



COUNCIL REPORT

To: Mayor and Council

Date: December 10, 2024

From: Ron Bowles, Chief Administrative Officer

Subject: **2025 Community Wildfire Resiliency Plan**

Report Prepared by: Jason Brolund, Fire Chief

INFORMATION SUMMARY

Community Wildfire Resilience Plans (CWRP) are the primary wildfire risk reduction planning mechanism for British Columbia communities. The 2025 West Kelowna CWRP is presented for adoption. Staff and expert consultants will present the plan to Council.

RECOMMENDATION to Consider and Resolve:

THAT Council adopt the City of West Kelowna Community Wildfire Resiliency Plan – 2025 as presented by the Fire Chief and attached to this report;

AND THAT Council adopt the updated policy regarding Wildfire Mitigation, Prevention and Forest Fuel Management on Private Land as attached to this report.

STRATEGIC AREA(S) OF FOCUS

Invest in Infrastructure – We will invest in building, improving and maintaining infrastructure to meet the needs of, and to provide a high quality of life for, current and future generations.

Foster Safety and Well-Being – We will pursue through direct action, advocacy, and collaboration with local and regional service providers, investments in community health, needs-based housing, emergency preparedness, policing, and other services that foster safety and well-being in West Kelowna.

BACKGROUND

In 2009, West Kelowna Fire Rescue (WKFR) and City of West Kelowna (CWK) Parks departments created and presented to Council our first Community Wildfire Protection Plan (CWPP). An updated plan was adopted by Council in 2018.

In 2010, Council established policy regarding Forest Fuel Management on Private Land. (*Appendix C*). The policy:

- Establishes a comprehensive public education and communication program focusing on private land to reduce the impact of wildfire on our community.
- Private property owners wishing for an assessment of their land can make a request to the Fire Department.
- Council will annually review the policy in relation to the Community Wildfire Protection Plan which will be managed by West Kelowna Fire Rescue staff in partnership with our forestry consultant and budget funds to conduct a program based on recommendations from West Kelowna Fire Rescue and public feedback (citizen's survey). The program will include financial and staff resources.
- West Kelowna Fire Rescue and our Forestry Consultant will pursue funding opportunities with the provincial and federal government to provide funding to private landowners and to continue treating the recommended areas of our community wildfire protection plan.
- Council will consider proper forest fuel mitigation components in all departments including Building, Planning, Parks and Engineering.

Since 2009, the CWK has undertaken several grant-funded projects, public education and FireSmart initiatives. As a proactive and forward-thinking community, the CWK has emerged as a leading organization among local governments in the field of wildland urban interface firefighting operations and hazard mitigation. Initiatives have included:

- Fire Danger Monitoring/Weather Station installed in Rose Valley
- Risk-based, real-time campfire bans and Park closures using data from the above
- Support for progressive fuel mitigation practices (air-curtain burning)
- "No Tossing Cigarette Butts" signage in high-risk areas of the community
- Inter-operability with BC Wildfire Service and regional mutual aid fire departments
- Recognized as an Operational Center of Wildfire Expertise by the Province (annual deployments of command staff, instructors/presenters at Regional and Provincial seminars/conferences)
- Risk-based enhanced staffing model
- Pro-active fire department Public Education Program and public messaging strategy (FireSmart Family Day Open House, ongoing FireSmart assessments)
- Partnership and support alongside Westbank First Nation for their ongoing mitigation activities, including attending a cultural burn in 2024.
- Addition of a full-time grant funded FireSmart Coordinator in 2022
- Assessments – since 2023, completed 185 home assessments. 120 Home Ignition Zone assessments and 65 Home Partners Program assessments.

- Fire Prevention staff trained to the highest standard as Wildfire Prevention specialists.
- Grants for work on Private Lands – Since 2019 awarded 199 grants to the public, worth \$79,155.68
- Neighborhood Recognition Program – 10th neighborhood joined in 2024.
- Debris Disposal Bins – Bins are available to all 10 recognized neighborhoods, 149 yards removed in 2024.
- Participation in Okanagan Regional FireSmart group – led the regional Ember mascot acquisition as well as regional advertising campaign.
- Participant in FireSmart BC Plant program - participating nurseries include Bylands and Xeriscape Endemic Nursery.
- Since 2019, 10 prescriptions and fuels management projects were completed.
- In 2024 the Fuel Mod Crew assessed 41 municipally owned properties and provided fuel reduction.
- Maintenance and replacement of Fire Danger rating signs.
- Outreach and Public Education - Highlights include the CWK re-leaf day, Light Up, Okanagan Master Gardeners AGM, Wildfire Responders Gratitude event, Westside Daze, Kalamoior Park Cleanup Day and promotional events in various neighborhoods.
- New Wildland Truck placed into service – 2024 (previous CWPP recommendation).
- Casa Loma and Lenz Rd evac plan and emergency egress development
- WKFR Deputy Fire Chiefs led development and delivery of Engine Boss and Task Force Leader training provincially (2019-2024).
- 2023 Lessons Learned Presentations

The CWRP (Community Wildfire Resiliency Plan) process replaces the previous CWPP (Community Wildfire Protection Plan), as mandated by the province. The CWRP must be reviewed and updated every 5 years, our current plan (CWPP) is now 6 years old.

DISCUSSION

West Kelowna Fire Rescue (WKFR) has led development of a new CWRP for our community, commencing in early 2024. The work has been supported by internal departments (Parks, Planning, Engineering, Public Works, Communications) as well as outside experts at Cabin Forestry and the BC Wildfire Service. The City of West Kelowna's 2025 CWRP builds on the recommendations of previous Community Wildfire Preparedness Plans (CWPP), plus our considerable experience in wildfire mitigation and operations, including lessons learned from significant events in our community.

The CWRP provides an assessment of our communities needs and wildfire risk. Importantly, it allows us to access funding for wildfire risk reduction, as the CWRP is a pre-requisite for funding under the UBCM CRI grant program.

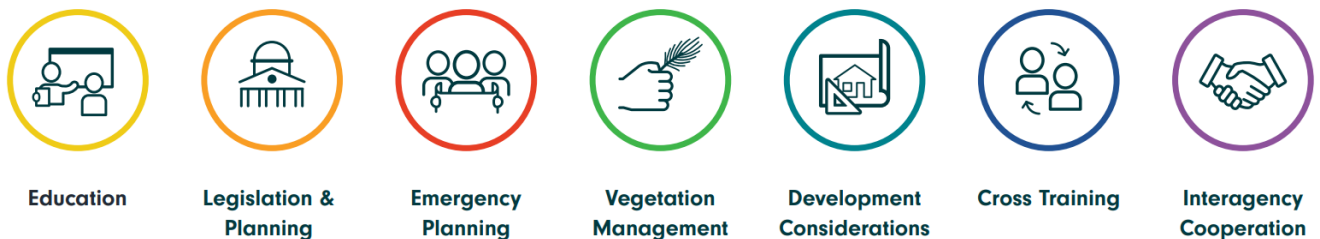
The plan analyzes an “Area of Interest” (AOI) that encompasses the Wildland Urban Interface (WUI) within the extent of West Kelowna’s municipal boundaries. The WUI is the area where the forest meets homes and structures. The AOI includes a 1.0 km buffered area of forested lands that extends beyond the jurisdictional and fire protection area boundaries. This buffered area is important as the provincial grant program provides funding within the AOI, allowing us to conduct work beyond city boundaries on crown lands.

The plan does not include analysis of WFN lands; however, it encourages close coordination with the WFN Community Wildfire Protection Plan as well as the WFN Community Forest Wildfire Protection Plan.

Private land makes up 78% of the AOI; however, the plan does not make recommendations for specific mitigation activities on this land due to the limited ability of local government to perform work there. Consistent with CWK Council Policy on fuel mitigation on private land, recommendations within the plan instead support a broad range of activities in these areas and support landowners to undertake prevention and mitigation activities.

The plan follows a standard provincial template; however, it has been customized to the needs of West Kelowna. The plan is intended to be viewed as an electronic document and contains many links throughout to aid navigation of this comprehensive technical document. *The updated plan is attached as Appendix A.*

The primary objective of the plan is to develop achievable and strategic action items. The plan follows the 7 key FireSmart disciplines:



An 8th discipline (“**Innovation**”) has been added to our plan to highlight the importance of working with external agencies and incorporating new and developing technologies.

The plan is a very broad, technical, scientific document that will guide and assist in prioritizing wildfire mitigation, prevention and preparedness activities for the next 5-10 years. Grouped by the 7 FireSmart Disciplines, the plan:

- Examines our community and the AOI
- Outlines values at risk due to wildfire, with a focus on Critical Infrastructure, Habitat and Species and First Nations and Cultural Values
- Undertakes a Wildfire Risk Assessment, including examination of Wildfire History and factors that lead to increased wildfire risk (topography, fuel types)

- Describes the local wildfire threat assessment process, a mandatory process under the plan that determines a Local Wildfire Risk Rating for specific locations.

The plan contains two core outcomes, in the form of recommendations/action items and fuel treatment units. There are 28 action items, and 72 fuel treatment units (encompassing 995 hectares) outlined within the plan. In addition, community critical infrastructure at 18 sites was assessed and scored for further mitigation.

Highlighted Recommendations:

- Increase capacity of the FireSmart program, including hiring of a second coordinator/specialist
- Increased public communications and events with coordinated messaging
- Ongoing improvements to the FireSmart Home Partners assessment and FireSmart Plant Tagging programs
- Implement a FireSmart educational program in local elementary schools
- Review and evaluation of the existing FireSmart grant program
- Multi-prong approach to legacy landscaping including bylaw updates and enforcement plan. Consideration of restriction and enforcement on sale of certain species of plants.
- Review of the Wildfire Interface Development Permit and covenant process
- Continued campaign for increased provincial/federal funding and cost recovery
- Further engagement and cross training with RDCO and WFN as well as BC Hydro, Fortis Gas, SD #23, MoTI
- Continued ongoing pre-incident planning (major incidents, one-way neighbourhoods)
- Establishment of a Cultural and Prescribed Burning program
- Equipment evaluation and acquisition (marine water delivery platform, PPE and other innovative solutions beyond sprinklers)
- Enhanced existing Fuel Modification Crew program
- Incorporation of FireSmart landscaping around Critical Infrastructure

Identification of Fuel Treatment Units (FTUs) is an important part of the CWRP process. Fuel treatment units are areas within the AOI that present a potential threat the community. Risk reduction activities are prioritized within these FTUs to reduce potential wildfire intensity and increase the safety and effectiveness of fire suppression activities.

Highlighted Fuel Treatment Units:

- FTU identification included reviewing the incomplete units from the previous 2018 CWPP, and potential maintenance areas for treatments completed prior to 2015.
- Post-wildfire salvage opportunities were assessed and three FTUs were identified in Bear Creek FSR, Turnbull Road, and McDougall Creek. (removing dead or damaged trees)
- Municipal owned properties with trees or critical infrastructure were assessed and 37 FTUs were identified on municipal land and parks. 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 (2) were identified for areas that were previously treated or should be considered for potential prescribed and cultural burning.
- A landscape level fuel break ~200 ha was identified. This FTU connects several previously fuel-treated areas and creates a loop around the city, providing protection from an approaching wildfire from the south.

Fuel treatment works identified in the CWRP are anticipated to extend beyond five years to complete.

A full listing of prioritized recommendations, recommended timelines, action items, critical infrastructure and prioritized treatment units are contained within the plan.

In addition, the plan contains a series of maps that visually illustrates the area analyzed (AOI), critical infrastructure, the burn history surrounding our community, the wildfire threat and the proposed fuel treatment areas and how they are interrelated.

There are 4 core maps that were developed for the CWRP:

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

Forest Fuel Management on Private Land

Local governments continue to have limited statutory authority and limited funding supports to enforce fuel mitigation and fire prevention activities on private land. Consequently, and as directed by Council policy since 2010, public education and awareness of “FireSmart” principles have been the primary focuses of wildfire prevention and mitigation on privately held properties.

As a part of the CWRP development process, staff has reviewed the existing 2010 Council Policy on Forest Fuel Management on Private Land. Staff has provided updates for Council consideration, to reflect modernized practices, including:

- Title updated to include “Wildfire Mitigation and Prevention”
- Housekeeping updates (City, CWRP, ongoing risk)
- Prioritization of activities based on risk as outlined in the CWRP
- Additional City departments added (Bylaw, Communications, Finance)

- Inclusion of existing city-wide Wildfire Mitigation Committee
- Direction to innovate and work with external agencies/governments
- Formalize twice annual updates to Council

Public Consultation Process

The primary goal of public engagement on the CWRP was to hear from residents and stakeholders about the impact of wildfire on the community and to gather input on what priorities should be set for wildfire management.

Public feedback was gathered from Oct. 23 to Nov. 4, 2024, through an eight-question survey available online and in paper format. Paper surveys were accessible at West Kelowna City Hall throughout the engagement period, ensuring all residents could share their insights.

Residents were invited to share their thoughts through the survey on OurWK.ca/wildfireplan and had the opportunity to ask questions and learn more about the CWRP.

An in-person open house was held on Oct. 30, 2024 to give the community the opportunity to meet the project team, ask questions, review mitigation work maps and provide feedback. 22 people attended the open house and shared their feedback.

During the engagement period, 58 completed surveys were received along with three resident inquiries.

- 98% support the City and WKFR advocating with the provincial government to advance wildfire resiliency projects requiring partnership with other governments (57 people)
- 97% support conducting fuel management in forested parks and City-owned property (e.g., managing removal of smaller/dead trees) (56 people)
- 95% support adjusting community planning and development bylaws to require new buildings in high-risk areas to use FireSmart construction and landscaping (55 people)
- 69% said they have already changed landscaping around their property to reduce fire risk (40 people)
- 57% indicated they had the highest level of concern for dead trees/vegetation being a potential wildfire factor in West Kelowna (33 people)
- 55% indicated they had the highest level of concern for ignition sources (e.g. cars parked on grass, cigarettes, equipment, campfires) being a potential wildfire factor in West Kelowna (32 people)

The Community Wildfire Resiliency Plan Engagement Summary Report as well as detailed survey data is included as Appendix D.

NEXT STEPS

Following adoption, the plan is required to be submitted to the province for endorsement.

Recommendations for action in the plan will then be undertaken over the next 5 years based on the Action Plan within the CWRP, including as a part of our annual FireSmart program. Prioritized Fuel Treatment units will help guide the budget requirements and workplan for prescriptions and mitigation projects (small and large scale as well as work by our Fuel Modification crews).

Survey results will also help inform the strategic action items to enhance community wildfire resiliency while prioritizing wildfire risk management in the wildland-urban interface, where homes and buildings intersect with forested areas.

The 2025 FireSmart Program will be unveiled in Spring 2025, with a presentation to Council.

FINANCIAL IMPLICATIONS

The cost of developing the plan has not exceeded \$32,000, the maximum available and funded under our approved 2024 CRI grant. Significant staff time has also been invested into supporting the project.

The funding available to develop the CWRP and subsequently action components within the CWRP are strongly linked to the (CRI) grant program. The CRI funding identifies specific wildfire mitigation strategies which are eligible for funding that is guided and prioritized based on community risk. A Council-adopted plan is required to continue to secure grant funding under the CRI program.

Budget needs for recommendations under the plan will be brought forward as a part of the normal budgetary process and/or addressed via grant funding to the extent it is available.

REVIEWED BY

Mark Roberts, Parks Manager

Warren Everton, Director of Finance/CFO

Trevor Seibel, Deputy CAO/Deputy Corporate Officer

APPROVED FOR THE AGENDA BY

Ron Bowles, Chief Administrative Officer

Powerpoint: Yes No

Attachments:

- Appendix A - City of West Kelowna 2025 Community Wildfire Protection Plan
- Appendix B - City of West Kelowna Council Policy – Forest Fuel Management – Private Land (2010)
- Appendix C - City of West Kelowna Council Policy – Forest Fuel Management – Private Land (UPDATED 2024)
- Appendix D – City of West Kelowna Engagement Summary Report - 2025 Community Wildfire Protection Plan
- Appendix E - *skipped to avoid confusion and align with plan document*
- Appendix F - AOI MAP
- Appendix G - Wildfire History Map
- Appendix H - Wildfire Threat Map
- Appendix I - Fuel Treatment Map

The CWRP resulted in additional highly detailed maps and raw technical data beyond what is attached. Council can review this information in its entirety at:
<https://www.ourwk.ca/wildfireplan>