



**REGIONAL DISTRICT
NORTH OKANAGAN**

Regional District North Okanagan

Community Wildfire Resiliency Plans 2025





Signature Page

Nathan Betz
FireSmart Coordinator
Regional District of North Okanagan

April 14, 2026

Date

Alastair Crick
Protective Services Manager
Regional District of North Okanagan

April 14, 2026

Date

Andrew Hunsberger, RPF
Rural Services Manager
Regional District of North Okanagan

April 14, 2026

Date



Acknowledgments

The Regional District of North Okanagan (RDNO) is located in the southern interior of British Columbia and spans a diverse landscape that includes lakes, valleys, grasslands, and forested hills. The region covers approximately 7,500 km² and is home to over 90,000 residents. Within its boundaries exist six self-governing municipalities—the City of Vernon, the City of Armstrong, the Village of Lumby, the District of Coldstream, the Township of Spallumcheen, and the City of Enderby. The RDNO governs five unincorporated electoral areas: Electoral Areas B, C, D, E, and F.

We acknowledge that the Regional District of North Okanagan lies within the traditional, ancestral, and unceded territories of the Splotsin, a member of the Secwépemc Nation, and the Syilx Okanagan Nation. We recognize and respect the deep connections that these Nations have to the land, water, and natural systems that sustain life in this region.

As we plan for greater wildfire resiliency, we honour the long-standing stewardship practices and cultural knowledge of Indigenous Peoples, whose relationship with fire and the land has shaped these ecosystems for generations. We are committed to collaboration, learning, and building relationships that support shared resilience and respect for Indigenous rights and traditional knowledge.

Forsite would like to acknowledge the contributions of many individuals during the building of the Regional District of North Okanagan CWRP's, including:

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- Vanessa Purves, RPF, Senior Wildfire Officer – Prevention, BCWS Kamloops Fire Centre
- Michael Aldred, RPF, Wildfire Prevention Officer, BCWS Kamloops Fire Centre



This report was completed with the support from the following staff from Forsite Consultants Ltd:

- Madison Hughes, FIT, AAg, Fuel Management Specialist, Project Manager
- Crystal Gauer, Wildfire Community Planner
- Lindsay Hill, RPF, Wildfire Management Specialist
- Lauren Shinnimin, RPF, Fuel Management Specialist
- Richelle Parada, GIS Specialist
- Kendall Stephan, GIS Technician
- Christine Pachkowski, RPBio, FIT, Ecosystem Restoration Planner
- Hailey Sigalet, RPF, Fuel Management Specialist
- Maximillian Moore, FIT, Fuel Management Specialist
- Tani Rademaker, Marketing Specialist
- Luke Madden, Sales and Marketing Assistant
- Moragh MacAulay, Communications Specialist

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1.0 Introduction

Community Wildfire Resiliency Plans (CWRPs) are the next generation of Community Wildfire Protection Plans (CWPPs). CWPPs were introduced in 2004 as part of the Strategic Wildfire Prevention initiative (SWPI) and served as the primary wildfire risk reduction planning mechanism for British Columbia communities. To better ensure that CWPPs consistently take a comprehensive approach toward wildfire, including risk reduction and resiliency measures, the BC Wildfire Service (BCWS) partnered with the BC FireSmart Committee to develop a new framework for Community Wildfire Resiliency Planning.

The Regional District of North Okanagan (RDNO) CWRPs are the framework for wildfire risk mitigation within each RDNO Electoral Area. The CWRPs identify the issues within each FireSmart Discipline and outline a comprehensive description of the actions needed to mitigate or manage the risks. These plans craft the next steps and future plans to reduce wildfire risk throughout the RDNO.

The purpose of the RDNO CWRP's are to identify wildfire hazards within the areas surrounding the communities in each electoral area; assess the potential risks and impacts to residents, properties, and community values; and provide strategies to reduce these threats, guided by FireSmart™ principles. In accordance with the *2024 Community Wildfire Resiliency Plan Instruction Guide*¹, the primary goals of the CWRP are to:

1. Increase communities' capacity and understanding of wildfire risk;
2. Foster greater collaboration within and across administrative boundaries;
3. Be more responsive to the needs of different types of communities throughout British Columbia in terms of their size, their capacity, and the threats they face; and
4. Develop achievable and accountable action items.

1.1 PLAN DEVELOPMENT SUMMARY

Forsite Consultants Ltd. (Forsite) was retained to develop five (5) CWRP's for the RDNO, one for each Electoral Area. The development of this plan included the following components:

1. **Gathering and analysis of background information:** A thorough review of existing local community plans, other relevant plans, and compilation of spatial data to help inform the CWRPs. Multiple meetings were held with RDNO staff, community members, member

7 FIRESMART DISCIPLINES

There are 7 FireSmart Disciplines that represent different aspects of wildfire preparedness, management, response, prevention, mitigation, and resiliency:

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

When implemented together through a CWRP, these 7 disciplines create a holistic framework for addressing wildfire risk at home, community, and provincial levels.

¹ [Community Wildfire Resiliency Plan Instruction Guide 2024](#), British Columbia FireSmart.



municipalities, and First Nations, to provide insight and community specific information to the plan.

2. **Identification of human and natural values-at-risk:** Development of a values-at-risk spatial database through information provided by the RDNO, public engagement meetings and surveys.
3. **Public engagement:** Public engagement was conducted throughout the month of July, where a Community CWRP Survey was developed and shared to receive input. In addition, community open houses were held July 21 – 25, 2025. Information was captured from the engagement and included in the plans.
4. **Member Municipality and First Nations Engagement:** On September 3, 2025, an engagement meeting was held with representatives from the Member Municipalities and First Nations to collaborative FireSmart effort, emergency management, and provide insight into the development the RDO CWRPs.
5. **Assessment of local wildfire hazard and risk:** On the ground wildfire threat assessments were completed in forested areas on Crown land within the Wildland Urban Interface adjacent to homes and other values. The results of these assessments were utilized to identify and delineate recommended areas for fuel management treatments.
6. **Development of a risk mitigation strategy with actionable recommendations:** The data and information collected in the above phases provided the necessary content to develop actionable CWRPs that are tailored to each RDNO Electoral Area. Each plan contains an Action Table which provides a comprehensive list of recommendations utilizing FireSmart principles, for RDNO to implement and increase overall wildfire resiliency.

1.2 COMMUNITY RESILIENCY INVESTMENT PROGRAM

The Community Resiliency Investment (CRI) Program was announced by the provincial government in 2018 with the goal of providing support and guidance to BC communities to reduce the risk and impacts of wildfire. For municipalities and regional districts, the program is administered by the Union of BC Municipalities (UBCM) on behalf of the Ministry of Forests. The CRI program provides funding to local governments and First Nations to undertake FireSmart planning and activities within their community that help build and support overall wildfire resiliency through the FireSmart Community Funding and Supports (FCFS) stream.

As of 2024, the CRI program requires each community to have an up-to-date **Community Wildfire Resiliency Plan**, a **FireSmart Coordinator position**, and participate in a **Community FireSmart Resiliency Committee** in order to be eligible to receive additional funding to undertake other FireSmart activities. This CWRP is designed to meet the requirements and expectations of the CRI program at the time of development, and recommendations within the Action Plan are intentionally organized to facilitate future CRI funding applications. However, it is important to note that government funding programs are subject to government budget availabilities and allotment. As such, the CRI program and eligible activities are subject to change annually.

2.0 Community Description

2.1 AREA OF INTEREST

The CRI program provides guidance for defining the Area of Interest (AOI), which varies depending on the type of local government (e.g., municipality versus a regional district) and structure density. For the RDNO CWRPs, the AOI is delineated by the administrative boundary of each Electoral Area.

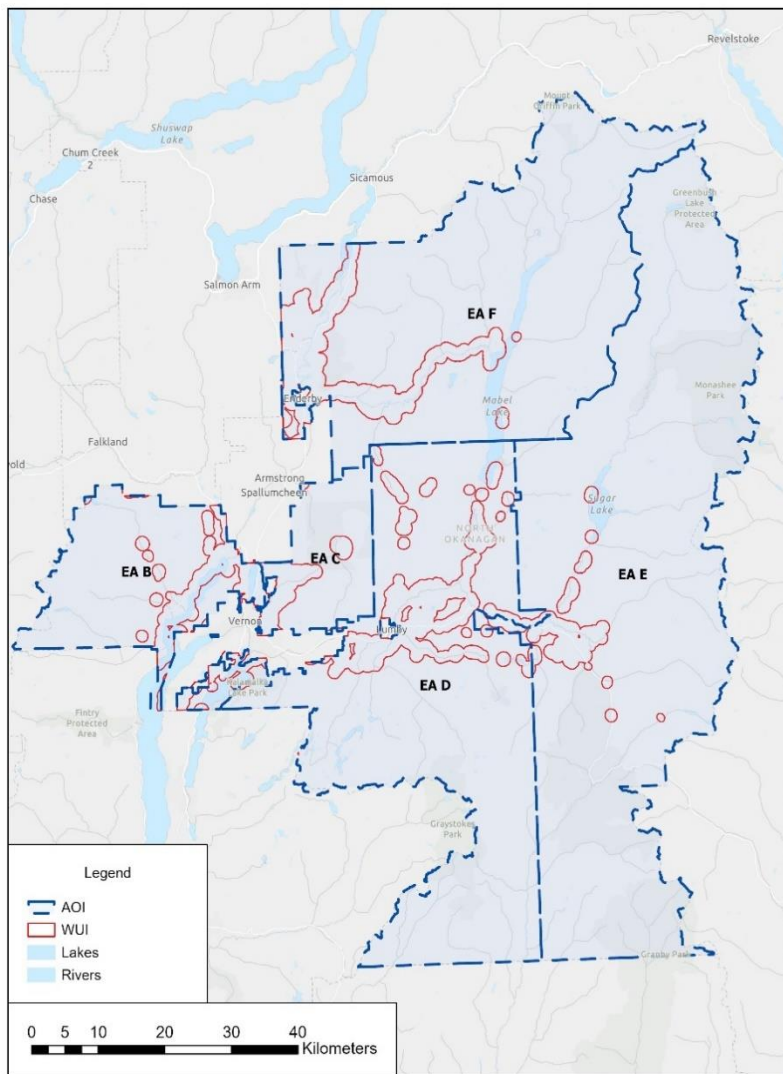


Figure 1. The RDNO area of interest and wildland urban interface.

2.2 WILDLAND- URBAN INTERFACE

The Wildland Urban interface (WUI) encompasses any area where combustible forest fuel is adjacent to homes, farm structures, or other outbuildings. This interface can occur at well-defined boundaries, known as the interface, or in areas where development and forest fuel intermingle with no clearly defined boundary, known as the intermix.

In this CWRP, the WUI differs from the AOI due to the criteria set forth by the provincial FCFS stream and CRI program. For FCFS eligibility, **the WUI is defined as a one-kilometre buffer surrounding areas with a structure density greater than six structures per square kilometre.** This buffer represents a reasonable distance which embers from a wildfire can travel and ignite structure.

2.3 LAND OWNERSHIP

In addition to the AOI and the WUI, only area which falls on Provincial and Municipal land is eligible for mitigation funding. All other land ownership types, including Federal, First Nations, and Private, are not eligible to receive the mitigation funding, and cannot be analyzed through the CWRPs. The mitigation funding is through the CRI program which allows for wildfire risk analysis and mitigation fuel treatments to be conducted.

Table 1. Land ownership and eligibility for the RDNO CWRPs.

CWRP Land Overview						
Area	AOI (ha)	WUI (ha)	Proportion of Eligible Land in WUI (Municipal and Provincial)	Eligible Land in WUI (Municipal and Provincial)	Proportion of Non-Eligible Land in WUI (Federal, First Nation, Private)	Non-Eligible Land in WUI (Federal, First Nation, Private)
RDNO Total	725,755	81,199.2	32.2%	25,983.7 ha	67.8%	55,215.5 ha
Electoral Area B	64,286	15,185.5	38.5%	5,997.0 ha	61.5%	9,188.5 ha
Electoral Area C	30,158	5,813.0	20.7%	1,198.1 ha	79.3	4,614.9 ha
Electoral Area D	180,977	26,217.9	25.6%	6,727.8 ha	74.4%	19,490.1 ha
Electoral Area E	264,346	9,818.2	45.9%	4,507.9 ha	54.1%	5,310.3 ha
Electoral Area F	185,988	24,165.6	30.1%	7,240.6 ha	69.9%	16,925.0 ha

3.0 Wildfire Risk Assessment

The wildfire risk assessment is a decision support tool intended to determine wildfire risk reduction activities and opportunities that will increase RDNO resiliency to wildfire.

It is important to understand the difference between **wildfire risk** and **wildfire threat**, and their context for the wildfire risk planning process. A wildfire risk-based framework considers the likelihood of an unwanted wildfire event, combined with the consequences to communities and high value resources and assets. Overall wildfire risk can be defined as a combination of the following:

- Likelihood (or probability) of an unwanted wildfire event occurring;
- Associated fire behaviour; and
- Consequence – the resulting impact or damage to values.

Wildfire risk is measured as the product of likelihood and consequence, but multiple inputs are also required to effectively quantify risk, including potential wildfire behaviour severity, value type, and value vulnerability. Identifying wildfire risk levels through the wildfire risk assessment results in a wildfire mitigation priority list, while presenting opportunities to enhance community resiliency.

Wildfire threat refers to the potential for a wildfire to ignite, spread, and consume organic material, such as trees, shrubs, and woody debris, across the landscape. Three main components are used to define wildfire threat, as follows:

- *Topography* – slope (affecting wildfire rate of spread), and aspect (affecting fuel dryness);
- *Fuel* – loading, size/shape, arrangement (horizontal/vertical), compactness, chemical properties, and fuel moisture; and
- *Weather* – temperature, relative humidity, wind speed and direction, and rainfall.

Together these three components interact to characterize the overall wildfire environment and influence wildfire behaviour (Figure 2.)

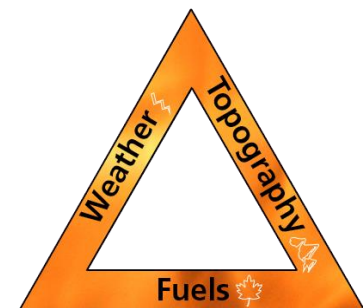


Figure 2. The fire behaviour triangle – interacting components that drive a wildfire

3.1 LOCAL WILDFIRE ENVIRONMENT

Spatial analysis of the wildfire environment factors, such as topography, fuels, and weather facilitate a deeper understanding of their combined effects on fire regimes, which includes frequency, intensity, size, severity, season, and ignition sources. By analyzing fire regime related data, we gain valuable insights into patterns and trends of wildfire activity within a specific area. This knowledge supports informed and effective decision-making for risk reduction and community resilience planning.



3.1.1 Topography

Topography describes the landscape that can influence fire behaviour including elevation, slope steepness, and slope direction (e.g., south-facing). Topography also includes prominent land features such as canyons and valleys. All these features can increase, or slow wildfire spread. Elevation influences weather conditions (like air temperature). The slope aspect influences vegetation growth and dryness (south-facing slopes in the northern hemisphere have more heat from the sun and are drier). Slope also influences how fast a fire moves: faster uphill due to pre-heating of vegetation from rising hot air and flame, and slower downhill. Additionally, features such as valleys influence wildfire spread by directing wind flow.

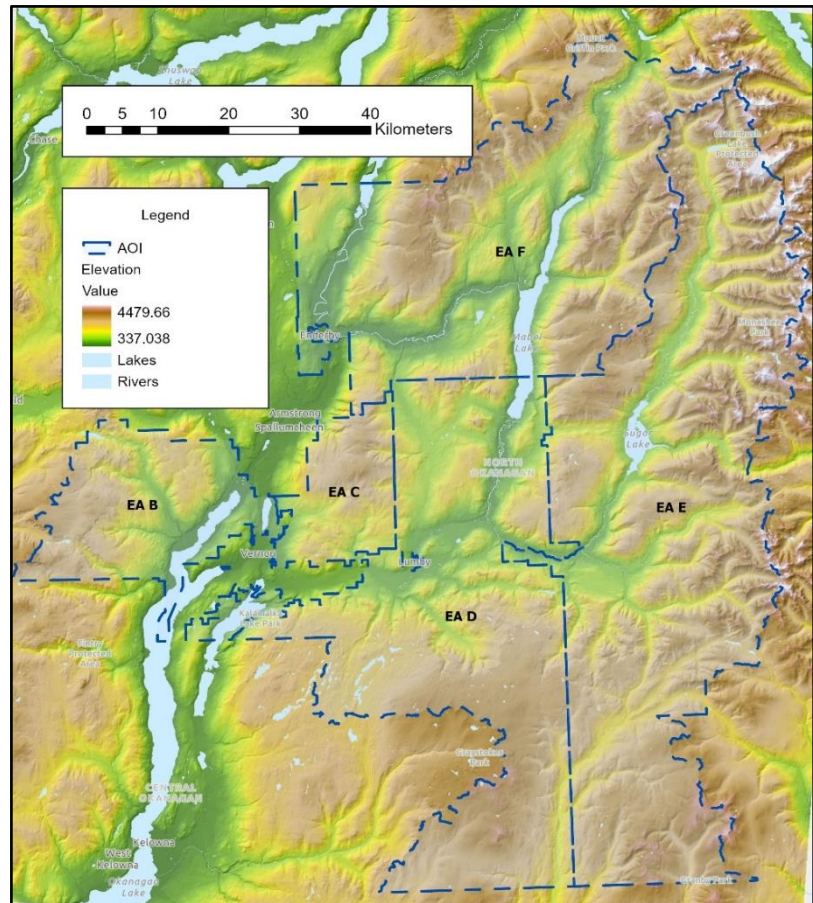


Figure 3. Topography map of RDNO.

NATURAL DISTURBANCE TYPE CATEGORIES

NDT 1 = Ecosystems with rare stand-initiating events

NDT 2 = Ecosystems with infrequent stand-initiating events

NDT 3 = Ecosystems with frequent stand-initiating events

NDT 4 = Ecosystems with frequent stand-maintaining fires

NDT 5 = Alpine Tundra and Subalpine Parkland ecosystems

3.1.2 Fuel

The vegetation (fuels) within any given area of British Columbia can be summarized using various methods including, the provincial Biogeo-climatic Ecosystem Classification (BEC) system², Natural Disturbance Types (NDT)³, and the Canadian Fire Behavior Prediction (FBP)⁴ System. The BEC system in BC describes and categorizes ecological zones by vegetation, soils, and climate. Regional subzones are derived from relative precipitation and temperature. By understanding the vegetative communities of an area, we can better predict the Natural Disturbance Types of those ecosystems and the potential effects of wildfire. For fire behaviour prediction purposes, Canadian forests and grasslands are categorized into different Fire Behaviour Prediction (FBP) System fuel types. These fuel types have different vegetation species and structure (e.g. vegetation density). Because of this, fire will behave differently in each fuel type. **See each Electoral Area CWRP for more information.**

² [Ecosystems of British Columbia](#). 1991. BC Ministry of Forests.

³ [Biodiversity Guidebook](#). 1995. BC Ministry of Forests.

⁴ [FBP Fuel Types](#). 2019. Natural Resources Canada.

Table 2. Summary of fuels within the RDNO area of interest.

BEC Zone	BEC Sub-variant	NDT Type	Area (Ha)
Engelmann Spruce – Subalpine Fir (ESSF)	wc, wcw, wh	NDT1	298,831.7
	dc, dcw, mh	NDT2	
	xc	NDT3	
	dcp, wcp	NDT5	
Interior Cedar – Hemlock (ICH)	vk, wk	NDT1	355,546.4
	mw	NDT2	
	dw, mk	NDT3	
	xm	NDT4	
Interior Douglas-fir (IDF)	dk, dm, xh	NDT4	36,679.1
Interior Mountain-heather Alpine (IMA)	un	NDT5	3,739.3
Montane Spruce (MS)	dm	NDT3	30,960.8

Table 3. Description of FBP Fuel Types found within RDNO.

Fuel Type	Description
C2 – Boreal Spruce	A very volatile fuel type - C2 produce high intensity and fast-moving fires more easily than other fuel types. Fires can easily become crown fires.
C3 - Mature Jack or Lodgepole Pine	Fastest rate of spread overall; however, requires high wind speeds and low fuel moistures to reach this faster rate of spread than other fuel types.
C5 - Red & White Pine	Mature stands with tall, closed canopies with moderately dense understory and shrub layers. Has the highest fire weather threshold of all conifer fuel types and requires extreme fire conditions to achieve full canopy fire. Lower rate of spread than other conifer fuel types.
C6 - Conifer Plantation	All conifer plantations with closed canopy crown canopy and no understory shrub layer. Moderate fire behaviour and spread rates compared to other coniferous fuel types due to its dependency on CBH and moisture content of moderate to heavy surface fuels.
C7 - Ponderosa Pine – Douglas Fir	Lowest rate of spread and lowest fire intensity of the conifer fuel types.
D1/D2 - Deciduous	Lower rates of spread, lower ember production and lower fire intensity (than conifer) when trees have leaves. Often used in urban interface areas to reduce fire behaviour around values.
M1/M2 - Mixedwood	The rate of spread and intensity of fire depends on the conifer/deciduous mix. Higher conifer mix will have faster rates of spread, higher fire intensity and more embers produced.
O1a/b – Grass	Fastest rate of spread potential.
S1/2/3 - Slash	Slash resulting from clearcut logging. Low threshold required for high fire intensity.

3.1.3 Weather and Climate

Weather attributes including temperature, relative humidity, precipitation, wind speed and wind direction are critical factors in the ignition, spread, and duration of wildfires. Weather is the most variable component of the wildfire environment, and it has a direct relationship to fuel moisture, which is a crucial determinant of combustibility. Local difference in aspect, topography and vegetation will also influence fuel-moisture at the site level. All weather forecasting for the AOI is dependent on observations from active BCWS weather stations within and surrounding the RDNO. [See each Electoral Area CWRP for more information.](#)

3.2 WILDFIRE HISTORY

Historical wildfire data has been collected in various capacities over the decades. The two historical wildfire data sets include the Historical Fire Perimeters (1917 – 2024) and the Historical Ignition Locations (1950 – 2024). This data allows fire practitioners to observe fire movement and ignition patterns across the landscape. Not all wildfires have mapped perimeters, so there is less fires displayed compared to fire ignition starts. The ignition data displayed does not include any cultural or prescribed fire, smoke chases, or nuisance fires.

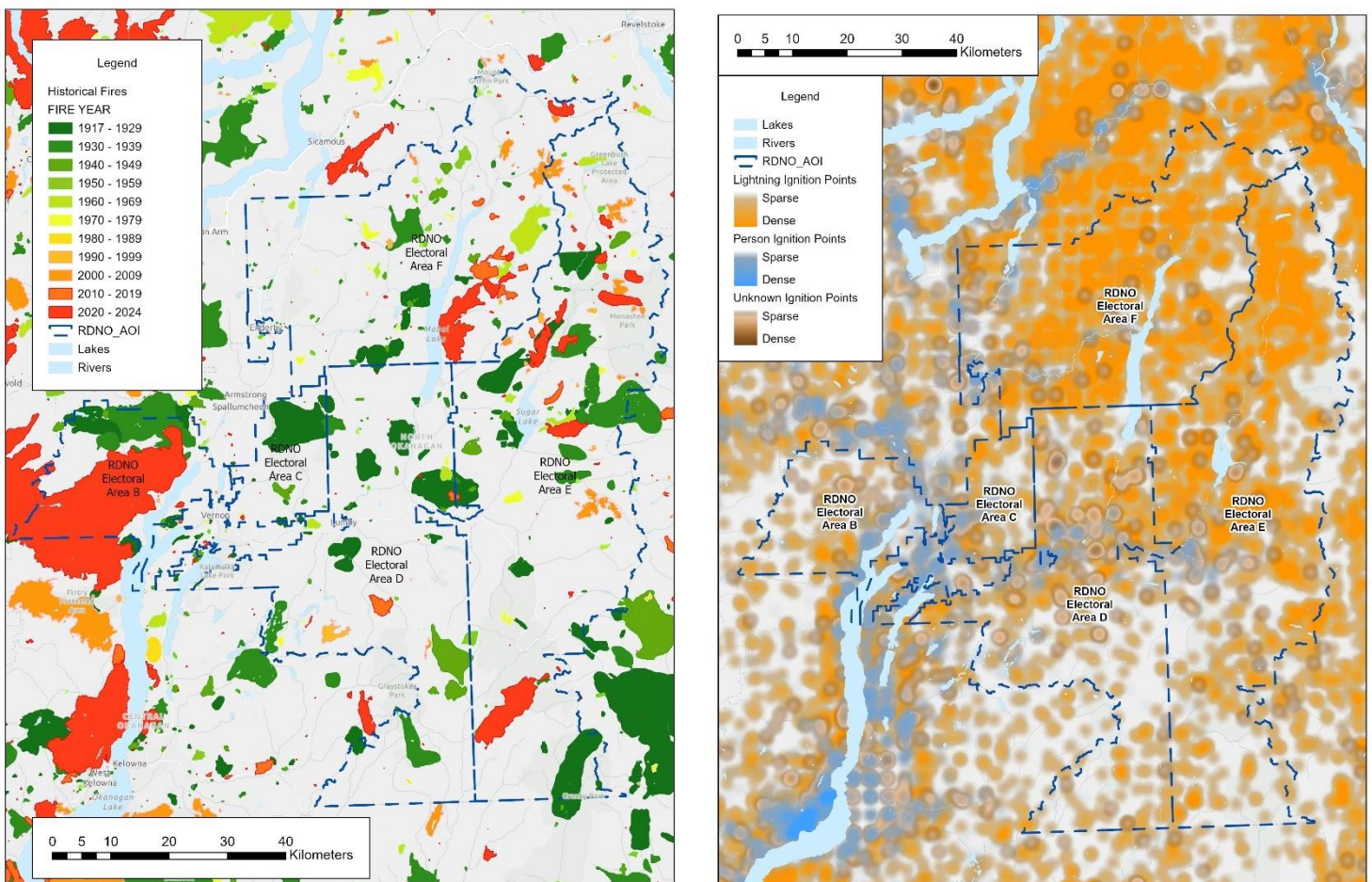


Figure 4. Historical wildfire perimeters and ignitions within the RDNO.



3.3 CANADIAN FOREST FIRE DANGER RATING SYSTEM (CFFDRS)

A **Fire Danger Rating sign** informs the public about the likelihood of wildfire ignition and spread in a specific area. These signs are commonly displayed on fire boards outside local fire departments or at the Ministry of Forests office. The rating is determined using three key elements of the **Canadian Forest Fire Weather Index (FWI) System**, which evaluates fire potential and categorizes the danger level as **Low, Moderate, High, Very High** or **Extreme** (Table 4).⁵

For further details about how fire danger ratings are calculated, please refer to the [FireSmart BC website](#).

Table 4. The five fire danger classes and general fire descriptions⁶

Fire Danger	Description
Low	Fires likely to be self-extinguishing and new ignitions unlikely. Any existing fires limited to smouldering in deep, drier layers.
Moderate	Creeping or gentle surface fires. Fires easily contained by ground crews with pumps and hand tools.
High	Moderate to vigorous surface fire with intermittent crown involvement. Challenging for ground crews to handle; heavy equipment (bulldozers, tanker trucks, aircraft) often required to contain fire.
Very High	High-intensity fire with partial to full crown involvement. Head fire conditions beyond the ability of ground crews; air attack with retardant required to effectively attack fire's head.
Extreme	Fast-spreading, high-intensity crown fire. Very difficult to control. Suppression actions limited to flanks, with only indirect actions possible against the fire's head.

3.4 PROVINCIAL STRATEGIC THREAT ANALYSIS (PSTA)

The BC Wildfire Service developed the Provincial Strategic Threat Analysis (PSTA) and Risk Class framework as provincial spatial datasets to evaluate and forecast potential wildfire threats. Leveraging provincial fuel type mapping, historical fire occurrence data, topography, and historical weather station data, the PSTA generates a wildfire threat score. Outputs from the PSTA include information and maps delineating fuel types, historical fire density, the potential for embers to land in an area (spotting impact), head fire intensity, and wildfire threat. The threat ranking is assigned to 1 of 10 classes, with 1 being low, 10 being extreme, and 7 being the threshold of the potential for catastrophic losses. The 10 classes can also be ranked into low, moderate, high, and extreme. Water and no data are separate classes in which wildfire threat is not ranked. The 'no data' class represents all private

⁵ What we talk about when we talk about the fire danger rating system. FireSmart BC

⁶ [Fire Danger](#). BC Wildfire Service.

land, meaning there is no way to identify the risk coming from each private parcel of land. The PSTA is a simple way of classifying the complex nature of wildfire threat which should be used to guide individuals who are preparing for what may happen on the landscape. Further details regarding the derivation of the PSTA dataset are available through the BC Wildfire Service.⁷

3.5 LOCAL WILDFIRE THREAT ASSESSMENT

Part of the process of developing this CWRP involves on-the-ground verification and assessment of local vegetation types and the inherent wildfire threat of forested areas within and around the WUI. Wildfire threat is assessed using the Wildfire Threat Assessment (WTA) tool developed by BC Wildfire Service⁸, which focuses on assessing forest stand attributes and fuel structure that contribute to wildfire intensity and spread, independent of fire weather. Wildfire threat differs from wildfire risk in that fire threat does not take into account proximity to values or the consequence of damage to those values in a wildfire event.

Field verification and wildfire threat analyses were completed on municipal and provincial Crown land found within the 1 km WUI throughout the RDNO. A total of 106 WTA plots were completed between all five of the electoral areas.

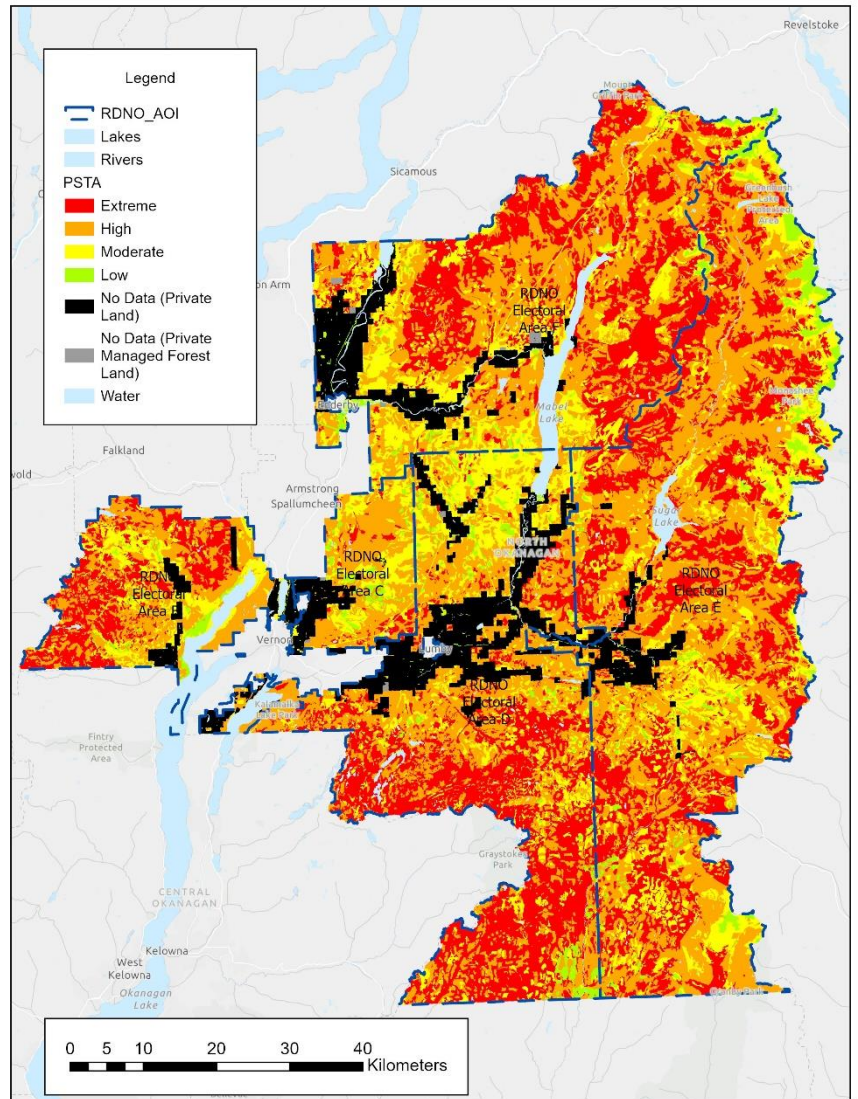


Figure 5. Wildfire Provincial Strategic Threat Analysis for RDNO.

⁷ 2021 Update: Provincial Strategic Threat Analysis (PSTA). Accessed March 2024.

⁸ [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/wildfire-status/prevention/fire-fuel-management/fuels-management/2020-wildfire-threat-assesment-guide-final.pdf](https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/wildfire-status/prevention/fire-fuel-management/fuels-management/2020-wildfire-threat-assesment-guide-final.pdf)



4.0 FireSmart Disciplines

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.

Goal: The CWRP aims to establish effective FireSmart educational activities and strategies so community members within RDNO understand the potential risk of interface wildfire and can play an active role to reduce that risk.

The CWRP is only successful if community members and stakeholders are collectively engaged in taking action to reduce wildfire risk at the individual level and community level.

The CWRP aims to establish effective communication and develop education activities so that each member of the community understands the potential for interface wildfires and play their role to reduce that risk. Education has been taken on in various capacities throughout each of the 5 RDNO Electoral Areas.

Current FireSmart Education Actions:

- RDNO website and online FireSmart resources
- Home Ignition Zone and Wildfire Mitigation Program Assessments
- Chipping Program
- FireSmart booth at various community events to spread knowledge and information

Future FireSmart Education Actions:

- Supporting the FireSmart BC Education Program through the local schools
- Work with local garden centers to implement the FireSmart Plant Program, promoting low-flammability species
- Promote the FireSmart Canada Neighbourhood Recognition Program

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 or First Nation communities. Provincial acts and regulations provide the means for local governments and First Nation communities to implement wildfire risk reduction actions through bylaws.

Goal: The goal is to facilitate an understanding of how local, provincial and federal legislation can either support or restrict the ability to implement local policies and bylaws and other wildfire risk reduction activities.

Regional Districts often work with limited tax bases and lean staff, so enforcing broad bylaws can be costly and unpopular in rural areas. Even so, a light, well-targeted regulatory backbone is useful: clear baseline rules set consistent expectations for development, provide a legal backstop in higher-risk situations, and align local practice with provincial standards. Within this context, several provincial and federal acts and regulations support or influence the CWRP process.

Table 5. Current RDNO Bylaws related to wildfire risk reduction.

Current RDNO Bylaws Related to Wildfire Risk Reduction	
Bylaw	Relation to Wildfire Risk Reduction
B.X. – Swan Lake Fire Protection Specified Area Bylaw 1056	The Regional District is authorized to provide local fire-protection and firefighting services within the applicable service area. A nearby hall, trained crews, and the right gear improve response times and help keep wildfires smaller and less damaging.
SilverStar Fire Department Bylaw 1347	
Lumby and District Volunteer Fire Department Bylaw 785	
City of Enderby Fire Protection Bylaw No. 1529	RDNO does not operate a fire department within Electoral Area F; however, the City of Enderby Fire Department has a separate fire protection area (Shuswap River) covering a portion of Electoral Area F. This Bylaw authorizes local firefighting services within the service area.
Open Burning Bylaw 2514	Applicable to Electoral Area B & C only. Regulates open burning to reduce uncontrolled fires and smoke. Set's burn season, requires permits, and limits burning to "good" ventilation and safe.

Various actions were recommended for each of these above bylaws to continue to keep the bylaws current and applicable with wildfire risk reduction activities.

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.

Goal: To implement a strategy for decreasing the chance of structural losses within the AOI due to a wildfire, by utilizing regulatory and administrative tools to reduce wildfire hazard and increase the number of homes and other infrastructure compliant with FireSmart guidelines.

Planning tools carry most of the day-to-day load. Official Community Plans set objectives and policies that guide land use; bylaws then operationalize those policies at the site scale. A balanced approach embeds wildfire resilience into existing frameworks—such as, wildfire-hazard Development Permit Areas, FireSmart-aligned subdivision and servicing guidelines, and zoning that reflects local risk.

Table 6. Current RDNO Regulation Related to Wildfire Risk and Development Considerations.

Current RDNO Regulations Related to Wildfire Risk in Developments	
Bylaw	Relation to Wildfire Risk Reduction
RDNO’s Electoral Area B & C (Bylaw 2626), SilverStar (Bylaw 1925), Electoral Areas D & E (Bylaw 2485), and Electoral Area F (Bylaw 2702) Official Community Plans	The Regional District is authorized to provide local fire-protection and firefighting services within the applicable service area. A nearby fire departments, trained crews, and the appropriate resources improve response times and help keep wildfires smaller and less damaging.
Subdivision Servicing (Bylaw 2600)	Sets servicing standards for new subdivisions throughout RDNO. For example; <i>Section 410</i> requires fire hydrants, which ensures reliable firefighting water supply in the WUI, supporting faster knockdown and limiting fire spread and damage.
Zoning (Bylaw 3000)	Establishes Zoning for RDNO, which provides the framework that other wildfire tools (e.g., Wildfire Development permit Areas, hydrant standards) rely on to improve WUI risk reduction.
Silver Star Zoning (Bylaw 1926)	

Various actions were recommended for each of these above bylaws to continue to keep the bylaws current and applicable with wildfire risk reduction activities.

4.4 INTERAGENCY COOPERATION

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 residents in your area. Individually they are responsible to their own organizations, but all the stakeholder organizations are dependent upon each other to develop an effective Community Wildfire Resiliency Plan and undertake a successful wildfire response.

COMMUNITY FIRESMART AND RESILIENCY COLLABORATIVES (CFRC)

As of 2024, the CRI Program required all applicant to participate in a CFRC in order to receive additional funding through the program. This requirement for funding was implemented upon recognition of the importance of collaboration in emergency preparedness and response between various partners, agencies, and stakeholders sharing the land based, understanding the roles and responsibilities different groups play helps streamline wildfire preparedness and emergency response efforts.

Goal: To establish and maintain collaborative relationships amongst the RDNO staff and key emergency response and management partners, including municipal Fire Departments and emergency preparedness staff, local First Nations, BC Wildfire Service, EMCR, Ministry of Forests, and other stakeholder groups to achieve a more wildfire resilient region.

The RDNO has an active Community FireSmart and Resiliency Collaborative comprised of key internal local government staff, including:

- The FireSmart Coordinator,
- Protective Services Manager,
- Rural Services Manager, and
- Other RDNO staff when required.

In addition to the RDNO staff, the group extends to the FireSmart Coordinators and/or representatives from each of the six Member Municipalities and the two First Nations groups (Splatins First Nation, and the Okanagan Indian Band).

The group meets quarterly to discuss wildfire preparedness and actions to cooperatively implement FireSmart programs throughout the entire region. Where applicable, it is important for this group to extend an invite to additional community partners to attend the meetings, such as BCWS, Ministry of Forest, BC Hydro, CN and/or CPKC Railway, etc.

The RDNO CFRC will be used to create greater capacity in each individual community's FireSmart program, by providing additional support between each other, and allowing for common messaging and program outcomes across the entire North Okanagan region.

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.

Goal: Develop a diverse skill set within local government, community members, Fire Departments, etc. to build redundancy and facilitate understanding across individuals/groups engaged in wildfire preparedness and response.

Cross training helps build relationships between different groups/agencies/organizations, identified areas of strength and weakness in existing emergency operations and processes and ultimately enhances emergency preparedness. Currently, a number of cross training courses are available to local government staff, fire department personnel, Cooperative Community Wildfire Response organizations, and engaged community members.

Table 7. Cross-Training Opportunities Available with RDNO.

Fire Department Members	Community Wildfire Response Organizations
<ul style="list-style-type: none"> • Wildfire Risk Reduction Basics Course • Fire Life and Safety Educator • ICS-100 (Incident Command System) • S-100 - Basic fire suppression and safety • S-185 - Fire entrapment avoidance and safety • SPP-WFF1 - Wildland Firefighter Level 1 • Wildland Structure Protection Program • S-231 - Engine Boss • Task Force leader (TFL-1 & TFL-Advanced) • Structure Division/Group Supervisor (DivS/GrpS) 	<ul style="list-style-type: none"> • ICS-100 (Incident Command System) • S-100 - Basic fire suppression and safety • S-185 - Fire entrapment avoidance and safety • Wildfire Risk Reduction Basics Course • SPP-115 Structure Protection in the WUI
Local Government Emergency Management Personnel, FireSmart Coordinator, and Community Members	Develop Cultural and Prescribed Fire Practitioners
<ul style="list-style-type: none"> • Local FireSmart Representative (LFR) training • Wildfire Mitigation Specialist Training • Wildfire Mitigation Specialist 'Train the Trainer' • Introduction to Emergency Management in Canada • FireSmart BC Landscaping Course • FireSmart BC Farm and Ranch Training • ICS-100 (Incident Command System) 	<ul style="list-style-type: none"> • BCTREX – Prescribed Fire Training Exchange • RX310 Introduction to Fire Effects • 2-11 The Fire Environment for Firefighters and Dispatchers • S-290 Principles of Fire Behaviour • S-291 Understanding the Fire Weather Index System

It is the jurisdiction of the RDNO and FireSmart Coordinator to choose who will receive training.



4.6 EMERGENCY PLANNING

Community preparations for a wildfire emergency 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.

Goal: The goal of emergency planning is to prepare the community to respond safely and effectively, in partnership with local first response agencies and local and regional authorities to wildfire events.

As observed in recent busy fire seasons, simultaneous wildfire emergencies across the province can strain resources, leading to shortages in heavy equipment, BCWS staff, and contractors. Resource availability may be severely limited or scarce during such times, necessitating the triage or prioritization of emergencies provincially. Therefore, local governments, partners, and individuals must be prepared and proactive in their response efforts. Comprehensive and apt Emergency Response Plans are a critical first step for communities to prepare for a large emergency event.

Emergency Management Programs focus on the four pillars of emergency management planning:

4 Pillars of Emergency Management

1. **Prevention and Mitigation**
2. **Emergency Preparedness**
3. **Response Activities**
4. **Recovery**

The RDNO CWRP’s focus on the first two pillars;

Prevention and Mitigation: Prevention and mitigation tasks are represented in the six other FireSmart disciplines. Through recommended actions of updating wildfire related legislation and regulations, providing wildfire education, training opportunities, and conducting wildfire risk reduction fuel treatments, the RDNO will continually work on prevention and mitigation of wildfire risk throughout the area.

Emergency Preparedness: Emergency Preparedness looks directly at the Emergency Response and Evacuation Plans. RDNO has a variety of Evacuation Plans in place for isolated or single egress/access communities. The CWRP’s looked at these plans, recommending amendments and updates, and potential areas to expand and implement new evacuation plans. The CWRP also recommended Pre-incident Wildfire Response Planning, to develop a wildfire specific emergency plan for emergency personnel to utilize. All emergency planning should be reviewed yearly by the RDNO for updates, and conduct training exercises to learn and practice utilizing the emergency plans prior to an emergency.

4.7 VEGETATION MANAGEMENT

The general 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.

Goal: Proactively manage vegetation at multiple scales such as the: Home Ignition Zone, Community Zone and Landscape Zone to reduce the potential wildfire intensity and ember exposure to people, infrastructure, and other values.

Fuel management, also referred to as vegetation management or fuel treatments, is an important element of wildfire risk reduction within the WUI. The primary objective of fuel management is to reduce the fuels available to burn and alter aspects of wildfire behaviour for safer and more effective suppression strategies.

There are three scales of vegetation management throughout the RDNO:



Home Ignition Zone

FireSmart landscaping is conducted immediately surrounding the home, promoting the removal, reduction, or conversion of flammable plants in order to create more fire-resistant areas around homes. Each priority zone around a building describes the ideal materials, plants, and uses to create a fire-resident home.

Figure 6. FireSmart Home Ignition Zone.

Community Zone: The community zone extends outward from homes to the neighbourhood level, promoting FireSmart Neighbourhood Champions and the Neighbourhood Recognition Program, to create a collaborative FireSmart goal for the community. This also extends to RDNO Critical Infrastructure, Parks, and Green Spaces, putting the ownership of FireSmarting public properties onto the Regional District.

Landscape Zone: At this scale, fuel management treatments are identified on Crown and Municipal Land to protect the community and greater landscape from severe impacts from wildfires. The CWRPs identified several fuel treatments for each Electoral Area. RDNO will need to work with BCWS, the BC Ministry of Forests, and other land managers to complete these treatments.



5.0 Implementation

5.1 FIRESMART ROAD MAP

No two FireSmart journeys are the same, however FireSmart has created a roadmap to help local governments understand where to start and general steps to take on the way to community wildfire resiliency⁹. The roadmap is broken into four different phases, and should be completed sequentially, but will depend on previous FireSmart activities and the recommended action items in this CWRP. There are three fundamental elements that should be completed prior to beginning the FireSmart roadmap.

1. **Establish a FireSmart position**
2. **Complete a Community Wildfire Resiliency Plan**
3. **Implement or participate in a Community FireSmart Resiliency Committee**

With the completion of the five RDNO CWRPs, RDNO has realized the requirements of the program, and can begin the FireSmart roadmap.

FireSmart Roadmap



1. Engagement Phase

In this phase, the primary objective is awareness. The focus is on building an understanding of the risk of wildfire and the benefits of developing and growing a local FireSmart program.

Activities that should be continued in this phase are suggested below, but not limited to:

- **FireSmart Positions:** Training.
- **Education:** Develop/update signage, social media, community websites and/or newsletters; organize and host public information meetings and workshops; promote and distribute FireSmart educational materials and resources; host a Wildfire Community Preparedness Day.
- **Interagency Cooperation:** Participate in FireSmart and/or fuel management planning tables; attend the annual Wildfire Resiliency and Training Summit.
- **Residential Areas:** Undertake Home Ignition Zone Assessments; offer off-site debris removal programs.



⁹ FireSmart. (2023). The FireSmart Roadmap. Referenced from: <https://firesmartbc.ca/resource/the-firesmart-roadmap/>



2. Initiative Phase

In this phase, the primary objective is acting on and implementing local FireSmart activities. The focus is on building capacity in people and the community to withstand wildfire events.

Activities that should be concluded in this phase are suggested below, but not limited to:

- **Education:** Support neighbourhoods to apply for FireSmart Canada Neighbourhood Recognition Program.
- **Community Planning:** Complete FireSmart assessments for critical infrastructure, community assets, culturally significant sites and/or green spaces.
- **Emergency Planning:** Assess community water delivery ability, purchase or inventory and maintain FireSmart structure Protection Trailers and continually update the emergency plan with lessons learned from previous events.
- **Training:** Undertake training for other FireSmart positions (beyond initial FireSmart coordinator), fire departments, and emergency management staff; develop local Home Partners program.
- **FireSmart Projects:** Complete mitigation activities for **critical infrastructure, community assets, culturally significant sites and/or green spaces** following completed FireSmart assessments.

3. Expansion Phase

In this phase, the primary objective is FireSmart activities within the Eligible WUI. The focus is on broader community planning.

Activities that should be completed in this phase are suggested below, but are not limited to:

- **Education:** Support the organization of a Farm and Ranch Wildfire Preparedness workshop.
- **Community Planning:** Develop FireSmart policies and practices for the design and maintenance of publicly owned land and dwellings.
- **Fuels Management:** Develop prescriptions and/or burn plans and undertake treatments, including cultural and prescribed fire.

4. Integration Phase

In this phase, the primary objective is long-term and permanent changes to support community wildfire resiliency. The focus is on development considerations and collaboration with partners.

Activities that should be completed in this phase are suggested below, but are not limited to:

- **Education:** Support the FireSmart BC Library program at local/regional libraries.
- **Development Considerations:** Amend Official Community Plans, Comprehensive Community Plans and/or land use, engineering, and public works bylaws to incorporate FireSmart principles; revise landscaping requirements in zoning and development permit documents; establish Development Permit Areas for Wildfire Hazard; amend referral processes for new developments to ensure multiple departments, including the fire department and/or emergency management personnel, are included.
- **Interagency Cooperation:** Support the FireSmart BC Plant Program at local garden centres or nurseries; partnerships with local landscapers, developers, real-estate agents, insurance, etc.