prevention technologies, including: a) Integrate data visualizations with regional EOC dashboard, such as Windy.com data, MODIS FIRMs data, BCWS data (fire perimeters, fire points, etc.). b) Research viability of installation of interface sensors c) Research the viability of the use of predictive wildland fire modeling and artificial intelligence to assist in prevention activities.	WKFR and FireSmart Coordinator	Moderate	2-5 years	TBD	TBD	Could include: UBC, sensors and cameras; the federal government, wildfire satellite (dedicated constellation of satellites); private companies such as Canada Wildfire and FPInnovations.	

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Appendix A: Glossary of Terms

Area of Interest: The AOI for a CWRP includes the area that lies within the municipal boundary. The AOI reflects how the community is organized and how it approaches other similar planning projects within its jurisdictional boundaries. When communities are located close together and are geographically aligned, a "regional" approach may be most effective.

Cultural Sites and Green Spaces: community-scale FireSmart vegetation management for areas that do not require removal of trees >2 m and/or do not require a fuel management prescription.

Critical Infrastructure (CI): are assets owned by the Provincial government, local government, public institution (such as health authority or school district), First Nation or Treaty First Nation that are essential to the health, safety, security or economic wellbeing of the community and the effective functioning of government, or assets identified in a Local Authority Emergency Plan Hazard, Risk & Vulnerability, and Critical Infrastructure assessment.

Fireshed: firesheds are a way to delineate where fires ignite and are likely to, or not to, spread to communities and expose buildings.

FireSmart Landscaping: is the removal, reduction, or conversion of flammable plants (such as landscaping for residential properties, parks, open spaces, and critical infrastructure) in order to create more fire-resistant areas in FireSmart Immediate, Intermediate, and Extended Zones (refer to the FireSmart Guide to Landscaping).

Fuel Management Treatment: Fuel management treatment is the manipulation or reduction of living or dead forest and grassland fuels to reduce the rate of spread and fire intensity, and enhance the likelihood of successful suppression, generally beyond 30 m of values at risk (private residence or CI).

Values at Risk: are the human or natural resources that may be impacted by wildfire. This includes human life, property, critical infrastructure, high environmental and cultural values, and resource values.

Wildfire Risk:

- Likelihood of a fire occurring
- Associated fire behavior
- Impacts of the fire (consequence)

Wildfire Threat: The ability of a wildfire to ignite, spread, and consume organic material (trees, shrubs, and other organic materials) in the forest. The major components used to define wildfire threat are fuel, weather, and topography.

Wildland Urban Interface (WUI): The WUI is defined in the FireSmart manual as any area where combustible forest fuel is found adjacent to homes, farm structures, or other outbuildings. This may occur at the interface, where development and forest fuel (vegetation) meet at a well-defined boundary, or in the intermix, where development and forest fuel intermingle with no clearly defined boundary.

Appendix B: Relationship to Other Plans

Plan Type	Description	Relationship to CWRP
Higher Level Plans		
Okanagan-Shuswap LRMP, 2001	This plan provides direction for the management of Crown land and resources within the Okanagan-Shuswap area spanning from the US border south of Osoyoos through to Salmon Arm in the north.	This plan covers the AOI for the 2024 West Kelowna CWRP and describes General Management Zones and Specific Resource Management Zones which will be relevant during development of fuel management prescriptions at the site level [38].
The Premier's Expert Task Force on Emergencies, 2024	This report provides recommendations to government on wildfire and emergency management which can be implemented before and during the 2024 wildfire season.	Some of the recommendations are applicable at the local government level. This document was referred to during the development of this CWRP when identifying actionable items for the 5-year plan [37].
Forest and Fire Management in BC: Toward Landscape Resilience, 2023	This report summarizes the current situation of forest and fire management across BC and the steps and recommendations for future management.	This document should be referred to when conducting all FireSmart and fuel management activities to ensure that the overarching goal of promoting fire resilient ecosystems is being considered at the site level [39].
RDCO		
RDCO Forest Health Strategy – Regional Parks, 2007	This report was developed to provide a strategy to manage tree mortality with RDCO parks due to forest health issues. This report came about in response to a high level of tree mortality within the RDCO parks system.	This report outlines fuel management objectives and future maintenance for RDCO parks, some of which are located within this CWRPs AOI [40].
RDCO CWPP, 2020	Community Wildfire Protection Plan for the RDCO.	The 2020 RDCO CWPP wasferred to during the development of this CWRP. Adjacent jurisdiction CWPP/CWRPs help to identify areas where collaboration

Plan Type	Description	Relationship to CWRP
		regarding strategic wildfire planning might be pursued [41].
RDCO Emergency Plan, 2020	This plan outlines the emergency response procedure for the RDCO inclusive of the CWK.	This plan should be referred to in order to identify critical infrastructure relevant to the preparedness, mitigation, response and recovery of an emergency [42].
Regional Housing Needs Assessments, 2019	This assessment report provides information on community demographic trends, indicators and housing situation, broken down by local jurisdiction within the RDCO.	This report provides demographic statistical information for the CWK [43].
RDCO Goats Peak Regional Park Management Plan, 2016	Management plan for the RDCO Goats Peak Regional Park.	This plan proposes developing a long-term forest management plan for the park which is adjacent to CWK land. There is opportunity here for collaborative efforts [44].
RDCO Gellatly Nut Farm Regional Park Tree Inventory and Heritage Orchard Management Plan, 2012	This plan incorporates heritage and cultural landscape values relevant to the Gellatly Nut Farm Regional Park.	This plan highlights the historical and cultural importance of Gellatly Nut Farm [45].
Regional Parks and Greenways plan for the Central Okanagan, 2008-2020	The plan outlines the need for the establishment of a “Regional Parks System” in order to provide enough open green space and beach access within the RDCO.	This plan strives to develop a “Greenway Network” in order to provide a diverse range of natural environments. Some of these overlap with the AOI for the 2024 CWRP for the CWK and so could be an area of collaboration with the RDCO when incorporating wildfire mitigation measures into the area [46].
City of West Kelowna		
City of West Kelowna Official Community Plan, 2020 - 2040	This plan provides a long-term vision which creates and implements plans and policies to help guide development and land	This plan is reviewed every 5 years and should coincide with an update to the CWK’s CWRP. This OCP informs where priority should be placed on fuels management based on community growth and development.

Plan Type	Description	Relationship to CWRP
	management specifically within the CWK.	This OCP also outlines the Wildfire Interface Permit Area (DPA) for the CWK and all applicable design principles and guidelines [47].
Housing Needs Assessment City of West Kelowna, 2022	This assessment report builds on the RDCO's Regional Housing Needs Assessments from 2019 and dives in deeper on topics such as demographic, economic, housing supply, community engagement and future housing needs.	Demographic statistics can be pulled from this report as well as the projected growth for the CWK [48].
City of West Kelowna Communications and Engagement Plan, 2021	This plan outlines CWK's strategies for reaching and communicating with community members.	This plan highlights how the CWK community members prefer to be communicated with. This is an important resource to refer to when implementing CWRP development actionable items and communicating that to the public [49].
City of West Kelowna CWPP, 2018	The 2018 CWPP for the CWK.	Utilized to identify outstanding actionable items to be carried forward to the 2024 CWRP for the CWK [50].
City of West Kelowna Parks Master Plan 2024	A ten-year plan to provide direction and guidance for managing parks, resources, infrastructure and investment.	This report provides information on the CWK's community features, character and population demographics. Many of the parks listed overlap with proposed fuel treatment units. Additionally, a breakdown of park type, improvements made, and public input on future development is available. This plan does not provide specific wildfire mitigation guidance or recommendations in parks [51].
City of West Kelowna – Recreational Trails Master Plan, 2024	This plan outlines the recreational trails master plan to improve connectivity within parks, recreation areas, neighbourhoods, schools, shopping areas, and open areas within West Kelowna.	This plan should be referred to when implementing wildfire mitigation work to ensure recreational trail connectivity is not being compromised. This plan has several measures for wildfire risk reduction [52].

Plan Type	Description	Relationship to CWRP
Westbank First Nation		
Ntityix Resources Ltd. Wildfire Risk Management Plan, 2020	A wildfire risk management plan for Westbank First Nations to identify, analyse, and evaluate wildfire risk across their area-based tenure, including a Community Forest Agreement (CFA) and First Nation Woodland License (FNWL), and the surrounding area.	The plan provides management strategy recommendations, as well as wildfire management zones (WMZ) for overlapping areas in West Kelowna [53].
Westbank First Nation Forestry Seven Generation Plan	Tactical plan that provides forest management guidance, including information on cultural burning and wildfire management.	Will be used to guide fuel management prescription specifications within areas of the Community Forest and adjacent crown land [54].
A syilx strategy to protect and restore siwɬkʷ 2021	This report outlines syilx Okanagan siwɬkʷ (water)governance and describes how the syilx Okanagan Nation will steward and care for siwɬkʷ.	This strategy should be referred to when any implementation work is to be completed within syilx Okanagan Territory which could affect siwɬkʷ (water) [55].
Westbank First Nation Forest Stewardship Plan Amendment Schedule, 2023	This Forest Stewardship Plan provides strategies for conserving and protecting timber and non-timber resources through government objectives for all tenure which falls within the Westbank First Nation Community Forest and Replaceable Forest Licence A91134. This plan is a requirement of the Forest and Range Practices Act.	The Community Forest Westbank Block of which this FSP is applicable is adjacent to the AOI for West Kelowna CWRP [56].
Westbank First Nation Comprehensive Community Plan, 2020	A plan for Westbank First Nation to guide future planning	The CCP highlights key social, cultural, economic, environmental and administrative aspects of Westbank

Plan Type	Description	Relationship to CWRP
	regarding the community. It identifies short- and long-term goals which align with Westbank First Nation's vision, principles and objectives.	First Nation. These identify where the community's priorities are, and how the new CWRP can align with these [57].
Westbank First Nation Parks and Trails Master Plan 2015	The master plan is intended to provide short- and long-term direction for the development and maintenance of parks, open spaces and recreational trails on Westbank First Nation IR #9 and IR #10	The plan provides an inventory, current and forecasted needs, recommendations, action items and an implementation strategy for a twenty-year period (2014-2034) [58]. This plan mentions that parks can help mitigate potential environmental disasters, such as wildfire; however, it does not provide objectives for fuel management or wildfire risk reduction.
Westbank First Nation Land Use Plan - Law No. 2007-01	This Land Use Plan describes the different kinds of land use supported on Westbank First Nation, and design guidelines for future development for new housing, community facilities and other utilities and infrastructure.	The Land Use Plan is a higher-level plan for land use management. Sub-plans include the Local Area Plans. These include identifying hazards such as wildfire, and the strategies which must be taken to mitigate these [59].
Community Wildfire Protection Plan Westbank First Nation, 2020	A 2020 CWPP for Westbank First Nation.	This CWPP outlines actionable items for Westbank First Nations land. This provides opportunity for collaboration between the CWK and Westbank First Nation [60].
Memorandum of Understanding for the Protection and Conservation of Cultural Heritage Sites in Regional Parks, 2017	This memorandum outlines the significance of conserving syilx cultural heritage.	This plan applies to the planning and development of existing and proposed regional parks which fall within the Westbank First Nation Area of Responsibility[61].

Appendix C: Critical Infrastructure Assessment Summary

CRITICAL INFRASTRUCTURE SUMMARY				
Critical Infrastructure	**Location**	**Description**	**Recommendation**	**Assessment Status and Map ID**
BC Hydro Sub Station	3099 Shannon Lake Road	Electrical Generation/Sub-Station	Vegetation management should be conducted onsite. Infrastructure is vulnerable to fire.	Assessment Complete, 2024
City Hall	3731 Old Okanagan Hwy	Government Buildings	Establish a non-combustible zone around entire structure.	Assessment Complete, 2024
Fire Hall #30	2708 Olalla Road	Fire Station	Siding upgrades recommended.	Assessment Complete, 2024
Fire Hall #31	3651 Old Okanagan Hwy	Fire Station	Installation 3 mm screening, fill gaps and holes in siding. Window upgrades to double pain glass.	Assessment Complete, 2024
Fire Hall #32	2708 Olalla Road	Fire Station	Minor site maintenance. Combustible storage against building (garbage cans recommended to move away from building/non-combustible zone). Remove shrubs/vegetation within 1.5 m.	Assessment Complete, 2024
Fire Hall #33	1805 Westlake Road	Fire Station	Upgrades to station should improve Critical building score and should include establishing a non-combustible zone (vegetation/mown grass is growing right up against building). Zone 1 remove conifers and surface fuels within 10 m of structure. Building maintenance should include needle clean up from roof.	Assessment Complete, 2024
Fire Hall #34	3399 Gates Road	Fire Station	Minor site maintenance to manage SFL accumulations within 10 m of structure.	Assessment Complete, 2024
Fortis BC - Natural Gas Station	Gellatly Rd	Gas/Oil Pump/Booster Station	Debris noted within noncombustable zone.	Assessment Complete, 2024
Johnson Bentley Memorial Aquatic Centre	3737 Old Okanagan Hwy	Government Buildings	Replace woodchip landscaping in noncombustable zone. Conifers within 10 of structure are pruned, but result in a higher score. Install 3 mm mesh to openings and vents. Final construction should be completed to FireSmart guidelines to improve score.	Assessment Complete, 2024
Webber Road Community Centre	2829 Inverness Road	Government Buildings	Install 3 mm mesh to ventilation, fix/fill gaps and cracks in siding and replace door weather stripping. Establish a non-combustable zone around entire structure. Remove conifers within 10 of structure.	Assessment Complete, 2024
Mt. Boucherie Recreation Centre	2760 Cameron Road	Government Buildings		Assessment Complete, 2024
Powers Creek Intake and Water Treatment Plant		Water Utility: Water Intake, Treatment Plant	Remove combustables against building and install 3 mm mesh to ventilation.	Assessment Complete, 2024
RCMP	2390 Dobbin Road	Police, Fire or Ambulance Station	Continue regular site maintence. Currently low score and meets FireSmart guidelines.	Assessment Complete, 2024
Rose Valley Reservior+Dam+Intake	1491 Rosewood Drive	Water Utility: Reservoir	Fill gaps/install/replace weatherstripping around doors (including gaps around the I beam used for chlorine tonners). Install 3 mm mesh on all vents. Damage to vent hoods should be repaired.	Assessment Complete, 2024
Smith Creek Reservoir	2802 Smith Creek Road	Water Utility: Reservoir	Install 3 mm mesh to ventilation, mow vegetation, and remove conifers within 10 m.	Assessment Complete, 2024
Webber Elementary & Community Centre	2829 Inverness Road	Education: School, College, University	Roof needs debris (needles, fine fuels) cleared, debris accumulations noted in fuel free zone. Some vents lack correct size. Portable structures have gaps along bases that could trap embers.	Assessment Complete, 2024
West Kelowna Seniors Centre	3661 Old Okanagan Hwy	Government Buildings	Remove vines and vegetation growing on building and within 1.5 m. Install 3 mm mesh to vents. Establish non-combustable zone. Regular site maintence should include debris clean up.	Assessment Complete, 2024
Westbank Lions Club	2466 Main Street	Government Buildings	Remove conifer hedge against building. Fill gaps and cracks.	Assessment Complete, 2024
Westbank Museum	2376 Dobbin Road	Government Buildings	Remove junipers, mow vegetation within 10 m of structure. Estblish non-combustable zone on sides/back of building. Building upgrades could include fire-resistant siding/replace wood siding.	Assessment Complete, 2024
MD Medical Centre (Real Canadian Super Store)	3020 Louie Drive	Clinic or Laboratory	Low priority for assessment	Outstanding
Towne Centre Medical Clinic	2475 Dobbin Road	Clinic or Laboratory	Low priority for assessment	Outstanding
West Kelowna Urgent Primary Care Centre	2484 Main Street	Clinic or Laboratory	Prioritize for assessment and apply for UBCM CRI funding to complete.	Outstanding
Highroads Medical Clinic	2145 Louie Dr	Clinic or Laboratory	Low priority for assessment	Outstanding

CRITICAL INFRASTRUCTURE SUMMARY				
Critical Infrastructure	**Location**	**Description**	**Recommendation**	**Assessment Status and Map ID**
Radiology Clinic	3685 Brown Rd	Clinic or Laboratory	Low priority for assessment	Outstanding
Valley Medical Laboratories	2427 Main St	Clinic or Laboratory	Low priority for assessment	Outstanding
Westside Medical Associates	103-1135 Stevens Rd	Clinic or Laboratory	Low priority for assessment	Outstanding
Chief Tomat Elementary	3365 East Boundary Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Constable Neil Bruce Middle School	2010 Daimler Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
George Pringle Elementary	3770 Eliott Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Glenrosa Elementary	3430 Webber Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Glenrosa Middle School	3565 McIver Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Helen Gorman Elementary	3230 Salmon Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Hudson Road Elementary	1221 Hudson Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Mar Jok Elementary	2101 McDougall Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Mount Boucherie Secondary	2751 Cameron Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Our Lady of Lourdes	2547 Hebert Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Rose Valley Elementary	1680 Westlake Road	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
sənsísyustən House of Learning	1920 Quail Lane	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Shannon Lake Elementary	3044 Sandstone Drive	Education: School, College, University	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Elliott Road Utilities Office	3717 Elliott Road	Government Buildings	Prioritize for assessment in the next 5 years	Outstanding
Lakeview Heights Community Centre	860 Anders Road	Government Buildings	Low priority for assessment	Outstanding
Multi Sport Dome	2139 McDougall Rd	Government Buildings	Low priority for assessment	Outstanding
Westbank Cemetery	3200 Eliott Road	Government Buildings	Low priority for assessment	Outstanding
Westbank Sewer Treatment Plant	4261 Gellatly Road	Government Buildings	Prioritize for assessment in the next 5 years	Outstanding
Bartly Pit / Works Yard	2515 Bartly Rd	Operations Centre/Works Yard	Low priority for assessment	Outstanding
Bartley Road Utilities Office	2570 Bartley Road	Operations Centre/Works Yard	Prioritize for assessment in the next 5 years	Outstanding
BC Ambulance Service - Stn 339	2577 Lower Glenrosa Rd	Police, Fire or Ambulance Station	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Rose Valley Water Treatment Plant	1500 Rosewood Drive	Water Quality	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Powers Creek Water Treatment Plant	3184 Shelter Drive	Water Quality	Prioritize for assessment and apply for UBCM CRI funding to complete	Outstanding
Blackwood Booster Station	119.5525037°W 49.8960381°N	Pump/Lift Station		Outstanding
Bridle Hill Pump Station	2525 Wild Horse Drive	Pump/Lift Station		Outstanding
Casa Rio Pump Station	481 Casa Rio Dr	Pump/Lift Station		Outstanding
East Boundary Lift Station	2821 East Boundary Rd	Pump/Lift Station		Outstanding
Ensign Lift Station	2100 Old Okanagan Hwy	Pump/Lift Station		Outstanding
Glengary Lift Station 2	3676 Glengarry Rd	Pump/Lift Station		Outstanding
Glenrosa Pump Station	3171 Coventry Cres	Pump/Lift Station		Outstanding
Green Bay Lift Station	1361 Green Bay Rd	Pump/Lift Station		Outstanding
Hitchner Jennens Lift Station	4081 Hitchner Rd	Pump/Lift Station		Outstanding

CRITICAL INFRASTRUCTURE SUMMARY				
Critical Infrastructure	**Location**	**Description**	**Recommendation**	**Assessment Status and Map ID**
Inverness Lift Station 1	2864 Invarness Rd	Pump/Lift Station		Outstanding
Keloka Drive Prefab Lift Station (Sewer)	119.5523030°W 49.8847906°N	Pump/Lift Station		Outstanding
Lakeview Ph 1 Lift Station	119.5453674°W 49.8505605°N	Pump/Lift Station		Outstanding
Lakeview Ph 4 Lift Station Devon Crt		Pump/Lift Station		Outstanding
Lakeview Ph 4 Lift Station Somerset Crt		Pump/Lift Station		Outstanding
Lakeview Ph 5 Lift Station 1		Pump/Lift Station		Outstanding
Lakeview Ph 5 Lift Station 2		Pump/Lift Station		Outstanding
LAT1 Pump Station	3184 Shetler Drive	Pump/Lift Station		Outstanding
Lift Station	119.5580221°W 49.8740205°N	Pump/Lift Station		Outstanding
Lift Station	119.5475708°W 49.8479761°N	Pump/Lift Station		Outstanding
Lift Station	119.5815352°W 49.8335989°N	Pump/Lift Station		Outstanding
Lift Station	119.5819021°W 49.8333644°N	Pump/Lift Station		Outstanding
Lift Station	119.6165620°W 49.8514911°N	Pump/Lift Station		Outstanding
Lift Station	119.6192615°W 49.8484232°N	Pump/Lift Station		Outstanding
Lift Station (Sewer)		Pump/Lift Station		Outstanding
Newport Road Lift St		Pump/Lift Station		Outstanding
Pebble Beach Lift Station (possibly manhole intake)	end Whitworth Rd	Pump/Lift Station		Outstanding
Pineridge Place Lift Station	culdesac across from 2531 Pineridge Pl	Pump/Lift Station		Outstanding
Pritchard Drive Lift Station	1595 Pritchard Dr	Pump/Lift Station		Outstanding
Pritchard Drive Lift Station	1595 Pritchard Dr	Pump/Lift Station		Outstanding
Shannon Woods Pump Station	2490 Shannon Woods Dr	Pump/Lift Station		Outstanding
Sunnyside Lake Station		Pump/Lift Station		Outstanding
Sunnyside Lift Station		Pump/Lift Station		Outstanding
Westgate Brentwood Rd Lift Station		Pump/Lift Station		Outstanding
Westside Country Club Lift Station		Pump/Lift Station		Outstanding
Westside Industrial Park Lift Station 1		Pump/Lift Station		Outstanding
Westside Industrial Park Lift Station 2		Pump/Lift Station		Outstanding
Whitworth Road Lift Station	2505 Whitworth Rd	Pump/Lift Station		Outstanding
WK Estates		Pump/Lift Station		Outstanding
Pettman Rd Reservoir		Water Utility: Reservoir		Outstanding
Pinewoods Reservoir	1753 Lenz Rd	Water Utility: Reservoir		Outstanding
Pritchard Reservoir	1696 Boucherie Road	Water Utility: Reservoir		Outstanding
Sandberg Rd Reservoir		Water Utility: Reservoir		Outstanding
Shannon Lake Reservoir	2105 Shannon Way	Water Utility: Reservoir		Outstanding

CRITICAL INFRASTRUCTURE SUMMARY				
Critical Infrastructure	**Location**	**Description**	**Recommendation**	**Assessment Status and Map ID**
Shannon Way Reservoir	2240 Hihannah Dr	Water Utility: Reservoir		Outstanding
Shannon Woods Reservoir	2340 Shannon Heights Place	Water Utility: Reservoir		Outstanding
Sunnyside #1 Reservoir		Water Utility: Reservoir		Outstanding
Sunnyside #2 Reservoir		Water Utility: Reservoir		Outstanding
Tallus Ridge Reservoir	end Blue Sky Dr	Water Utility: Reservoir		Outstanding
WBID Water Treatment Plant		Water Utility: Treatment Plant (incl. chlorinator, etc.)		Outstanding
Pritchard Intake		Water Intake		Outstanding
Sunnyside Intake		Water Utility: Water Intake		Outstanding
WK Estates Intake		Water Utility: Water Intake		Outstanding
Big Horn Reservoir Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Dobbin Lake Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Esperon Lake Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Horseshoe Lake Centre Dyke Dam (Iskaht)		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Horseshoe Lake East Dyke Dam (Islaht)		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Horseshoe Lake West Dam (Islaht)		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Jackpine Lake Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Lambly Lake Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Lambly Lake Spillway Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Panther Lake Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Tadpole Lake North Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
Tadpole Lake South Dam		Water Utility: Dam	Regular damn maintence should achieve and maintain vegetation management objectives	Outstanding
End of Dunwater Diversion		Water Utility: Intake		Outstanding
Blackwood Reservoir and Booster Station		Water Utility: Reservoir		Outstanding
Bylaw #0060 - West Kelowna Estates Phase I		Water Utility: Reservoir		Outstanding
Glenrosa Reservoir	3235 Glenrosa Road	Water Utility: Reservoir		Outstanding
Menu Road Reservoir	1247 Menu Road	Water Utility: Reservoir		Outstanding
Dunwater Diversion		Water Utility: Water Intake		Outstanding
Dunwater Diversion Ditch Headwall		Water Utility: Water Intake		Outstanding
Dunwater Diversion Headwall		Water Utility: Water Intake		Outstanding

Appendix D: FTU Summary Table

FUEL TREATMENT SUMMARY

TU-ID	Name	Total Area (ha)	Ownership	Treatment Unit Type/Objective	Required Treatment Activities/Rationale/Comments	Local Risk Rating	Priority Rank
1	Sunview Dr Moonbeam	0.9	Municipal	Community/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuel / Rocky terrain, potential hazard tree removal. Thick overstory along private property in northwest, open rocky knoll through the middle. Fuel Type = C-7 OS = 400-600 sph Py6Fd4, US = <900 sph, Fd6Py5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	1
2	Rose Ridge Park (7)	24.4	Municipal	Community/WRR	UT, P, SFR, HTR / Hazardous surface fuels and ladder fuels / Patchy low - high severity of fire throughout. Low mortality from fire. Fuel Type = C-7, OS = 400-600 sph Py5Fd5, US = 400-600 sph, Py5Fd5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	2
3	Scott Cr Horizon Trail	5.3	Municipal	LFB/WRR	OT, UT, P, SFR / Hazardous surface and ladder fuels / Patchy spot fires (low - mod severity). Removal of dead L1 and thinning of some living overstory to create gaps in canopy. Terrain slope constraints present. Hand treat or machine treat off the trail where operable. Fuel Type = C-7, OS = 600-900 sph Fd6Py4, US = <900 sph Fd8Py2, CBH = <5 m, CC = 40-60%, Duff = 1-2 cm.	High	3
4	McDougall Creek	15.0	Community Forest	LFB/WRR	UT, HTR, P, SFR / Hazardous surface and ladder fuels / Patchy, low to moderate severity burn. Patchy overstory mortality. Sensitive rocky soils throughout with riparian in west. Slope constraints. Fuel Type = C-7, OS = 400-600 sph Fd5Py3At2, US = <900 sph Py10, CBH OS = <5m, CC = 30-60%, Duff = 1-2 cm, heavier needle load under Py.	High	4
5	Mt. Boucherie Park (13)	4.6	Municipal	Community/WRR	OT, HTR, UT, P, SFR / Hazardous surface and ladder fuels / Steep & rocky >50%. Fuel Type = C-7, OS = 400-600 sph Py6Fd4, US = <900 sph Py5Fd5, CBH OS = <5 m, CC = 20-40%, Duff = 2-5 cm.	High	5
6	Rose Meadow Park (54)	5.3	Municipal	Community/WRR	OT, UT, P, SFR / Hazardous surface and ladder fuels / Thin overstory to create caps in canopy. If size is reduced by 0.3 ha, it qualifies for greenspace IF no overstory removal and thinning only conifers <2 m height. Fuel Type = C-7, OS = 400-600 sph Py7Fd3, US = 400-600 sph, Py5Fd5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	6
7	Hudson West (47)	2.3	None	Community/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Slopes 40-60%. Brushing treatment recommended. Fuel Type = C-7, OS = 600-900 sph Fd10, US = 900-1500 sph Fd10, CBH OS = <5m, CC = 40-60%, Duff = 2-5 cm.	High	7
8	Hudson	3.1	Municipal	Community/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Slopes 40-60%. Brushing treatment recommended. Fuel Type = C-7, OS = 600-900 sph Fd10, US = 900-1500 sph Fd10, CBH OS = <5m, CC = 40-60%, Duff = 2-5 cm.	High	8
9	Sandstone Park	2.2	Crown Provincial	Green Space/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Thin conifers <2 m height. Fuel Type = C-7, OS = 600-900 sph Py6Fd4, US = 900-1500 sph, Py6Fd4, CBH = <5 m, CC = 40-60%, Duff = 1-2 cm.	High	9
10	West Ridge Park	1.9	Municipal None	Green Space/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Thin only only conifers <2 m height. Sliver of forested park between dense single family residential neighbourhood. Recommend increased pruning heights to allow for overstory retention. Fuel Type = C-7 OS = 400-600 sph Py6Fd4, US = <900 sph, Fd6Py5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	10
11	Moonbeam East (56)	1.7	Municipal	Community/WRR	HTR, UT, P, SFR / Hazardous ladder fuels / Hand treatment to thin denser patches of understory, some steeper slopes.Fuel Type = C-7, OS = <400 sph Py7Fd3, US = <900 sph Py7Fd3, CBH OS = <5 m, CC = <20%, Duff =1-2 cm.	High	11
12	Shannon Way Park (30)	2.7	Municipal	Community/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuels / hand treatment to manage surface and ladder fuels, variable terrain with steeper dry slopes and a moisture-receiving area with brush. Fuel Type = C-7, OS = 600-900 sph Py5Fd5, US = <900 sph, Fd6Py4, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	12
13a	Seclusion Bay Rd Egress	1.6	None	Green Space Egress/WRR	UT, P, SFR / Hazardous surface and ladder fuels / One way out neighbourhood egress, on steep rocky slopes, patchy distribution and continuity of generally short L1/L1 sub to L4 Py. Cut only conifers <2 m height. Fuel Type = C-7, OS = <400 sph Py5Fd5, US = <600 sph, Py5Fd5, CBH = <5 m, CC = <20%, Duff = 1-2 cm.	High	13a
13b	Seclusion Bay Rd Egress	0.5	Municipal	Green Space Egress/WRR	UT, P, SFR / Hazardous surface and ladder fuels / One way out neighbourhood egress, on steep rocky slopes, patchy distribution and continuity of generally short L1/L1 sub to L4 Py. Tallus slope to be excluded.Cut only conifers <2 m height. Fuel Type = C-7, OS = <400 sph Py5Fd5, US = <600 sph, Py5Fd5, CBH = <5 m, CC = <20%, Duff = 1-2 cm.	High	13b
14	Broad View	3.5	Crown Provincial	Crown Provincial/WRR	OT, HTR, UT, SFR and P / Hazardous surface and ladder fuels / Wick of dense overstory between homes, leading into riparian area. Potential overstory removal to create gaps in canopy, with treatments to address ladder fuels and surface fuels.	High	14
15	Stonegrove Park	0.4	Municipal	Green Space/WRR	HTR, UT, P, SFR / Hazardous surface fuels and some ladder fuels / Thin conifers <2 m height. Low level of effort for pruning and thinning. Cobblestone Park WTA data used. Fuel Type = C-7 OS = 600-900 sph Fd5Py5, US = <900 sph, FFd5Py5, CBH = <5 m, CC = 40-60%, Duff = 1-2 cm.	High	15
16 a	Cobblestone Park	0.2	Municipal	Green Space/WRR	UT, P, SFR / Hazardous surface fuels and some ladder fuels / Thin conifers <2 m height. Low level of effort for pruning and thinning. Fuel Type = C-7, OS = 600-900 sph Fd5Py5, US = <900 sph Fd5Py5, CBH OS = <5m , CC = 40-60%, Duff = 1-2 cm.	High	16a
16 b	Cobblestone Park	1.2	Municipal	Community/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Thin conifers to create gaps in canopy. Fuel Type = C-7, OS = 600-900 sph Fd5Py5, US = <900 sph Fd5Py5, CBH OS = <5m , CC = 40-60%, Duff = 1-2 cm.	High	16b
17	Lake View Cove	1.0	None	Green Space Egress/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Brushing of deciduous to mitigate roadside risk. Do not cut conifers >2 m height. Fuel Type = C-7, OS = <400 sph Py9Fd1, US = <900 sph Py10(Fd), CBH OS = <5m, CC = 20-40%, Duff = 1-2 cm.	High	17
18	Turnbill Rd	7.9	Crown Provincial	Community/WRR	HTR, UT, P, SFR / Hazardous trees and surface fuels / Thin understory, prune, clean surface fuel. Fuel Type = C-7 OS = 600-900 sph Fd10, US = <900 sph, Fd8Ep2, CBH = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	18
19	Mt. Boucherie South	9.0	Municipal	Community/WRR	HTR, P, SFR, remove dead/downed stems / Hazardous surface and ladder fuels / Steep & rocky, addressing wick of fuel up draw and areas behind homes. Fuel Type = C-7, OS = 100-400 sph Py9Fd1, US = <900 sph Py10(Fd), CBH OS = <5 m, CC = <20%, Duff = 1-2 cm.	High	19
20	Westbank Sub-Station Shannon Lake Road	0.5	Crown Provincial	CI/WRR	OT, UT, P, SFR / Hazardous surface and ladder fuels around CI / Heavier understory thinning and pruning to create fuel strata gap around CI. Recommended fuel-free area 0-10 m out from CI. Fuel Type = C-7 OS = <400 sph Py10, US = <900 sph Py10(At), CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	20
21	Eain Lamont Park (01a)	1.8	Municipal	Green Space/WRR	UT, P and SFR / Hazardous surface and ladder fuels / Fuel Type = C-7, OS = 100-200 sph Fd8Py2, US = <100 sph Fd10, CBH OS = <5m , CC = <20%, Duff = 1-2 cm with thick needle beds.	High	21
22	Wild Horse Park	5.5	Municipal	Community/WRR	UT, HTR, P, SFR / Hazardous surface and ladder fuels / Patchy dense clumps of conifers with pockets of aspen in openings with some shrub die-off to be brushed. Fuel Type = C-7 OS = <400 sph Fd5Py5, US = <900 sph, Fd6Py5, CBH = <5 m, CC = 20-40%, Duff = 2-5 cm.	High	22

FUEL TREATMENT SUMMARY

TU-ID	Name	Total Area (ha)	Ownership	Treatment Unit Type/Objective	Required Treatment Activities/Rationale/Comments	Local Risk Rating	Priority Rank
23	East of Johnston Bentley	1.7	Crown Provincial	Green Space/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Thin conifers <2 m height. High level of effort for pruning and heavy needle beds under drip line, 5-7 cm depth. Pinecones and needles continuous on surface. Gullies and benched terrain surrounded by residential area. SFL: ~0.3-0.5 kg/m2 of pine cones and needle litter. Occasional openings of no surface fuels. Fuel Type = C-7, OS = 50-100 sph Py10, US = 150-250 sph Py10, CBH OS = <5m , CC = 40-60%, Duff = 1-2 cm, fines, needles, cones, rabbit brush, bunchgrass.	High	23
24 a	Powers Creek (4)	44.9	None Community Forest	LFB/WRR	OT, P and SFR / Hazardous surface and ladder fuels / Very steep, challenging operability for mechanical or hand treatment. Riparian management Area, sensitive soils, terrain stability concern potential. Fuel Type = C-7 & M-1/2, OS = 600-900 sph Fd6Py4(AtSx), US = 900-1500 sph Fd6At2Sx2, CBH OS = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	24a
24 b	Powers Creek	3.8	Municipal Community Forest	LFB/WRR	OT, P and SFR / Hazardous surface and ladder fuels / Very steep, challenging operability for mechanical or hand treatment above CI. Riparian management Area, sensitive soils, stability concern potential. Fuel Type = C-7, OS = 400-600 sph Py6Fd4, US = 400-600 sph, Py5Fd5, CBH = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	24b
24 c	Powers Creek	5.4	Crown Provincial Community Forest	LFB/WRR	HTR, OT, P and SFR / Hazardous surface and ladder fuels / Very steep, challenging operability for mechanical or hand treatment on the high side of the egress to and from powers creek CI. Riparian management Area, sensitive soils, stability concern potential. Fuel Type = C-7, OS = 400-600 sph Py6Fd4, US = 400-600 sph, Py5Fd5, CBH = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	24c
25	Gates Rd Egress	1.6	None	Community Egress/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Powerline limits ability to do overstory thinning. OT likely not effective due to adjacent neighbouring property fuels.	High	25
26	Gates Grove Park	2.3	Municipal	Community/WRR	OT, UT, HTR, P, SFR/ Hazardous surface fuel and ladder fuel / C-3 Fuel type, <10-30 m from multiple residences. Overstory thinning recommended due to proximity to homes and adjacent private land that is forested.	High	26
27	Westbank Centre Park	0.6	Municipal	Community/WRR	OT, TFB, P, SFR / Hazardous surface and ladder fuels / Some pruning has occurred but understory is ~ 500-600 sph and should be thinned. Needle beds are heavy throughout, surface clean up should be done. Community park upslope. Fuel Type = C-7 OS = 400-600 sph Py6Fd4, US = <900 sph, Py9Fd1, CBH = <5 m, CC = <20%, Duff = 1-2 cm.	High	27
28	Shannon Springs Park	0.9	Municipal	Green Space/WRR	HTR, UT, P, SFR / Hazarous surface and ladder fuels / hand treatment to thin understory under L1 conifer driplines. Riparian management area. Cut only conifers <2 m height. Fuel Type = M-1/2, D-1/2, OS = 400-600 sph Act9Fd1, US = 1500-2500 sph, Act9Fd1, CBH = 10 m, CC = 60-80%, Duff = 5-10 cm.	High	28
29	Connemara Park	0.8	Municipal	Community/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Overstory ~100 sph. Understory ~600 sph. Clumps of 10-12 L3s throughout. Needle beds 5-10 cm in dripline. Needle coverage continuous through park. Fuel Type = C-7, OS = ~100 sph Py10, US = ~600 sph Py10(Fd), CBH OS = <5m , CC = 20-40%, Duff = 1-2 cm.	High	29
30 a	Smith Creek East	110.9	Community Forest	LFB/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Large area tying into landscape break. Slope, terrain, and riparian constraints. Fuel Type = C-7, OS = 400-600 sph Fd66Py4, US = <900 sph, Fd7Py3, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	High	30a
30 b	Smith Creek West	42.8	Crown Provincial Community Forest	LFB/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Shaded fuel break. Fuel Type = C-7 OS = 400-600 sph Fd6Py4, US = <900 sph, Fd10, CBH = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	30b
30 c	Smith Creek West	52.8	Crown Provincial Community Forest	LFB/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Shaded fuel break. Fuel Type = C-7 OS = 400-600 sph Fd6Py4, US = <900 sph, Fd10, CBH = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	30c
31	Faulkner Creek Horizon (15)	1.2	Municipal	Community/WRR	OT, UT, SFR / Hazardous surface fuels and dense crown / Thinning of deciduous ladder fuels, limited pruning or conifer understory thinning. Fuel Type = C-7, OS = <400 sph Fd8Py2, US = <900 sph PyFd5, CBH OS = <6-9 m , CC = 40-60%, Duff = 1-2 cm	High	31
32	Morningside Park	0.3	Municipal	Green Space/WRR	UT, P, SFR / Hazardous ladder fuels / Moist deciduous site with lots of smaller CWD and fines. Brushing deciduous <2 m height, and deciduous shrubs. Fuel Type = M-1/2, OS = 600-900 sph At(Fd), US = <900 sph At10, CBH OS = <10m, CC = >80%, Duff = 5-10 cm.	High	32
33	Smith Creek	46.4	Community Forest	LFB/WRR	HTR, OT, UT, P, SFR / Hazardous surface and ladder fuels / Large area, looks recently pruned in places. Overstory removal could be considered in areas accessible from the road. Fuel Type = C-7, OS = 400-600 sph Fd6Py4, US = <900 sph, Fd10, CBH = <5 m, CC = 40-60%, Duff = 2-5 cm.	High	33
34	Copper Ridge Park	0.1	Municipal	Community/WRR	UT, P, SFR / Hazardous surface fuels and ladder fuels / Fuel Type = C-3 & M-1/2 fuel type with high SMR. Brushing of built up deciduous ladder fuels. OS = 400-600 sph Fd7Py2Act1, US = <900 sph Fd5Act5, CBH OS = <5m , CC = 60-80%, Duff = 2-5 cm.	Moderate	34
35	McKeller Rd	3.8	Crown Provincial	Green Space/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuel / Recent succession of deciduous and Fd understory due to Pl falling out. Thin hazard trees, thin conifers trees <2 m height, brush deciduous shrub. Fuel Type = M-1/2, OS = 600-900 sph At(Fd), US = 900-1500 sph Ep6Fd2At2, CBH OS = <10m, CC = 40-60%, Duff = 2-5 cm.	High	35
36	Landscape Fuel Break West	206.5	Crown Provincial Community Forest	LFB/WRR	OT, UT, HTR, P, SFR, Px / Hazardous fuel type / Extend fuel treatment to 1-2 km along southwestern interface and ties into existing treated areas. Upwind of prevailing wind and reduce potenial ember spotting potential. Mixed fuel types, C-3, M-1/2, S-1/2, and C-7 in the north. TU encompasses previously harvested areas for potential surface fuel managment and prescribed burn. The area has not been ground truthed and final area is anticipated to change.	High	36
37	Rose Valley Rd Bear Cr (27)	11.2	Municipal	LFB/WRR	OT, UT, SFR / Hazardous stand and future hazardous fuels if left unmaintained / Severe burn throughout, Total removal of overstory due to 100% mortality in L1-L4. 100-140 m3/ha of merchantable salvage. Fir is susceptible to sap rot within 3 years of mortality. If left unmanaged, trees will fall and become hazardous fuels once grasses and conifers regenerate in 1-2 years. Mechanical treatment may be suitable though terrain and slope constraints are present. Recommended salvage log to offset treatment costs. Fuel Type = C-7, OS = 400-600 sph Py6Fd4, US = <600 sph, Py5Fd5, CBH = <5 m, CC = <5%, Duff = 1-2 cm.	Moderate	37
38	McLeod Rd	1.2	Municipal	Community/WRR	OT, TFB, US, P, SFR / Hazardous surface and ladder fuels / High stem density in all layers, steep terrain. Fuel Type = C-7, OS = 400-600 sph Fd5Py5, US = <900 sph Fd9Py1, CBH OS = 6-9 m, CC = 40-60%, Duff = 2-5 cm.	High	38
39	Smith Creek Park	0.4	Municipal	LFB/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Shaded fuel break. Ties into Smith Creek Greenway. Riparian area within. Brush dead deciduous stalks. Fuel Type = M-1/2, OS = 400-600 sph Fd7Py2Act1, US = <900 sph, Fd5Act5, CBH = <5 m, CC = 60-80%, Duff = 2-5 cm.	High	39
40	Sandberg Rd	0.4	Municipal	Green Space/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Thin dead deciduous and conifer understory <2 m height, prune, SFL, boundary along a dry drainage/gully. Fuel Type = C-7 & M-1/2, OS = <400 sph Py6Fd2At2, US = <900 sph Fd6Py2At2, CBH = <5 m, CC = 20-40%, Duff = 2-5 cm.	Moderate	40
41	Pinot Gris Walkway	1.1	Municipal	Green Space/WRR	HTR, P, SFR / Hazardous surface and ladder fuels / Low understory, cut dead/sick overstory. Fuel Type = C-7, OS = 100-300 sph Py10, US = <900 sph Py10, CBH OS = <5 m, CC = <20%, Duff = 1-2 cm.	Moderate	41

FUEL TREATMENT SUMMARY

TU-ID	Name	Total Area (ha)	Ownership	Treatment Unit Type/Objective	Required Treatment Activities/Rationale/Comments	Local Risk Rating	Priority Rank
42	Multi-Sport Centre	5.3	Municipal	CI/WRR	UT, P, SFR / Hazardous fuel type / Already mostly pruned to 1.5 m. Fuel Type = C-7, OS = 400-600 sph Py8Fd2, US = <900 sph Py5Fd5, CBH OS = <5 m, CC = 20-40%, Duff = 1-2 cm. Would be suitable for Px.	Moderate	42
43	Smith Creek Greenway	0.7	Municipal	LFB/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Ties into Copper Ridge Park & Smith Creek Park. Riparian area within. Brush dead deciduous stalks. Fuel Type = M-1/2, OS = 400-600 sph Fd7Py2Act1, US = <900 sph, Fd5Act5, CBH = <5 m, CC = 60-80%, Duff = 2-5 cm.	Moderate	43
44	Shannon Lake Rd Egress	2.1	Municipal None	Green Space/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Treatment to improve egress, variable density of trees and surface fuels. Only cute conifers <2 m height. Fuel Type = C-7, OS = 600-900 sph Py6Fd4, US = <900 sph, Fd6Py4, CBH = <5 m, CC = 20-40%, Duff = 2-5 cm.	Moderate	44
45	Shannon Lake Rd Canyon	0.5	Municipal	Green Space/WRR	UT, P, SFR / Hazardous surface fuels / Higher levels of surface fuels & CWD under canopy downslope from homes. Only cut conifers <2 m height. Fuel Type = C-7, OS = 600-900 sph Py6Fd4, US = <900 sph, Fd6Py4, CBH = <5 m, CC = 20-40%, Duff = 2-5 cm.	Moderate	45
46	Boulder Park	0.4	Municipal	Community/WRR	OT, HTR, UT, SFR and P / Hazardous surface and ladder fuels / Area is upslope from homes. Manage for needle beds, hazard trees, and ladder fuels.	Moderate	46
47 a	Shannon Lake (10)	0.8	Community Forest	CI/WRR	UT, P, SFR / Hazardous surface and ladder fuels / immediately upslope of CI water infrastructure/reservoir. Fuel Type = C-7, OS = <400 sph Py7Fd3, US = <900 sph, Py5Fd5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	Moderate	47a
47 b	Shannon Lake (10)	9.1	Community Forest	LFB/WRR	UT, P, SFR / Hazardous surface and ladder fuels, road right of way / Contains riparian to the east. Shaded fuel break. Fuel Type = C-7, OS = <400 sph Py7Fd3, US = <900 sph, Py5Fd5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	Moderate	47b
48	Davidson Creek Park (10)	5.9	Municipal	Community/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuels / Well-spaced overstory. Steep slopes, upslope of values at risk. 1-3% beetle kill.Fuel Type = C-7, OS = 400-600 sph Py7Fd3, US = <900 sph Fd5Py5, CBH OS = <5m , CC = 20-40%, Duff = 1-2 cm.	Moderate	48
49	Shannon Hills NE	4.1	Community Forest	Green Space/WRR	UT, P, SFR / Hazardous surface fuels / Higher levels of surface fuels under canopy on slope up to homes. Minimal level of effort for pruning and thinning if surface fuels are addressed <0.5 kg/m2. Only cut conifers <2 m height. Slope constraints. Fuel Type = C-7, OS = 400-600 sph Py7Fd3, US = <900 sph, Py5Fd5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	Moderate	49
50	Rock Ridge Park (12)	2.6	Municipal	Community/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuels / Dense canopy of L1-L1 sub on steep slopes surrounded by residence. Patches of fir beetle mortality. Active beetle observed on site. Fuel Type = C-7, OS = 600-900 sph Fd10(Py), US = <400 sph, Fd10(Py), CBH = <5 m, CC = 40-60%, Duff = 1-6 cm. SFL: 0.5-0.8 kg/m2 of mostly large fines and small CWD, grasses, herbs, fines, cones	Moderate	50
51	Bear Creek FSR (442)	14.4	Crown Provincial Community Forest	LFB/WRR	OT, UT, P, SFR / Hazardous fuel type if left unmaintained / Severe burn throughout, should be considered for salvage opportunities and future threat and to offset treatment costs. 180 m3/ha salvage volume of Py6Fd4. Sap rot will target Fd within 3 years of mortality.100% mortality due to fire. Fuel Type = Slash/old C-7 (100% mortality in L1) OS = 400-600 sph Py7Fd3, US = <900 sph, Fd6Py5, CBH = 10 m, CC = <10%, Duff = 1-2 cm.	Moderate	51
52	Rose Valley Reservoir (1)	28.3	Community Forest	CI/WRR	HTR, UT, P, SFR / Hazardous fuels and hazard trees / Main access route to damn and reservoir infrastructure. Mixed severity burn. HTR in the highest severity burn areas. Some pruning and light clean up on low severity. Standing dead presently low risk, however, becomes highly hazardous once stems fall to ground and regen grows through. Fuel Type = C-7, OS = 400-600 sph Fd5Py3At2, US = <900 sph Fd5At3Py2, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	Moderate	52
53	Tallus Greenway	3.5	Municipal	Green Space/WRR	UT, P, SFR / Hazardous surface and ladder fuel / Thin <2 m height conifers, and brush dead deciduous, upslope of of dense single family neighbourhood. Fuel Type = C-7 OS = 400-600 sph Py7Fd3, US = <900 sph Py5Fd5, CBH = <5 m, CC = 20-40%, Duff = 1-2 cm.	Moderate	53
54	Maintenance (557)	53.9	None	LFB/WRR	Px / Hazardous surface fuels / Previously treated area with potential for cultural/prescribed fire maintenance treatment.	Moderate	54
55	Jonagold Park (14) (57)	2.5	Municipal	Community/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuels /Brushing treatment recommended. Fuel Type = C-7, OS = 50-100 sph Py10, US = ~25 sph Py10, CBH OS = <5m, CC = <20%, Duff = 1-2 cm, heavier needle load.	Moderate	55
56	Paramount Park	1.1	Municipal	Community/WRR	HTR, UT, P, SFR /Hazardous surface and ladder fuels / Hazardous shrubby riparian area could use brushing of dead deciduous stalks and pruning of conifers. Fuel Type = C-7, OS = <400 sph Fd5Py5, US = <900 sph Fd5Py5, CBH OS = <5 m, CC = 20-40%, Duff = 1-2 cm.	Moderate	56
57	Art Pond	1.0	None	Green Space/WRR	UT, P and SFR / Hazardous surface and ladder fuels / Riparian area around pond, thin conifers <2 m height. Fuel type = C-7, OS = 400-600 sph Py5Fd5(At), US = <900 sph Fd7Py2At. CBH OS = <5 m, CC = 50%, Duff = 1-5 cm.	Moderate	57
58	Glenrosa Road	5.0	Crown Provincial	Community/WRR	OT, HTR, UT, P, SFR / Hazardous surface fuel, ladder fuel, and dangerous trees / Dense overstory and forest health/grey attack visible from google earth imagery, along with rocky openings. No WTA, recommended to be added for consideration after field work. Use WTA 4 for representative data. Easement along the eastern boundary has a garden in it. Further work required to determine ownership and notify adjacent property owners. PMBC layer lists this parcel as Crown Land. Recommend treating and buffering around the garden.	Moderate	58
59	Glenrosa Rd McKeller Rd (53)	0.4	None	Green Space/WRR	UT, HTR, P, BR, SFR / Hazardous surface and ladder fuels / Manage hazardous pine beetle kill in overstory, with extremely dense brush acting as ladder fuel. Brushing treatment recommended, Fuel Type = M-1/2 & C-7, OS = ~400 sph Fd7Py3(AtEp), US = 25-75 sph At5Fd3Ep2, CBH OS = <5m, CC = 20-40%, Duff = 2-5 cm.	Moderate	59
60	Rose Valley North (27)	36.6	Crown Provincial	LFB/WRR	HTR, UT, P, SFR / Hazardous surface and ladder fuels / Patchy low-mod severity burn, overstory intact, thin dead L2-L4. Fuel Type = C-7 & M-1/2 in moisture-recieving areas, OS = 600-900 sph Py5Fd5(At), US = <600 sph, Py5Fd5(At), CBH = <5 m, CC = 40-60%, Duff = 1-2 cm.	High	60
61	Glenrosa Rd Infrastructure	0.0	Municipal	CI/WRR	UT, P, SFR / Hazardous surface and ladder fuels / Fuel-free area exists 0-10 m from infrastructure, small patch to thin and prune to the east of the infrastructure. Fuel Type = C-7, OS = ~600 sph Fd9Ep1, US = <900 sph Fd9Ep1, CBH OS = <5m , CC = 40-60%, Duff = 1-2 cm	Moderate	61
62	Fire Station #34	0.4	Municipal	CI/WRR	OT / Hazardous crown fuels / Overstory spacing to 3 m. Pruning and SFL completed already. Forested fuels within 10-30 m of CI. Fuel Type = C-7, OS = 550-650 sph Fd9Py1, US = ~25 sph Fd5Py5, CBH OS = <5m , CC = <20%, Duff = 1-2 cm	Moderate	62
63	Maintenance (251)	32.9	Community Forest	LFB/WRR	Px / Hazardous surface fuels / Previously treated area. Potenial for cultural/prescribed fire maintenance treatment.	Moderate	63
64	AMU - Glenrosa South (287)	66.4	Crown Provincial Community Forest None	LFB/Px	Px / Future hazardous surface and ladder fuels / Large area previously treated. Cultural or prescribed fire is suitable as a maintenance treatment.	Moderate	64

FUEL TREATMENT SUMMARY

TU-ID	Name	Total Area (ha)	Ownership	Treatment Unit Type/Objective	Required Treatment Activities/Rationale/Comments	Local Risk Rating	Priority Rank
65	AMU - Gorman	73.5	Community Forest None	LFB/Px	Px / Future hazardous surface and ladder fuels / Large area previously treated. Cultural or prescribed fire is suitable as a maintenance treatment.	Moderate	65
n/a	Transmission Powerline	n/a	Mixed	LFB/WRR	Mixed treatment regimes / Hazardous surface and ladder fuels, important CI / where FTUs are adjacent to transmission powerline fuel treatment should manage the powerline ROW.	n/a	n/a
	SUM	**995**					

Land Ownership: from Parcel Map BC. Unallocated land ownership is labelled as "none".

Treatment Type/Objective: Community, Critical Infrastrucutre (CI), Egress, Green Space, Landscape-level Fuel Break (LFB), Prescribed Fire (Px), Wildfire Risk Reduction (WRR)

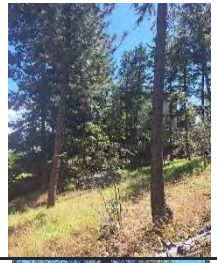
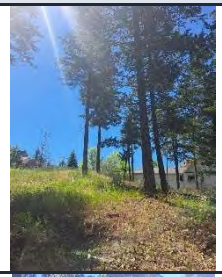
Required Treatment Activities: UT = understory thin, OT = overstory thin, TFB = thin from below, HTR = Hazard tree removal, P=Prune, BR=Brushing SFR = surface fuel removal, , SPH = stems per hectare, SMR = Soil Moisture Regime;DBH = diamter at breast hieght, Tree class/size codes: L1 = > 17.5 cm dbh, L1s = 12.5-17.5 cm dbh, L2 = 12.5-7.5 cm dbh , L3 =>1.3 m tall up to 7.5 cm dbh, L4 = < 1.3 m tall.

Additional Abbreviations: CC = crown closure, CBH = crown base height, OS = overstory, US = understory, SPH = stems per hectare; SMR = Soil Moisture Regime; DBH = diamter at breast hieght; Tree class/size codes: L1 = > 17.5 cm dbh, L1s = 12.5-17.5 cm dbh, L2 = 12.5-7.5 cm dbh , L3 =>1.3 m tall up to 7.5 cm dbh, L4 = < 1.3 m tall.

* Greenspaces with removal of trees > 2m in height require a prescription.

Appendix E: WTA Summary Table

Appendix E WTA Plot Photos

WTA PLOT PHOTOS						
WTA	**Crown**	**Surface**	**North**	**East**	**South**	**West**
1						
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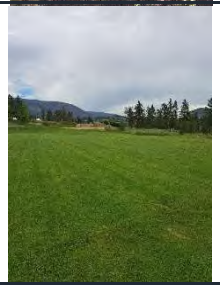
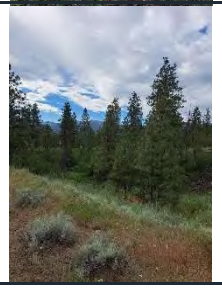
3						
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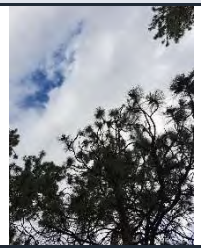
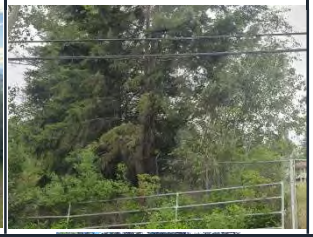
5						
6						
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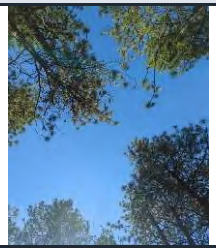
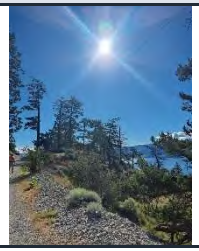
WTA PLOT PHOTOS

WTA	Crown	Surface	North	East	South	West
9						
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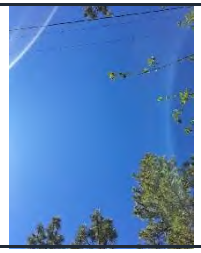
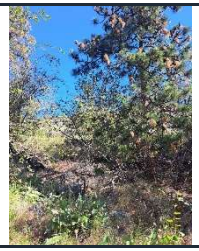
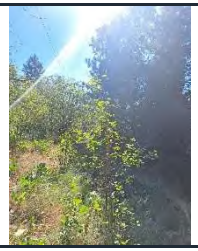
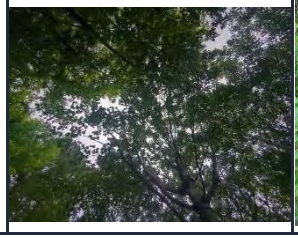
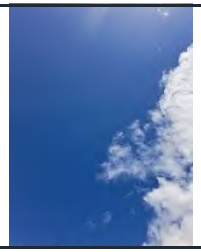
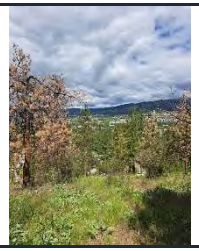
11						
12						

13							
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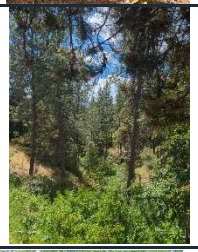
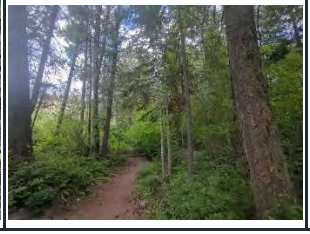
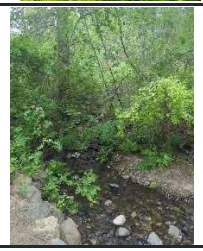
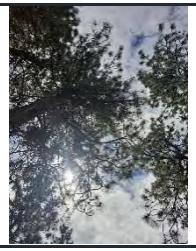
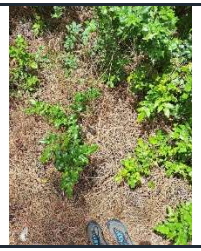
16							
18							

19						
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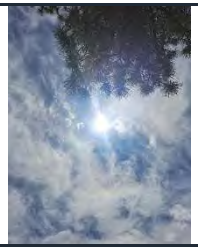
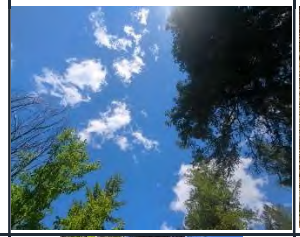
21						
22						
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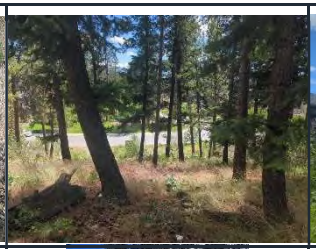
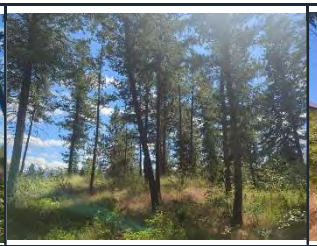
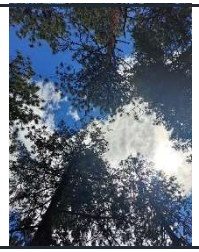
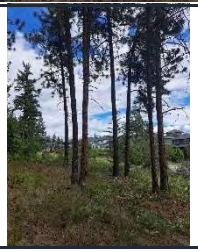
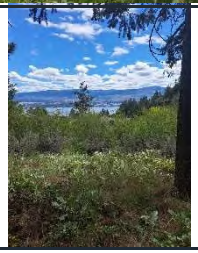
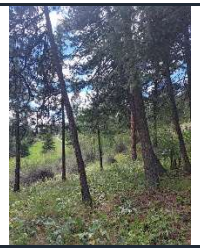
24						
25						
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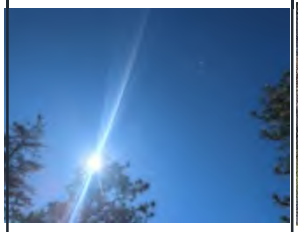
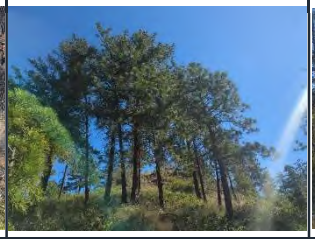
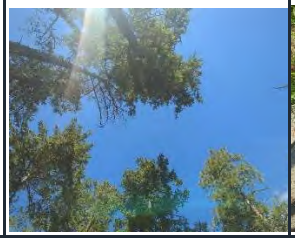
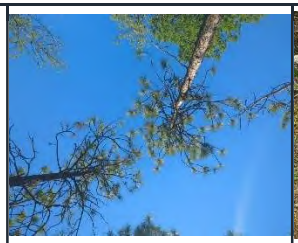
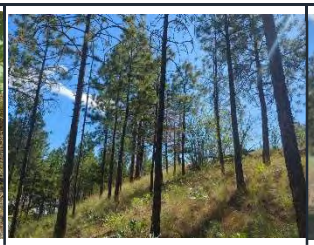
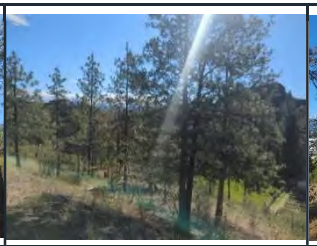
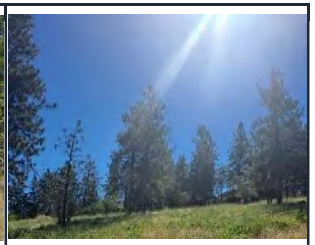
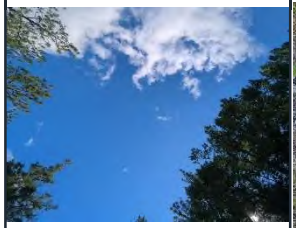
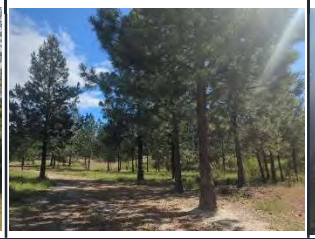
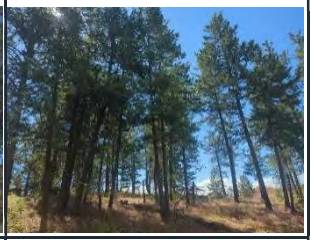
34						
36						

38						
40						
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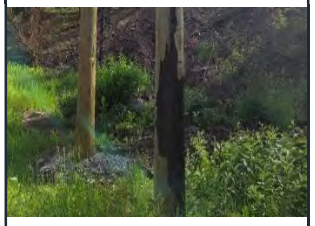
43						
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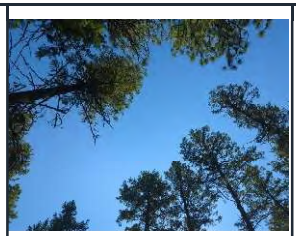
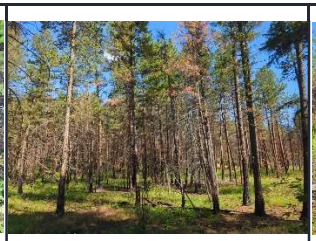
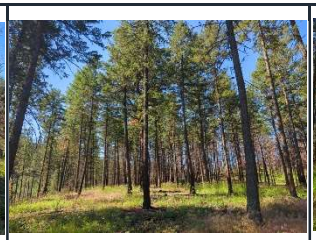
45						
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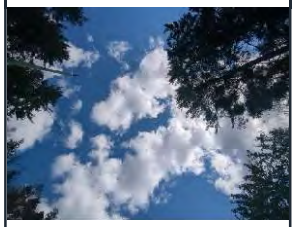
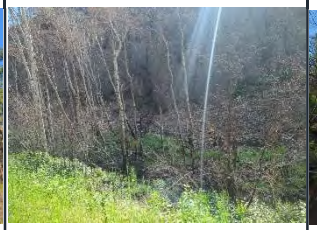
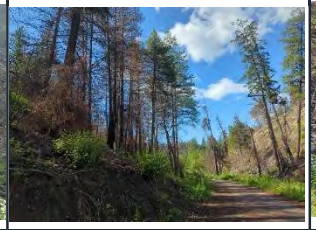
47						
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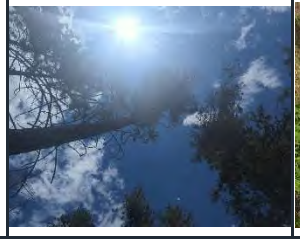
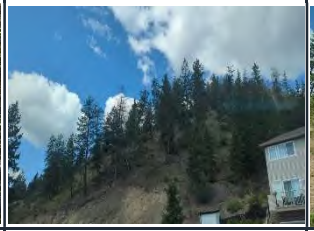
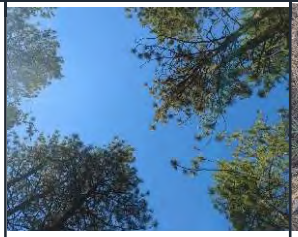
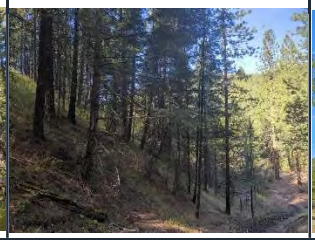
50						

51						
52						
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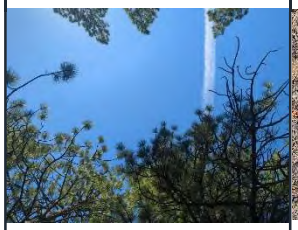
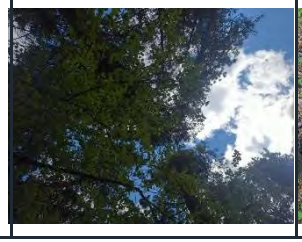
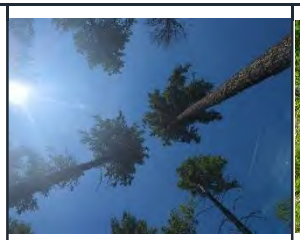
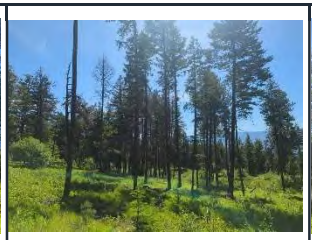
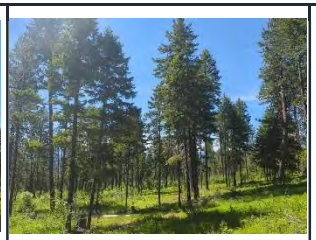
54						
55						

56						
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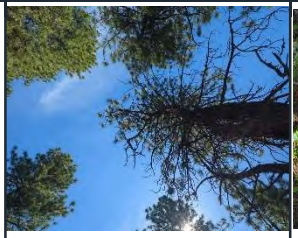
58						
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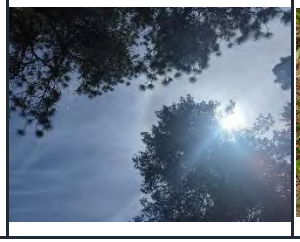
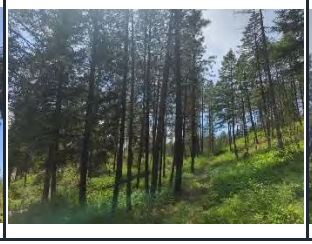
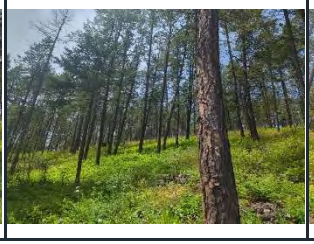
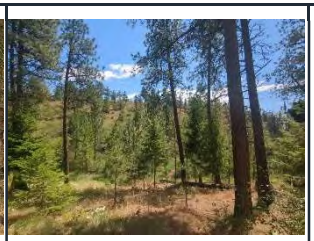
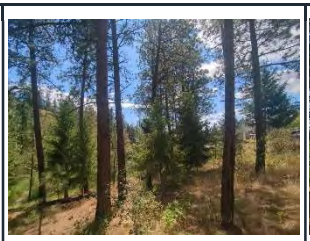
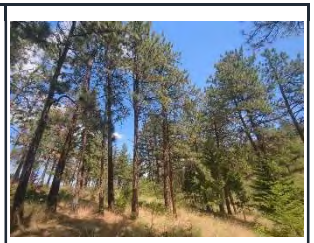
60						

61						
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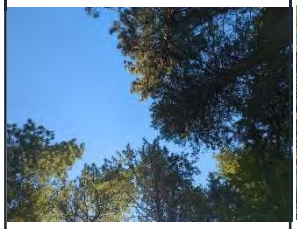
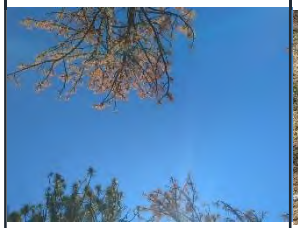
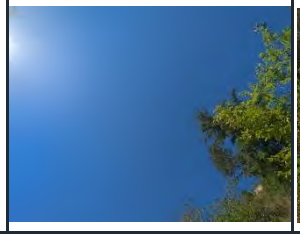
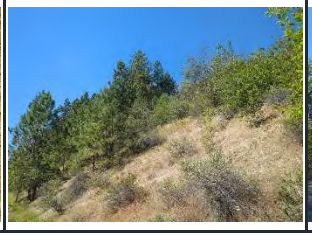
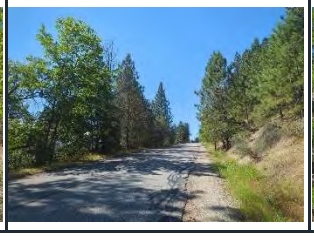
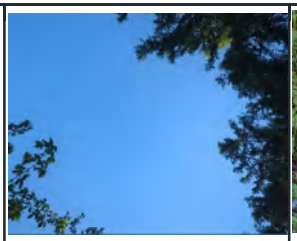
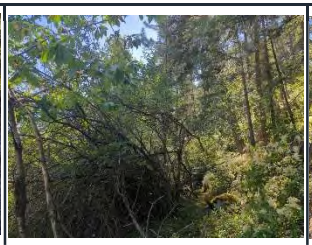
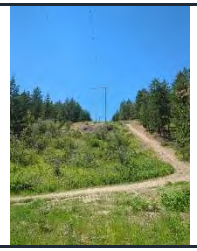
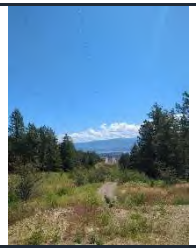
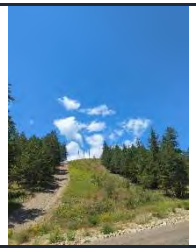
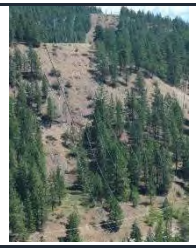
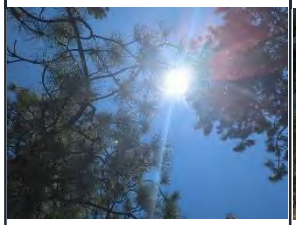
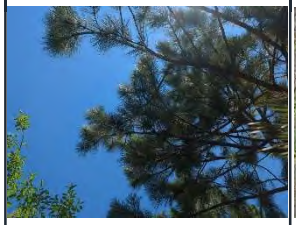
63						
64						
65						

66						
67	No crown closure where assessed					
68						
69						
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*WTA70 Crown and Surface photos are representative of area

WTA PLOT SUMMARY

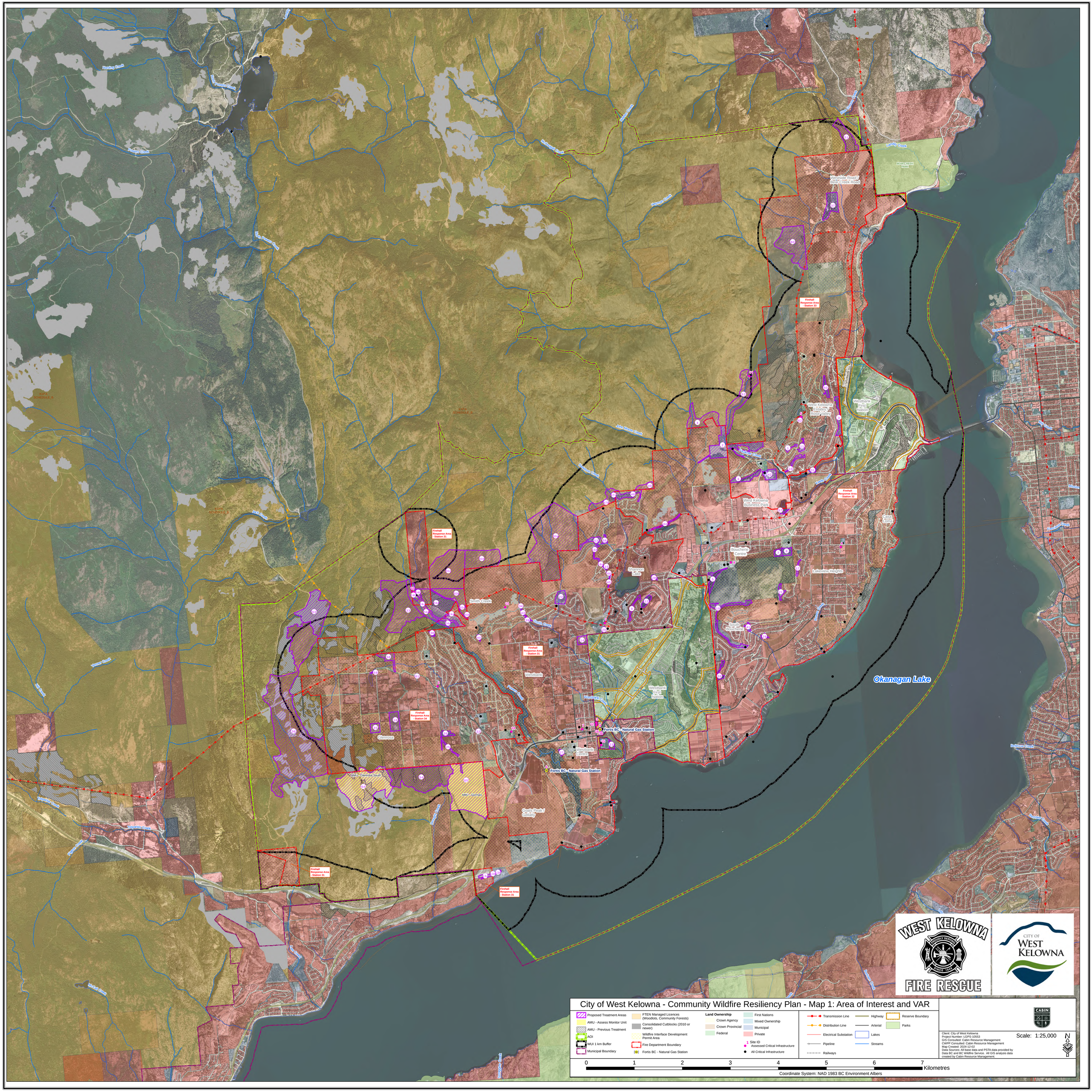
Plot #	Latitude/ Longitude	Comments	Depth of Organic Layer (cm)	Surface fuel composition	Dead and down material continuity (<7cm)	Ladder fuel composition	Ladder fuel horizontal continuity	SPH understory	Overstory composition crown base height (CBH)	Fuel strata gap (m)	SPH overstory	Crown closure	Dead and dying (% of dominant and codominant stems)	Score	Local Threat
1	49.88423808, -119.5579443	Hand treatment	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles or fine branch material).	< 10%		< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	601 - 900	20 - 40%	21 - 50% - Standing Dead / Partial Down	45	Low
2	49.88795457, -119.5499271	High priority, failed beetle management - pheromone packs. UT, SFL.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles or fine branch material).	< 10%	Spruce / Pine / Fir	< 10% - Sparse coverage	901-1500	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	61-80%	21 - 50% - Standing Dead / Partial Down	69	Moderate
4	49.84427663, -119.6877064	Pl is dead from beetle.	2 - <5 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Deciduous	>60% - Uniform coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	21 - 50% - Standing Dead / Partial Down	63	Moderate
5	49.82653039, -119.6211124	Low branches on Py. Heavy needle beds under drip line, depth of 5-7 cm . Pinecones and needles continuous on surface. Gullies and benched terrain surrounded by residential area.	1 - <2 cm	Sagebrush, Bunchgrass, Juniper, Scotch Broom.	10 - 25%	Spruce / Pine / Fir	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	65	Moderate
6	49.84279601, -119.6759113	Cl present. P, UT, TFB	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	< 10%	Mixwood	40 - 60% - Patchy coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	< 20%	21 - 50% - Standing Dead / Partial Down	49	Moderate
7	49.82621387, -119.6361014	Understory is ~500-600 SPH. Needle beds are heavy throughout. Park located upslope. SFR, UT, P	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles or fine branch material).	10 - 25%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	401 - 600	< 20%	< 20% - Standing Dead / Partial Down	60	Moderate
8	49.84471863, -119.6728379	Mature Fd & Py with high CBH. No ladder or surface fuels observed. Tree stress observed (potential beetle pressure)	1 - <2 cm	Pinegrass	< 10%	Deciduous	Absent	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	42	Low
9	49.8050092, -119.6566791	Isolated patch (0.12 ha) on a Talus outcrop. Benched next to egress route. OT, TFB.	1 - <2 cm	Sagebrush, Bunchgrass, Juniper, Scotch Broom.	< 10%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	57	Moderate
10	49.85044536, -119.6699895	Dense overstory and fuel loading. UT, SFR, P.	2 - <5 cm	Pinegrass.	26 - 50%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (6-9m).	< 3 m	401 - 600	41 - 60%	< 20% - Standing Dead / Partial Down	70	High
11	49.80424151, -119.6611074	Understory ~400 sph. Over 100-200 sph. Dense Tree patches . Needle beds under drip line 8cm. WTA 9 and 11 same area assessed.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles or fine branch material).	10 - 39%	Spruce / Pine / Fir	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	58	Moderate
12	49.83133261, -119.6593395	Moist deciduous site with lots of smaller CWD and fines.	5 - <10 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Deciduous	>60% - Uniform coverage	< 900	Deciduous (< 25% Conifer).	< 3 m	601 - 900	> 80%	21 - 50% - Standing Dead / Partial Down	55	Moderate
13	49.83737377, -119.5885252	Overstory ~60 sph. Understory ~25sph, isolated to open areas away from L1 drip line.	1 - <2 cm	Pinegrass.	< 10%	Mixwood	Absent	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	44	Low
14	49.92373555, -119.5438943	Severe burn throughout. Lots of red needles. 140m3 of salvage.	1 - <2 cm	Pinegrass.	Absent	Absent	Absent	< 900	Conifer with Moderate CBH (6-9 m).	4 - 6 m	401 - 600	< 20%	>75% - Standing Dead / Partial Down	44	Low
15	49.83953952, -119.5874802	Overstory ~450 sph. Understory ~50 sph. Heavier needle load. Maintenance Rx recommended. Residential surrounds park.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	< 10%	Spruce / Pine / Fir	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	401 - 600	< 20%	< 20% - Standing Dead / Partial Down	53	Moderate
16	49.8491084, -119.6567336	UT, P, SFR. Follows a dry draw.	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	10 - 25%	Mixwood	40 - 60% - Patchy coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	60	Moderate
17	49.84188913, -119.5830853	Overstory ~50 sph. Understory 20 sph. Playground park FireSmart activity maintenance from parks team recommended. Residential surrounding poly.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	< 10%	Spruce / Pine / Fir	Absent	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	45	Low
18	49.85414453, -119.6437317	Thin and P, SFR. Riparian area.	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	> 50%	Mixwood	>60% - Uniform coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	61-80%	< 20% - Standing Dead / Partial Down	75	High
19	49.84422668, -119.5745514	Overstory ~100 sph. Understory ~600 sph. Clumps of 10-12 L3s throughout. Needle beds 5-10 cm in dripline. Needle coverage continuous through park. Dense understory veg: Oregon grape, saskatoon and rose.	1 - <2 cm	Lichen, Conifer, Shrubs	10 - 25%	Spruce / Pine / Fir	40 - 60% - Patchy coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	63	Moderate
20	49.85482644, -119.6318727	UT, P, SFR. Pockets of At in openings with some shrub die off.	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	61	Moderate
21	49.84677109, -119.5786827	Overstory ~100 sph understory ~0 only Rosa spp. Residential surrounding poly.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	< 10%	Deciduous	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	20 - 40%	21 - 50% - Standing Dead / Partial Down	40	Low
22	49.8648978, -119.6178571	Open shrubby riparian area could use brushing of dead stalks. Thin, P understory, SFR.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	59	Moderate
23	49.8535334, -119.5685373	Overstory ~100 sph understory ~25 sph. Needle beds 5-10 cm.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	26 - 50%	Deciduous	40 - 60% - Patchy coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	54	Moderate
24	49.860481, -119.6194785	TFB (L1s), P, SFR.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	41 - 60%	< 20% - Standing Dead / Partial Down	63	Moderate
25	49.85233027, -119.5683472	Isolated tree patch in park bordered by trails.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	< 10%	Deciduous	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	< 20%	21 - 50% - Standing Dead / Partial Down	40	Low
26	49.86468161, -119.5909441	TFB (L1s), P, SFR-up.	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	41 - 60%	< 20% - Standing Dead / Partial Down	65	Moderate
27	49.84881609, -119.5779637	Overstory ~60 sph, no understory. Drainage through TU leading to culvert.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	< 10%	Deciduous	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	37	Low
29	49.82435378, -119.6851204	Overstory ~200 sph. No understory. Mixed severity burn, 20-30 average dbh. Upslope of road for residential property access.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	< 10%	Spruce / Pine / Fir	Absent	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	20 - 40%	>75% - Standing Dead / Partial Down	54	Moderate

WTA PLOT SUMMARY														
Plot #	Latitude/ Longitude	Comments	Depth of Organic Layer (cm)	Surface fuel composition	Dead and down material continuity (<7cm)	Ladder fuel composition	Ladder fuel horizontal continuity	SPH understory	Overstory composition crown base height (CBH)	Fuel strata gap (m)	SPH overstory	Crown closure	Dead and dying (% of dominant and codominant stems)	Score	Local Threat
31	49.82301997, -119.685538	Overstory ~200 sph. Lower severity burn, more open and drier than WTA29, with less standing dead.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	< 10%	Spruce / Pine / Fir	Absent	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	< 20%	51 - 75% - Standing Dead / Partial Down	51	Moderate
32	49.87949405, -119.5602076	Dense canopy around a rocky Knoll. Forest health issues on Knoll	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	< 20% - Standing Dead / Partial Down	68	High
33	49.82364123, -119.681239	Overstory ~200 sph. Less standing dead, higher tree survival. Appears to be lower intensity fire.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	< 10%	Spruce / Pine / Fir	Absent	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	< 400	< 20%	>75% - Standing Dead / Partial Down	53	Moderate
34	49.87894515, -119.5583978	UT and P.	1 - <2 cm	Sagebrush, Bunchgrass, Juniper, Scotch Broom.	< 10%	Mixwood	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	54	Moderate
36	49.88013592, -119.5809614	Patchy severity of fire throughout. Needs thin, P, SFR.	1 - <2 cm	Pinegrass.	10 - 25%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	21 - 50% - Standing Dead / Partial Down	69	High
37	49.8183432, -119.6326993	No understory except around riparian area. Canyon running E/W. FdPy mix 5 m > CBH. 200-300 sph. Main Egress Gelatly Rd.	1 - <2 cm	Lichen, Conifer, Shrubs.	< 10%	Spruce / Pine / Fir	< 10% - Sparse coverage	< 900	Conifer with Moderate CBH (6 - 9 m).	3 - 6 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	46	Low
38	49.87385509, -119.5780382	UT, P, SFR.	1 - <2 cm	Pinegrass.	10 - 25%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	< 20% - Standing Dead / Partial Down	66	High
40	49.87426876, -119.5685446	UT, P, SFR. CBH at 1.5m from previous pruning. Increase CBH to > 2m.	1 - <2 cm	Pinegrass.	10 - 25%	Decidious	Absent	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	49	Moderate
41	49.82356982, -119.6373916	~500-600 sph understory. 400-500 overstory.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Spruce / Pine / Fir	40 - 60% - Patchy coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	< 20% - Standing Dead / Partial Down	67	High
42	49.87453771, -119.5557465	Sparce understory. Mature trees could use spacing = OT.	1 - <2 cm	Pinegrass.	26 - 50%	Mixwood	< 10% - Sparse coverage	< 900	Conifer with Moderate CBH (6 - 9 m).	< 3 m	< 400	41 - 60%	< 20% - Standing Dead / Partial Down	56	Moderate
43	49.9354396085102, -119.535760951041	Moderate - severe burn, 180m3/ha salvage volume	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Elevated Dead Fuel	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	401 - 600	20 - 40%	>75% - Stan	66	High
44	49.88167444, -119.5470055	Impacted by spot fires. Thin, P, SFR.	1 - <2 cm	Pinegrass.	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	41 - 60%	< 20% - Standing Dead / Partial Down	65	Moderate
45	49.918163650567, -119.553849178698	Low-mod severity burn. Overstory intact, remove dead L2-L4.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	10 - 25%	Elevated Dead Fuel	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	3 - 6 m	601 - 900	41 - 60%	< 20% - Standing Dead / Partial Down	56	Moderate
46	49.85709178, -119.6049712	Riparian area with heavy SFL and heavy brush.	5 - <10 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	> 50%	Deciduous	>60% - Uniform coverage	1501 - 2500	Deciduous (< 25% Conifer).	< 3 m	401 - 600	61 - 80%	< 20% - Standing Dead / Partial Down	63	Moderate
47	49.8860762222823, -119.578163341177	Low to High severity burn, patchy. Overstory intact. Need to remove dead L2-L4.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs	Absent	Absent	Absent	< 900	Conifer with Moderate CBH (6 - 9 m).	6-9 m	401 - 600	20 - 40%	51 - 75% - Standing Dead / Partial Down	33	Low
48	49.84998395, -119.6191654	UT, P, SFR	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	41 - 60%	< 20% - Standing Dead / Partial Down	64	Moderate
49	49.8849514157411, -119.588040861904	Patchy, low-high severity burn.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Elevated Dead Fuel	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	51 - 75% - Standing Dead / Partial Down	67	High
50	49.8586889932163, -119.617266823397	UT, TFB, P, SFR	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Deciduous	< 10% - Sparse coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	20 - 40%	< 20% - Standing Dead / Partial Down	58	Moderate
51	49.8744374621059, -119.603881464729	Low to moderate severity burn, patchy. SFR, and HTR.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Elevated Dead Fuel	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	51 - 75% - Standing Dead / Partial Down	67	High
52	49.85623887, -119.6668997	Thin, P, SFR	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	10 - 25%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	901 - 1500	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	41 - 60%	< 20% - Standing Dead / Partial Down	70	High
53	49.8652433006503, -119.620885880946	Thin, P, SFR	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	< 20% - Standing Dead / Partial Down	61	Moderate
54	49.8549341, -119.6694194	Thin, P, SFR	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	10 - 25%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	901 - 1500	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	< 20% - Standing Dead / Partial Down	69	High
55	49.834539496786, -119.682970174845	Thin, P, SFR	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	> 50% Coverage	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	41 - 60%	< 20% - Standing Dead / Partial Down	68	High
56	49.85712635, -119.7031101	Lots of slash, main egress route up slope of park (Gellatly Rd S). Residential E/W of park. UT, SFL,P	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	< 20% - Standing Dead / Partial Down	63	Moderate
57	49.8343265585311, -119.688449624289	BR dead stalks and SFR	2 - <5 cm	Moss, Herbs, and Deciduous Shrubs.	10 - 25%	Mixwood	40 - 60% - Patchy coverage	901 - 1500	Deciduous (< 25% Conifer).	3 - 6 m	601 - 900	41 - 60%	21 - 50% - Standing Dead / Partial Down	47	Low
58	49.85988026, -119.6674391	Large area. SFL, UT, P.	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	41 - 60%	< 20% - Standing Dead / Partial Down	64	Moderate
59	49.8287706047333, -119.667953450407	BR and SFL for Egress.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	10 - 25%	Mixwood	>60% - Uniform coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	41 - 60%	< 20% - Standing Dead / Partial Down	59	Moderate
60	49.85961111, -119.6324464	Large area, looks recently pruned, increase CBH (prune height), thin.	1 - <2 cm	Moss, Herbs, and Deciduous Shrubs.	> 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	41 - 60%	< 20% - Standing Dead / Partial Down	61	Moderate
61	49.852975108825, -119.607603918047	Thin, P, and SFR	1 - <2 cm	Pinegrass.	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	20 - 40%	< 20% - Standing Dead / Partial Down	64	Moderate
62	49.8506853598351, -119.612442746193	Thin, P, and SFR	1 - <2 cm	Pinegrass.	10 - 25%	Spruce / Pine / Fir	10 - 39% - Scattered coverage	901 - 1500	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	20 - 40%	< 20% - Standing Dead / Partial Down	69	High

WTA PLOT SUMMARY															
Plot #	**Latitude/ Longitude**	**Comments**	**Depth of Organic Layer (cm)**	**Surface fuel composition**	**Dead and down material continuity (<7cm)**	**Ladder fuel composition**	**Ladder fuel horizontal continuity**	**SPH understory**	**Overstory composition crown base height (CBH)**	**Fuel strata gap (m)**	**SPH overstory**	**Crown closure**	**Dead and dying (% of dominant and codominant stems)**	**Score**	**Local Threat**
63	49.8558087021816, -119.586737406959	Extremely steep & rocky. SFL, remove dead wood and prune.	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	20 - 40%	21 - 50% - Standing Dead / Partial Down	66	High
64	49.8509698325, -119.579247610114	Steep & rocky. SFL, P, remove dead wood.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	10 - 25%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	21 - 50% - Standing Dead / Partial Down	57	Moderate
65	49.8568467848559, -119.562805564981	Egress, BR, P, SFR	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	10 - 25%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	55	Moderate
66	49.8599975227505, -119.565960462581	Thin, prune, SFL clean-up and BRing .	2 - <5 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	40 - 60% - Patchy coverage	901 - 1500	Conifer with Low CBH (<5 m).	< 3 m	601 - 900	41 - 60%	21 - 50% - Standing Dead / Partial Down	73	High
67	49.8571386208897, -119.645942445823	Transmission line could use SFL previous brushing as resulting in substantial surface fuels. Prune and BR.	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	10 - 25%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	< 20%	< 20% - Standing Dead / Partial Down	54	Moderate
68	49.8484393672899, -119.620211214612	Thin, P, SFR	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	20 - 40%	< 20% - Standing Dead / Partial Down	59	Moderate
69	49.8228329713422, -119.640467341746	Thin, P, SFR	1 - <2 cm	Fuel (<1 cm). Dead Fines (Leaves, needles, or fine branch material).	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	401 - 600	41 - 60%	< 20% - Standing Dead / Partial Down	60	Moderate
70	49.82347577, -119.6752739	Riparian area around pond. UT and P	2 - <5 cm	Moss, Herbs, and Deciduous Shrubs.	26 - 50%	Mixwood	10 - 39% - Scattered coverage	< 900	Conifer with Low CBH (<5 m).	< 3 m	< 400	41 - 60%	< 20% - Standing Dead / Partial Down	59	Moderate

Appendix F: Area of Interest Map

City of West Kelowna - Community Wildfire Resiliency Plan - Map 1: Area of Interest and VAR



Proposed Treatment Areas
AMU - Assess Monitor Unit
AMU - Previous Treatment
AOI
WUI 1 km Buffer
Municipal Boundary

FTEN Managed Licences (Woodlots, Community Forests)
Consolidated Cutblocks (2010 or newer)
Wildfire Interface Development Permit Area
Fire Department Boundary
Fortis BC - Natural Gas Station

Land Ownership
Crown Agency
Crown Provincial
Federal
First Nations
Mixed Ownership
Municipal
Private

1 Site ID
Assessed Critical Infrastructure
All Critical Infrastructure

Transmission Line
Distribution Line
Electrical Substation
Pipeline
Railways
Highway
Arterial
Lakes
Streams
Reserve Boundary
Parks

0 1 2 3 4 5 6 7 Kilometres

Coordinate System: NAD 1983 BC Environment Albers

CABIN

Client: City of West Kelowna
Project Number: LGPS-10553
GIS Consulted: Cabin Resource Management
CWPP Consulted: Cabin Resource Management
Map Created: 2024-12-02
Data Sources: All base data and PSTA data provided by Data BC and BC Wildfire Service. All GIS analysis data created by Cabin Resource Management.

Scale: 1:25,000

N

Appendix G: Wildfire History Map

City of West Kelowna - Community Wildfire Resiliency Plan - Burn History

FIRE YEAR

- 1922 - 1929
- 1930 - 1940
- 1941 - 1969
- 1970 - 2012
- 2013 - 2023

Okanagan Lake

Proposed Treatment Areas
AMU - Assess Monitor Unit
AMU - Previous Treatment
AOI
WUI 1 km Buffer
Municipal Boundary
Land Ownership

Transmission Line
Distribution Line
Electrical Substation
Pipeline
Highway
arterial
Lakes
Streams
Reserve Boundary
Parks

0 1 2 3 4 5 6 7 Kilometres

Coordinate System: NAD 1983 BC Environment Albers

Client: City of West Kelowna
Project Number: LGPS-10553
GIS Consulted: Cabin Resource Management
CWPP Consulted: Cabin Resource Management
Map Created: 2024-11-30
Data Sources: All base data and PSTA data provided by Data BC and BC Wildfire Service. All GIS analysis data created by Cabin Resource Management.

Scale: 1:25,000

N

Appendix H: Wildfire Threat Map

Local Fire Threat Class	Hectares (ha)
Extreme	301
High	2063
Moderate	1578
Low	17
No Data	4921
Water	2005

Okanagan Lake

City of West Kelowna - Community Wildfire Resiliency Plan - Map 2: Local Fire Risk

FIRE THREAT CLASS - December 2024

- Extreme
- High
- Moderate
- Low
- No Data (Private Land)
- Water
- Proposed Treatment Areas
- AMU - Assess Monitor Unit
- AMU - Previous Treatment
- WUI 1 km Buffer
- AOI
- Reserve Boundary
- Municipal Boundary
- Land Ownership
- Transmission Line
- Distribution Line
- Electrical Substation
- Pipeline
- Highway
- Arterial
- Lakes
- Streams
- Reserve Boundary
- Parks

0 1 2 3 4 5 6 7 Kilometres

Coordinate System: NAD 1983 BC Environment Albers

Client: City of West Kelowna
Project Number: LGPS-10553
GIS Consulted: Cabin Resource Management
CWPP Consulted: Cabin Resource Management
Map Created: 2024-12-03
Data Sources: All base data and PSTA data provided by Data BC and BC Wildfire Service. All GIS analysis data created by Cabin Resource Management.

Scale: 1:25,000

Appendix I: Fuel Treatment Maps

TUID/ Priority Ranking	Treatment Unit Name	Area (ha)	Parcel Type
1	Sunview Dr Moonbeam	0.9	Municipal
2	Rose Ridge Park (7)	24.4	Municipal
3	Scott Cr Horizon Trail	5.3	Municipal
4	McDougall Creek	15.0	Community Forest
5	Mt. Boucherie Park (13)	4.6	Municipal
6	Rose Meadow Park (54)	5.3	Municipal
7	Hudson West (47)	2.3	None
8	Hudson	3.1	Municipal
9	Sandstone Park	2.2	Crown Provincial
10	West Ridge Park	1.9	Municipal, None
11	Moonbeam East (56)	1.7	Municipal
12	Shannon Way Park (30)	2.7	Municipal
13a	Seclusion Bay Rd Egress	1.6	None
13b	Seclusion Bay Rd Egress	0.5	Municipal
14	Broad View	3.5	Crown Provincial
15	Stonegrove Park	0.4	Municipal
16a	Cobblestone Park	0.2	Municipal
16b	Cobblestone Park	1.2	Municipal
17	Lake View Cove	1.0	None
18	Turnbill Rd	7.9	Crown Provincial
19	Mt. Boucherie South	9.0	Municipal
20	Westbank Sub-Station Shannon Lake Rd	0.5	Crown Provincial
21	Eain Lamont Park (01a)	1.8	Municipal
22	Wild Horse Park	5.5	Municipal
23	East of Johnston Bentley	1.7	Crown Provincial
24a	Powers Creek (4)	44.9	None, Community Forest
24b	Powers Creek	3.8	Municipal, Community Forest
24c	Powers Creek	5.4	Crown Provincial, Community Forest
25	Gates Rd Egress	1.6	None
26	Gates Grove Park	2.3	Municipal
27	Westbank Centre Park	0.6	Municipal
28	Shannon Springs Park	0.9	Municipal
29	Connemara Park	0.8	Municipal
30a	Smith Creek East	110.9	Community Forest
30b	Smith Creek West	42.8	Crown Provincial, Community Forest
30c	Smith Creek West	52.8	Crown Provincial, Community Forest
31	Faulkner Creek Horizon (15)	1.2	Municipal
32	Morningside Park	0.3	Municipal
33	Smith Creek	46.4	Community Forest
34	Copper Ridge Park	0.1	Municipal
35	McKeller Rd	3.8	Crown Provincial
36	Landscape Fuel Break West	206.5	Crown Provincial, Community Forest
37	Rose Valley Rd Bear Cr (27)	11.2	Municipal
38	McLeod Rd	1.2	Municipal
39	Smith Creek Park	0.4	Municipal
40	Sandberg Rd	0.4	Municipal
41	Pinot Gris Walkway	1.1	Municipal
42	Multi-Sport Centre	5.3	Municipal
43	Smith Creek Greenway	0.7	Municipal
44	Shannon Lake Rd Egress	2.1	Municipal, None
45	Shannon Lake Rd Canyon	0.5	Municipal
46	Boulder Park	0.4	Municipal
47a	Shannon Lake (10)	0.8	Community Forest
47b	Shannon Lake (10)	9.1	Community Forest
48	Dawdson Creek Park (10)	5.9	Municipal
49	Shannon Hills NE	4.1	Community Forest
50	Rock Ridge Park (12)	2.6	Municipal
51	Bear Creek FSR (442)	14.4	Crown Provincial, Community Forest
52	Rose Valley Reservoir (1)	28.3	Community Forest
53	Tallus Greenway	3.5	Municipal
54	Maintenance (557)	53.9	None
55	Jonagold Park (14) (57)	2.5	Municipal
56	Paramount Park	1.1	Municipal
57	Art Pond	1.0	None
58	Glenrosa Road	5.0	Crown Provincial
59	Glenrosa Rd McKeller Rd (53)	0.4	None
60	Rose Valley North (27)	36.6	Crown Provincial
61	Glenrosa Rd Infrastructure	0.05	Municipal
62	Fire Station #33	0.4	Municipal
63	Maintenance (251)	32.9	Community Forest
64	AMU - Glenrosa South (287)	66.4	Crown Provincial, Community Forest, None
65	AMU - Gorman	73.5	Community Forest, None

Note: (Prior TU#) overlaps current TU

See Detail 1
See Detail 2
See Detail 3
See Detail 4
See Detail 5

Okanagan Lake

City of West Kelowna - Community Wildfire Resiliency Plan - Map 3: Proposed Fuel Treatments

Proposed Treatment
AMU - Assess Monitor Unit
AMU - Previous Treatment
AOI
WUI 1 km Buffer
Municipal Boundary
FTEN Managed Licences (Woodlots, Community Forests)

Land Ownership
Crown Agency
Crown Provincial
Federal
First Nations
Mixed Ownership
Municipal
Private

Transmission Line
Distribution Line
Electrical Substation
Pipeline
Railways
Highway
Arterial
Lakes
Streams
Reserve Boundary
Parks
Fortis BC - Natural Gas Station
Detail Map Coverage

0 1 2 3 4 5 6 7 Kilometres

Coordinate System: NAD 1983 BC Environment Albers

CABIN

Client: City of West Kelowna
Project Number: LGPS-10553
GIS Consulted: Cabin Resource Management
CWPP Consulted: Cabin Resource Management
Map Created: 2024-12-02
Data Sources: All base data and PSTA data provided by Data BC and BC Wildfire Service. All GIS analysis data created by Cabin Resource Management.

Scale: 1:25,000

WEST KELOWNA FIRE RESCUE

CITY OF WEST KELOWNA

TUID/ Priority Ranking	Treatment Unit Name	Area (ha)	Parcel Type
1	Sunview Dr Moonbeam	0.9	Municipal
2	Rose Ridge Park (7)	24.4	Municipal
3	Scott Cr Horizon Trail	5.3	Municipal
4	McDougall Creek	15.0	Community Forest
5	Mt. Boucherie Park (13)	4.6	Municipal
6	Rose Meadow Park (54)	5.3	Municipal
7	Hudson West (47)	2.3	None
8	Hudson	3.1	Municipal
9	Sandstone Park	2.2	Crown Provincial
10	West Ridge Park	1.9	Municipal, None
11	Moonbeam East (56)	1.7	Municipal
12	Shannon Way Park (30)	2.7	Municipal
13a	Seclusion Bay Rd Egress	1.6	None
13b	Seclusion Bay Rd Egress	0.5	Municipal
14	Broad View	3.5	Crown Provincial
15	Stonegrove Park	0.4	Municipal
16a	Cobblestone Park	0.2	Municipal
16b	Cobblestone Park	1.2	Municipal
17	Lake View Cove	1.0	None
18	Turnbill Rd	7.9	Crown Provincial
19	Mt. Boucherie South	9.0	Municipal
20	Westbank Sub-Station Shannon Lake Rd	0.5	Crown Provincial
21	Bain Lamont Park (01a)	1.8	Municipal
22	Wild Horse Park	5.5	Municipal
23	East of Johnston Bentley	1.7	Crown Provincial
24a	Powers Creek (4)	44.9	None, Community Forest
24b	Powers Creek	3.8	Municipal, Community Forest
24c	Powers Creek	5.4	Crown Provincial, Community Forest
25	Gates Rd Egress	1.6	None
26	Gates Grove Park	2.3	Municipal
27	Westbank Centre Park	0.6	Municipal
28	Shannon Springs Park	0.9	Municipal
29	Connemara Park	0.8	Municipal
30a	Smith Creek East	110.9	Community Forest
30b	Smith Creek West	42.8	Crown Provincial, Community Forest
30c	Smith Creek West	52.8	Crown Provincial, Community Forest
31	Faulkner Creek Horizon (15)	1.2	Municipal
32	Morningside Park	0.3	Municipal
33	Smith Creek	46.4	Community Forest
34	Copper Ridge Park	0.1	Municipal
35	McKeller Rd	3.8	Crown Provincial
36	Landscape Fuel Break West	206.5	Crown Provincial, Community Forest
37	Rose Valley Rd Bear Cr (27)	11.2	Municipal
38	McLeod Rd	1.2	Municipal
39	Smith Creek Park	0.4	Municipal
40	Sandberg Rd	0.4	Municipal
41	Pinot Gris Walkway	1.1	Municipal
42	Multi-Sport Centre	5.3	Municipal
43	Smith Creek Greenway	0.7	Municipal
44	Shannon Lake Rd Egress	2.1	Municipal, None
45	Shannon Lake Rd Canyon	0.5	Municipal
46	Boulder Park	0.4	Municipal
47a	Shannon Lake (10)	0.8	Community Forest
47b	Shannon Lake (10)	9.1	Community Forest
48	Davidson Creek Park (10)	5.9	Municipal
49	Shannon Hills NE	4.1	Community Forest
50	Rock Ridge Park (12)	2.6	Municipal
51	Bear Creek FSR (442)	14.4	Crown Provincial, Community Forest
52	Rose Valley Reservoir (1)	28.3	Community Forest
53	Tallus Greenway	3.5	Municipal
54	Maintenance (557)	53.9	None
55	Jonagold Park (14) (57)	2.5	Municipal
56	Paramount Park	1.1	Municipal
57	Art Pond	1.0	None
58	Glenrosa Road	5.0	Crown Provincial
59	Glenrosa Rd McKeller Rd (53)	0.4	None
60	Rose Valley North (27)	36.6	Crown Provincial
61	Glenrosa Rd Infrastructure	0.05	Municipal
62	Fire Station #33	0.4	Municipal
63	Maintenance (251)	32.9	Community Forest
64	AMU - Glenrosa South (287)	66.4	Crown Provincial, Community Forest, None
65	AMU - Gorman	73.5	Community Forest, None

Note: (Prior TUid) overlaps current TU

Glenrosa
Westbank
Westbank Centre
Goats Peak / Gellatly
Law Creek
Smith Creek
Westbank Creek
Powers Creek
Drought Creek
Okanagan Lake
AMU - Glenrosa South
AMU - Gorman
KTPA SCHEDULE_B
Fortis BC - Natural Gas Station

City of West Kelowna - Community Wildfire Resiliency Plan - Detail 1: Proposed Fuel Treatments

Proposed Treatment
AMU - Assess Monitor Unit
AMU - Previous Treatment
AOI
WUI 1 km Buffer
Municipal Boundary
FTEN Managed Licences (Woodlots, Community Forests)

Land Ownership
Crown Agency
Crown Provincial
Federal
First Nations
Mixed Ownership
Municipal
None
Private
Unknown

Transmission Line
Distribution Line
Electrical Substation
Pipeline
Highway
arterial
Lakes
Streams
Reserve Boundary
Parks
Fortis BC - Natural Gas Station

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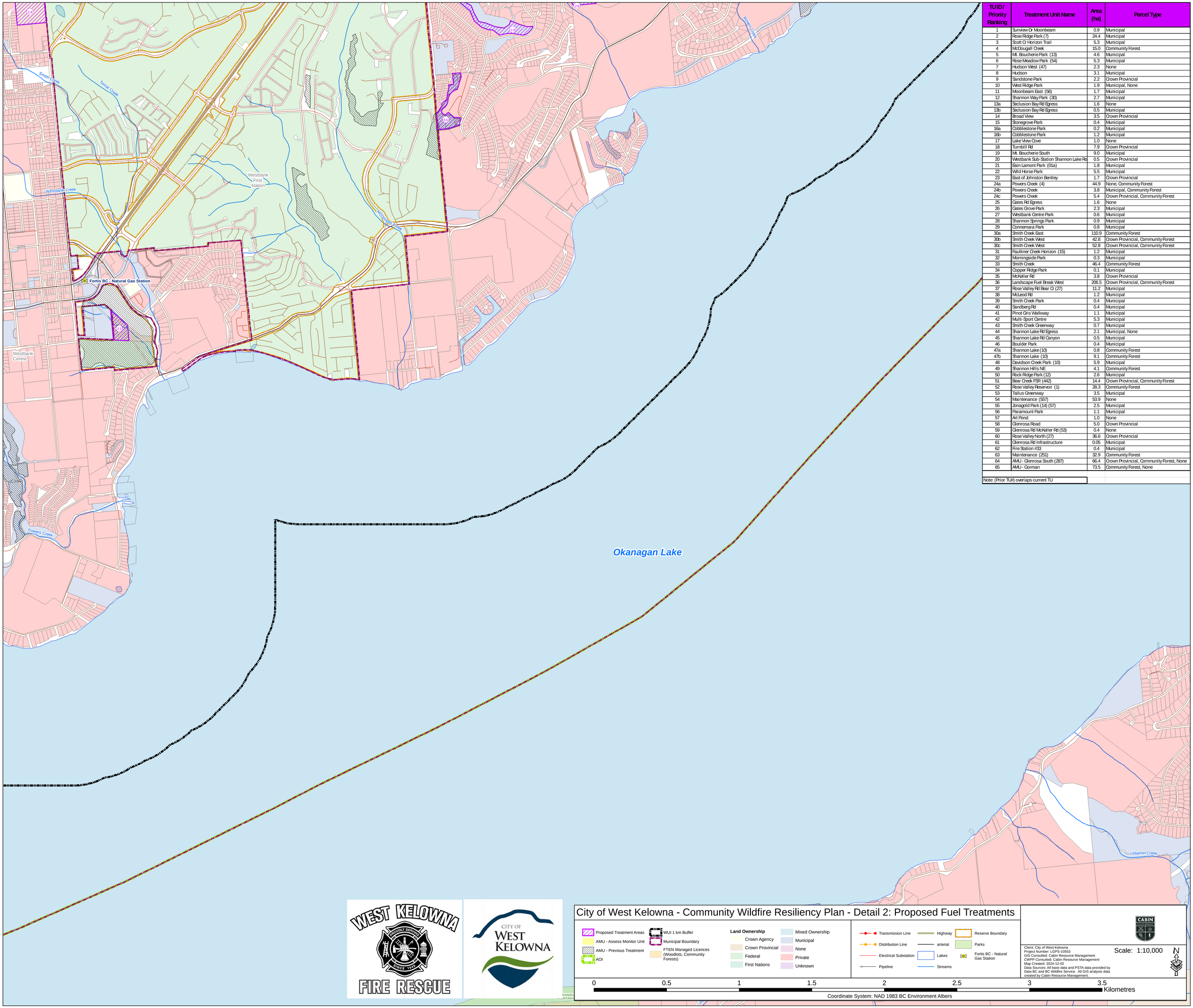
0 0.5 1 1.5 2 2.5 3 3.5 Kilometres

Coordinate System: NAD 1983 BC Environment Albers



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5	Mt. Boucherie Park (13)	4.6	Municipal
6	Rose Meadow Park (54)	5.3	Municipal
7	Hudson West (47)	2.3	None
8	Hudson	3.1	Municipal
9	Sandstone Park	2.2	Crown Provincial
10	West Ridge Park	1.9	Municipal, None
11	Moonbeam East (56)	1.7	Municipal
12	Shannon Way Park (30)	2.7	Municipal
13a	Seclusion Bay Rd Egress	1.6	None
13b	Seclusion Bay Rd Egress	0.5	Municipal
14	Broad View	3.5	Crown Provincial
15	Stonegrove Park	0.4	Municipal
16a	Cobblestone Park	0.2	Municipal
16b	Cobblestone Park	1.2	Municipal
17	Lake View Cove	1.0	None
18	Turnbill Rd	7.9	Crown Provincial
19	Mt. Boucherie South	9.0	Municipal
20	Westbank Sub-Station Shannon Lake Rd	0.5	Crown Provincial
21	Elain Lamont Park (01a)	1.8	Municipal
22	Wild Horse Park	5.5	Municipal
23	East of Johnston Bentley	1.7	Crown Provincial
24a	Powers Creek (4)	44.9	None, Community Forest
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24c	Powers Creek	5.4	Crown Provincial, Community Forest
25	Gates Rd Egress	1.6	None
26	Gates Grove Park	2.3	Municipal
27	Westbank Centre Park	0.6	Municipal
28	Shannon Springs Park	0.9	Municipal
29	Connemara Park	0.8	Municipal
30a	Smith Creek East	110.9	Community Forest
30b	Smith Creek West	42.8	Crown Provincial, Community Forest
30c	Smith Creek West	52.8	Crown Provincial, Community Forest
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32	Morningside Park	0.3	Municipal
33	Smith Creek	46.4	Community Forest
34	Copper Ridge Park	0.1	Municipal
35	McKeller Rd	3.8	Crown Provincial
36	Landscape Fuel Break West	206.5	Crown Provincial, Community Forest
37	Rose Valley Rd Bear Cr (27)	11.2	Municipal
38	McLeod Rd	1.2	Municipal
39	Smith Creek Park	0.4	Municipal
40	Sandberg Rd	0.4	Municipal
41	Pinot Gris Walkway	1.1	Municipal
42	Multi-Sport Centre	5.3	Municipal
43	Smith Creek Greenway	0.7	Municipal
44	Shannon Lake Rd Egress	2.1	Municipal, None
45	Shannon Lake Rd Canyon	0.5	Municipal
46	Boulder Park	0.4	Municipal
47a	Shannon Lake (10)	0.8	Community Forest
47b	Shannon Lake (10)	9.1	Community Forest
48	Davidson Creek Park (10)	5.9	Municipal
49	Shannon Hills NE	4.1	Community Forest
50	Rock Ridge Park (12)	2.6	Municipal
51	Bear Creek FSR (442)	14.4	Crown Provincial, Community Forest
52	Rose Valley Reservoir (1)	28.3	Community Forest
53	Tallus Greenway	3.5	Municipal
54	Maintenance (557)	53.9	None
55	Jonagold Park (14) (57)	2.5	Municipal
56	Paramount Park	1.1	Municipal
57	Art Pond	1.0	None
58	Glenrosa Road	5.0	Crown Provincial
59	Glenrosa Rd McKeller Rd (53)	0.4	None
60	Rose Valley North (27)	36.6	Crown Provincial
61	Glenrosa Rd Infrastructure	0.05	Municipal
62	Fire Station #33	0.4	Municipal
63	Maintenance (251)	32.9	Community Forest
64	AMU - Glenrosa South (287)	66.4	Crown Provincial, Community Forest, None
65	AMU - Gorman	73.5	Community Forest, None

Note: (Prior TUI) overlaps current TU

City of West Kelowna - Community Wildfire Resiliency Plan - Detail 2: Proposed Fuel Treatments

- Proposed Treatment Areas
- AMU - Assess Monitor Unit
- AMU - Previous Treatment
- AOI
- WUI 1 km Buffer
- Municipal Boundary
- FTEN Managed Licences (Woodlots, Community Forests)

Land Ownership

- Crown Agency
- Crown Provincial
- Federal
- First Nations
- Mixed Ownership
- Municipal
- None
- Private
- Unknown

- Transmission Line
- Distribution Line
- Electrical Substation
- Pipeline
- Highway
- arterial
- Lakes
- Streams
- Reserve Boundary
- Parks
- Fortis BC - Natural Gas Station

0 0.5 1 1.5 2 2.5 3 3.5 Kilometres

Coordinate System: NAD 1983 BC Environment Albers

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N

City of West Kelowna - Community Wildfire Resiliency Plan - Detail 3: Proposed Fuel Treatments

TUID / Priority Ranking	Treatment Unit Name	Area (ha)	Parcel Type
1	Sunview Dr Moonbeam	0.9	Municipal
2	Rose Ridge Park (7)	24.4	Municipal
3	Scott Cr Horizon Trail	5.3	Municipal
4	McDougall Creek	15.0	Community Forest
5	Mt. Boucherie Park (13)	4.6	Municipal
6	Rose Meadow Park (54)	5.3	Municipal
7	Hudson West (47)	2.3	None
8	Hudson	3.1	Municipal
9	Sandstone Park	2.2	Crown Provincial
10	West Ridge Park	1.9	Municipal, None
11	Moonbeam East (56)	1.7	Municipal
12	Shannon Way Park (30)	2.7	Municipal
13a	Seclusion Bay Rd Egress	1.6	None
13b	Seclusion Bay Rd Egress	0.5	Municipal
14	Broad View	3.5	Crown Provincial
15	Stonegrove Park	0.4	Municipal
16a	Cobblestone Park	0.2	Municipal
16b	Cobblestone Park	1.2	Municipal
17	Lake View Cove	1.0	None
18	Turnbill Rd	7.9	Crown Provincial
19	Mt. Boucherie South	9.0	Municipal
20	Westbank Sub-Station Shannon Lake Ro	0.5	Crown Provincial
21	Eain Lamont Park (01a)	1.8	Municipal
22	Wild Horse Park	5.5	Municipal
23	East of Johnston Bentley	1.7	Crown Provincial
24a	Powers Creek (4)	44.9	None, Community Forest
24b	Powers Creek	3.8	Municipal, Community Forest
24c	Powers Creek	5.4	Crown Provincial, Community Forest
25	Gates Rd Egress	1.6	None
26	Gates Grove Park	2.3	Municipal
27	Westbank Centre Park	0.6	Municipal
28	Shannon Springs Park	0.9	Municipal
29	Connemara Park	0.8	Municipal
30a	Smith Creek East	110.9	Community Forest
30b	Smith Creek West	42.8	Crown Provincial, Community Forest
30c	Smith Creek West	52.8	Crown Provincial, Community Forest
31	Faulkner Creek Horizon (15)	1.2	Municipal
32	Morningside Park	0.3	Municipal
33	Smith Creek	46.4	Community Forest
34	Copper Ridge Park	0.1	Municipal
35	McKeller Rd	3.8	Crown Provincial
36	Landscape Fuel Break West	206.5	Crown Provincial, Community Forest
37	Rose Valley Rd Bear Cr (27)	11.2	Municipal
38	McLeod Rd	1.2	Municipal
39	Smith Creek Park	0.4	Municipal
40	Sandberg Rd	0.4	Municipal
41	Pinot Gris Walkway	1.1	Municipal
42	Multi-Sport Centre	5.3	Municipal
43	Smith Creek Greenway	0.7	Municipal
44	Shannon Lake Rd Egress	2.1	Municipal, None
45	Shannon Lake Rd Canyon	0.5	Municipal
46	Boulder Park	0.4	Municipal
47a	Shannon Lake (10)	0.8	Community Forest
47b	Shannon Lake (10)	9.1	Community Forest
48	Davidson Creek Park (10)	5.9	Municipal
49	Shannon Hills NE	4.1	Community Forest
50	Rock Ridge Park (12)	2.6	Municipal
51	Bear Creek FSR (442)	14.4	Crown Provincial, Community Forest
52	Rose Valley Reservoir (1)	28.3	Community Forest
53	Tallus Greenway	3.5	Municipal
54	Maintenance (557)	53.9	None
55	Jonagold Park (14) (57)	2.5	Municipal
56	Paramount Park	1.1	Municipal
57	Art Pond	1.0	None
58	Glenrosa Road	5.0	Crown Provincial
59	Glenrosa Rd McKeller Rd (53)	0.4	None
60	Rose Valley North (27)	36.6	Crown Provincial
61	Glenrosa Rd Infrastructure	0.05	Municipal
62	Fire Station #33	0.4	Municipal
63	Maintenance (251)	32.9	Community Forest
64	AMU - Glenrosa South (287)	66.4	Crown Provincial, Community Forest, None
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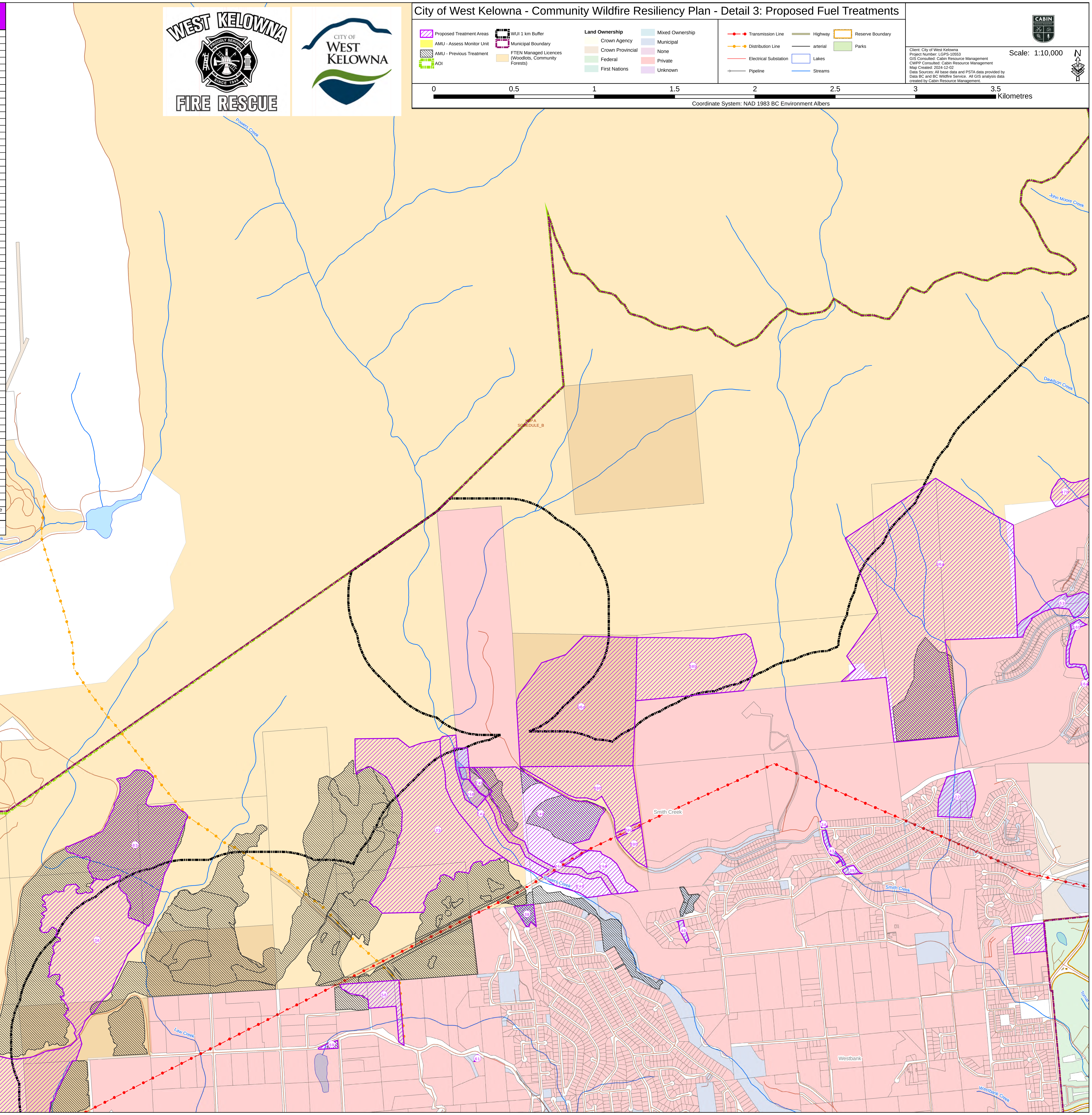
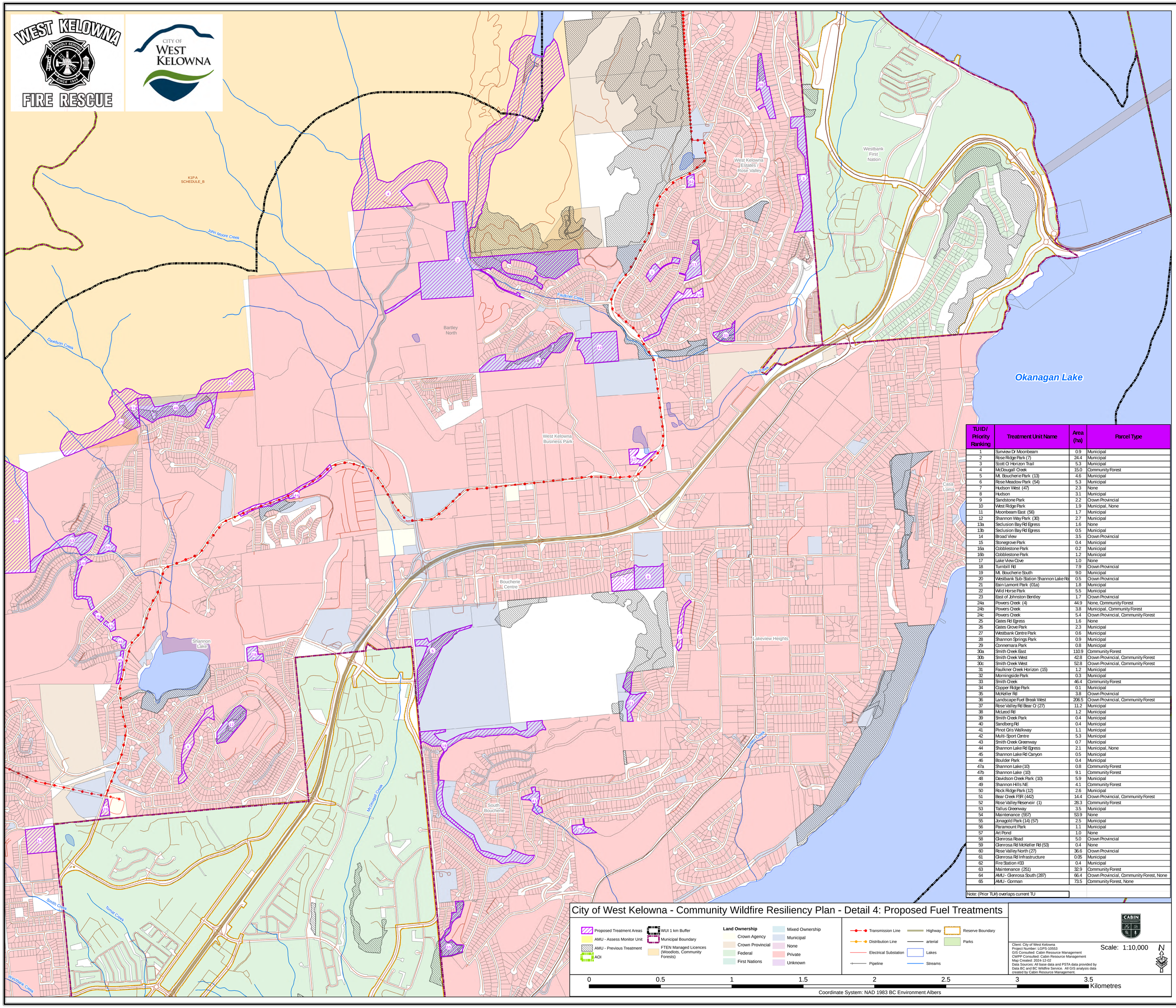
Note: (Prior TU#) overlaps current TU





TU ID / Priority Ranking	Treatment Unit Name	Area (ha)	Parcel Type
1	Sunview Dr Moonbeam	0.9	Municipal
2	Rose Ridge Park (7)	24.4	Municipal
3	Scott Of Horizon Trail	5.3	Municipal
4	McDougall Creek	15.0	Community Forest
5	Mt. Boucherie Park (13)	4.6	Municipal
6	Rose Meadow Park (54)	5.3	Municipal
7	Hudson West (47)	2.3	None
8	Hudson	3.1	Municipal
9	Sandstone Park	2.2	Crown Provincial
10	West Ridge Park	1.9	Municipal, None
11	Moonbeam East (56)	1.7	Municipal
12	Shannon Way Park (30)	2.7	Municipal
13a	Seclusion Bay Rd Egress	1.6	None
13b	Seclusion Bay Rd Egress	0.5	Municipal
14	Broad View	3.5	Crown Provincial
15	Stonegrove Park	0.4	Municipal
16a	Cobblestone Park	0.2	Municipal
16b	Cobblestone Park	1.2	Municipal
17	Lake View Cove	1.0	None
18	Turnbill Rd	7.9	Crown Provincial
19	Mt. Boucherie South	9.0	Municipal
20	Westbank Sub-Station Shannon Lake Rd	0.5	Crown Provincial
21	Bain Lamont Park (01a)	1.8	Municipal
22	Wild Horse Park	5.5	Municipal
23	East of Johnston Bentley	1.7	Crown Provincial
24a	Powers Creek (4)	44.9	None, Community Forest
24b	Powers Creek	3.8	Municipal, Community Forest
24c	Powers Creek	5.4	Crown Provincial, Community Forest
25	Gates Rd Egress	1.6	None
26	Gates Grove Park	2.3	Municipal
27	Westbank Centre Park	0.6	Municipal
28	Shannon Springs Park	0.9	Municipal
29	Connemara Park	0.8	Municipal
30a	Smith Creek East	110.9	Community Forest
30b	Smith Creek West	42.8	Crown Provincial, Community Forest
30c	Smith Creek West	52.8	Crown Provincial, Community Forest
31	Faulkner Creek Horizon (15)	1.2	Municipal
32	Morningside Park	0.3	Municipal
33	Smith Creek	46.4	Community Forest
34	Copper Ridge Park	0.1	Municipal
35	McKeller Rd	3.8	Crown Provincial
36	Landscape Fuel Break West	206.5	Crown Provincial, Community Forest
37	Rose Valley Rd Bear Cr (27)	11.2	Municipal
38	McLeod Rd	1.2	Municipal
39	Smith Creek Park	0.4	Municipal
40	Sandberg Rd	0.4	Municipal
41	Pinot Gris Walkway	1.1	Municipal
42	Multi-Sport Centre	5.3	Municipal
43	Smith Creek Greenway	0.7	Municipal
44	Shannon Lake Rd Egress	2.1	Municipal, None
45	Shannon Lake Rd Canyon	0.5	Municipal
46	Boulder Park	0.4	Municipal
47a	Shannon Lake (10)	0.8	Community Forest
47b	Shannon Lake (10)	9.1	Community Forest
48	Davidson Creek Park (10)	5.9	Municipal
49	Shannon Hills NE	4.1	Community Forest
50	Rock Ridge Park (12)	2.6	Municipal
51	Bear Creek FSR (442)	14.4	Crown Provincial, Community Forest
52	Rose Valley Reservoir (1)	28.3	Community Forest
53	Tallus Greenway	3.5	Municipal
54	Maintenance (557)	53.9	None
55	Jonagold Park (14) (57)	2.5	Municipal
56	Paramount Park	1.1	Municipal
57	Art Pond	1.0	None
58	Glenrosa Road	5.0	Crown Provincial
59	Glenrosa Rd McKeller Rd (53)	0.4	None
60	Rose Valley North (27)	36.6	Crown Provincial
61	Glenrosa Rd Infrastructure	0.05	Municipal
62	Fire Station #33	0.4	Municipal
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65	AMU - Gorman	73.5	Community Forest, None

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City of West Kelowna - Community Wildfire Resiliency Plan - Detail 4: Proposed Fuel Treatments

- Proposed Treatment Areas
- AMU - Assess Monitor Unit
- AMU - Previous Treatment
- AOI
- WUI 1 km Buffer
- Municipal Boundary
- FTEN Managed Licences (Woodlots, Community Forests)

Land Ownership
- Crown Agency
- Crown Provincial
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- Transmission Line
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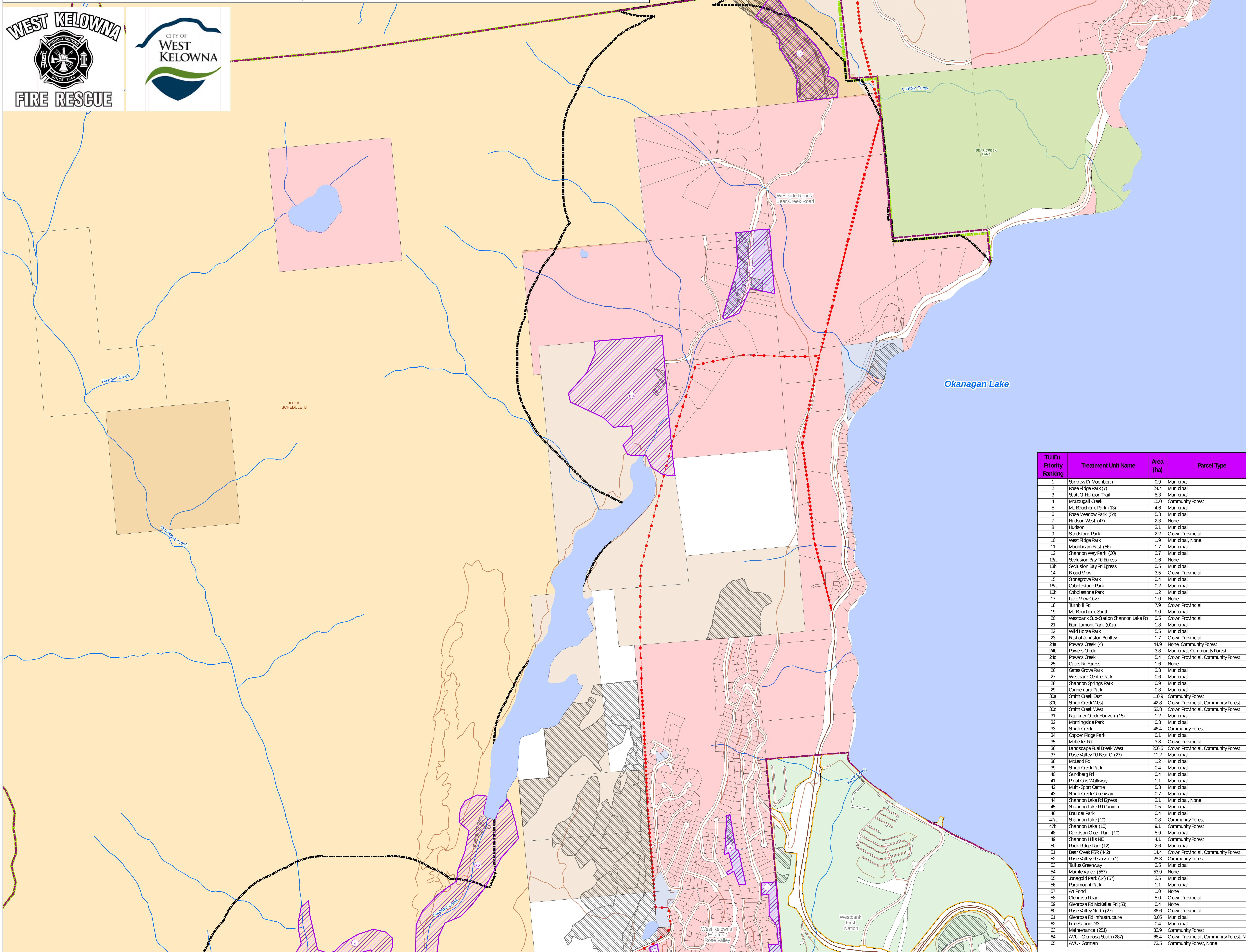
City of West Kelowna - Community Wildfire Resiliency Plan - Detail 5: Proposed Fuel Treatments



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