

COMMUNITY WILDFIRE Resiliency Plan Instruction Guide



INSERT FUNDING BODIES AND PARTNERSHIP LOGOS HERE - BC GOVERNMENT / UBCM / FNESS

A GUIDE FOR LOCAL GOVERNMENTS AND FIRST NATIONS TO SUPPORT THE DEVELOPMENT OF COMMUNITY WILDFIRE RESILIENCY PLANS

Updated November 2023



Table of Contents

Part 1 CWRP Overview	5
1.1 How to Use This Instruction Guide	6
1.2 Community Wildfire Resiliency Planning in BC	6
1.3 Background	8
1.4 CWRP Risk Mitigation Identification and Actions	8
1.5 Relationship to the Community Resiliency Investment Funding Program	9
1.6 Goals of the Community Wildfire Resiliency Plan Template and Instruction Guide	11
1.7 Relationship to Existing CWPPs	12
1.8 Relationship to Other CWRPs and WUI Plans	12
Part 2 CWRP Development Process	13
2.1 Define Your Audience and Key Stakeholders	14
2.2 Identify a Community FireSmart and Resiliency Committee, if not set up	15
2.3 Establish Communication and Engagement Methods	17
2.4 FireSmart Positions, Expertise and Capacity	
2.5 Develop a Project Charter	20
2.6 Determine Final Plan Formats and Distribution Strategies	21
Part 3 CWRP Template	22
Section 1 to 3 Front Matter (Cover, Signature Page, Table of Contents, Acknowledgments)	22
Section 4 Executive Summary	23
Section 5 Introduction	24
Section 6 Relationship to Other Plans	24
Section 7 Community Description	
7.2 Determining the Wildland-Urban Interface	31
7.3 Community Information	
7.4 Values at Risk	
Section 8 Wildfire Risk Assessment	35
8.1 Local Wildfire Environment and Fire History Summary	
8.2 Risk Framework & Risk Class Maps	
8.3 Local Wildfire Threat Assessment	40



8.4 Hazard, Risk, and Vulnerability Assessment	
Section 9 FireSmart Disciplines	42
9.1 Education	43
9.2 Legislation and Planning	46
9.4 Interagency Cooperation	51
9.5 Cross-Training	53
9.6 Emergency Planning	55
9.6.1 Pre-Incident Planning	57
9.6.2 Wildfire Preparedness Condition Level	58
9.6.3 Recovery Planning	60
9.7 Vegetation and Fuels Management	61
9.7.1 FireSmart landscaping (Residential and critical infrastructure)	62
9.7.2 Fuel Management Treatment	65
Section 10 FireSmart Roadmap & CWRP Action Plan	67
10.1 FireSmart Roadmap	67
	71
10.2 CWRP Action Plan	71
10.3 Tracking and Reporting	71
10.4 Plan Monitoring and Updates	72
11 Appendices	72
Appendix A Glossary	72
Appendix B Public Engagement and Collaboration	73
Appendix C Plan Development Supporting Documentation	73
Appendix D: Home Ignition Zone	73
Appendix E: WTA Plots and Photos	73
Appendix F: Maps	73
Appendix G: Key Provincial and Federal Acts and Regulations	74



Frequently Used Acronyms

AOI	Area of Interest
AOP	Annual Operating Plan
BCBC	British Columbia Building Code
BC	British Columbia
BCWS	British Columbia Wildfire Service
BEC	Biogeoclimatic Ecosystem Classification
CFFDRS	Canadian Forest Fire Danger Rating System
CFRC	Community FireSmart Resiliency Committee
CFS	Community Funding and Support
CI	Critical infrastructure
CLWRR	Crown Land Wildfire Risk Reduction
CIFFC	Canadian Interagency Forest Fire Centre
CRI	Community Resiliency Investment
CWRP	Community Wildfire Resiliency Plans
DP	Development Permit
DPA	Development Permit Area
EMCR	Emergency Management and Climate Readiness
EMP	Emergency Management Plan
EPA	Emergency Program Act
FBP	Fire Behaviour Prediction System
FCI	Forest Carbon Initiative
FCFS	FireSmart Community Funding and Supports
FESBC	Forest Enhancement Society of British Columbia
FESIMS	Forest Enhancement Society Information Management System
FMP	Fire Management Plan
FNESS	First Nations Emergency Services Society
FRPA	Forest & Range Practices Act
GIS	Geographic Information Systems
FSCCRP	FireSmart Canada Community Recognition Program
HIZ	Home Ignition Zone
HVRA	Hazard, Risk, and Vulnerability Analysis
HVRA	High Value Resources and Assets
LRMP	Land and Resource Management Plan



MOF **Ministry of Forests** MOTI Ministry of Transportation and Infrastructure PSOE Provincial State of Emergency PSTA Provincial Strategic Threat Assessment OCP **Official Community Plan** OFC Office of the Fire Commissioner **Resource Sharing Wildfire Allocation Protocol** RSWAP SARA Species at Risk Act SOLE State of Local Emergency SPU Structure Protection Units Union of British Columbia Municipalities UBCM VAR Values at Risk WRR Wildfire Risk Reduction Wildland-Urban Interface WUI

Part 1 CWRP Overview

Welcome to the Community Wildfire Resiliency Plan Instruction Guide. This guide serves as a companion to the Community Wildfire Resiliency Plan (CWRP) template and provides explanatory information, resources, and other guidance to support communities in plan development.

In this guide, you'll find:

- Supplemental information to support the preparation of each of the CWRP template sections.
- A list of potential plans and guidance on the relationship of this template with other plans.
- Strategies and tips on the development and maintenance of a CWRP.



1.1 How to Use This Instruction Guide

This instruction guide is structured into three sections:

- Part 1CWRP Overview Provides backgroundinformation on CWRPs in general.
- Part 2 CWRP Development Process – Provides information
- Part 3 CWRP Template Provide a comprehensive approach toward CWRPs (INSERT LINK to TEMPLATE)

Where applicable, links to resources have been provided. Note that these links can frequently change, so be sure to check original sources if including them in a CWRP.

1.2 Community Wildfire Resiliency Planning in BC

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^{TM1} Committee to develop a new framework for Community Wildfire Resiliency Planning.

Key provincial goals of the Community Wildfire Resiliency Planning process are to:

- Increase communities' capacity and understanding of wildfire risk;
- Foster greater collaboration within and across administrative boundaries;



- 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
- Develop achievable and accountable action items.

To support the implementation of these goals, several recommendations were developed based on a year-long process that consisted of internal reviews, analysis, and community feedback. One of the primary recommendations included the need to develop an updated CWRP template and associated development guidance.

¹FireSmart, Intelli-feu and other associated Marks are trademarks of the Canadian Interagency Forest Fire Centre.



1.3 Background

The development of the CWRP template was based on an extensive review of existing CWPPs from across the province and elsewhere, input from communities and agencies, research into the effectiveness of CWPPs, and a cross jurisdictional review of the latest science and best practices that informs CWPPs. This research and input were synthesized to produce a CWRP that ensures the successful components of previous CWPPs are maintained while integrating new elements that more comprehensively align with the seven FireSmart disciplines.

1.4 CWRP Risk Mitigation Identification and Actions

This plan should identify the issues within each section

of the plan. By identifying the issues, a comprehensive description of the action to mitigate or manage this risk should be described in the appropriate section.

For example, the CWRP will identify areas of higher wildfire risk, such as neighbourhoods adjacent to the forested edge and/or areas that fall in an overall high to extreme category. The action could be prioritizing these areas for FireSmart assessments and rebates. Or, the CWRP may identify the risk of a wildfire impacting the community in the southwest border of the community.

The action could be developing a comprehensive fuel break network XX metres from the community to mitigate the risk of the wildfire by reducing the fuel loading. This would be

Seven FireSmart Disciplines

There are seven 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.

Disciplines target specific audiences and engage a variety of skillsets to implement.

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



described in detail to ensure the readers of the plan understand the issue and what the mitigating actions will do to reduce or manage the risk.

1.5 Relationship to the Community Resiliency Investment Funding Program

The funding available to develop the CWRP and eligible recommendations within the CWRP are strongly linked to the <u>Community Resiliency Investment (CRI) funding</u> program.

The CRI funding identifies specific wildfire mitigation strategies which are eligible for funding that is guided and prioritized based on community risk.

Differing risk levels require tailored risk management to minimize negative impacts from wildfires to communities and high values at risk. The intent is to enable cost effective wildfire risk reduction strategies that will mitigate wildfire threat to communities at two different scales—local and provincial.

The CRI program was announced by the provincial government in 2018 and is intended to reduce the risk of wildfires and mitigate their impacts on BC communities.

CRI includes two streams:

- FireSmart Community Funding & Supports administered by the Union of BC Municipalities.
- Crown Land Wildfire Risk Reduction administered by the Ministry of Forests in partnership with Land Managers (e.g BC Parks).



1.5.1 FireSmart Community Funding and Supports (FCFS)

The FCFS funding is available to local governments (municipalities and regional districts) and First Nations (Bands, Treaty First Nations, and Indigenous National Governments with authority for lands and resources) in BC for the development of a CWRP and other eligible activities.

The FCFS funding is modeled on the seven FireSmart disciplines but offers funding that expands upon the disciplines in order to support a broader range of FireSmart activities.

Starting in 2024, to be eligible for FCFS, eligible applicants will be required to have a CWRP (or other acceptable plan) in place, have a local FireSmart Coordinator or similar position, and host or participate in a Community FireSmart Resiliency Committee. All of these elements are eligible for FCFS funding.

Communities undertaking a CWRP are strongly encouraged to review the funding opportunities available through the CRI program.

While communities can develop and implement a wide variety of actions that are most relevant to their needs, communities may also wish to align their CWRP actions with CRI eligibility requirements to apply for future funding support.

1.5.2 Crown Land Wildfire Risk Reduction (CLWRR)

The CLWRR funding mechanism is administered through the MOF in partnership with Land Managers Natural Resource Districts, Mountain Resorts, and BC Parks who deliver activities on the ground and provide authorizations on provincial Crown land. This program



is available for internal provincial government delivery of priority activities on higher risk areas of provincial crown land.

CLWRR Program highlights include:

- Fuel management planning and treatment activities focusing on provincial Crown land located around communities.
- Cultural and prescribed fire, including planning and operational treatments, and the development of a comprehensive provincial prescribed fire program.
- Risk reduction activities targeting provincially identified critical infrastructure, beginning with critical response infrastructure such as government-owned radio repeaters, weather stations, and air tanker bases.

There is a recognized need for collaboration and coordination of FCFS and CLWRR streams and project initiatives adjacent and near local governments, First Nation communities, and supporting critical infrastructure. Integrated fuel management planning along with <u>CLWRR WUI WRR Plans (Tactical Plans)</u> led by the MOF/BC Parks and Mountain Resorts provides the forum for this collaboration and coordination. The led by local governments and First Nations provide the forum for this to occur for all FS activities.

1.6 Goals of the Community Wildfire Resiliency Plan Template and Instruction Guide

The goal of the new CWRP template is to help communities develop a comprehensive, and science-based approach toward wildfire risk reduction that reflects local priorities and provincial goals for prevention and mitigation. The CWRP instruction guide and template



ensure that all seven FireSmart disciplines are well represented in the resiliency planning process.

The CWRP template and Instruction guide are also designed to empower communities to develop a CWRP in a collaborative, cost-effective, and time-efficient manner.

1.7 Relationship to Existing CWPPs

Existing CWPPs can remain valid for up to five years. However, communities seeking to develop new plans or update existing plans should follow this new CWRP guidance.

Under FCFS, CWPPs less than five years old can be updated to reflect:

- The addition of the FireSmart Roadmap (CWRPs only); Recently acquired land or areas of new development, etc.;
- Ground-truthing for new treatment units;
- Significant changes to forest stand composition and/or forest health changes or impacts; and
- The integration of other plans or information into an existing CWPP/CWRP.

1.8 Relationship to Other CWRPs and WUI Plans

As communities develop and adopt future CWRPs, they are encouraged to consider the effectiveness of integrating with adjacent CWRPs and the effectiveness of nesting different scales of CWRPs within another. For example, multiple communities that are located in close proximity with each other may target activities appropriate to implement within their administrative boundaries and collaborate on the development of overarching multi-party or regional district sub-scale CWRPs.



WUI WRR Plans are primarily funded through the Crown Land Wildfire Risk Reduction (CLWRR) funding stream under the Community Resiliency Investment Program (CRI), additional funding programs included but are not limited to Forest Enhancement Society of BC. The purpose of a WUI WRR Plan is to provide provincial land managers with information relating to wildfire threat and risk within the project area, effectively guiding the location, priority, and development of fuel management projects on Crown land.

Acting as a conduit between high-level strategic plans (e.g., landscape-level wildfire risk and threat analysis) and site-level operational plans (e.g., fuel management prescriptions), WUI WRR Plans ensure alignment with broad forest, wildfire, and fuel management standards and policies. A key outcome of a WRR WUI Plan is a prioritized list of fuel management units and higher-level planning units. These delineations assist decision making in the implementation of funding programs like the CLWRR and FESBC specific to fuel management activities within the WUI.

In addition, BC Parks is developing Parks Ecologically-Based Fire Management Plans which may have a WUI WRR Planning component within its broader planning document. In instances where a CWRP AOI overlaps with or is adjacent to a protected area, it is imperative that BC Parks staff are communicated with in the initial planning stages to provide guidance and expectations.

Part 2 CWRP Development Process

There are many considerations when embarking on the development of a new CWRP or updating an existing one, including transitioning from a current CWPP.

Part 1 helps users answer the following questions to maximize a positive CWRP outcome:

• Who is this plan intended for? Outline who the main audience is for your CWRP. and identify your key stakeholders or partners.



- What will this plan achieve? What is the intended outcome (update or full new plan)?
- How will the plan support community needs and provide value? How will it link into existing emergency planning (eg evacuation routes identified in the local EMP)
- How does the plan identify and describe actions to mitigate or manage issues affecting the community? These need to be individually designed for each community.
- How will this plan be developed or updated? For example, is the CWRP a specimen plan for communities to use as a reference tool to aid in managing their contracts. This will be tied to FCFS funded staff and ongoing community training.
- Who How When will this occur?
- Who should be involved in the creation and review of this plan? Review the land ownership and ensure that Land Managers (e.g NR Districts, BC Parks, Mountain Resorts are involved if the CWRP includes provincial crown lands. Also ensuring that a FCFS BCWS/FNESS representative is on your CWRP team will help to streamline the approval processes and provide critical input during the CWRP development.
- The FS Coordinator position should be the project manager representing the community / client and providing direction on CWRP development.
- What will make this plan successful?
- Who holds the authority and accountability for implementing the plan?

2.1 Define Your Audience and Key Stakeholders

Knowing intended audiences for the CWRP will guide the development of the plan. An audience should be defined more broadly than "the community." Rather, think of the following groups in terms of: a) if and how they may be expected to participate in the plan development process; and b) how each group may benefit from developing and reading the final plan (land managers, such as Forest Districts or BC Parks Regions, emergency



responders, BCWS, neighbourhood associations, Indigenous communities, planning and public works, elected officials, businesses, volunteer organizations, industry professionals, and more). Knowing these audiences upfront sets up strategic paths for effective engagement and content development.

2.2 Identify a Community FireSmart and Resiliency Committee, if not set up

Starting in 2024, to be eligible for FCFS, applicants will be required to have or participate in a Community FireSmart Resiliency Committee.

Defining audience and key stakeholders also sets the stage for how these interests can be represented during the development process. Successful CWRPs reflect a range of local knowledge and expertise, which can be accomplished by creating a multi-disciplinary, multi-agency committee or group. If your CFRC is too large and integrated with multiple communities then you may require a Steering Committee for your CWRP.

<u>Community FireSmart and Resiliency Committees (CFRCs)</u> is a mechanism for coordinating collaboration between local FCFS and Crown WRR-funded activities and collaborating on new plans and projects for the future. The CFRC activities can extend beyond the initial development of the CWRP, typically to guide and coordinate the implementation of the CWRP.

Examples of CFRC representation are described in Table 1. Consider whether the role is advisory or will take a more hands-on approach, such as conducting research, developing content, and reviewing drafts.



TABLE 1. EXAMPLES OF COMMITTEE REPRESENTATION AND ROLES			
Agency	Representative Area	Primary, advisory/collaboration/ recommend, engagement/partner	
Local Governments and First Nations	 FireSmart Coordinator FNESS representative Local fire department Land-use planning Parks and recreation Engineering/public works Bylaws Elected officials Elder/ traditional knowledge keepers Natural resources 	Primary – provides data, information and other relevant plan content; works to determine CWRP actions; conducts outreach with other stakeholders and the public to discuss the plan and receive additional input.	
Provincial Government	 BC Wildfire Emergency Management BC Natural Resource District BC Parks Ministry of Highways, Transportation and Housing 	Advisory/Collaboration – attends committee meetings, reviews plan content; may provide some data and information or suggestions for resources; directly supports development of plan. Recommend: government land managers may evaluate, prioritize and fuel management within their respective areas of authority (e.g BC Parks) in cooperation with CWRP communities, Inclusion of these key stakeholders in CFRC's is critical. They may support and endorse content, including risks within specific jurisdictional areas.	
Natural Resource/ Critical Infrastructure Industry	 Forest sector Mining Critical Infrastructure sector (electrical utilities, gas, communications) Agricultural and/or Ranching industry 	Advisory/ Collaboration – reviews plan content; may provide some data and information or suggestions for resources; supports development of plan; may provide input on specific actions relate to areas of interest.	



Business	 Tourism Realtors Developers Chamber of Commerce 	Engagement/ Partner – supports development of plan and may communicate support with other interest groups and public; may provide input on specific actions relate to areas of interest.
Non-Government Organizations	 Local land trusts and conservation foundations Recreation clubs (snowmobiling, cross- country skiing, hiking, cycling) Indigenous organizations 	Advisory/Engagement/ Partner – supports development of plan and may communicate support with other interest groups and public; reviews plan content; may provide some data and information or suggestions for resources may provide input on specific actions relate to areas of interest.

2.3 Establish Communication and Engagement Methods

Communication methods with government agencies, CFRC members, First Nations communities, community members, and other interested parties may vary depending on their role in the CWRP development process.

Potential communication and engagement methods can include:

• **Project website** - Create a dedicated project website (or webpage housed within an existing website) that provides information about draft reviews and upcoming meetings, accepts public questions and comments, and shares other updates.

Ensure this website is monitored frequently and updated for accuracy.

• **Committee meetings** - Develop a schedule that includes in-person meetings and teleconferences for committee members to discuss content development and planning priorities.



Teleconferences should ideally include an online screen sharing feature when discussing any content changes.

• **Community events** - Incorporate public workshops or open houses to share updates about the CWRP and seek input into the plan.

Posters, presentations, and other visuals are helpful tools for these events. In addition, breakout groups or other creative small group engagement opportunities can be effective.

- **Media releases** Share important announcements with media regarding community input events, final plan adoption, and other relevant topics or successes.
- **Social media** In addition to a project website, social media can provide a cost-effective outreach tool to advertise upcoming CWRP events.

Ensure that communications and engagement methods comply with any local, provincial, or other requirements, such as public notification and review/comment period requirements prior to final plan adoption. Follow all data and privacy laws.

2.4 FireSmart Positions, Expertise and Capacity

Starting in 2024, to be eligible for FCFS, applicants will be required to have a FireSmart position.

To increase local capacity, communities are encouraged to create a FireSmart position to oversee eligible activities and to establish a sustainable FireSmart program. FireSmart positions work with the local CFRC and the provincial FireSmart program to guide wildfire resiliency work in their community. Certain specialists can also provide additional capacity and expertise to support the plan's development.



Topics and activities that might need external expertise include:

- Project management.
- Indigenous cultural safety.
- Meeting facilitation.
- Community outreach.
- Local Wildfire Threat Assessments.
- Vegetation management.
- FireSmart Home and Critical Infrastructure Ignition Zone assessments. Integrating wildfire risk reduction into land use planning strategies, bylaws, or development permit areas.

Communities seeking external support or expertise are encouraged to first review this guide to help determine what type of resources, knowledge and skills, and capacity will be required to develop the CWRP, and assess which components can be led internally by community staff, including incremental staff and/or consultants funded by FCFS program.

Regardless of the team put together to create the CWRP, the outcome should reflect a community-driven, collaborative plan that reflects multiple disciplines and areas of expertise. Most importantly, the resulting CWRP must have local stakeholder buy-in and local government/First Nation accountability for the plan implementation. An example of this would be to ensure that a BC Parks Land Manager is part of the team when planning within a BC Parks area as Land Managers have the decision-making authority for proposed fuel management treatments on provincial crown land.



2.5 Develop a Project Charter

Developing a Project Charter for the CWRP at the outset can help guide the planning process and ensure the final CWRP meets its intended objectives. The Project Charter does not need to be extensive (i.e., a few pages in length), but it should capture key planning topics, including:

- **Members:** Committee members, key roles and responsibilities for the committee chair and project lead, and additional project planning needs, such as required expertise or capacity not available through the CFRC members and CWRP project budget.
- Audience and Key Stakeholders: As discussed above, identifying the intended audiences will help inform who should read the plan and how to appropriately draft content for each target audience.
- Roles and Responsibilities: It is important to define roles and responsibilities of the CWRP development team/Steering Committee at the outset.
- **Goals:** It is important to establish the goals of the CWRP based on the seven FireSmart disciplines. If the plan is an update, review previous goals to ensure they align with the new CWRP guidance. If the plan is new, conduct a CFRC discussion to establish what long-term outcomes are desired by development and implementation of the CWRP.
- Scope: Community or communities that the CWRP planning process will encompass, and the scale(s) at which planning will occur. Note any opportunities or limitations associated with these scales, such as the desired level of action. If the geographic scope of the CWRP is considering the inclusion of Crown Land, BC Wildfire Service and Land Managers (i.e., local MOF natural resource district WRR staff) must be engaged. This ensures limiting redundancy in planning initiatives and integration of subject matter expertise.
- **Considerations:** Identify other community considerations that could affect the success of this plan. For example, note whether there will be concurrent community priorities that



could distract from the development of the CWRP and any steps to address these potential challenges.

- **Plans**: Identify a list of key plans that will need to be reviewed during the initial development phase, including other CWRPs, and the local Emergency Management Plan (see Relationship to Other Plans in Part 3) for more information.
- Schedule: Create a project management framework, including critical milestones, such as the intended timeframe for development, number of committee meetings and public workshops. Typical project phases for a CWRP include: 1) Kick-off (scoping and outline);
 2) Research (information gathering and data collection); 3) Document Drafting (content development); 4) Public Review (feedback and input); 5) Final Plan (editing and approval).

2.6 Determine Final Plan Formats and Distribution Strategies

Finally, it's helpful to consider where the final CWRP will be housed, who will be responsible for its implementation and long-term maintenance, and how the plan will be distributed.

It is generally expected that completed CWRPs are presented to Chief and Council, Mayor and Council and/or Chair and Board, and that the completed plan is available to the public and other Land Managers. Conducting these discussions with your group early in the development process will help inform the resources required for successfully sharing and maintaining the plan.

If a CWRP project website is being developed, consider how the final content will be posted on this website. Some communities use different formats to share plan content, such as creating a story map and videos that interview community members or share interactive visual material from the CWRP. The final plan can also be structured online in pieces, based on topics, which can be easier to download than one large file.



Part 3 CWRP Template

Part 3 aligns with the CWRP Template and provides users with explanatory information and supplemental resources to support the development of plan content.

Section 1 to 3 Front Matter (Cover, Signature Page, Table of Contents, Acknowledgments)

This section provides basic and essential information to a reader and includes the cover, signature page, table of contents, acknowledgments, and acronyms.

Cover

Insert one or several images of the community, a notable fire, people working on mitigation projects, or other topics that represent the area and goals of the CWRP. Note that when using images in the CWRP, be sure to obtain authorization and properly credit all individuals or agencies.

Sign off Page

For example: CAO, elected representative

Contents

A table of contents is included for easy document navigation. Refresh the final table with updated fields and page numbers prior to finalizing the plan.

Tables and Figures

Insert a list of tables and figures based on the final plan contents.

Acknowledgments

Acknowledge CWRP committee members, volunteers, other departments or agencies, community groups, elected officials, and other participants who were engaged in the



development process. Insert suggested or required language if the CWRP was associated with a grant or funding source that requires this information.

Acronyms

Modify the list of acronyms to reflect the final terms used in the CWRP.

Section 4 Executive Summary

Draft an executive summary that is intended for any reader to understand the key takeaways of the CWRP. An executive summary should be written after the rest of the plan is complete and capture the following:

- The plan's purpose.
- Intended audiences.
- Topics addressed.
- What the plan intends to achieve, including a summary of key CWRP. recommendations/actions, with dates and accountabilities.
- How the plan will be implemented, including a summary table of the recommendations linked to the FireSmart Roadmap.
- Monitoring and plan update.

Some audiences may only read the executive summary, so it's essential to convey the most important information in a succinct manner and ensure this section can be read on its own.

Infographics, maps, tables, or other visual resources that summarize information are also helpful to include in the executive summary. This material may be the same as other figures used later on, if appropriate to repeat.



Section 5 Introduction

An introduction orients readers to the CWRP and is different from an executive summary. The purpose of the introduction is to:

- Provide an overview of the plan's contents;
- List overarching plan goals;
- Describe who and how intended audiences should use the document; and
- Identify which sections may be most relevant to different users.

Repurpose content from the Project Charter (see Project Charter section in Part 2) for the final plan contents, which should have addressed many of the topics above.

This section should also include CWRP background information, such as when the plan was last updated, who participated in the plan development process, and a summary of public engagement conducted to help inform the plan. Note that more information about plan development and public engagement can also be included in the appendices.

Section 6 Relationship to Other Plans

Wildfires can affect all aspects of a community. As a result, there are many plans that relate to the CWRP. Plans can help inform the CWRP by providing helpful information that guides plan content development. Other plans will be informed by the final CWRP. Some plans, such as the Official Community Plan, Comprehensive Community Plan, or the Emergency Management Plan will serve both purposes.

This section helps users identify which plans to consider during the development process as useful resources and which plans to review following the completion of the CWRP. This also helps ensure that the CWRP avoids unnecessary duplication of content.



Linkages to CWPPs/CWRPs

Communities should determine whether there are other CWPPs/CWRPs in place within their community. Because these plans can be implemented at different scales, ensure that the relationship between any applicable CWPPs/CWRPs is well-established.

Linkages to Other Plans

The following table should be consulted when undertaking the CWRP process. Communities will differ in terms of which plans are most applicable, and there may be others that should be consulted which are not on the list below, such as transportation plans or economic development plans. Update table to provide community specific information based on the applicable plans reviewed as part of the CWRP process. For example, when reviewing and building table below ensure relevant local plans, assessments and summaries are referenced, in addition to that provided in the table below to provide critical and community specific; information to build from.

Plan Type	Description	Relationship to CWRP	Additional Information
Official Community Plan	Municipalities, regional districts and the Islands Trust have the authority to develop official community plans under the Local Government Act. These plans create and implement a comprehensive and long-term vision for land use, social, cultural, infrastructure, transportation, economic, environmental, and other community-based planning priorities.	 Provides community demographic data and growth trends. Can set forth policies to support wildfire hazard planning. Can reference the CWRP for information related to wildfire hazard and link this with growth and development decisions. 	Official Community Plans (BC Website)

TABLE 2. KEY PLANS AND RELATIONSHIP TO CWRP



First Nations Comprehensive Community Plan	Comprehensive Community Planning is a community-led approach to planning, where the process is driven and owned by all community members rather than by a small group or committee.	 Provides community demographic data and growth trends. Can set forth policies to support wildfire hazard planning. Can reference the CWRP for information related to wildfire hazard and link this with growth and development decisions. 	CCP Handbook Comprehensive Community Planning for First Nations in British Columbia Fourth Edition (sac-isc.gc.ca)
Emergency Management Plan	The BC Emergency Program Act requires local authorities to prepare a local all-hazard Emergency Management Plan (EMP). The foundation of the plan is a Hazard, Risk, and Vulnerability Analysis (HRVA), which determines the hazards affecting a community.	 The Provincial Strategic Threat Assessment (PSTA), WUI Risk Class Assessment maps, and the WUI Wildfire Threat Assessment can be used to support identifying the wildfire risk to the local area of responsibility for input into both the HRVA as part of the EMP, and the wildfire risk assessment within the CWRP. The EMP should identify and incorporate strategic-level community wildfire resiliency goals and objectives as part of an all-hazards approach (as outlined in the EMP Guide linked above),while the CWRP should describe the detailed actions required to address wildfire resiliency based on the seven FireSmart disciplines. Coordination between the two plans to eliminate both redundancy and gaps is essential. 	Emergency Program Act Emergency Management Planning Guide for Local Authorities and First Nations Wildland Urban Interface Risk Class Maps (BC Website)



Neighbourhood / Area Plan	Local plans such as neighbourhood or area plans provide detailed planning measures for a specific area within a community to support implementation of OCP/CCP. (Most relevant where overlap occurs with identified WUI/wildfire hazard areas.)	• Ensure that local guidelines and requirements for architectural design, housing, local parks, and other area features are compatible and reconciled with the CWRP wildfire risk reduction goals and actions.	
FireSmart Neighbourhood Community Assessments and Plans	Completed Firesmart Neighbourhood Community Assessments and Plans	These small-scale plans can help inform a community- wide CWRP.	<u>Example-</u> FireSmart- <u>Community-</u> <u>Plan.pdf</u>
CLWRR WUI Wildfire Risk Reduction Plans)	WUI-focused plan to develop and action plan for mitigating or managing wildfire risk to support fuel management investments.	 In most cases this plan will border Community Wildfire Resiliency Plan areas of concerns. 	Contact the local Fire Centre for more information.
Strategic Plan	Strategic plans help prioritize a community's annual goals and activities for goal setting, implementation, and budgeting purposes.	 Review the Strategic Plan to determine if and how wildfire planning factors into the community's priorities. Inclusion can support resource allocation for CWRP implementation. 	
Regional Land Use Plans & Legal Direction (for fuel management)	Most areas of the province have completed regional and sub- regional land use plans. Landscape or watershed level plans have also been completed for many areas.	 These plans contain resource management objectives that can provide guidance or, in some cases, legal direction for CWRP implementation. 	<u>Land Use Plans</u> <u>& Legal</u> Direction by <u>Region (BC</u> <u>Website)</u>



Climate Action , and/or Sustainability Plans	Climate action, sustainability, or resiliency plans address actions to reduce greenhouse gas emissions, improve air and water quality, and a range of social, environmental, and economic issues that are critical to long- term health, vibrancy, and well- being of a community.	 Align actions to mutually support goals whether actions listed in climate change / sustainability plan support or conflict with CWRP actions, such as increases in green infrastructure projects, to manage accordingly for multiple goals. 	
Urban Forestry Plan	Many larger communities that have a significant urban component develop an Urban Forestry Plan to guide the sustained planning, planting, protection, maintenance, and care of trees, forests, and greenspaces within their boundaries. These plans typically centre around the economic, environmental, social, and public health benefits of trees.	 Review recommended tree and plant species lists to encourage appropriate selection of vegetation for wildfire hazard areas. Ensure that tree health, plantings, and maintenance are linked with wildfire hazard management. 	
Community Forest Management Plan (if applicable)	The community forest agreement (CFA) was developed in 1998 and is an area-based forest licence that provides a local government, community group, First Nation, or community-held corporation the exclusive right to harvest timber and manage other forest resources within the CFA area. Community forestry involves locally directed forest management based on social,	Align harvesting, silviculture ,and other forest management objectives with wildfire risk reduction.	Community Forest Agreements (BC Website)



Parks, Recreation and Trail Plans	ecological, and economic sustainability for the benefit of the entire community. Local governments and First Nations commonly develop parks and recreation plans to guide the management of their parks and open spaces. These can range from intensively managed urban parks to passively managed natural areas. Trail planning may be incorporated into these plans or developed as stand-alone planning. It is also becoming increasingly common for community groups to take on trail planning and management responsibilities under agreement with local governments, First Nations, or the provincial government.	 Align park vegetation management objectives with wildfire risk reduction. Ensure that trail planning and development can support wildfire risk reduction strategies wherever possible (control lines, emergency access, etc.) Incorporate wildfire risk reduction into visitor use, regulations, and public safety planning. 	
BC Parks Plans	 Parks Management Plans Management Plans will have relevant planning information for wildfire prevention projects. Some of this information will be directly related to fire management objectives, while others may point towards identified values and objectives that will need to be considered during project planning. Fire Management Plans 	Under "Relationship to CWRP" These plans will aid BC Parks Staff in their process of considering projects for initiation and operationalization as per the BC Parks Wildfire Prevention Planning Toolkit. BC Parks is the designated land manager and legislative decision maker for BC Parks and Protected Area lands. Projects proposed in CWRPs will be evaluated by BC Parks for feasibility and alignment with legislation prior to approval	



 BC Parks FMPs analyze local 	being given.	
fire history and environment,		
climate conditions and		
values to provide high-level		
guidance on wildfire response,		
prevention and prescribed		
fire strategies.		
 Consider the natural role of 		
fire on the landscape. This is		
achieved through an		
ecosystem-based		
management approach.		
management approach.		
BC Parks Wildfire Response		
Plans		
BC Parks Wildfire Response		
Plans identify values at risk		
and wildfire response		
strategies that should be		
discussed with BCWS in the		
event of a wildfire.		
Plans should be updated		
annually to ensure the best		
available information is		
captured.		

Section 7 Community Description

This section defines the planning area for the CWRP and provides information to help readers understand data and trends that may affect the CWRP planning process.

Determining the Area of Interest (AOI) and the spatial extent of the Wildland-Urban Interface (WUI) that exists within and adjacent to a local government or First Nations administrative boundary is an important step to establishing the extent of where the CWRP actions will apply and where Crown Land WRR activities will occur.



7.1 Establishing the Area of Interest

The AOI for a CWRP includes the area that lies within the municipal boundary, regional district boundary, or First Nations land, including First Nation reserve land, land owned by a Treaty First Nation (as defined by the Interpretation Act) within treaty settlement lands, or land under the authority of an Indigenous National Government boundary For regional districts this could be the boundary of an electoral area that encompasses multiple unincorporated communities. This mimics a municipal boundary approach and has been successful in some areas of the province to gain efficiencies. The AOI is not the eligible WUI.

The AOI should reflect 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.

To define the AOI, start with administrative boundaries and any other local information to identify the area that makes the most sense from a structure density, administrative, and community resiliency perspective.

7.2 Determining the Wildland-Urban Interface

The Provincial Strategic Threat Analysis (PSTA) and WUI risk class maps and data are provided to communities by the BCWS as a starting point for guiding the identification of the WUI, which is different from the AOI.

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.



Eligible Wildland Urban Interface (WUI): for the purpose of the FireSmart Community Funding and Supports program the eligible WUI is the area in which risk assessment activities will be undertaken and is defined a maximum of one kilometer from the structure density class greater than 6.

Risk assessment activities are limited to the eligible WUI; local government land and First Nations land within the WUI must be assessed, but risk assessments on Provincial Crown Land within the WUI is voluntary (but eligible for funding).

For the purpose of the FireSmart Community Funding and Supports program, in cases where the WUI is outside of the AOI, confirmation that the proposed risk assessments activities are supported will be required from Provincial Crown Land Manager (BC Parks, Mountain Resort Branch, Natural Resource District and/or Recreation Sites and Trails) and/or other land managers (e.g. Indigenous Services Canada, local government) at the time of application submission.

In addition, risk assessment activities for Private Managed Forest Land (PMFL) are eligible for funding if located within the eligible WUI and only with the consent of the PMFL owner (which must be submitted at the time of application submission).

Spatial data is available for the WUI from the <u>BC Data Catalogue</u> using the search term WUI BC.

7.3 Community Information

Provide a snapshot of general information about the community to identify key information and trends. The table is provided as an addition to other descriptive information. Populate each field with community information. Additionally detailed information about the fire environment and values and community resiliency is required to help inform other components of the plan. To help readers understand key socioeconomic influences, such



as influxes in visitors during the summer months, expected growth in the WUI, vulnerable populations, number of renters vs. homeowners, and other topics that may inform outreach, mitigation, and prioritization discussions.

Sources of data and information include:

- Official Community Plan (or equivalent).
- Housing Needs Report.
- Economic Development Plan.
- Statistics Canada (see Census Profile).

Local government and First Nations Community websites also provide a host of information.

7.4 Values at Risk

Values at risk (VAR) 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.

In the event of a wildfire approaching a community, the first priority is human life and safety, including the evacuation of at-risk areas. Wildfires can move quickly and unpredictably. It takes time for people to evacuate an area and safe egress can be blocked by the fire itself or by vehicle congestion or accidents.

Publicly and provincially owned 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.

Provide any relevant and additional information from the Emergency Response Plan. For example, describe the current firefighting resources within the community. Include information on whether there is a full-time or paid-on-call department; number and type of apparatus, firefighters, firehalls; and whether there are any mutual aid agreements or fire protection service agreements in place.

Describe critical infrastructure and the risk that wildfire poses to the infrastructure (this requires working with the asset owners). Outline the services related to critical infrastructure (electricity, communications, water supply, waste treatment, hospitals, schools, etc.), and the impacts and implications of disruption to these services during and after a wildfire. Most of this information should be available in the local emergency plan. Updated information regarding transmission and distribution lines and what they supply (e.g. identify if a power line supplies other communities), locations of transformers and towers, types of poles (metal vs. wood), substation or generating station locations, loads, and what they supply is important information for a CWRP. Identify water supply infrastructure elements, such as intake dams and locations, pipelines, water treatment plants, sewer facilities, etc. Describe water availability for firefighting and the potential for drought conditions during wildfire season.

Communities that depend on surface water from a specific watershed should be aware that wildfire has the potential to cause significant damage to soils, high rates of sedimentation and/or landslides that can degrade water quality for many years. In worst- case scenarios, the water supply may have to be abandoned (temporarily or permanently) or new water treatment infrastructure may need to be built, which can take several years and substantial funding.

When a community relies partially or completely on surface water, describe the location of the watershed and its vulnerability to wildfire. Describe the current water reservoir and/ or



drinking water supply capacity, its relevance and vulnerability, and provide any initial analysis of potential wildfire impacts.

Indigenous cultural heritage resources include archaeological sites, traditional use sites, historic buildings and artifacts, and heritage trails, or any other objects or places of "historical, cultural, or archaeological significance to British Columbia, a community, or an aboriginal people." Non-archaeological cultural heritage in BC is generally not protected by statute, but the use of and access to these resources is enshrined as a constitutionally protected Aboriginal right. Locally identified cultural heritage values that may be impacted by wildfire or suppression efforts can be included. Alternatively, a First Nation Community may provide the name of the department within their community that houses this information so responders can be informed in the event of a wildfire incident.

Describe other resource values, such as those that exist in BC Parks and protected areas, or other localized value of importance such as the timber harvesting land base and its contributions and impacts on short-, mid-, and long-term timber supply, if relevant. Provide updated information in the CWRP on hazardous values, such as large propane facilities, landfills, rail yards, storage facilities containing explosives, etc. Outline any mitigation measures.

Section 8 Wildfire Risk Assessment

All participants in this process must have a basic understanding of the terms "wildfire risk" and "wildfire threat," as well as how they are applied in the context of wildfire risk planning. The two terms are defined as:

Wildfire risk:

- Likelihood of a fire occurring.
- Associated fire behaviour.



• 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, which break down further to:

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

The wildfire risk assessment provides a decision support tool for determining the most appropriate wildfire risk reduction activities and opportunities to increase community resiliency through the application of the seven FireSmart disciplines.

For the purpose of the FCFS funding, risk assessment activities are limited to the eligible WUI; local government land and First Nations land within WUI must be assessed, but risk assessment on Crown land within WUI is voluntary (but eligible for funding). In addition, risk assessment activities for Private Managed Forest Land (PMFL) are eligible for funding if located within the eligible WUI and **only with the consent of the Land Manager or PMFL owner**.

8.1 Local Wildfire Environment and Fire History Summary

A brief summary of the local wildfire environment and history provides an effective synopsis to both the technical and non-technical audience, allowing them to understand the general challenges that the location and history present in terms of wildfire.



The wildfire environment description should generally describe the three environmental components that influence fire behaviour:

- **Topography:** a general description of the topography that the community is situated in. This description should reference the community in relation to slope, terrain, elevation range, valley orientation, aspect, and any significant features, such as locally significant water bodies or glaciers.
- Fuel (vegetation): a general description of the vegetation that is within and surrounding the community. This may include a description of dominant tree species, biogeoclimatic zone descriptions, life form description (grassland, shrubland, conifer forest), forest health impacts or concerns, and unique vegetation features, such as the presence of old growth management areas.
- Weather: a general description of the local climate, including annual precipitation, annual temperatures, common weather events, local wind patterns, and any unique weather characteristics.

Fire History

- The fire history description should generally describe the historical wildfire activity, including significant events and impacts, using the following statistics and descriptions:
- Number.
- Size.
- Location of fires within or adjacent to the community.
- Time of year.
- Cause.
- Significant wildfires that have resulted in evacuations, home losses, or other community impacts.



8.2 Risk Framework & Risk Class Maps

Differing risk levels require tailored risk management to minimize negative impacts from wildfires to communities and high value critical infrastructure. The intent is to enable cost effective wildfire risk reduction strategies that will mitigate wildfire threat to communities and values at risk, at local and provincial scales. Through the identification of risk level, priorities for mitigation and opportunities for increasing community resiliency are both enhanced.

Provincial Strategic Threat Analysis

At a provincial scale, the wildfire risk framework starts with an analysis of the wildland urban interface (WUI). Quantification of wildfire threat components, including likelihood (fire occurrence), severity (Head Fire Intensity, which is calculated using the using the 90th percentile weather conditions and fuel type), and wildfire propagation potential (spotting) at the provincial scale is represented by the Provincial Strategic Threat Analysis (PSTA).

The PSTA assesses and maps potential threats to values on the landscape, including communities, infrastructure, and natural resources.

This identifies areas for wildfire risk reduction in order to minimize negative impacts to human life and safety, including first responders, public health, and the infrastructure required to maintain business continuity and support recovery efforts.

For areas where there is a discrepancy in the classification, local wildfire threat plots will need to be completed to quantify the change in the wildfire threat class. This process is described in BCWS Wildfire Threat Assessment Guide and Worksheets. The updated wildfire threat will be used to develop local risk class assessments, which will be planned and implemented on priority WUI areas and for isolated critical infrastructure.



WUI Risk Class Assessment & Maps

In BC, structure densities are used to define the human structure interface boundary of the wildland urban interface (WUI) for fire and risk management planning purposes. It identifies the zone of transition between unoccupied land and human development. A 2 km buffer is then applied to represent a reasonable maximum distance that embers can travel from a wildfire to ignite a structure. This represents the historic approach to defining the WUI for BC. As the Wildfire Risk Management plan is developed, a newer process may be put in place that would replace this process.

Once defined, the WUI layer is combined with the PSTA wildfire threat layer (Crown land) to highlight a coarse scale spatial pattern of risk area using certain criteria, such as density and threat ratings. The WUI risk class assessment is driven by structure location (not by administrative boundaries) to reflect the actual location of structures that exist on the land base in relation to wildfire threat. This creates WUI polygons that may include multiple jurisdictions that are linked by the continuation of structure density.

Currently, the province only has data available to support fire threat analysis on Provincial Crown land. There are large tracts of private land that exist within the WUI where no data is available. The amount of private land is an important component in the risk analysis due to the lack of data to inform fire risk identification across jurisdictional boundaries. Therefore, the buffer was expanded to 2.75 km around structure classes with a density of >25 for the analysis in order to create separate WUI polygons. A subsequent analysis of the PSTA data was performed to allocate polygons to one of five Risk Classes.

The resulting WUI Risk Class Map highlights patterns and trends in the WUI in a simplistic and easy to understand way. This is available as a high-level analysis to support the initial identification of areas for FireSmart Community Funding & Supports applications. WUI Risk Class (RC): the level of risk ("risk class") reflects the analysis of weighted PSTA threat components within the individual WUI Risk Class polygons. Five risk class ratings were



applied to the WUI polygons, with "1" being a higher relative risk and "5" being the lowest relative risk. The application of relative risk does not imply "no risk," since the goal is to identify areas where there is higher risk.

Subsequent activities or inputs are required to determine the most effective risk control options, including developing a CWRP or other plan that includes assessment of local threat on the ground, identification of FireSmart priorities, ground truthing the area to determine local threat, and developing a site level plan for treatments.

The PSTA is designed to consistently assess and map potential wildfire threats to values across the landscape, including communities, infrastructure, and natural resources, and to integrate different aspects of wildfire hazard and risk. In this context, "values" refer to human-made structures or natural resources or features that have a measurable or intrinsic worth and could be negatively impacted by wildfires.

The PSTA is intended to provide a strategic-level analysis of many different factors that contribute to wildfire threats, but it is not intended to represent absolute, site-specific values. Local governments and First Nations should further calibrate this data locally using additional tools, such as the results of the Hazard, Risk, and Vulnerability Assessment and the Wildfire Threat Assessment Guide and Worksheets. This can also provide additional information for non-provincial Crown lands.

8.3 Local Wildfire Threat Assessment

The goal of the <u>mandatory 2020 Wildfire Threat Assessment</u> (WTA) Process is to link the PSTA to updated fuel assessment so the PSTA will reflect a local wildfire threat. Consistency in the approach to updating the PSTA for a local wildfire threat is a fundamental outcome. The entire area of interest would have to be assessed and confirmed during the process. The subsequent local wildfire risk classification process builds from the



local wildfire threat score to include additional fire behaviour and values information gathered through the WTA process.

The PSTA is a starting point meant to aid in the identification of areas requiring further review. Updating the PSTA to produce the local wildfire threat score is predominantly linked to fuel type updating. The BCWS, through the development of the BCWS Fuel Type Mapping and Summary Document has developed a set of principles that are used to assign a fuel type to all polygons in BC. Detailed information on the approach, assumptions, and principles is provided in the <u>BC Fuel Type Map Document.</u>

The use and interpretation of this tool requires the expertise of a forest professional who has wildfire vegetation management within their scope of practice. This step depends on the presence, or amount of forested land, within the CWRP AOI.

The PSTA provides threat information for the provincial crown land base.

Provincial government policy requires that local governments and Indigenous communities obtain the written consent of private forest landowners prior to undertaking wildfire risk or threat assessments on these parcels.

To learn more about or download the PSTA data, click here.

To learn more about or download the provincial WUI Risk Class data, click here.

To learn more about the 2020 BCWS Wildfire Threat Assessment Guide and Worksheets, click here.

8.4 Hazard, Risk, and Vulnerability Assessment

The Hazard, Risk, and Vulnerability Analysis (HRVA) that local governments undertake as part of the legislative requirements to develop a local Emergency Management Plan may provide additional locally-derived information that can augment the PSTA, particularly



regarding critical infrastructure. Within the HRVA, local governments are required to undertake a critical infrastructure assessment. Emergency Management BC supports this by providing the Critical Infrastructure Assessment Tool.

Review the HRVA in the Local Emergency management Plan to augment the PSTA with critical infrastructure, and other relevant information where applicable.

To learn more about the Hazard, Risk, and Vulnerability Analysis (HRVA), click here.

To learn more about the Critical Infrastructure Assessment Tool, click here.

Section 9 FireSmart Disciplines

The CWRP template is designed to comprehensively plan for all aspects of community wildfire by structuring strategies based on the seven FireSmart disciplines: Education, Vegetation Management, Legislation and Planning, Development Considerations, Interagency Cooperation, Cross-training, and Emergency Planning.

The risk assessment work completed in Section 8 will identify the areas of the community that should be prioritized for action, and the **FireSmart Roadmap (Section 10)** will help local governments and First Nations understand where to start and what steps to take on the way to community wildfire resiliency.

Each FireSmart section below includes the following:

- Description of what this FireSmart discipline is intended to address. Analysis of challenges and opportunities to consider in the CWRP planning.
- process, including any considerations unique to the discipline, such as specialized expertise required.



• Topics and examples for potential CWRP actions and link to FireSmart Roadmap Resources and information sources, as applicable.

9.1 Education

By promoting a sense of empowerment and shared responsibility, public education and outreach play a critical role in helping a community prepare for a wildfire and participate in wildfire risk reduction and resiliency activities. This discipline often supports the successful implementation of many other FireSmart disciplines by building awareness and understanding. Specific outreach activities can be used to engage the public in understanding their role and actively participating in wildfire risk reduction throughout the community.

For example, demonstrating vegetation management in public parks or around public buildings, and working with the Ministry Land Managers (Natural Resource Districts, BC Parks) to ensure fuel management types of vegetation treatments are conducted in high-risk forested areas around the community can help educate the public on the importance managing their private or residential land to be FireSmart and create buy-in for conducting these activities.

Analysis

The effectiveness of public education and outreach activities varies and can depend on specific factors, including the broadness of the effort, consistency of messages, types of messengers, and formats and tools used.

While public education and outreach activities often target residents, it's important to consider other audiences that could benefit from learning about wildfire goals and actions in the CWRP, such as elected officials, business owners, land managers, adjacent local communities, volunteer organizations, industry professionals, and visitors. In addition,



consider all ages and demographics, especially any vulnerable populations that may require more targeted messaging campaigns with information tailored to their concerns.

A wide variety of outreach tools or tactics can be used to distribute messages to target audiences. These may include:

- Informational materials, including brochures, newsletters, videos, posters, social media and websites;
- Community events, such as field tours, workshops, trainings, public meetings, or Wildfire Community Preparedness Day;
- Engaging neighbourhoods within the community through the FireSmart Canada Neighbourhood Recognition Program;
- Individual communications, such as door-to-door site visits;
- Media releases and public service announcements;
- Technical reports and research papers;
- Information hotlines and emergency alert systems;
- Feedback mechanisms, such as public surveys; and
- Community signage.

Keep in mind that the timing of outreach matters. Some activities are more effective on an ongoing basis, while others are most relevant immediately before, during, or after a wildfire. Collaboration with other organizations should also be considered.

The spokesperson delivering the key messages should be trusted by the audiences receiving the information (this may vary across communities). For example, credible sources within the government may include fire chiefs, fire department personnel, emergency managers, or local government/First Nation officials. Credible sources outside



of government agencies include local media, community service organizations, and religious, cultural, and other organizations.

When multiple spokespeople are used, it's essential to coordinate messaging for consistency to avoid confusion. Education and outreach are most impactful when there are multiple messengers delivering the same message through a variety of formats and on a regular basis.

Action Planning & FireSmart Roadmap

Education and outreach planning can encompass many actions targeting different audiences. If one does not exist already, consider developing a communication strategy as a starting point. This strategy will determine which education and outreach tools are most appropriate for implementing CWRP goals, how this information should be disseminated across different audiences, the degree of effort and resources required, and the priority level and timing of implementation. Find out what worked and didn't work in other communities.

Other potential public education and outreach actions that can help inform a communication strategy or be conducted separately include:

- Disseminating the final CWRP through a website and conducting community meetings to support its implementation; Presenting final CWRP to EOs;
- Conducting an inventory of existing educational materials and activities being used by the community to review current approaches and identify gaps or inconsistencies in outreach and messaging;
- Conducting a survey;
- Coordinating with FireSmart BC to host a local community preparedness day or other annual event that aligns with provincial activities (e.g., Fire Prevention Week);



- Working with chamber of commerce to conduct a workshop for businesses on preparedness and recovery planning activities;
- Developing a school education campaign to help different ages learn about "good" and "bad" wildfire;
- Offering half-day FireSmart Community Champion trainings for residents;
- Hosting FireSmart Day (or other opportunities) presentations on topics such as home construction, property maintenance and landscaping, wildfire insurance, and evacuation planning;
- Distributing education materials to vulnerable populations or those with any outreach considerations (languages, accessibility); and
- Ensuring signage is in place for all FireSmart demonstration areas.

Activities related to FireSmart education will appear in the first stage of the FireSmart Roadmap, annually but should reflect progression in terms of the community's understanding and adoption of FireSmart principles.

Resources

FireSmart BC resources and materials are available on the **FireSmart BC website**, under **Resources**, in **Ember's Den**, or in the **Toolkit**.

9.2 Legislation and Planning

Legislation and Planning can be a very effective tool for reducing wildfire risk on locally owned or administered lands within the administrative boundaries of a local government or First Nation communities.



Analysis

Review local bylaws and policies as they relate to local wildfire risk reduction activities; in addition, there are several provincial and federal acts and regulations that support or govern local wildfire risk reduction activities, either directly or indirectly. Local governments and First Nations can develop and implement their own local bylaws to effectively address specific local conditions or challenges. However, it is important to understand how provincial or federal legislation can either support or restrict the ability of a local government or First Nation to implement local legislation and other wildfire risk reduction activities.

While not exhaustive, Appendix G provides a summary of several key provincial and federal acts and regulations that the CWRP team should be familiar with when undertaking the development of a CWRP. It is expected that the final CWRP will outline for the community how relevant policy and legislation will apply to the unique circumstances of the community. For example relationship between local burning bylaws vs provincial, existence of Provincial Parks within CWRP perimeter for example.

Action Planning

Identify gaps in local community bylaws and policy as relates to wildfire resiliency and risk reduction and in consideration of existing provincial and federal legislation. Activities related to FireSmart legislation and planning (referred to as Community Planning in the FCFS program) are generally considered in the Expansion phase of the FireSmart Roadmap.

Example CWRP actions to address local legislative requirements include:

• Review land use bylaws to assess where current bylaws inadvertently promote conditions that may contribute to fire spread (e.g., smoke prohibitions landscaping, fencing).



Resources

Additional information about specific legislation in appendix F

BC Building Act Guide. BC Emergency Program Act. BC Forest & Range Practices Act (FRPA). Park and Protected Areas Legislation. BC Foresters Act. BC Local Government Act. BC Open Burning and Smoke Control Regulations. BC Wildfire Act and Regulations.

9.3 Development Considerations

This section addresses how community land use and development in wildfire-prone areas affects the susceptibility of the community at different scales. In this context, development refers to any aspect of the built environment, including structures (homes, businesses, accessory structures), attachments to structures (fences, decks), critical facilities (hospitals, schools), and critical infrastructure (roads, bridges).

This section also recognizes the relationship between the built environment and the natural environment (natural or cultivated landscaping, natural forest located in parks or adjacent to the community, open spaces such as grasslands, recreational areas, and the broader forest/ grasslands in the landscape) in terms of where and how a community is or will be developed. For example, high-density, clustered development with forest or grassland on the fringe might be managed differently compared to low-density, large lot development that is interspersed throughout a forest or grassland.



Analysis

A number of factors can influence the susceptibility of development, effectiveness of response, and level of public safety during a wildfire, including:

- Location of development, including hazardous or vulnerable land uses, in relation to high threat forested vegetation, steep slopes, and other geographical features that contribute to extreme fire behaviour;
- Access and circulation patterns;
- Availability and adequacy of water supply;
- Type of construction materials on structures and attachments;
- Lot size and structure density;
- Design guidelines and architectural standards;
- Addressing and street signage;
- Landscaping, screening, and buffering; and
- Temporary land uses that determine the type of use and quantity of people.

Many of these factors can be planned for and regulated through the community land use planning and development process. Review the Official Community Plan, other related community-oriented plans, and development processes to identify how these plans currently address wildfire risk in new and existing developments. These plans provide the basis for assessing local conditions, gathering information, and making decisions.



The CWRP can support this planning in several ways, including identifying the level of wildfire risk for existing development (see the Risk Assessment section of this document or more information) and creating appropriate strategies to reduce risk; and identifying where future growth is planned and the extent to which wildfire mitigation requirements are necessary to minimize wildfire risk.

The CWRP can identify actions to help reduce the vulnerability of people and susceptibility of development (e.g., structures, infrastructure) in wildfire-prone areas. However, many of these actions will require updates to the Official Community Plan, bylaws, and other local plans or regulations. Therefore, the process of identifying actions should occur in close coordination with local community planning, development, and building staff.

Action Planning

Community land use and development actions should consider all scales (lot, subdivision/neighborhood, and community) to comprehensively support wildfire risk reduction and resiliency. There are a number of potential actions and communities are encouraged to assess how policies and bylaws can support their own risk reduction goals.

Determine actions to address gaps in identified in the community planning and development processes as they relate to wildfire risk reduction.

Example CWRP actions to address land use and development:

- Review the Official Community Plan to assess and ensure wildfire hazard information from the CWRP or other assessments on provincial Crown land is integrated into planning decisions related to land use, future growth, environment and resources, transportation, public safety, and other topics.
- Review other local plans, such as the Emergency Management Plan, to align goals and actions with the CWRP and Official Community Plan related to land use and development.



- Consider adopting a local development permit area tied to wildfire hazard levels and requiring minimum standards for access, water supply, construction materials and techniques, fuel management, and lot design. Consider including specific guidance in the local development permit area based on the FireSmart Home Ignition Zone (HIZ) and Priority Zones.
- Assess and determine how future planning and development activities can support postfire recovery in the event of a wildfire.

Activities related to development considerations are generally considered in the Integration phase of the FireSmart Roadmap)

Resources

Specific growth data and locations of future development can be found in the Official Community Plan and Housing Needs Reports (see Table 2 for more details).

Information on Development Permit Areas is available here.

National Guide for Wildland-Urban Interface (WUI) Fires provides guidance to Canadian local governments and First Nations on WUI land use planning and regulation implementation.

Additional guidance on land use planning tools and strategies for the Wildland-Urban Interface include the American Planning Association's PAS Report 594, Planning the Wildland-Urban Interface (2019), which is available at no charge through the <u>association's</u> <u>website</u>.

9.4 Interagency Cooperation

It takes the collaborative efforts of multiple stakeholders working together to achieve a wildfire resilient community, including local fire departments, staff, provincial government



officials such as Emergency Management BC (EMBC) and BCWS, BC Parks and NR District Land Manager, selected officials, representatives, industry representatives, and residents. Coordination and cooperation are required to develop an effective CWRP and be prepared in the event of a wildfire.

Analysis

The CWRP development process offers an opportunity for individual organizations to work together and develop strong interagency and interdepartmental working relationships well ahead of an emergency response. The goal is to broaden from department or agency silos and a single jurisdiction-based approach to a risk-driven, multi-agency, and multi-scalable approach. This increases the ability of individual organizations to plan effectively and ultimately work efficiently together during an emergency response.

Identify current state or examples of inter-agency cooperation including service agreements, memorandums of understanding, existing committees, and other formal/informal agreements as they relate to wildfire risk reduction.

If not already in place, one of the first actions undertaken during the CWRP planning process should be the development of a Community FireSmart and Resiliency Committee. It should comprise the individual organizations needed for effective and collaborative planning, as well as the organizations that are expected to work together during a wildfire response. The purpose of the CFRC is to bring together local communities and provincial agency staff (EMBC, MOF, BC Parks) with stakeholders to collaboratively coordinate, plan, and share information on FireSmart activities at a local and regional level. Communities may also consider participating in existing multi-agency fire and/or fuel management tables.

Starting in 2024, to be eligible for FCFS, applicants will be required to have or participate in a Community FireSmart Resiliency Committee.



Action Planning

Identify opportunities to improve interagency/stakeholder relationship building and cooperation.

Activities related to interagency cooperation are generally considered in the Engagement and Integration phases of the FireSmart Roadmap.

Resources

Additional resources on Interagency Cooperation are available on the FireSmart BC site.

Information on structure protection is available on the BC Wildfire Service Wildland structure protection program site.

9.5 Cross-Training

CWRP planning requires many different professions who may not typically work in a wildfire environment to understand other disciplines and wildfire management planning objectives. Cross-training firefighters, public works staff, utility workers, administration staff, planning and logistics staff, and other key positions support the development of comprehensive and effective CWRP activities, including a safe and effective wildfire response.

Analysis

Acquiring new skills and understanding of other professional disciplines to inform CWRP development and support implementation requires training across different disciplines. Just as wildland and structural firefighters are trained for different purposes, land use planners, building inspectors, landscape professionals, and administration professionals typically do not have the skills and experience required to address wildfire resiliency planning or



engage in a wildfire response. As a result, communities must support and invest in crosstraining opportunities to expand local capacity and expertise to enable a broader set of individuals to engage in the CWRP process across different FireSmart disciplines.

Review current state of training as it relates to wildfire risk reduction activities throughout your organization.

Cross-training objectives and actions in the CWRP should ensure that all staff and agency partners who are expected to participate in the development and implementation of the plan, or participate in a wildfire response and recovery, are appropriately trained.

Action Planning

Identify opportunities to develop and/or implement training within your organization. Training opportunities will vary based on community needs, but may include the following:

- Wildfire Risk Reduction Basics course
- Local FireSmart Representative
- FireSmart Community Champion
- Home Partners Program Wildfire Mitigation Specialist
- ICS-100 (introduction to effective system for command, control, and coordination of response at an emergency site; available online)
- S-100 Basic fire suppression and safety (basic fire suppression training for contract crews) and S-100A (annual refresher)



- S-185 Fire entrapment avoidance and safety (general knowledge course on wildfire safety and entrapment avoidance for local governments, contract crews, and First Nations)
- S-231 Engine Boss (training for structure protection program in a WUI event)
- WSPP-115 (training for structure protection unit crews) and WSPP-FF1 (train the trainer)
- Task force leader (for structure protection only)
- Structure Protection Group Supervisor (GrpS) (for structure protection only

Activities related to cross training are generally considered in the Engagement and Initiative phases of the FireSmart Roadmap.

Resources

More information is available on <u>FireSmart training courses</u> on the FireSmart BC website, such as Local FireSmart Representative training, FireSmart 101, and Community Champions.

Contact the BC Office of Fire Commissioner or the BC Wildfire Service for guidance in obtaining wildfire suppression training.

9.6 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 as a whole.



Analysis

Wildfires that threaten human life, structures, and critical infrastructure are extremely complex and dynamic incidents to respond to. These incidents can typically involve multiple concurrent emergency response events, such as:

- Wildland fire suppression involving multiple resources
- Structural fire response (multiple structures)
- Public, vulnerable population, and livestock evacuation
- Public health
- Search and rescue
- Complex traffic control
- Law enforcement
- Medical emergencies
- Utility emergencies
- Hazardous materials
- Emergency support services
- Structure and infrastructure damage assessments
- Post-fire recovery
- Other associated natural hazard response (storm, flooding)

Without significant emergency pre-planning for all phases of a response, a wildland urban interface incident will almost immediately overwhelm resources and render them ineffective.



9.6.1 Pre-Incident Planning

November 8, 2023, <u>the Emergency and Disaster Management Act</u> came into force, replacing the Emergency Program Act.

The updated legislation reflects the realities of the modern world including global pandemics, security threats and climate change, and shifts from focusing on emergency response to the four pillars of emergency management.

While some powers and duties under the Act are now in effect, others will be brought into force through regulation. For more information on the key components that are now functional, and those that will come into effect after regulations are made, please see <u>When</u> <u>Does B.C.'s New Emergency Management Legislation Come into Effect? (PDF, 183KB)</u>.

The former Emergency Program Act focused heavily on the response phase of emergency management. The new legislation shifts to address all four phases of emergency management—mitigation, preparation, response, and recovery—and includes rules, obligations, or authorities related to each phase.

Recognizing the benefits of sharing responsibilities for planning and of the collective exercise of powers during emergency events, local authorities, Indigenous governing bodies, and the provincial government have the ability to create or join multi-jurisdictional emergency management organizations.

Under the legislation, new requirements have been established for the provincial government and local authorities to consult and cooperate with Indigenous governing bodies in the preparation, response, and recovery phases. Critical infrastructure owners will also be required to consult and cooperate with Indigenous governing bodies in the



preparation phase. Consultation and cooperation requirements related to risk assessments and emergency management plans will be phased in as regulations are made.

We are developing additional guidance and support on implementation of consultation and cooperation requirements.

When regulations are made, designated critical infrastructure owners will be required to conduct risk assessments, create emergency management and business continuity plans, and provide emergency management information upon request. The provincial government will be authorized to order critical infrastructure owners to take mitigation or preparation actions, and will be able to take steps to ensure the coordination of critical infrastructure owners during the response and recovery phases.

Roles and responsibilities of local authorities, including requirements for the development of risk assessments, business continuity plans, and emergency management plans that cover all four phases of emergency management, will be modernized and clarified. The regulation will also finalize the framework for multi-jurisdictional emergency management organizations.

Once the regulations are in force, additional time will be provided to meet the new requirements.

9.6.2 Wildfire Preparedness Condition Level

The following preparedness condition level table can be used to develop local daily action guidelines based on expected local wildfire condition. Develop a local daily action guidelines based on prep-condition or populate the following table consistent with local community circumstances.



TABLE 3. WILDFIRE RESPONSE PREPAREDNESS CONDITION GUIDE

Prep-Con LEVEL	Action Guidelines
ILOW	All Community staff on normal shifts.Staff will update fire danger signs.
II MODERATE	All Community staff on normal shifts.
III HIGH	 All Community staff on normal shifts. Daily detection patrols by staff. Regional fire situation evaluated. Daily fire behaviour advisory issued. Wildland fire-trained Community staff and EOC staff notified of Prep- Con level. Establish weekly communications with local wildland fire agency contacts Hourly rain profile for all weather stations after lightning storms. update fire danger signs.
IV EXTREME	 Rain profile (see III). Daily detection patrols by Staff. Daily fire behaviour advisory issued. Regional fire situation evaluated. EOC staff considered for stand-by. Wildfire Incident Command Team members considered for stand-by/extended shifts. Designated Community staff: water tender and heavy machinery operators, arborists may be considered for stand-by/extended shifts. Consider initiating Natural Area closures to align with regional situation. Provide regular updates to media Services members/Community staff on fire situation. Update public website as new information changes.



V FIRE (S) ONGOING	 All conditions apply as for Level IV (regardless of actual fire danger rating). Provide regular updates to media/structural fire departments/park staff on fire situation. Mobilize EOC support if evacuation is possible, or fire event requires additional support. Mobilize Wildfire Incident Command Team under the direction of the Fire Chief. Implement Evacuation Alerts and Orders based on fire behaviour prediction and under the direction of the Fire Chief.
--------------------	---

9.6.3 Recovery Planning

Recovery plans are a critical part of emergency planning. Review any existing local emergency plans in relation to recovery planning.

More information is available here.

The local Emergency Management Plan will cover most of the required general emergency planning that a local authority must undertake to be prepared. However, specific wildfire response planning, such as structure protection plans, could be developed as part of the Community Wildfire Resiliency Plan.

Activities related to emergency planning are generally considered in the Initiative phase of the FireSmart Roadmap.

Resources

The National Research Council (NRC) Wildland-Urban Interface Technical Committee published a National Guide for Wildland-Urban Interface (WUI) Fires in the fall of 2020; it provides guidance to Canadian local governments and First Nations on WUI land use



planning and regulation implementation, as well as guidance on wildfire response preparedness planning.

9.7 Vegetation and Fuels 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 public safety and fire suppression effectiveness and reduce damage and losses to structures and infrastructure.

The ability to plan and implement an effective vegetation management strategy can be influenced by:

- Land ownership and jurisdiction (private, local government, First Nation land, BC Parks, provincial Crown, federal) Vegetation type
- Access
- Biomass disposal options Forest product market Funding, species at risk
- Skilled worker/expertise availability Specialized equipment availability
- Legislation, cultural values, archeology resources Organizational capacity
- Location and number of structures
- Location of critical infrastructure as identified in the local emergency management plan hazard and risk vulnerability assessment

Vegetation management can be accomplished through two different activities: Residential scale FireSmart landscaping and fuel management treatments.



Address the following topics in developing local vegetation management strategies.

- Home Ignition Zone.
- Community Zone.
- Landscape Zone.

9.7.1 FireSmart landscaping (Residential and critical infrastructure)

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 Non-combustible Zone and Priority Zones 1 and 2 (refer to the FireSmart Guide to Landscaping).

Analysis

Vegetation management at the residential scale is further delineated by FireSmart priority zones, as described in the FireSmart Home Ignition Zone (HIZ) and Priority Zones (Figure 1).

The HIZ typically includes the structure and the immediately adjacent area, extending out to 30 metres from the structure. The HIZ is typically the private property owner's responsibility; however, in developments with smaller lots, the HIZ may extend onto publicly-owned lands or adjacent private lands.





Figure 1. FireSmart Home Ignition Zone

Critical infrastructure is identified through the local Emergency Management Plan or is infrastructure that is essential to the health, safety, security or economic wellbeing of the community and the effective functioning of government (such as fire halls, emergency operations centres, radio repeaters, etc.)

Vegetation management planning and implementation is undertaken based on the combined input from horticulture specialists and a forest professional with wildfire mitigation expertise.

The expertise of a professional forester is highly recommended in cases where Priority Zones 2 and 3 involve "typical" forest stands, or potential conflicts with other natural resource values. The FireSmart Guide to Landscaping provides vegetation management guidance.



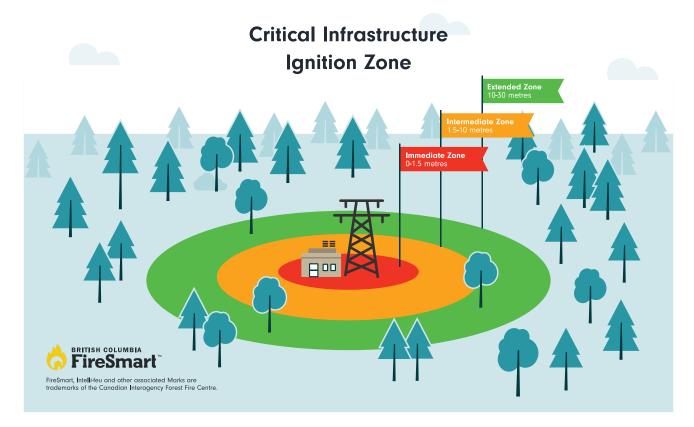


Figure 2. FireSmart Critical Infrastructure Ignition Zone

FireSmart landscaping priorities for both residential properties and critical infrastructure should be identified in a FireSmart Home Ignition Zone Assessment Scorecard, FireSmart Critical Infrastructure Assessment or FireSmart Home Partners Program Assessment.

Activities related to FireSmart landscaping are generally considered in the Engagement phase (residential assessments, offsite debris disposal) and Initiative phase (rebate programs, critical infrastructure) of the FireSmart Roadmap.



9.7.2 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 outside of FireSmart Non-combustible Zone and Priority Zones.

Analysis

Opportunities for fuel management located exclusively on Provincial Crown land, outside of municipal boundaries, regional district parks, or First Nation lands; engagement with BCWS Fire Centre Prevention Staff, Land Managers (i.e., MOF Natural Resource District WRR staff, BC Parks staff), and CFRC members is required to ensure integrated planning between the CWRP and CLWRR Program.

Early engagement with BCWS and WRR staff will reduce planning inefficiencies and identify areas to collaborate. For example, when a CWRP is being developed it is essential to determine if a WUI WRR Plan has been developed for the area or is intended to be developed as it may or may not have planned for fuel/vegetation management on crown land adjacent to the community(s) of interest.

Vegetation management is also governed and guided by several pieces of provincial legislation, standards, and tools (see Legislation and Planning discipline for more information). Local legislation may also have to be considered. Obtaining the expertise of a forest professional with wildfire vegetation management within their scope of practice for guidance in managing natural or forest vegetation areas in the WUI is highly recommended—and it is required by provincial law if fuel management prescriptions are being developed to guide projects or are conducted on provincial Crown land.



Action Planning and FireSmart Roadmap

Within the highest threat priority units that are likely to be treated during the lifespan of the CWRP, design logical fuel treatment units for fuel management treatments.

Design logical fuel treatment units to modify fire behaviour and create options for fire suppression. Key principles to be considered in the development of fuel treatment units (FTU's) include: continuity, relatively linear, anchored to non-fuel areas, accessible, defensible, and designed to be effective in changing fire behaviour from a crown fire to a surface fire during 90th percentile fire weather conditions for the local area.

Proposed treatments should be sufficient in size, sufficiently treated, and strategically located with boundaries that can be effectively utilized for wildfire response. Boundaries should be consistent with logical burn unit planning principles, including: utilizing topographical breaks and man-made and natural features (roads, railways, hydro transmission lines, gas pipelines, wetlands, lakes, irrigated fields, non-fuel areas, etc.). Fuel treatment design should also consider constrained areas (i.e. private land, constraints that preclude treatment), and treatment method (commercial timber harvest, mechanical, prescribed fire, etc.).

For each fuel treatment unit (uniquely identified), specify the fire management objectives related to the desired change in fire behaviour that will guide future fuel treatment prescription development. For example:

- Conduct fuel treatments to create residual stands characteristics that do not support active crown fire.
- Apply cultural and prescribed fire under suitable conditions to provide ecological benefits, reduce fuel loading, and reduce the probability of catastrophic fire in the future.



Resources

The BCWS Fire and Fuel Management web page offers a number of tools that support fuel management planning, including Fuel Management WUI WRR Planning and Fuel Management Prescription Guidance, and can be accessed <u>here</u>.

For Ministry of Forests crown land, contact your local Ministry of Forest office.

For lands managed by BC Parks contact the applicable Parks & Protected Area Section Head, For Mountain Resorts, or other land managers, contact the designated authority at that ministry.

All proposed fuel management polygons are required to be approved by technical staff (BCWS WPO and/or FNESS mitigation specialists). Contact a local BC Parks representative when working within BC Parks areas. All proposed fuel management polygons proposed within BC parks and protected areas are required to be approved by BC Parks.

More information on engaging and consulting with First Nations regarding vegetation management is also available <u>here</u>.

Section 10 FireSmart Roadmap & CWRP Action Plan

10.1 FireSmart Roadmap

No two FireSmart journeys are the same, but this road map is provided to help local governments and First Nations to understand where to start and what steps to take on the way to community wildfire resiliency.

It is recommended that the phases be completed in sequence, but this will depend on what activities have already been completed and what activities are recommended in a CWRP



based on local analysis. Review your Community's current status within the four roadmap phases to support and provide further direction of activities along the Firesmart roadmap.

Some activities, including education, may appear in multiple phases but should reflect progression in terms of the community's understanding and adoption of FireSmart principles. For information on the Firemsmart Roadmap please go <u>here</u>.

The three foundational elements that should be completed before you engage in the road map are:

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

Engagement Phase

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

Activities that should be completed 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 FireSmart BC Conference/Wildfire Urban Interface Symposium.



• **Residential areas:** Undertake Home ignition zone assessments; offer off-site debris removal programs.

Initiative Phase

In this phase, the primary objective is taking action and implementing local FireSmart activities. The focus is on building capacity both in people and your community's capacity to withstand wildfire events.

Activities that should be completed 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 and community assets.
- Emergency Planning: Assess community water delivery ability; FireSmart Structure Protection Trailer development and plan.
- **Training:** Undertake training for other FireSmart positions (beyond initial FireSmart Coordinator), fire departments, and emergency management staff; develop local Home Partners program.
- **FireSmart projects:** Under mitigation activities for critical infrastructure and community assets with completed assessments.
- Residential areas: Offer local rebate programs.



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 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 First Nations land and publicly owned land and dwellings.
- Fuels Management: Develop prescriptions and/or burn plans and undertake treatments, including cultural and prescribed fire.

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 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.

10.2 CWRP Action Plan

Effective implementation of the CWRP requires a robust action plan and tracking mechanisms (the FireSmart Roadmap should be used for this purpose). Each major element of the roadmap should have corresponding objectives and actions to address the issues, challenges, or needs identified and discussed in detail in the plan.

Objectives should be clear in their intent; actions to achieve the objectives should identify the organization or individual who is responsible for leading the action (agency, group, individual), the priority of the action (high, medium, low), expected timeframe needed to complete the action, resources required (funding, staff capacity), and metric for success.

10.3 Tracking and Reporting

Establish a dedicated section for tracking and reporting to create accountability, track accomplishments, and report successes. For

example, future columns can be added to the action table above that annually note whether actions have been completed, if they are in progress, and changes to priority levels. If actions have been completed, capture any specific, measurable outcomes that help show how the community has successfully reduced its risk.

Tip: Apply SMART Criteria to Action Plan.

When drafting objectives and actions, test whether they fit the SMART approach using the criteria below:

Specific - target exactly what is to be achieved.

Measurable - quantify or suggest an indicator of progress.

Assignable - specify who will do it.

Realistic - state what results can realistically be achieved.

TimeBound - state expected time for completion.



These outcomes are beneficial when reporting to decision makers and seeking future project funding.

10.4 Plan Monitoring and Updates

Schedule regular monitoring and updates to ensure the plan does more than "sit on a shelf." Communities should set a schedule that ideally includes a minimum annual review of the CWRP action plan and a five-year comprehensive review of the entire plan. During the annual review, consider whether any significant changes have occurred, such as the adoption of a new plan that could affect CWRP implementation. The five-year comprehensive review should review the entire plan and consider how risk has changed based on any recent wildfires, vegetation management works completed, significant changes to the built environment due to growth and development, economic changes, or other factors that would influence the overall success of the plan. This needs to include a detailed analysis of all previously completed fuel management treatments within the planning area with an updated status and/or a maintenance plan.

11 Appendices

Appendices provide additional information to the reader to support content presented in the main portion of the CWRP. Example appendices are provided below and should be tailored to the final community CWRP needs. Other appendices can be added in support of community circumstances.

Appendix A Glossary

A baseline glossary is provided in appendix A. Amend the baseline glossary to provide key terms specific to your community and/or contained within your local CWRP. Note that these terms should crosswalk with other plans to ensure that terms are consistently defined across different plans.

Resources for glossary terms include:

 <u>BCWS Wildfire Glossary of Terms</u> commonly used to describe wildfire and fuel management.



- Canadian Interagency Forest Fire Centre (CIFFC) <u>Canadian Wildland Fire</u> <u>Management Glossary</u>.
- FireSmart Guidebook for Community Protection (2013) Glossary of Terms.

Appendix B Public Engagement and Collaboration

Information related to public surveys, public workshops, or other communication and outreach activities can be added in an appendix to help readers understand the type and scope of public participation that helped inform the final plan.

Appendix C Plan Development Supporting Documentation

Supplemental materials related to how the plan was developed can be added, such as committee meeting notes, to help readers understand other activities and information that supported content development.

Appendix D: Home Ignition Zone

Appendix E: WTA Plots and Photos

Appendix F: Maps



Appendix G: Key Provincial and Federal Acts and Regulations

BC Building Act and Building Code

The BC Building Code (BCBC) is a provincial regulation that governs how new construction, building alterations, repairs, and demolitions are completed. This code establishes minimum requirements for safety, health, accessibility, fire, and structural protection of buildings, as well as energy and water efficiency. It applies throughout the province except for some federal lands and the City of Vancouver.

In the spring of 2015, the Province passed the Building Act, which provides specific direction to local governments and Treaty First Nations, and changes the authorities that local governments and Treaty First Nations have with respect to technical building requirements. Currently, the BC Building Code does not address wildfire hazard areas. One of the changes made to the BC Building Act allows local governments and Treaty First Nations to create Development Permit Areas (DPA's) that can include wildfire risk reduction measures, including technical building requirements.

BC Local Government Act

The Local Government Act (LGA) provides the legal framework and foundation for the establishment and continuation of local governments to represent the interests and respond to the needs of their communities, including the powers, duties, functions, and flexibility necessary for fulfilling their purpose. Specifically related to wildfire risk reduction, this act provides direction on adopting bylaws and administering new development, including the designation of development permit areas through the official community plan for protection of development from wildfire. Within a wildfire development permit area, local governments can require exterior design and finish of buildings to address wildfire hazard. This is considered a "temporarily unrestricted" technical building requirement under the BC Building Act to give the province time to institute alternate permanent wildfire hazard mitigation measures, likely within the BC Building Code. Local governments are also able to regulate landscaping, vegetation management, the location of accessory structures, such as fences and decks, and community access through the development permit area, or separate subdivision standards.

First Nation communities are not subject to the local government act; however, many First Nations in BC have undertaken the development and implementation of a Comprehensive



Plan, which is similar to a local government Official Community Plan. This provides the opportunity for these First Nations communities to integrate wildfire risk reduction objectives into their Comprehensive Planning process.

BC Open Burning and Smoke Control Regulations (OBSCR) and Local Bylaws

The OBSCR governs the burning of vegetative material associated with a range of activities, such as land clearing, forestry operations, and agriculture. It sets out the conditions under which open burning of vegetative debris can be authorized. The revised regulation mainly supports the objectives of reducing impacts on human health, enabling and encouraging compliance, and minimizing undue costs to industry.

The regulation does not generally prohibit burning but rather aims to ensure that open burning is conducted with minimal risk to air quality. While facilitating some necessary open burning practices, the new regulation also maintains air protection measures, and encourages alternatives to burning. Some local governments have their own additional bylaws as well that currently prohibit smoke. A review of potentially conflicting local regulation with the objectives of the CWRP (e.g. fuel management) and, if need be, consideration of exemptions to allow for burning for wildfire risk reduction, should be part of the CWRP process. Some local governments have their own additional bylaws as well that currently prohibit smoke. A review of potentially conflicting local regulation with the objectives of the comments have their own additional bylaws as well that currently prohibit smoke. A review of potentially conflicting local regulation with the objectives of the CWRP (e.g. fuel management) and, if need be, consideration of exemptions to allow for burning for wildfire risk reduction, should be part of the CWRP process.

BC Wildfire Act and Wildfire Regulations

The Wildfire Act and Wildfire Regulation define the legal responsibilities and obligations which everyone in British Columbia is subject to. When the BC Wildfire Service places bans or restrictions in an area, the Wildfire Act and Regulation makes them enforceable. As such, everyone in BC is expected to understand and abide by the Wildfire Act and Regulation. This legislation came into effect on March 31, 2005. Its key goal is to specify responsibilities and obligations on fire use, wildfire prevention, wildfire control, and rehabilitation. Local governments have the primary responsibility for wildfire response on non-Crown public lands within their administrative boundaries.



BC Forest & Range Practices Act

The Forest & Range Practices Act (FRPA) outlines how all forest and range practices and resource-based activities are to be conducted on Crown land in BC, while ensuring protection of everything in and on them, such as plants, animals, and ecosystems. All forest and range licensees' activities are governed by FRPA and its regulations during all stages of planning, road building, logging, reforestation, and/or grazing.

FRPA standards and requirements ensure high levels of protection for resource values, while streamlining planning processes for both government and industry.

Park Act and Ecological Reserves Act.

The Park Act (link to legislation) provides for the establishment, classification and management of parks, conservancies and recreation areas. The Ecological Reserve Act (link to legislation) provides for the establishment and administration of ecological reserves. These Acts designate ministerial authority to Parks employees to make decisions on modifications and developments to Parks. This includes WRR treatments and fuel management. Importantly, BC Parks are separate from Crown Land and fall under different legislation.

Consultation with BC Parks Area Staff and Land and Resource Team and subsequent written authorization is required under the Acts prior to conducting any operations in BC Parks or Ecological Reserves.

BC Parks maintains a separate Wildfire Risk Reduction budget and staff to lead these projects, which may be done in co-operation with a CWRP proponent community. Consultation with BC Parks is highly recommended if Parks or Ecological Reserves occur within the CWRP Area of Interest. These consultations can provide valuable local context, catalyze co-operation between Parks and proponent communities, and leverage additional funding sources to complete additional WRR prescriptions and treatments.



Canada Federal Fisheries Act

The Federal Fisheries Act applies to fish and fish habitat associated with freshwater rivers, streams, creeks, and ditches, as well as seasonally wetted habitat, such as flood plains and intermittent streams. It also includes all marine coastal habitats and estuaries. The Fisheries Act prohibits any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat (HADD), unless this HADD has been authorized by the Minister of the Department of Fisheries and Oceans. The removal of vegetation, including shrubs and trees in areas that can affect fish habitat fall within the legal reach of the Federal Fisheries Act. Bylaws, development permit requirements and vegetation management are the primary wildfire risk reduction activities that could be under the legal requirements of the Federal Fisheries Act.

Canada Federal Species at Risk Act

The purposes of the Species at Risk Act (SARA) is to prevent wildlife species in Canada from disappearing, to provide for the recovery of wildlife species that are extirpated (no longer exist in the wild in Canada), endangered, or threatened as a result of human activity, and to manage species of special concern to prevent them from becoming endangered or threatened.

A series of measures, applicable across Canada, provides the means to accomplish these goals. Some of these measures establish how governments, organizations, and individuals in Canada work together, while others implement a species assessment process to ensure the protection and recovery of species. Some measures provide for sanctions for offences under SARA. With regards to the CWRP, bylaw implementation, development permit area requirements, and vegetation management planning must consider the requirements and prohibitions of the SARA.

The acts above provide the means for local government to implement wildfire risk reduction actions through bylaws. Additional provincial and federal acts present legislation that outline local governments' responsibilities regarding wildfire, as well as environmental protection legislation that must be followed during mitigation activities.