WESTERN VALLEY RSC

March 2026

COMMUNITY WILDFIRE RESILIENCY PLAN

THE VILLAGE OF SOUTHERN VICTORIA

CONNECT TO A GREENER LIFE

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Acknowledgements

This Community Wildfire Resilience Plan (CWRP) was developed through collaboration with local leadership, fire services, regional service commission staff, provincial agencies, and community members. The plan reflects input from representatives of the Southern Victoria Rural District, local volunteer fire departments serving the area, the Western Valley Regional Service Commission, and provincial agencies responsible for wildfire management and emergency preparedness. Their time, local knowledge, and commitment to community safety were essential to the development of this plan.

This plan was prepared by Transitional Solutions Inc. We acknowledge that the lands and waters of the Southern Victoria area are part of the traditional and unceded territory of the Wolastoqiyik (Maliseet) people, whose name comes from the Wolastoq (Saint John River), meaning the beautiful and bountiful river.

For thousands of years, the Wolastoqiyik have lived with, cared for, and stewarded these forests, rivers, and landscapes—using fire thoughtfully as a tool for renewal, habitat management, and resilience. Their deep knowledge of land, fire, and seasonal change continues to offer important lessons as we face increasing wildfire risk driven by climate change.

As we work together to reduce wildfire risk, protect communities, and restore landscapes, we recognize the importance of Indigenous knowledge, leadership, and partnership in building a safer and more resilient future for all.

The authors of this report would like to thank and acknowledge the following people and agencies for their assistance and participation in creating this CWRP:

- Local fire department and Fire Chief Phil Walker
- Provincial wildfire service staff Emma Farnham, Troy Adams and Roger Collet
- Wolastoqiyik people
- Emergency management officer Josh Corey
- Regional partners
- Residents and volunteers
- Funding partners

Executive Summary

Southern Victoria's wildfire risk is best characterized as low to moderate overall, with localized areas of higher exposure concentrated east of the Saint John River where residential development intersects with continuous mixed wood and conifer-dominated fuels, steeper slopes, and limited road access. While the community has not historically experienced large or damaging wildfires, the combination of human-caused ignitions, episodic drought conditions, and evolving climate patterns presents credible wildfire scenarios that warrant proactive planning and risk reduction. The most plausible wildfire event in Southern Victoria would involve a wind-driven surface fire during the spring curing period or extended summer dry conditions, producing sustained ember cast in eastern interface corridors such as Woodland Drive, Beech Glen Road, and portions of the Route 109 corridor. In these areas, slope-aligned fuels and single-access road networks increase operational complexity and may shorten evacuation timelines under elevated fire weather conditions.

Much of the community west of the Saint John River benefits from agricultural land use, deciduous forest cover, fragmented fuel patterns, and favourable access, all of which limit sustained wildfire intensity and spread. However, localized wildland-urban interface conditions in eastern neighbourhoods create uneven risk distribution across the municipality. This Community Wildfire Resiliency Plan provides a proportionate, evidence-based framework to address that variability. The plan emphasizes prevention of human-caused ignitions, reduction of structure ignition potential through FireSmart™ Home Ignition Zone principles, targeted defensibility-focused vegetation management in priority corridors, strengthened evacuation and notification reliability, and enhanced wildfire-specific operational readiness within the fire service.

The review identified several governance and preparedness gaps that require attention. The Municipal Emergency Plan, last reviewed in 2003, requires modernization to incorporate a formal hazard and risk assessment, a wildfire or wildland-urban interface annex, clearly articulated State of Local Emergency procedures, and updated contact and coordination protocols. Fire service structural capacity is strong and supported by effective mutual aid relationships; however, expansion of wildfire-specific training, development of pre-incident response planning for higher-exposure neighbourhoods, and establishment of a local structure protection equipment cache would improve readiness during fast-moving interface events. Rural water supply capacity is functional but geographically limited and should be periodically reviewed and mapped to support pre-incident planning.

Wildfire resilience in Southern Victoria is a shared responsibility involving Council, municipal administration, emergency management leadership, the Perth-Andover Fire Department, provincial partners, and residents. Implementation priorities for the next two years include modernization of emergency governance tools, formalization of structured FireSmart™ programming, enhancement of evacuation planning in single-access areas, execution of outstanding mutual aid agreements, and initiation of targeted mitigation in eastern interface corridors. These actions align with available provincial and federal funding programs supporting wildfire prevention, FireSmart™ expansion, equipment acquisition, and emergency preparedness planning.

Southern Victoria's wildfire risk is manageable but unevenly distributed. Proactive, proportionate action now will reduce structure ignition potential, improve evacuation reliability, clarify governance authority, and strengthen long-term community resilience. This plan establishes a clear and practical path forward

consistent with provincial wildfire strategy and national FireSmart™ standards while reflecting the specific landscape, development patterns, and operational realities of the community.

1. Introduction

Wildfire plays a natural role in shaping many of New Brunswick's forests and ecosystems, including areas where people live, work, and recreate. As communities continue to grow and development continues across both rural and peri-urban areas, the potential for wildfire to affect populated areas is increasing. Added to this, a changing climate is contributing to drier conditions and longer fire seasons, making wildfire preparedness more important than ever for communities across the province.

The **Community Wildfire Resiliency Plan (CWRP)** is a proactive planning tool that helps communities better understand their wildfire risks and identify practical actions to reduce them. By identifying vulnerable areas, protecting key community assets, and strengthening local capacity for wildfire prevention, preparedness, and response, the planning process supports safer and more resilient communities. The CWRP provides a clear framework for municipal leadership, emergency services, partner agencies, and residents to work together on coordinated, long-term solutions that reflect local conditions, governance structures, and community capacity.

FireSmart™® is a nationally recognized wildfire prevention and mitigation program led by FireSmart™ Canada by the Canadian Interagency Forest Fire Centre (CIFFC). The program provides science-based guidance to help individuals, communities, governments, and industry reduce wildfire risk and increase resilience in the wildland-urban interface (WUI). FireSmart™ principles form a core foundation of this CWRP and guide the recommended actions related to public education, vegetation management, development, emergency planning, and interagency cooperation.

This CWRP is organized into the following sections:

- **SECTION 1: Introduction** – Purpose of the CWRP and the planning process/methodology used.
- **SECTION 2: About the Area** – Area of Interest, communities covered, environment/climate context, wildfire history, and existing plans/policies.
- **SECTION 3: Values at Risk** – People and homes, critical infrastructure, cultural values, and hazardous sites.
- **SECTION 4: Wildfire Threat and Risk** – Fire regime context, weather/climate trends, fuels and topography/access, fire history, and local threat/risk assessment.
- **SECTION 5: Risk Management and Mitigation Factors** – Priority risk reduction areas, FireSmart™ planning and recommendations, fuel management strategy, bylaws/policy considerations, and prevention of human-caused fires.
- **SECTION 6: Emergency Preparedness and Response** – Emergency management and evacuation planning, water supply for suppression, fire department readiness, mutual aid/interagency cooperation, and structure protection readiness.
- **SECTION 7: Community Engagement and Education** – Public awareness and outreach, communication tools, school/youth engagement, partnerships, and monitoring/reporting.
- **SECTION 8: Implementation Plan and Funding** – Governance/roles, prioritization/phasing, funding opportunities, and monitoring/review.

By following this structured approach, New Brunswick communities can better understand their wildfire risks and take proactive steps to protect people, property, and critical infrastructure while building long-term resilience.

1.1. Purpose of the CWRP

The CWRP is designed to help residents, property owners, and community partners better understand the wildfire risks in the community of Southern Victoria. It examines potential wildfire impacts within the community and outlines practical steps that can be undertaken collectively to reduce risk.

This plan is not only a technical assessment; it is a practical planning tool intended to support the protection of people, homes, and community assets across a predominantly rural landscape. It provides the community, residents, and partner agencies with a clear understanding of priority wildfire risks and identifies actions that can be implemented over time to strengthen community resilience.

By following the plan, the community can:

1. Lower the chance of a wildfire reaching or spreading through the community,
2. Protect homes, businesses, and important community infrastructure, and
3. Lessen the economic and social impacts that wildfires can have on families and the community.

The CWRP supports shared responsibility among residents, community organizations, local governments, and response partners to work together toward a safer, more prepared community.

1.2. CWRP Methodology

In New Brunswick, the CWRP program is supported through provincial and federal funding opportunities aimed at helping municipalities and rural communities reduce their wildfire risk. These programs provide financial support for wildfire planning, risk assessments, and FireSmart™ activities that strengthen local preparedness and community resilience.

Through the FireSmart™ New Brunswick program and other provincial wildfire prevention initiatives, communities across the province can develop wildfire protection and resiliency plans tailored to their local landscapes, development patterns, and governance structures. These programs support municipalities and rural districts in undertaking wildfire risk assessments, identifying priority mitigation actions, and advancing FireSmart™ education and implementation.

This CWRP was developed through a structured planning process carried out by the project team in collaboration with the Western Valley Regional Service Commission, Southern Victoria representatives, emergency services, and regional and provincial partners. The process combined data review, field verification, technical wildfire analysis, and stakeholder input to assess local wildfire risk and identify community-specific mitigation actions. The following outlines the key actions taken:

- **Initiation and Planning** – The project team established a work plan, identified key municipal, regional, and provincial partners, and confirmed engagement and coordination approaches for

the development of the CWRP. Early coordination focused on defining the area of interest, identifying available data sources, and confirming roles and responsibilities.

- **Risk and Threat Assessment** – Critical infrastructure, values at risk, and local fuel conditions were identified using available provincial wildfire data, community records, fire department information, and field verification conducted within the area of interest. This step focused on understanding exposure related to fuels, access constraints, development patterns, and wildfire behaviour potential within the WUI.
- **GIS and Data Analysis** – Wildfire threat mapping was informed through a review of vegetation and land-cover data, aerial imagery, and available GIS layers to assess fuel types, landscape patterns, and potential wildfire behaviour. Several maps were produced using the New Brunswick raster fuel layer to provide a consistent, landscape-level representation of fuels across the study area. In addition, polygon-based maps were developed using staff ground-truthing, reflecting observed fuel types and site-specific conditions identified during field assessments. Collectively, these datasets supported wildfire risk classification and informed the identification of priority areas for mitigation and response planning.
- **Field Work** – Site visits were conducted within the area of interest to ground-truth fuel classifications, confirm access and topographic constraints, identify priority risk areas, and validate wildfire hazard information. Field observations were used to validate data assumptions and identify site-specific vulnerabilities not visible through desktop analysis alone.
- **Strategy and Action Planning** – Based on the risk assessment findings, practical mitigation strategies were developed and prioritized. Actions were aligned with FireSmart™ principles and structured to identify responsible parties, implementation timeframes, and key considerations related to resources, feasibility, and community capacity and governance context.
- **Review and Refinement** – Draft plan content was reviewed internally and refined to ensure alignment with local conditions, operational realities, and provincial wildfire management priorities. Feedback from community leadership and fire service representatives informed revisions to risk characterization and recommended actions.
- **Community Engagement and Education** – Findings from the wildfire risk assessment were used to inform the development of community engagement and education strategies focused on FireSmart™ awareness, prevention, and preparedness. These strategies are intended to support long-term behaviour change and shared responsibility for wildfire risk reduction.

Understanding how Southern Victoria interacts with its surrounding forests, topography, vegetation, and infrastructure was a core component of the planning process. This approach supports informed decision-making regarding where and how wildfire mitigation, preparedness, and response efforts can be most effectively applied.

In New Brunswick, wildfire risk assessments are supported by provincial wildfire management tools, local knowledge, and field verification. For this CWRP, information was drawn from sources such as provincial wildfire threat mapping, vegetation and land cover data, municipal emergency plans, and community engagement sessions to create a clear and actionable path toward long-term wildfire resilience. Where historical wildfire occurrence data were limited or pending at the time of plan development, available municipal fire response records, regional wildfire trends, and professional judgement were used to inform the assessment. These limitations do not diminish the identified wildfire risk but highlight the importance of ongoing data updates and periodic plan review.

2. About the Area

2.1. Area of Interest

For the purposes of this CWRP, the Area of Interest (AOI) defines the geographic boundary within which wildfire risk was assessed and mitigation strategies were developed. Southern Victoria is in northwestern New Brunswick within the Western Valley Regional Service Commission. The area includes the former Perth-Andover area and surrounding rural settlements, including Carlingford, Turner Settlement, Aroostook, and rural areas east of the Saint John River south of Tobique First Nation. West of Highway 2, the AOI extends to the Canada–United States Maine border crossing.

The region includes a mix of small urban, rural residential, agricultural, and forested lands and supports an estimated population of approximately 2,000 residents distributed across multiple communities and settlements.

The Saint John River is the dominant natural feature in Southern Victoria and forms a defining corridor through the centre of the region. It creates a clear east–west division in land use, terrain, and access. Settlement patterns, vegetation, and topography are strongly influenced by the river system.

Terrain varies across the area. West of the river, the landscape is characterized by relatively flat agricultural lands. East of the river, terrain becomes steeper and more heavily forested. Several residential areas are located either upslope or downslope of forested fuels, particularly in areas east of the river.

Primary regional access is provided by Highway 2, which connects Southern Victoria to other parts of New Brunswick and the U.S. border. Route 109 serves as a key eastward corridor from Perth-Andover, connecting more remote and forested areas. Additional secondary and local roads serve rural settlements such as Carlingford, Turner Settlement, Hillandale, Woodland Drive, and Beech Glen Road.

Land use within Southern Victoria is diverse. Perth-Andover functions as the primary service centre, with more concentrated residential development, infrastructure, and community facilities. Surrounding areas transition into agricultural lands, rural residential properties, and extensive forested areas. Forest cover is more continuous east of the Saint John River and along the Route 109 corridor, where WUI conditions are more prevalent. West of Perth-Andover, particularly toward Carlingford and Turner Settlement, the landscape becomes increasingly agricultural, with more open fields and fragmented forest patches.

Overall, Southern Victoria's geographic setting is defined by its river corridor, varied terrain, dispersed rural development pattern, and reliance on a limited number of transportation routes.

2.2. Community Context

The Southern Victoria AOI includes the community of Perth-Andover and surrounding rural settlements such as Carlingford, Hillandale, Turner Settlement, and Aroostook, as well as dispersed residential areas east of the Saint John River, including Woodland Drive, Beech Glen Road, and the Route 109 corridor. Collectively, these communities support an estimated population of approximately 2,000 residents.

Development patterns vary across Southern Victoria. Perth-Andover functions as the primary population and service centre and is characterized by more concentrated residential development along with local

commercial and institutional uses. Outside of Perth-Andover, development becomes increasingly rural and dispersed, consisting of agricultural lands, farmsteads, and low-density residential properties.

Fire protection throughout Southern Victoria is provided by Perth-Andover Fire Rescue, a volunteer fire department serving all communities and rural areas within the AOI. The department provides structural, rural, and wildland fire response across a large and geographically diverse service area.

Access and evacuation conditions vary by location. Perth-Andover benefits from relatively good road connectivity and multiple route options, reducing evacuation constraints during emergencies. In contrast, areas such as Woodland Drive, Beech Glen Road, and sections of Route 109 are served by single-entry, single-exit roadways with narrow paved surfaces and steeper terrain. Other rural areas such as Carlingford, Hillandale, Turner Settlement, and Aroostook generally experience fewer access constraints due to more open landscapes and lower development density.

2.3. Environment and Climate

Southern Victoria is located within the Upper Saint John River Valley and forms part of New Brunswick's Acadian Forest region. The surrounding landscape consists primarily of deciduous and mixed-wood forest, interspersed with agricultural lands and river valleys. Common tree species include maple, birch, beech, and ash, with components of spruce, fir, pine, and cedar. These vegetation types contribute to varied fuel conditions across the community and surrounding areas and influence wildfire behaviour potential.

Weather averages for Southern Victoria were supplemented with climate data from the nearest Environment and Climate Change Canada weather station located in Woodstock (Figure 2-1). This information provides insight into regional weather trends and helps characterize typical seasonal conditions and fire season patterns that influence wildfire risk.

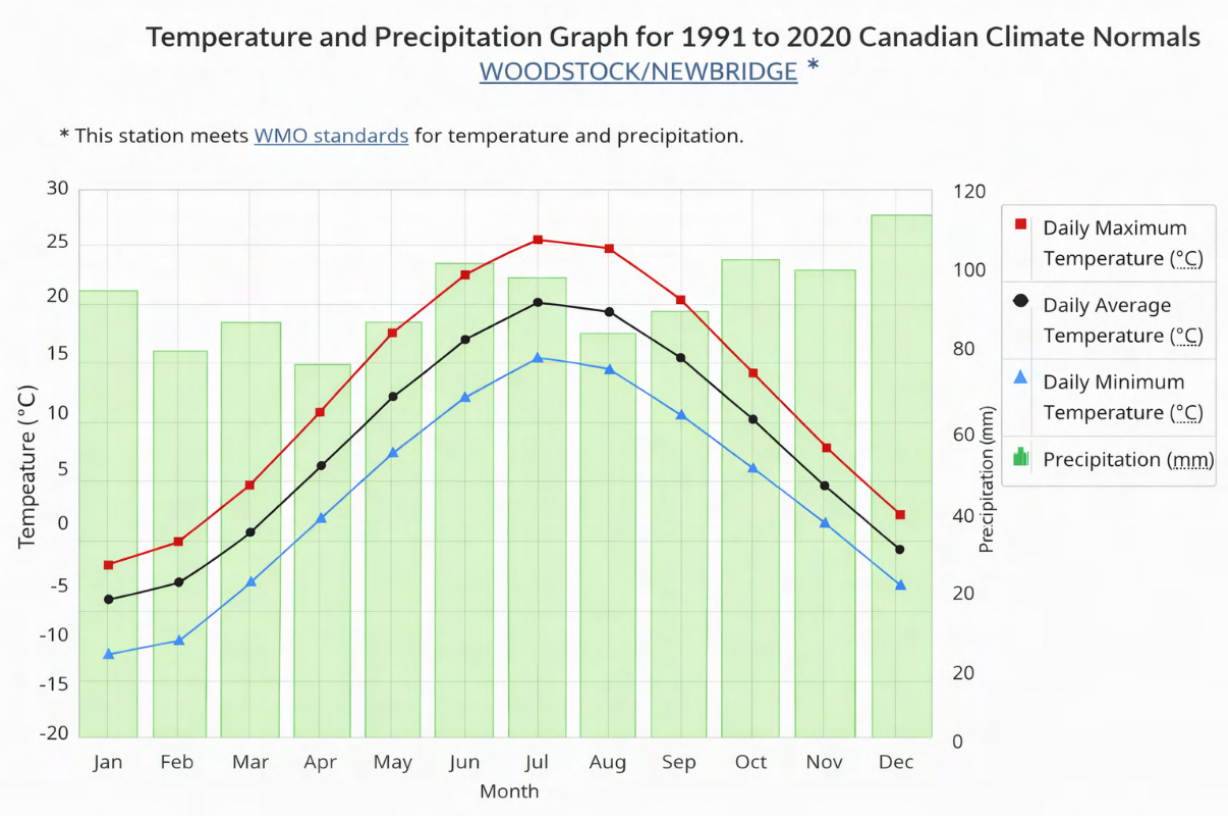


Figure 2-1 Weather Averages Recorded for Woodstock, NB. Canadian Climate Normals 1991–2020 by Environment and Climate Change Canada, Woodstock/Newbridge weather station. https://climate.weather.gc.ca

Key climate factors relevant to wildfire risk include:

- **Spring Conditions (April-May):** Average daily temperatures rise steadily during April and May, with daytime highs reaching the mid-teens. This period coincides with snowmelt and occurs prior to full leaf-out, resulting in exposed grasses and fine surface fuels that can dry rapidly. This pre-green-up window typically represents the period of highest wildfire risk.
- **Summer Conditions (June-August):** June through August are the warmest months of the year, with average daily maximum temperatures regularly exceeding 20°C and often reaching the mid- to high-20s. During extended warm or dry periods, forest and surface fuels can dry quickly, particularly when precipitation is below seasonal norms.
- **Precipitation Patterns:** Precipitation occurs throughout the year; however, summer rainfall is variable. Below-average monthly totals during some years may contribute to short-term drought conditions, increasing fuel dryness and ignition potential.
- **Wildfire Season:** The wildfire season generally extends from mid-April through October. Variability in temperature, precipitation, humidity, and wind during this period significantly influences fuel moisture levels and wildfire potential.

2.4. Historical Fire Response Overview

Available wildfire records and historical information indicate that Southern Victoria has not experienced any major documented wildfires. As with most rural and forested areas in New Brunswick, small brush and forest fires occur periodically, often associated with human activity or short-term dry conditions.

These incidents are typically limited in size, quickly controlled, and not considered significant at the community or regional scale. There are no well-documented wildfire events that have resulted in large-scale impacts within Southern Victoria.

While the absence of major historical wildfire events suggests the area has not historically experienced significant wildfire impacts, this does not eliminate risk. Changing weather patterns, seasonal dry conditions, and ongoing development in proximity to forested areas continue to influence wildfire exposure and reinforce the need for proactive risk reduction and preparedness measures.

2.5. Existing Plans and Policies

Southern Victoria operates as a Regional Community under a Hybrid Council model consisting of a mayor and six Councillors representing three wards. Legislative authority for bylaws, emergency governance, and land-use planning rests with the Regional Community. This section provides a high-level overview of existing municipal plans, by-laws, and policy tools that influence wildfire prevention, preparedness, and response within the Southern Victoria. The intent is to establish governance context. A more detailed review of legislative authority and specific policy considerations related to wildfire risk reduction is provided in Section 5.4.

Village of Perth-Andover Emergency Measures Organization Plan

This plan establishes the authority, structure, and responsibilities for emergency response within Perth-Andover, including activation of the Emergency Operations Centre, emergency alerting procedures, and declaration of a State of Local Emergency. The plan identifies roles for municipal staff, emergency services, and partner agencies such as the fire department, RCMP, public works, health services, and the Canadian Red Cross. While developed for Perth-Andover, its provisions support coordinated emergency response across Southern Victoria.

Southern Victoria Strategic Plan (2023–2025)

This plan provides overarching direction for decision-making, investment, and service delivery across Southern Victoria. It is structured around key pillars including public safety, municipal services, environmental sustainability, infrastructure management, and community well-being. Community protection is identified as a core priority. The Strategic Plan supports the objectives of this CWRP by reinforcing commitment to public safety, environmental stewardship, and proactive planning.

Dangerous or Unsightly Premises By-law

This by-law authorizes the local authority to require property owners to address conditions that pose risks to public safety or community well-being. Although not wildfire-specific, it enables enforcement action to address unmanaged vegetation, accumulated debris, or other hazardous conditions that may contribute to wildfire risk within developed areas.

Perth-Andover Corporate GHG and Energy Action Plan

This plan recognizes the impacts of climate change on communities and emphasizes mitigation, adaptation, and resilience measures related to energy use, infrastructure, and environmental stewardship. While it does not directly address wildfire, its focus on climate-related risk awareness and adaptive planning supports broader community resilience. Increased understanding of climate-driven

risks, combined with proactive adaptation measures, complements wildfire preparedness and risk reduction efforts in Southern Victoria.

FireSmart™ Canada

FireSmart™ is a nationally recognized program focused on reducing wildfire risk at the community, neighbourhood, and property level. It promotes practical actions such as vegetation management, development of defensible space, home ignition zone treatments, and public education to reduce the likelihood of wildfire impacts to homes and infrastructure.

Information gathered during the Southern Victoria site visit indicates that Perth-Andover undertook significant online engagement related to FireSmart™ practices in 2025, with an emphasis on educating residents about vegetation management and home-level risk reduction measures. These efforts demonstrate increasing community awareness and provide a foundation for expanding FireSmart™ principles across Southern Victoria.

Building on existing engagement initiatives presents an opportunity to formalize and strengthen FireSmart™ implementation. Establishing local FireSmart™ committees, prioritizing higher-risk neighbourhoods, and aligning FireSmart™ actions with bylaws, emergency planning, and this CWRP would further enhance long-term community protection and wildfire preparedness.

3. Values at Risk

The purpose of this section is to identify the people, infrastructure, environmental features, and other community assets within the Southern Victoria AOI that could be impacted by wildfire. Understanding what is at risk provides the foundation for assessing wildfire threat and for prioritizing mitigation actions later in this plan.

3.1. People and Homes

Population within Southern Victoria is concentrated in and around the community of Perth-Andover, which represents the largest cluster of permanent residents in the area. This location includes established residential neighbourhoods, community services, schools, healthcare facilities, and commercial uses, making it a primary life safety priority during a wildfire event. Residential development in Perth-Andover is generally compact and benefits from established infrastructure and hydrant coverage.

Outside of Perth-Andover, population is distributed across rural settlements including Carlingford, Hillandale, Turner Settlement, and Aroostook. These areas are characterized by low-density rural residential and agricultural development, with many homes separated from forest fuels or located within open farmland. Based on site visit observations, homes in these communities are generally accessible for engine operations, and access and evacuation constraints are limited compared to more heavily forested areas. While overall population density is lower, these homes remain important values at risk due to reliance on private water supplies and potentially longer emergency response times.

The highest concentration of risk to people and homes is located east of the Saint John River, particularly beyond Woodland Drive. In this area, residential development transitions into intermix conditions, where homes are situated within mixed and conifer-dominant fuels on steeper terrain. Site observations identified areas of significant blowdown, limited separation between structures and adjacent fuels, and a single paved road providing one way in and one way out access. These conditions could complicate evacuation and emergency response occurring at the same time during a wildfire event.

3.2. Critical Infrastructure

Critical infrastructure within Southern Victoria includes communications assets, utility infrastructure, emergency response facilities, healthcare services, schools, municipal facilities, and water supply infrastructure. These assets support public safety, emergency coordination, and continuity of services during wildfire and other emergency events.

Most identified infrastructure sites within Southern Victoria are assessed as Low wildfire risk. This is primarily due to surrounding deciduous or agricultural land cover, available defensible space, separation from continuous conifer-dominant fuels, and generally favourable access conditions. One site, the Tinker Dam Hydroelectric Facility, is classified as Moderate risk due to surrounding fuel characteristics and potential exposure of supporting infrastructure.

Infrastructure sites were assigned relative wildfire risk ratings based on surrounding fuel types, proximity of vegetation to structures, construction characteristics, access, slope position, and defensibility (Table 3-1).

Critical Infrastructure Risk Classification – Method Overview

Risk classifications for critical infrastructure were developed using a structured qualitative assessment. Each site was reviewed based on observable conditions and contextual wildfire exposure factors. The intent of this assessment is to support relative risk prioritization within Southern Victoria, not to provide engineering-level fire performance analysis or probabilistic modelling.

The following variables were considered:

- **Fuels** – Type, flammability, and proximity of vegetative fuels to the structure.
- **Site Management** – Presence or absence of ground fuel maintenance and vegetation management.
- **Topography (Slope)** – Whether the structure is positioned upslope of adjacent fuels (higher exposure) or downslope (lower exposure).
- **Structure Characteristics** – Construction type and susceptibility to direct flame contact, radiant heat, or ember intrusion.
- **Infrastructure Components** – Vulnerability of exposed components (e.g., antennas, mechanical systems, utility infrastructure) to heat transfer or fire damage.
- **Access** – Site accessibility for emergency response, including roadway width, grade, and turning limitations.
- **Water Availability** – Proximity and reliability of water supply for suppression or site protection.

This assessment reflects current observable conditions at the time of review and is intended to inform mitigation planning,

Table 3-1 Critical Infrastructure and Associated Wildfire Risk Rating

Infrastructure / Service Type	Name/Description	Location	Owner/ Operator	Risk
Cell Tower	Rogers Cell Tower	Fort Road 46.7572, -67.7595	Rogers Communications	Low
	Explornet	NB-2 46.7539, -67.7113	Explornet	Low
	Bell Mobility	12778 Rte 105 46.758, -67.6922	Bell Mobility	Low
Power Infrastructure	Tinker Dam Hydroelectric Dam	46.8095, -67.7671	NB Power	Moderate
Water Tower	Perth-Andover/ Bridge Water Tower	18 Industrial Park Crescent	Southern Victoria	Low
	Aroostook Water Tower	60 Tower Road	Southern Victoria	Low
Municipal Centre	River Valley Civic Centre	10 School St. Perth- Andover	Southern Victoria	Low
Fire Station	Perth-Andover Fire Department	1219 West Riverside Drive	Southern Victoria	Low
Police Station	RCMP	3 Uplands View	RCMP	Low
Ambulance Station	Ambulance Station	109 F Tribe Road	Ambulance New Brunswick	Low

Infrastructure / Service Type	Name/Description	Location	Owner/ Operator	Risk
Hospital	Hotel-Dieu of St. Joseph (Perth-Andover)	10 Woodland Hill	Horizon Health	Low
School	Andover Elementary School	9 School Street	NB Department of Education	Low
	Perth-Andover Middle School	20 Nissen Street	NB Department of Education	Low
	Southern Victoria High School	13 School Street	NB Department of Education	Low
Pharmacy	Lewis Pharmacy	14F Tribe Rd	Pharmachoice	Low

Figure 3-1 illustrates the spatial distribution of identified critical infrastructure within the Southern Victoria's AOI. The map provides geographic context for understanding the relationship between infrastructure assets, surrounding development patterns, and adjacent forested or agricultural lands. Viewing these assets spatially supports wildfire risk assessment by highlighting infrastructure located in forest-adjacent areas, along transportation corridors, or in locations where access and fuel continuity may influence emergency response. This spatial perspective informs subsequent discussion of wildfire threat, operational considerations, and mitigation priorities.

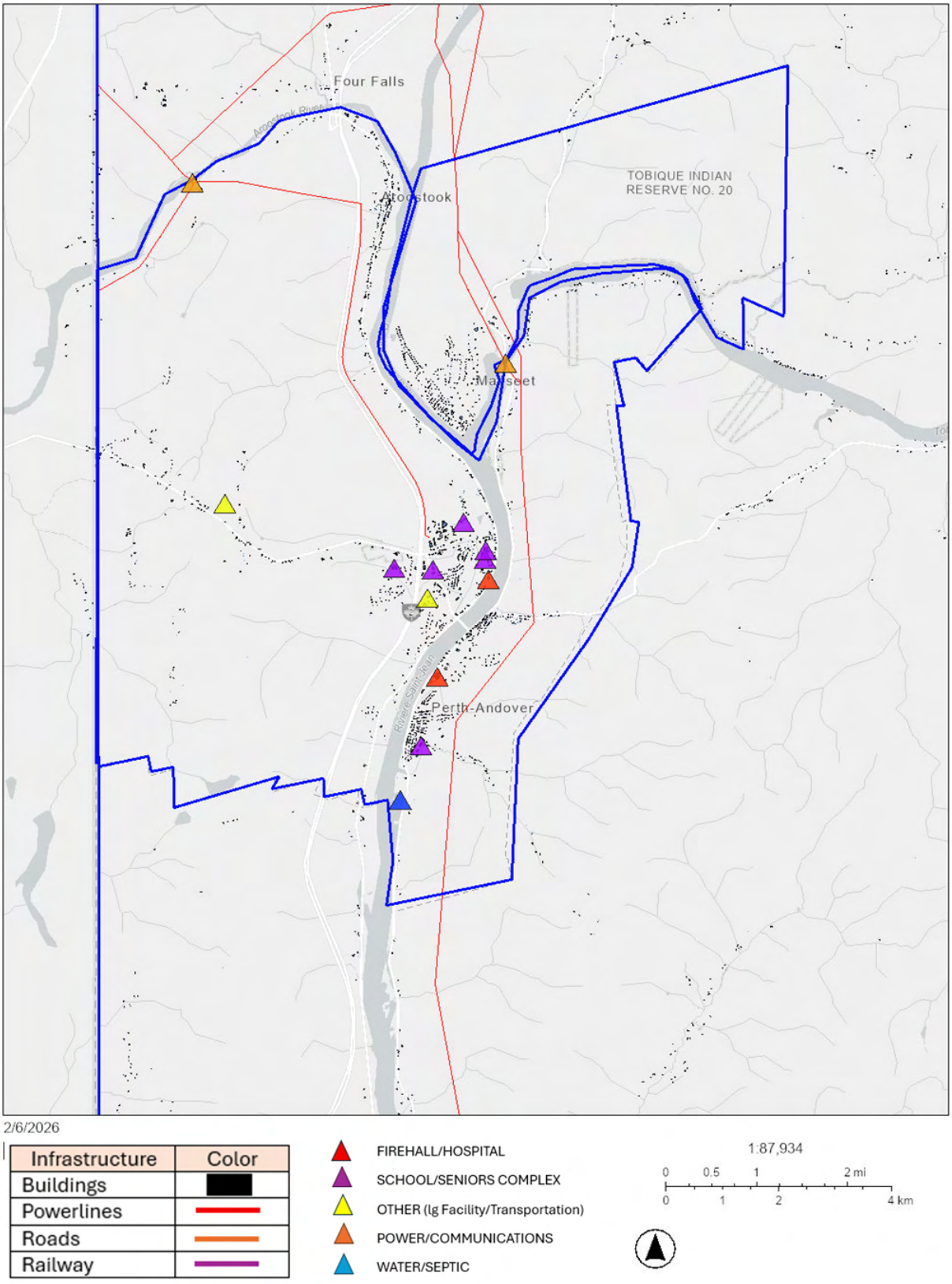


Figure 3-1 Geographic Distribution of Critical Infrastructure in Southern Victoria AOI

Moderate-Risk Infrastructure

The Tinker Dam Hydroelectric Facility is located on Tinker Road along the Aroostook River and is owned and operated by NB Power. The primary dam structure and associated infrastructure are largely non-combustible in construction. However, the surrounding fuels contain a high proportion of coniferous vegetation, increasing the potential for wildfire intensity and ember production under dry and windy conditions. There is also potential exposure to associated infrastructure and power distribution components during a large wildfire event.

Active structural protection may be operationally challenging given the site context. A site-specific assessment and protection strategy should be developed in coordination with the owner to support infrastructure resilience and continuity of power generation.

Low-Risk Infrastructure

The remaining identified infrastructure sites, including communications towers, water towers, the municipal centre, fire station, police services, ambulance station, hospital, schools, and pharmacy, are classified as Low wildfire risk under typical conditions. These facilities are generally situated in areas characterized by lower fuel continuity, agricultural surroundings, maintained defensible space, or improved access.

A low-risk classification does not eliminate wildfire exposure. Ongoing vegetation maintenance and periodic reassessment of surrounding fuel conditions remain important to support long-term operational continuity.

3.3. Environmental and Cultural Values

The Saint John River and the Tobique River are significant environmental features within Southern Victoria and represent important ecological and water resource assets. Wildfire suppression activities conducted near these waterways should incorporate measures to prevent runoff of suppression products, including foams and gels, into surface waters or tributaries.

Operational planning in proximity to watercourses should consider runoff management practices and the environmental implications of suppression agents, particularly those containing PFAS or PFOS. Protection of water quality and downstream users should remain a priority during wildfire response operations.

3.4. Hazardous Sites

Southern Victoria contains limited industrial development, including facilities such as a sawmill and a food distribution operation located along Industrial Park Crescent. A patch of mixed fuels is present north of these properties, which could present exposure under certain wildfire conditions.

In the event of a wildfire, these properties should be evaluated for potential impact based on fire behaviour, fuel continuity, and access considerations. Appropriate protective actions should be implemented as required to reduce operational and secondary hazard risks.

4. Wildfire Threat and Risk

Wildfire threat in Southern Victoria is influenced by forest composition, terrain, development patterns, and human activity across a predominantly rural landscape. Much of the area consists of agricultural lands and deciduous or low-conifer mixed wood forests that generally present lower wildfire intensity potential. However, localized areas of elevated risk are present where homes are intermixed with conifer-dominant fuels, situated upslope of forested areas, or accessed by limited road networks.

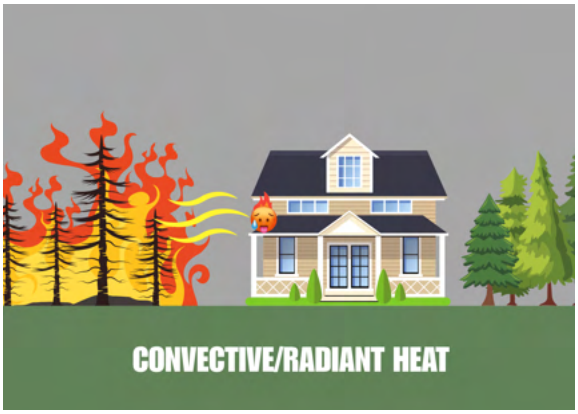
These higher exposure conditions are most prevalent east of the Saint John River and along select rural corridors, where more continuous fuels, steeper terrain, and seasonal fire weather patterns may increase the potential for wildfire spread and associated impacts to homes and infrastructure.

Although Southern Victoria has not experienced major documented wildfire events, evolving climate conditions and continued development adjacent to forested areas reinforce the importance of proactive planning, targeted mitigation, and sustained preparedness to effectively manage wildfire risk.

Wildfires threaten homes and communities through three primary mechanisms: direct flame contact, convective and radiant heat, and ember transport. These mechanisms are influenced by fuel continuity and condition, fuel moisture, wind speed and direction, and topography. As illustrated in Figure 4-1, wildfire impacts to structures and communities are most likely where fuels are continuous from the forest to developed areas and where weather and terrain conditions support fire spread.

Direct Flame Contact occurs when flames physically touch a structure, vegetation or object causing it to ignite. Such as flames touching, siding, decks or fences.

Typically occurs when combustible materials are within the flame zone (0-1.5m immediate zone) or when fire spreads through continuous fuels in forests.



Radiant heat is heating energy that travels outward from a fire in waves, heating nearby objects without touching them. It can ignite materials or cause them to weaken, crack or off gas even before flames arrive.

Windows cracking, melted vinyl siding, vegetation drying and igniting ahead of the fire front. It can be a major cause of damage and or ignition of a structure during wildfires.

Fire embers (firebrands) are small burning pieces of material carried by wind ahead of the main fire. They can start new fires far from the original flame front. Embers can land in dry grass, leaf litter and bark mulches, but also enter vents, valleys and gutters where leaf/litter accumulation is, on deck furniture and susceptible gaps and openings in your home.

Figure 4-1 Mechanisms of Wildfire Spread; source: Transitional Solutions Inc.

4.1. Fire Regime and Local Ecology

Southern Victoria is located within the Acadian Forest Region, a transitional forest ecosystem characterized by a mix of deciduous, mixed wood, and conifer-dominated stands. Natural fire regimes in this region are generally defined by low to moderate frequency and low to moderate intensity wildfires. Historically, fire has played a limited but ecologically important role in shaping forest structure and species composition. In river valleys and agricultural transition areas, deciduous hardwoods such as sugar maple, yellow birch, and beech are common and typically contribute to lower fire intensity and slower rates of spread under most conditions.

Upland and eastern portions of the AOI contain higher concentrations of coniferous species, including spruce, fir, pine, cedar, and larch, as well as mixed wood stands with accumulated dead and down

material. These fuel types are more susceptible to torching, intermittent crown fire, and ember production during periods of drought, elevated temperatures, and wind. In areas where forest stands have not been actively managed, fuel continuity and the presence of ladder fuels increase the potential for more severe wildfire behaviour, particularly on slopes and within intermix development patterns.

Overall, the local fire regime in Southern Victoria is influenced more by weather, fuel condition, and topography than by frequent natural ignitions. Human-caused ignitions account for the majority of wildfire starts, particularly during the spring curing period and in proximity to roads, trails, and rural properties. While the region has not experienced large, high severity wildfire events historically, the presence of continuous conifer fuels in select areas, combined with changing climate conditions, reinforces the importance of proactive fuel management and FireSmart™ practices to maintain a fire regime compatible with community safety and ecological resilience.

4.2. Weather and Climate Trends

Wildfire behaviour in Southern Victoria is strongly influenced by seasonal weather patterns, local wind regimes, and topographic effects associated with the Saint John River valley. The regional wildfire season typically extends from mid-April through October, with the highest ignition risk occurring in spring following snowmelt and prior to full green up. During this period, fine fuels such as cured grasses, leaf litter, and surface debris dry rapidly while live fuel moisture remains low, creating conditions that are receptive to ignition and rapid surface fire spread.

During the spring dip, wildfire activity is commonly driven by exposed grasses, leafless deciduous stands, and south-facing slopes that receive greater solar radiation. Fires during this period often spread quickly across open and partially forested areas but typically burn at lower intensity unless accompanied by strong wind. As the season progresses into summer, extended warm and dry periods can lead to increased fuel drying across surface and elevated fuel layers. Under these conditions, mixed wood and conifer dominated stands, particularly those containing dead and down material, become more susceptible to sustained burning, higher fire intensity, and increased ember production.

Local wind patterns play a significant role in wildfire behaviour. Dominant winds are influenced by valley and terrain effects, with prevailing southerly flow more common during warmer months and westerly flow during cooler periods. In addition to regional wind patterns, upslope and down valley winds can significantly increase fire spread rates, particularly in steeper terrain east of the Saint John River. These localized wind effects can preheat fuels upslope, accelerate fire movement toward residential areas, and complicate suppression and evacuation efforts during elevated fire danger conditions.

Although Southern Victoria often experiences periods of higher ambient humidity and fog that can moderate fire behaviour, these conditions can change rapidly. When fog dissipates and is followed by dry air, elevated temperatures, and wind, wildfire potential can increase quickly, especially in areas with continuous fuels and limited access. Overall, wildfire risk in Southern Victoria is episodic rather than constant, but weather-driven spikes in fire danger reinforce the importance of seasonal preparedness, timely public communication, and proactive mitigation measures.

Table 4-1 summarizes the typical seasonal wildfire risk periods applicable to western New Brunswick.

Table 4-1 Typical Seasonal Wildfire Risk Periods

Period	Description
Late April - Early May	Snowmelt completed; trees still dormant fuels very dry and ignition risk elevated early in the wildfire season. This is when the “spring dip” typically peaks.
May - June	Trees begin leaf-out and root uptake increases moisture in live fuels, but risk remains high if dry spells occur. Many wildfires occur in May/June when fuels are dehydrated and before canopy closure.
Mid - Late Summer (July)	In many years, the overall peak wildfire growth and area burned happens around July, when fuels are dry and weather conditions (heat, low RH, wind) are most conducive to fire spread.

As green up progresses in late May and June, live fuel moisture increases and fire spread potential generally moderates. However, extended dry spells during this transition can maintain elevated wildfire risk.

4.3. Fuel Types and Distribution

Wildfire professionals in the Maritimes and across Canada use the Canadian Forest Fire Behaviour Prediction (FBP) System to classify fuel types and predict wildfire behaviour under specific conditions.

The FBP System is a nationally recognized scientific framework used to predict specific weather, fuel, and terrain conditions affect key fire behaviour characteristics such as **rate of spread, fire intensity, flame length, and fuel consumption**. It uses inputs including wind speed and direction, temperature, relative humidity, slope, and fuel moisture, many of which are derived from the Canadian Forest Fire Weather Index (FWI) System. These predictions support wildfire preparedness, operational decision-making, risk assessment, and community planning by helping fire managers understand potential fire growth, suppression challenges, and impacts to people, infrastructure, and ecosystems.

4.3.1. FUEL CONDITIONS AFFECTING FIRE RISK

While weather patterns, wind, and terrain influence wildfire behaviour as described in Sections 4.1 and 4.4, fuel characteristics determine how readily fire ignites, how intensely it burns, and whether it remains a surface fire or transitions vertically into vegetation canopies and structures.

Wildfire does not spread as a single uniform process but instead transitions through different fuel layers as it moves across the landscape. Fire may begin in surface fuels and, under certain conditions, spread vertically through ladder fuels into tree canopies and adjacent structures. Fuel continuity from the forest floor to tree crowns increases the likelihood of vertical fire spread and contributes to more intense and difficult-to-control fire behaviour in forested and developed environments. Figure 4-2 and Table 4-2 illustrate the primary fuel layers involved in wildfire spread and their role in enabling surface, ladder, and crown fire behaviour.

Figure 4-2 Fuel Layers and Vertical Fire Spread; source: Transitional Solutions Inc.

Table 4-2 Fuel Layers and Their Role in Wildfire Spread

Type of Fuel	Description	Example	Fire Behavior
Surface Fuels	Materials on the forest floor	Leaves, grass, fallen branches, pine needles	Burn quickly; carry fire along the ground
Ladder Fuels	Plants that connect ground fuels to tree crowns	Tall grass, shrubs, low tree limbs	Help flames climb into the treetops
Crown Fuels	Tops of trees and tall shrubs	Tree canopies, dry needles	Cause fast-moving, intense crown fires
Man-made Fuels	Human materials that burn easily	Decks, fences, sheds, firewood piles	Increase fire risk around homes

Fuel types within and surrounding the Southern Victoria AOI were classified using the FBP System, which provides a standardized framework for interpreting potential fire behaviour under given conditions. Table 4-3, below, summarizes the primary fuel groups identified in the study area and outlines their general characteristics, relative wildfire risk, and expected fire behaviour. This information is intended to support interpretation of wildfire risk patterns shown on fuel and risk maps and does not represent site-specific fire behaviour modelling.

Table 4-3 General Fire Behaviour Characteristics of Key Fuel Types in the Southern Victoria AOI

Fuel Group	Colour on Map (CIFFC)	Fuel Type	Description	Relative Fire Risk	Expected Fire Behaviour
Coniferous (C Fuels)	Dark Green	C-2	Conifer forest (spruce; all ages)	Extreme	Crown fire likely; very high intensity and rapid spread
	Pale Green	C-3	Mature pine	High	High-intensity fire; crown involvement possible under severe conditions
	Yellow - Green	C-4	Immature pine	High	Fast surface spread with torching and crown fire potential
	Very Light Purple	C-5	Red/white pine	High	Surface fire common; intermittent crown fire possible
	Light Purple	C-6	Pine plantation	High	Surface-to-crown transition likely depending on stand height/structure
Deciduous (D Fuels)	Light to Dark Brown	D-1 / D-2	Deciduous forest (leafless vs. green)	Low	Typically, low-intensity surface fire; green deciduous often slows or stops spread
Mixedwood (M Fuels- % conifer)	Light to Dark Orange/ Yellow	M-1 / M-2 (25%)	Mixed wood (leafless vs. green), ~25% conifer	Low	Surface fire; occasional torching in conifer pockets
	Light to Dark Orange/ Yellow	M-1 / M-2 (50%)	Mixed wood, ~50% conifer	Moderate	Surface fire with torching; intermittent crown fire possible
	Light to Dark Orange/ Yellow	M-1 / M-2 (75%)	Mixed wood, ~75% conifer	High	Surface fire with intermittent to sustained crown fire under severe conditions
Mixedwood (M Fuels- deadwood %)	Medium to Dark Red	M-3 / M-4 (30%)	Mixed wood with dead/down fuels (~30% deadwood)	Moderate	Surface to crown fire possible; intensity increases with dead fuel loading
	Medium to Dark Red	M-3 / M-4 (60%)	Mixed wood with heavy dead/down fuels (~60% deadwood)	High	High-intensity fire; crown fire possible
	Medium to Dark Red	M-3 / M-4 (100%)	Mixed wood with very heavy dead/down fuels (~100% deadwood)	Extreme	Very high intensity; crown fire likely under severe conditions
Slash / Cutover (S Fuels)	Pink	S-2	Light slash (tops/branches remaining)	Moderate	Moderate-high spread rates; high surface intensity
	Fuchsia	S-3	Heavy slash / windthrow	High	Very high intensity and rapid spread; difficult to control
Grass (O Fuels)	Pale to Medium Yellow	O-1a	Matted grass (spring, post-snowmelt) (~30% deadwood)	Moderate	Very rapid spread and high intensity in early season
	Pale to Medium Yellow	O-1b	Standing grass (no snow matting) (30-70% deadwood)	High	Extreme behaviour when cured; lower intensity after green-up

4.3.2. FUELS WITHIN THE AREA OF INTEREST

Fuel types within Southern Victoria reflect the diverse land use and forest composition across the AOI, ranging from agricultural lands and deciduous forests to mixed wood and conifer dominated stands. This variation results in generally lower wildfire intensity potential across much of the region, with localized

areas of elevated fuel hazard where coniferous fuels are continuous or intermixed with residential development.

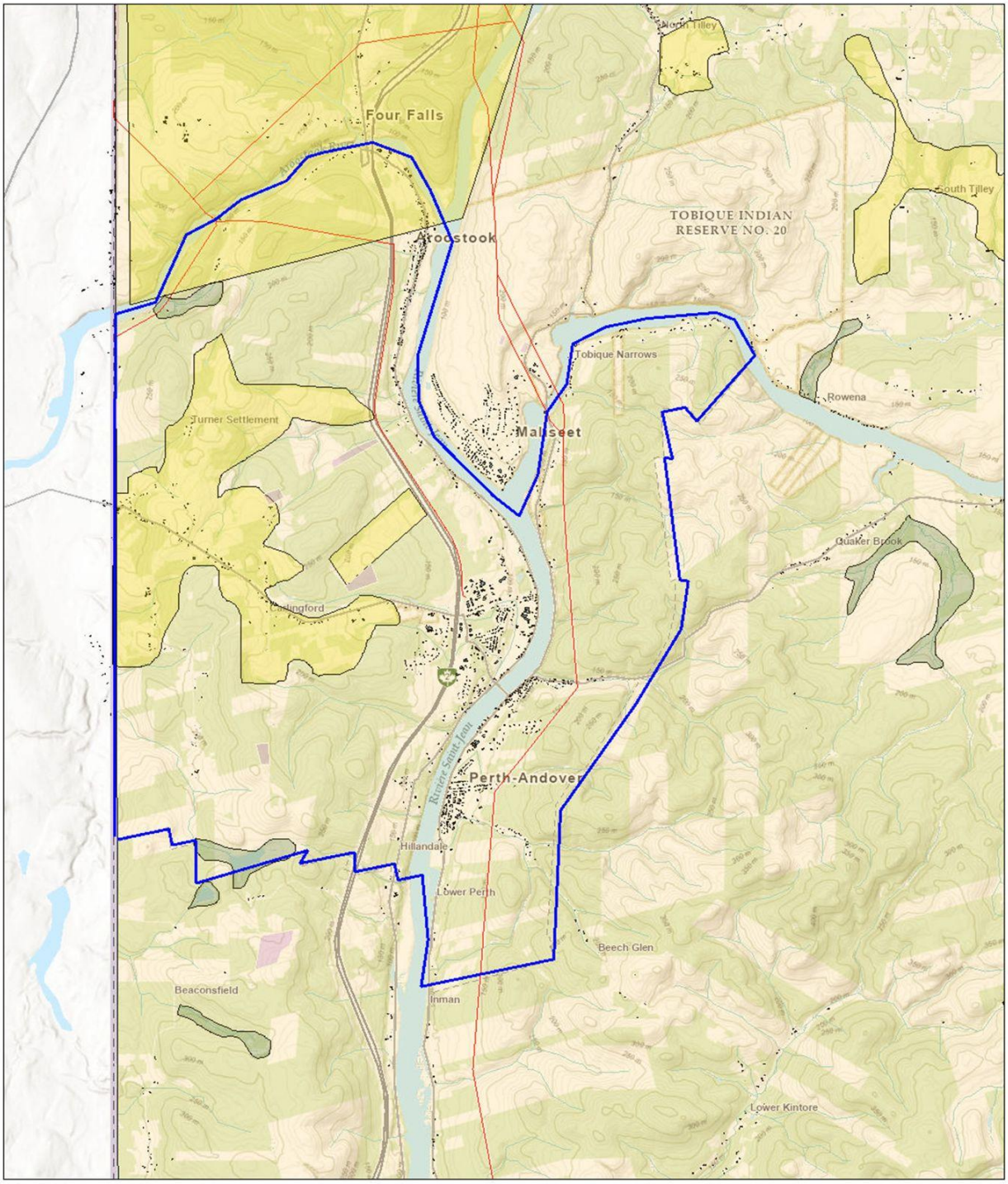
West of the Saint John River, including Perth-Andover, Carlingford, Hillandale, Turner Settlement, and Aroostook, fuels are predominantly agricultural, deciduous, or low conifer mixed wood. These areas consist largely of open fields, pastureland, hardwood stands, and fragmented forest patches with limited fuel continuity. Fire behaviour in these fuel types is typically characterized by low to moderate intensity surface fire. Most residential properties in these areas are considered accessible and generally defensible through engine operations due to fuel breaks, flatter terrain, and improved road access.

East of the Saint John River, fuel conditions shift. Areas beyond Woodland Drive, along Beech Glen Road, and portions of the Route 109 corridor contain more continuous mixed wood and conifer dominated fuels, including spruce, fir, pine, cedar, and larch. These locations also exhibit areas of dead and down material and blowdown, particularly where forest management activity has been limited. The presence of ladder fuels and closely spaced trees increases the potential for torching, intermittent crown fire, and ember production under dry and windy conditions.

Across the AOI, fuels can be broadly categorized into surface fuels such as grasses, leaf litter, needles, and fallen branches; ladder fuels including shrubs, saplings, and low tree limbs; and crown fuels consisting of tree canopies. In developed areas, human caused fuels such as wooden decks, sheds, fences, firewood piles, and combustible landscaping materials further contribute to wildfire exposure, particularly where they are located in proximity to structures.

Overall, while much of Southern Victoria contains fuel types that are less conducive to extreme wildfire behaviour, specific intermix and interface areas present fuel conditions capable of supporting more severe fire behaviour when combined with slope, wind, and seasonal fire weather. These locations represent priority areas for FireSmart™ implementation and targeted fuel management to reduce fuel continuity, improve defensibility, and limit potential impacts to homes and infrastructure.

Figure 4-3 illustrates the distribution of key fuel types across the study area, including coniferous, mixed wood, deciduous, grass, and slash fuels. Fuel classifications are displayed using standardized colour conventions consistent with Canadian Interagency Forest Fire Centre (CIFFC) guidelines. This map is intended to support interpretation of wildfire behaviour potential and risk patterns discussed in this chapter and does not represent site-specific fire behaviour modelling.



FUEL TYPE	COLOR
C2/C5 (Boreal Spruce/Pines mixed aged)	Pale Green
M1/M2 -50/50% SW/HW	Orange
M3/M4 – 30-60% dead Balsam Fir	Brown
D1 – Deciduous	Pale Brown
O1 – Matted/Standing Grass/Seasonal	Pale Yellow
S2/3 – Clearcut medium/heavy slash	Pink
Fuel Coloration is as per the CIFFC guidelines.	

Figure 4-3 Fuel Types and Distribution in Southern Victoria AOI

4.4. Topography and Access

Topography and access are key factors influencing wildfire behaviour and response capability within Southern Victoria. The landscape is shaped by the Saint John River corridor, creating a contrast between relatively flat agricultural lands west of the river and steeper, more forested terrain to the east. These topographic differences directly influence fire spread potential, responder access, and evacuation feasibility.

West of the Saint John River, terrain is generally gentle to moderately sloped and dominated by open agricultural lands and fragmented forest patches. These conditions tend to moderate fire intensity and rate of spread, provide natural and agricultural fuel breaks, and support effective access for fire apparatus. Road networks in these areas typically offer multiple route options, reducing evacuation constraints and improving suppression effectiveness.

East of the Saint John River, terrain becomes steeper, with continuous forested slopes and benches where residential development is often located upslope or intermixed with wildland fuels. In these areas, wildfire behaviour can be amplified by slope driven flame tilt and preheating of fuels, increasing rates of spread and the potential for uphill fire runs toward homes. South and west facing slopes are more susceptible to earlier snowmelt, faster drying, and increased fire activity during spring and early summer.

Residential areas along Woodland Drive, Beech Glen Road, and portions of the Route 109 corridor are positioned on mid-slope and upper-slope terrain features where forest fuels extend below structures. Under aligned wind conditions, these slope configurations increase preheating and rate of spread toward homes, elevating exposure to direct flame contact and ember intrusion. In addition, these same neighbourhoods are served by single entry, single exit roadways, some of which are narrow and constrained by terrain. These conditions can complicate simultaneous evacuation and emergency response, particularly during fast moving wildfire events. Limited turnaround space, steep grades, and restricted shoulder width may also impede staging and movement of fire apparatus.

Overall, while much of Southern Victoria benefits from favourable terrain and access conditions, specific areas east of the Saint John River present increased wildfire exposure due to steeper slopes, continuous fuels, and constrained road networks. These areas warrant priority consideration for FireSmart™ mitigation, fuel management, and development of tactical evacuation and response planning.

Figure 4-4 illustrates the geographic extent of the Southern Victoria AOI and provides spatial context for wildfire risk assessment. The AOI boundary is outlined in blue, with developed areas, transportation corridors, and surrounding forested lands shown to illustrate the relationship between settlement patterns and adjacent fuels. Shaded areas represent locations of steeper terrain within the AOI. Identifying these areas of slope is important for understanding how topography may influence wildfire behaviour, rates of spread, access, and evacuation considerations in different parts of Southern Victoria.

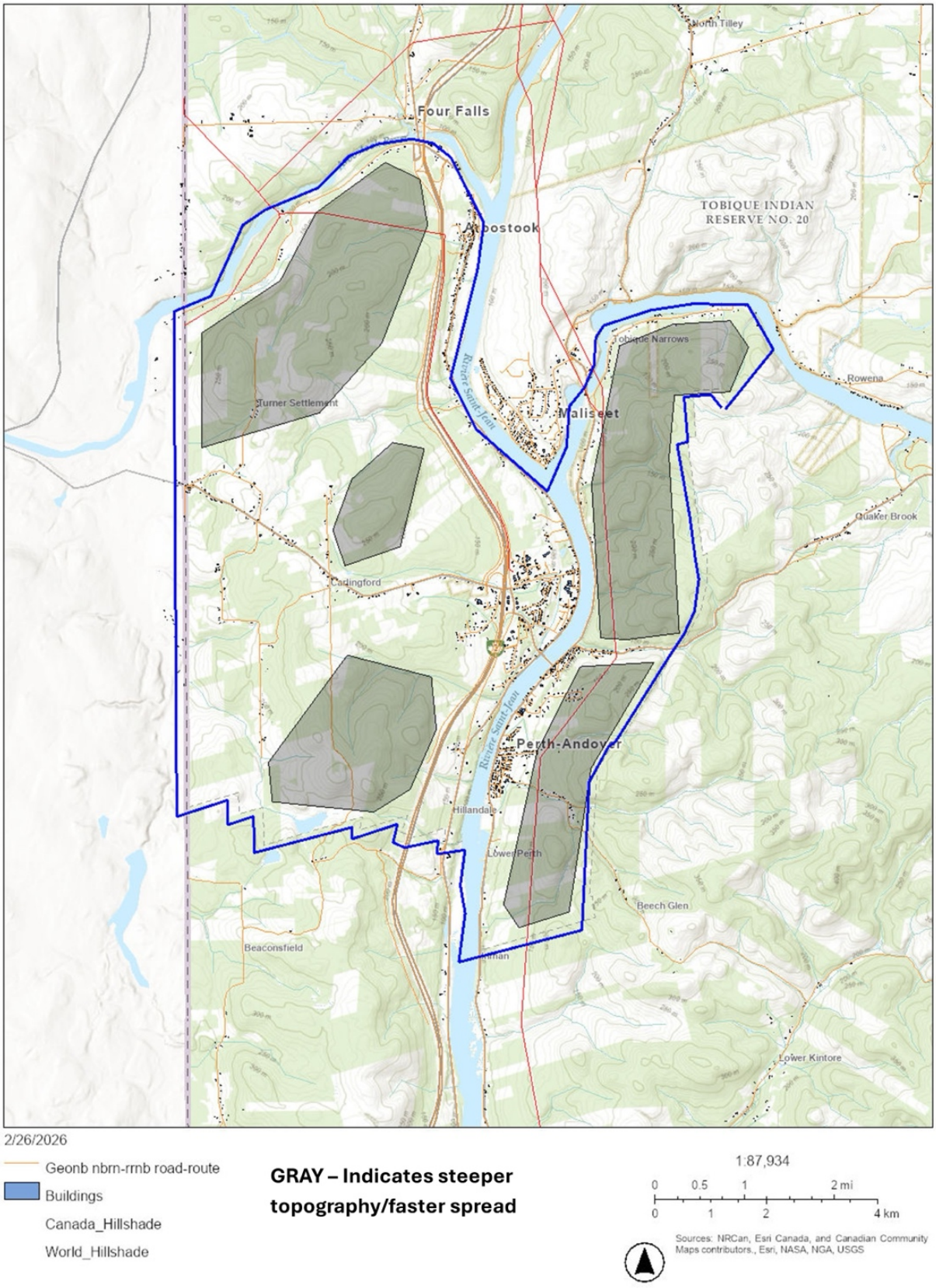


Figure 4-4 Areas of Steep Topography (shaded in grey) in Southern Victoria AOI

Terrain Influences on Fire Behaviour

Slope, slope position, and aspect influence fire behaviour by increasing preheating and rate of spread on upslope runs and by contributing to earlier seasonal drying on south-facing slopes. The general relationships between terrain position, slope, and fire behaviour are summarized in Table 4-4 and Table 4-5.

Table 4-4 Slope Position and Relative Fire Behaviour Implications

Slope Position of Fire	Fire Behaviour Implications
Bottom of slope or valley	Impacted by normal rates of spread
Mid Slope-Bench	Impacted by increased rates of spread.
Mid Slope - Continuous	Impacted by faster rates of spread if there is no break in the terrain features and or fuels ahead of the fire.
Upper one third of slope	Impacted by extreme rates of spread. At risk to large continuous fire run, preheating fuels, and spot fires.

Table 4-5 Effect of Ground Slope on Fire Behaviour

Slope Percent	Fire Behaviour Implications
20%	Very little flame and fuel interaction caused by slope, normal rate of spread.
21-30%	Flame tilt begins to preheat fuels, increasing rate of spread.
31-45%	Flame tilt preheats fuels and begins to encroach into fuels ahead, high rate of spread.
46-60%	Flame tilt preheats fuels and begins to encroach into fuels ahead, VERY HIGH rate of spread.
Greater than 60%	Flame tilt preheats fuels and begins to encroach into fuels ahead, EXTREME rate of spread.

Aspect also influences seasonal drying patterns. South-facing slopes typically experience earlier snowmelt and faster drying than north-facing slopes. In the spring, wildfires often move quickly through open areas and south-facing slopes until reaching shaded or denser forest conditions where fire spread may slow. Later in the season, prolonged drying increases the availability of larger fuels and forest floor organic layers, allowing fire to burn deeper into duff and increasing suppression difficulty.

Homes located in the upper third of slope positions are exposed to accelerated flame tilt, increased radiant heat, and ember cast distances. Where access roads run along ridge or bench features with forest fuels below, evacuation timing and structure protection deployment must account for shortened response windows during wind-aligned events.

4.5. Wildfire Occurrence History

Available wildfire records and local operational knowledge indicate that Southern Victoria has not experienced large or damaging wildfires affecting communities, critical infrastructure, or extensive forested areas. Historical wildfire activity has primarily consisted of small, localized grass, brush, and

forest fires, most often occurring during the spring curing period or under short term dry conditions. These incidents have generally been human caused and associated with debris burning, roadside ignitions, or recreation related starts, and have typically been controlled quickly by local fire services.

Within Perth-Andover, past wildfire incidents have been limited and largely confined to small forest patches or open areas, including isolated mixed wood fuel pockets near developed areas. These fires have not demonstrated sustained growth or significant impact, largely due to fragmented fuels, agricultural breaks, and timely suppression. In rural portions of Southern Victoria, including agricultural and low-density residential areas west of the Saint John River, wildfire occurrence has similarly been infrequent and of limited consequence.

While historical wildfire activity has been limited, the absence of past large-scale events does not eliminate future risk. Area's east of the Saint John River, where more continuous coniferous fuels, steeper terrain, and intermix development are present, contain characteristics that could support more complex wildfire behaviour under extreme weather conditions. As climate variability increases and development continues near forested lands, reliance on historical fire occurrence alone is not sufficient for risk assessment. Proactive mitigation, FireSmart™ implementation, and preparedness planning remain important to reduce the likelihood and potential impact of future wildfire events in Southern Victoria.

4.6. Local Wildfire Threat and Risk Assessment

Overall Wildfire Threat Rating: MODERATE

Based on fuel conditions, topography, access, historical wildfire occurrence, and local response capacity, wildfire threat in Southern Victoria is assessed as Moderate overall. Southern Victoria's wildfire risk profile is characterized by low probability but localized high-consequence interface exposure in eastern slope-aligned neighbourhoods with constrained egress. Topography in this region is what drives the risk up, but the fuels are dominated by deciduous on these higher elevations.

Much of the area benefits from agricultural land use, deciduous dominated forests, and fragmented fuel patterns that limit wildfire intensity and sustained spread. These conditions, combined with generally good access and established fire service coverage, reduce the likelihood of widespread wildfire impacts under typical conditions.

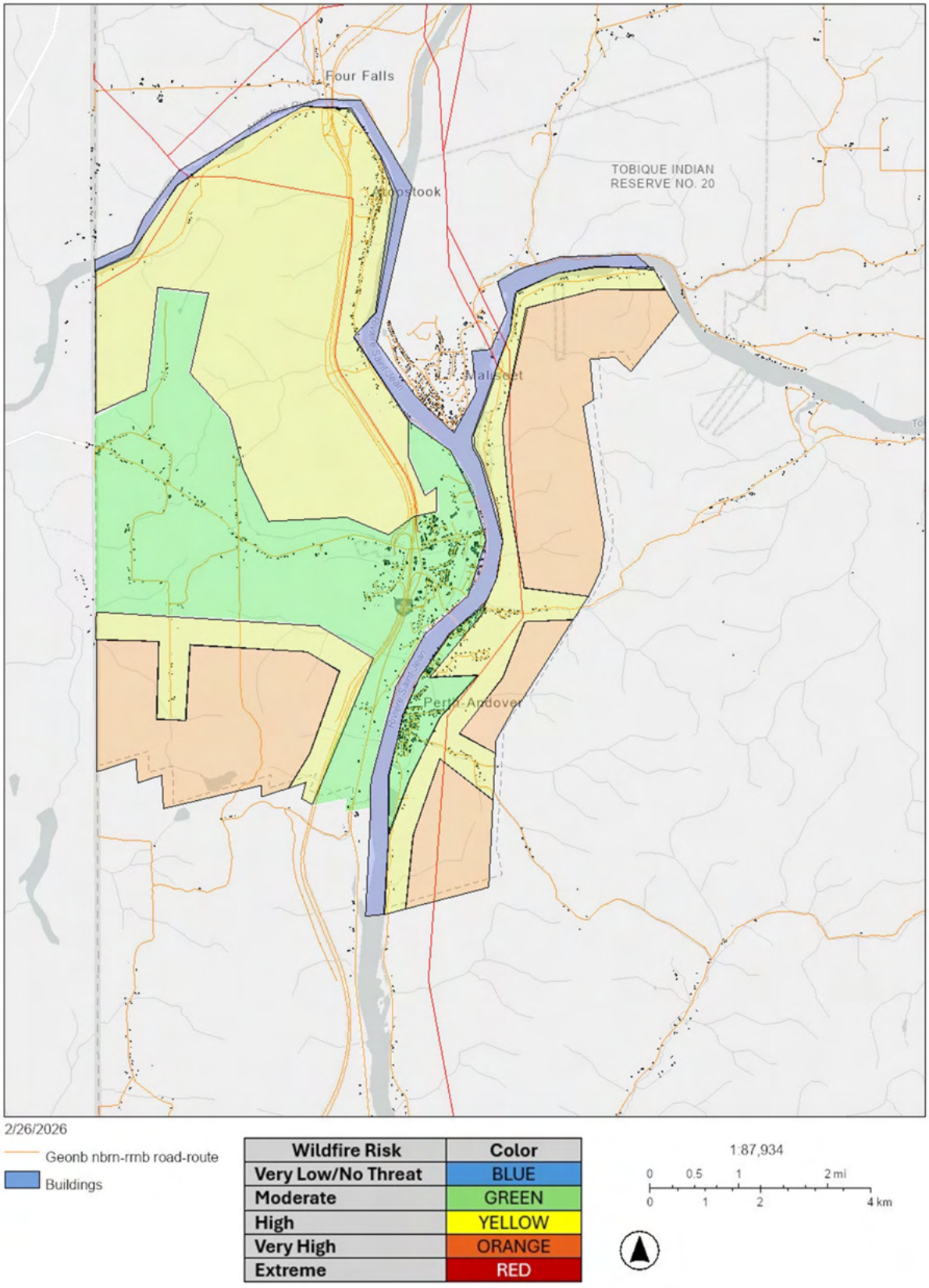
Area's west of the Saint John River, including Perth-Andover, Carlingford, Hillandale, Turner Settlement, and Aroostook, are assessed as Low wildfire risk. Fuels in these locations are discontinuous, terrain is generally gentle, and most residential properties are accessible and defensible through engine operations. While small, human caused fires may occur periodically, they are unlikely to result in significant structure loss or extended wildfire events under normal fire weather conditions.

High wildfire threat is concentrated east of the Saint John River, particularly beyond Woodland Drive, along Beech Glen Road, and within portions of the Route 109 corridor. These areas contain more continuous mixed wood and conifer dominated fuels, steeper slopes that promote uphill fire spread, and single-entry access routes. Residential development in these locations is often upslope or intermixed with forest fuels, increasing exposure to direct flame contact and ember intrusion during periods of elevated fire weather.

While Southern Victoria has not experienced large wildfire events historically, wildfire risk is influenced by human ignition potential, particularly during the spring curing period and in proximity to roads, trails, and rural properties. Periodic episodes of elevated fire weather, when combined with steeper terrain, continuous fuels, and limited access in select eastern areas, could increase fire behaviour and place pressure on suppression operations and evacuation.

Overall, wildfire risk in Southern Victoria is manageable but unevenly distributed. Targeted FireSmart™ implementation, fuel management, strengthened preparedness, and focused response planning in identified higher exposure areas will further reduce risk and enhance the community's capacity to prevent, withstand, and respond to future wildfire events.

Figure 4-5 illustrates the relative distribution of wildfire risk across Southern Victoria based on the combined influence of fuel type and continuity, topography and slope, access and egress constraints, structural proximity to forest fuels, and historical wildfire occurrence patterns. Risk classifications are presented using a five-class scale ranging from Very Low to Extreme, with water bodies shown separately. The map reflects relative wildfire exposure and consequence potential at the municipal scale and is intended to support prioritization of mitigation, preparedness, and planning efforts.



Wildfire Risk	Color
Very Low/No Threat	BLUE
Moderate	GREEN
High	YELLOW
Very High	ORANGE
Extreme	RED

Figure 4-5 Wildfire Risk Classifications in the Southern Victoria AOI

The following table outlines the key definitions of each risk category in the wildfire risk map:

RISK CLASS	DEFINITION
LOW/ NONE	• Gravel, Concrete • Water
MODERATE	• Higher Percentage of Open Fuels (Grasses/sparse softwoods) • Closer to roads/first response • Little to No topography issues – minor grade • Good Access, water supply • Infrastructure not at risk or present • Interface but less chance of fire spreading based on above
HIGH	• High percentage of conifers closer to homes • Less open areas • Fuels conducive to spread based on type/density • Topography begins to play a role in increased fire behaviour • Moderate population with intermix to interface • Critical Infrastructure Present • Water Access minimal
VERY HIGH	• High percent of Conifers in poor health and close to structures • Topography is an issue to spread fire • Further away from First Response • Access/egress is hindered by road conditions or driveway length/width. Less egress or one-way roads • Intermix – Homes are separated protection more difficult • Critical Infrastructure is not clear of vegetation • Water Supply is minimal/long distance
EXTREME	• Remote difficult to access • Topography and fuels an issue • Long distance from First Response • Contains fuels that are continuous • Structures is any seasonal, or in immediate zone

5. Risk Reduction and Mitigation

5.1. Introduction

Wildfire risk reduction in Southern Victoria reflects a Low to Moderate, spatially variable threat, with elevated exposure concentrated in identified WUI areas east of the Saint John River where residential development is adjacent to continuous mixed wood and conifer dominated fuels.

The most credible wildfire scenario involves a moderate intensity surface fire with sustained ember production during short periods of elevated fire weather, particularly in areas with steeper slopes and limited access. Human caused ignitions remain the primary source of wildfire occurrence, especially during the spring curing period.

WILDFIRE RISK REDUCTION PRIORITIES IN SOUTHERN VICTORIA

Wildfire mitigation and preparedness actions identified in this chapter are structured around the following priority hierarchy:

1. *Life safety*
2. *Evacuation reliability and responder safety*
3. *Structure ignition reduction*
4. *Critical infrastructure continuity*
5. *Environmental protection and suppression impact management*

This hierarchy reflects the municipality's moderate but spatially concentrated wildfire risk profile and guides prioritization where resources, access, or operational capacity are constrained.

Mitigation efforts in Southern Victoria should be targeted and proportionate to the overall risk profile. Broad scale forest alteration is not warranted. Instead, priorities focus on:

- Reduction of structure ignition potential in identified WUI areas
- Targeted vegetation management to reduce fuel continuity
- Improved access reliability and evacuation planning in higher exposure locations
- Increased public awareness and voluntary FireSmart™ participation
- Strengthened coordination between local, regional, and provincial partners

FireSmart™ Canada provides the primary organizing framework for wildfire risk reduction in this plan. The Seven FireSmart™ Disciplines are applied in a manner consistent with Southern Victoria's fuel types, topography, access patterns, and development structure. In particular, the Home Ignition Zone (HIZ) concept describes how wildfire exposure to structures is driven primarily by conditions on and immediately surrounding buildings. The Home Ignition Zone focuses attention on the area within 30 metres of a structure, where embers, radiant heat, and nearby fuels are most likely to cause ignition. As illustrated in Figure 5-1, the HIZ is divided into Immediate (0-1.5 m), Intermediate (1.5-10 m), and Extended (10-30 m) zones, providing a practical framework for prioritizing wildfire mitigation actions. Supporting guidance on FireSmart™ principles and the Home Ignition Zone is provided in Appendix C.

Figure 5-1 The Home Ignition Zone illustrates how wildfire risk to structures is influenced by fuels and features within 30 metres of a building, emphasizing the importance of priority mitigation actions closest to the structure (source: FireSmart™ Canada).

The following sections outline practical mitigation actions designed to reduce wildfire intensity, limit ember exposure, protect life safety, and strengthen long term community resilience.

5.2. FireSmart™-Based Mitigation Strategies

Formal FireSmart™ activity in Southern Victoria is emerging. Initial public engagement occurred in 2025 through online outreach focused on vegetation management and home level risk reduction. While structural fire protection capacity is strong, wildfire specific prevention, coordinated vegetation management, and structured community programming remain limited.

Mitigation actions should prioritize neighbourhoods east of the Saint John River where WUI conditions are present, while maintaining a proportionate approach across lower risk areas.

5.2.1. VEGETATION MANAGEMENT

Vegetation management should focus on reducing fuel continuity and fire intensity adjacent to homes, infrastructure, and access routes in higher exposure areas. Priority locations include Woodland Drive,

Beech Glen Road, and portions of the Route 109 corridor where residential development is intermixed with continuous mixed wood and conifer fuels. Recommended actions include:

- Removal and reduction of dead and down material, blowdown, and dense understory vegetation near residential properties
- Pruning lower tree branches and thinning dense stands to reduce ladder fuels and vertical fire spread
- Managing grass and shrub fuels during the spring curing period, particularly on south facing slopes and along roadsides
- Coordinating vegetation treatments along roadways, trails, and utility corridors to improve access, visibility, and firefighter safety

Broad scale forest alteration is not recommended. Treatments should be targeted and defensibility focused.

5.2.2. DEVELOPMENT AND LAND USE PLANNING

Future development and redevelopment in Southern Victoria should incorporate FireSmart™ principles, particularly within WUI areas east of the Saint John River. Planning considerations include:

- Encouraging adequate setbacks between structures and adjacent forest fuels, especially on upslope properties
- Promoting driveway standards that support fire apparatus access, turnarounds, and safe evacuation
- Encouraging the use of non-combustible or ignition resistant building materials, including roofing and siding
- Reducing combustible landscaping immediately adjacent to structures
- Integrating wildfire risk considerations into land use planning and subdivision review processes

These measures will help prevent the creation of new high exposure interface conditions.

5.2.3. EDUCATION AND PUBLIC AWARENESS

Given that wildfire occurrence in Southern Victoria is predominantly human caused, education represents the most immediate and cost-effective risk reduction strategy. Outreach should focus on residents within identified WUI areas, rural property owners, and those living near roads, trails, and forested lands. Priority actions include:

- Continue and expand FireSmart™ public education efforts initiated in 2025
- Promote FireSmart™ 101 training for residents, community leaders, and staff
- Deliver seasonal wildfire preparedness messaging focused on spring ignition prevention, summer preparedness, and fall vegetation management
- Provide clear, locally relevant guidance on Home Ignition Zone principles, defensible space, and safe yard practices
- Engage directly with communities that may face communication barriers, including the Amish population

Establishing a local FireSmart™ committee or working group should be considered to support ongoing coordination and sustained engagement.

5.2.4. EMERGENCY PLANNING

Emergency planning should reflect documented topographic and access constraints in eastern portions of the AOI. Priority actions include:

- Identifying and mapping higher risk WUI areas requiring enhanced response planning
- Developing tactical evacuation plans for neighbourhoods with single access and steeper terrain
- Identifying and pre-planning safe refuge areas, staging areas, and evacuation routes
- Integrating wildfire specific considerations into the Municipal Emergency Plan, including evacuation triggers and communication protocols
- Addressing notification challenges for populations without access to modern communications, including the Amish community

Focused planning in single access neighbourhoods will improve operational reliability during concurrent evacuation and suppression.

5.2.5. INTERAGENCY COOPERATION

Wildfire mitigation and response require coordination between Southern Victoria, provincial wildfire authorities, utilities, neighbouring fire departments, and landowners. Recommended actions include:

- Formalizing cooperation with the DNR for wildfire response and command coordination
- Finalizing and signing the Central Valley Mutual Aid Agreement
- Conducting pre-season coordination meetings with neighbouring fire departments, provincial wildfire staff, and emergency management representatives
- Coordinating fuel management initiatives with utilities, landowners, and trail organizations
- Engaging local Amish communities to improve shared understanding of wildfire risk

Coordinated planning will improve operational consistency and reduce duplication of effort.

5.2.6. CROSS-TRAINING

Strengthening wildfire and WUI response capability within the fire service will improve operational resilience. Recommended actions include:

- Supplementing existing EFF training with WUI specific training, including structure triage and engine operations in interface settings
- Conducting joint training or exercises with DNR and mutual aid partners
- Developing wildfire tabletop or field exercises focused on evacuation procedures, unified command, and resource deployment
- Encouraging FireSmart™ training to at least Level 2 for fire service personnel involved in community risk assessment

Building wildfire specific competency supports safe and effective operations during elevated fire weather events.

5.2.7. LEGISLATION AND POLICY

Municipal authority can support wildfire risk reduction through targeted policy tools. Recommended actions include:

- Reviewing and updating existing bylaws to support wildfire related emergency actions and vegetation maintenance requirements
- Considering enhanced property maintenance standards addressing accumulated debris, unsafe firewood storage, and unmanaged vegetation near structures
- Ensuring wildfire risk reduction measures align with provincial legislation and emergency powers

Policy tools should emphasize education and voluntary compliance while retaining authority to address high risk conditions when necessary.

5.3. Targeted Fuel Management

Fuel management in Southern Victoria is intended to reduce wildfire intensity, limit fire spread toward communities, and improve firefighter safety and operational effectiveness, particularly in areas where WUI conditions are present. Fuel management actions are designed to complement FireSmart™ home level mitigation and focus on targeted, localized treatments rather than broad landscape scale intervention. Treatments should be selective, strategic, and proportionate to the Low to Moderate wildfire threat profile identified in Chapter 4.

5.3.1. PRIORITY TREATMENT AREAS

Fuel management should be prioritized in areas where multiple risk factors converge, including fuel continuity, slope alignment, access limitations, and proximity to residential development. Based on documented fuel conditions and development patterns, the following areas warrant phased and focused treatment:

- **Woodland Drive** and adjacent areas east of the Saint John River contain homes intermixed with continuous mixed wood and conifer dominated fuels, steeper slopes, and limited access. These characteristics increase potential fire behaviour intensity and operational complexity.
- **Beech Glen Road** includes residential properties located within mixed fuels with higher conifer composition and limited defensible space in select locations.
- **Portions of the Route 109 corridor** contain more continuous forest cover with upslope residential development that may increase exposure during wind aligned fire events.
- **Select riverbank and rural interface properties** where forest fuels extend toward homes from below or upslope positions also warrant targeted assessment.
- **Roadways, trails, and utility corridors** throughout the AOI should be included in priority planning where vegetation encroachment may increase ignition potential, facilitate fire spread, or constrain suppression access.

Implementation within these areas should begin with site specific assessment and phased treatment, expanding as capacity and landowner participation increase.

5.3.2. TREATMENT OBJECTIVES

Fuel treatments should be designed to:

- Reduce horizontal and vertical fuel continuity in mixed wood and conifer dominant interface areas
- Limit ember production potential near residential development
- Decrease ladder fuels that may support torching or localized crown involvement

- Reduce concentrations of dead and down woody material adjacent to homes and along slopes
- Improve firefighter access, visibility, and defensibility along key travel corridors

Treatments should prioritize life safety, firefighter safety, and compatibility with surrounding ecological and land use values.

5.3.3. RECOMMENDED FUEL TREATMENT ACTIONS

Fuel treatments should reduce hazardous fuel loading while maintaining community character and environmental sensitivity. Recommended actions include:

- Selective thinning of coniferous trees near residential areas to reduce crown density and horizontal fuel continuity
- Removal and treatment of dead and down material, particularly blowdown and accumulated woody debris adjacent to homes and on steeper slopes
- Pruning of lower tree branches and reduction of dense understory vegetation to limit ladder fuels and vertical fire spread
- Grass and shrub fuel management during the spring curing period and extended dry conditions, especially on south facing slopes and open areas
- Vegetation management along roadways, trails, and utility corridors to improve access, visibility, and operational reliability

Prescribed burning may be considered in limited, well-defined areas where appropriate and subject to regulatory approval and operational feasibility.

5.3.4. MAPPING AND PLANNING

Fuel management planning should be supported by updated mapping that identifies priority treatment areas, fuel types, slope position, access routes, and proximity to residential structures and critical infrastructure. Mapping should be used to guide annual and multi-year treatment planning, support funding applications and regulatory approvals, inform operational pre-planning, and track completed treatments to ensure continuity and effectiveness over time. Spatial information should be refined through local knowledge and field verification to supplement existing provincial datasets.

5.3.5. COORDINATION AND LANDOWNER ENGAGEMENT

Effective fuel management in Southern Victoria will require coordination across multiple land tenures and jurisdictions. Many priority treatment areas involve private land or lands outside direct municipal control. Recommended coordination actions include:

- Working with private landowners in priority WUI areas to encourage and support defensibility focused fuel reduction
- Coordinating with provincial forestry and wildfire agencies to align treatments with regulatory requirements and provincial objectives
- Collaborating with municipal departments, utilities, and trail organizations to integrate fuel management into routine maintenance activities
- Exploring partnerships and cost sharing opportunities where municipal authority is limited

Through targeted and collaborative fuel management focused on priority interface areas, Southern Victoria can reduce wildfire intensity potential, improve suppression effectiveness, and support long term community resilience without imposing unnecessary landscape scale alteration.

5.4. Bylaws and Policy Considerations Supporting Wildfire Risk Reduction

Municipal bylaws and governance tools are foundational to enabling wildfire prevention, emergency response, and recovery. In Southern Victoria, several legislative instruments provide a solid framework for wildfire and WUI response. However, updates and clarifications are recommended to reflect municipal amalgamation, align with current provincial legislation, and strengthen operational authority during fast evolving incidents. The intent of this section is to ensure that existing legal frameworks effectively support the mitigation and response measures identified in this plan.

5.4.1. FIRE DEPARTMENT BYLAW

Southern Victoria operates under Fire Department Bylaw S-8, passed in October 1999. The bylaw remains under the pre-amalgamation name of Perth-Andover but is otherwise comprehensive and contains the core authorities required to respond to structural and WUI events.

The bylaw grants the Fire Chief the powers of a local assistant under the Fire Prevention Act for the purposes of carrying out their duties. Section 7.01 of the Fire Prevention Act authorizes a local assistant or member of a fire department to enter buildings or premises where a fire or explosion has occurred or is in progress, and adjoining or reasonably proximate properties, and to take any action considered necessary to extinguish the fire or prevent its spread.

The existing bylaw also includes authority to remove or demolish structures where necessary to prevent fire spread. This provision is operationally significant during rapidly evolving WUI incidents where high winds, slope alignment, and heavy fuel loading may require decisive action to prevent urban conflagration.

While suppression and spread prevention authorities are clearly established once a fire is present, authority is less explicit regarding proactive wildfire protection measures undertaken in advance of structural involvement. During WUI incidents, fire services may need to enter properties prior to flame contact for site preparation, sprinkler installation, structure protection deployment, or other defensive measures. Clarifying this authority within the bylaw would strengthen operational readiness and reduce reliance on declaration of a State of Local Emergency (SOLE) for time sensitive structure protection actions.

The Emergency Measures Act permits warrantless property entry following declaration of a SOLE. However, given the rapid progression possible in interface fires, reliance solely on SOLE declaration may not align with operational timelines.

Consideration should also be given to replacing references to “fires” with the broader term “incidents” within the bylaw. This terminology better reflects the modern scope of fire service responsibilities and ensures authority extends to rescues, hazardous materials events, medical response, and other emergency situations requiring property entry.

A full review and reissuance of the Fire Department Bylaw under the current municipal name, with updated provincial legislative references, is recommended.

ILLUSTRATIVE AUTHORITY LANGUAGE

The Fire Chief or the Member in Charge at an incident shall have the authority to:

(a) enter a premise or property where an incident has occurred, and to cause any member, apparatus, or equipment of the Fire Department to enter, when necessary to combat, control, or otherwise deal with the incident;

(b) enter, pass through, or over buildings or property adjacent to an incident, and to cause members of the Fire Department to do the same, when necessary to gain access to the incident or to protect persons or property.

Using the term "incident" rather than "fire" supports a broader range of emergency responses, including rescue, hazardous materials incidents, and medical response, and provides clearer authority for preventative actions taken to limit fire spread.

5.4.2. EMERGENCY MANAGEMENT BYLAW

The Emergency Management Bylaw was enacted in December 1981 and reflects a typical New Brunswick emergency governance structure. The bylaw outlines requirements for declaring a State of Local Emergency and requires participation of the Mayor and two members of Council. This threshold is appropriate for declaration of a SOLE.

The bylaw specifies that upon declaration, municipal employees are required to report to the Emergency Operations Centre and carry out duties as directed. It also addresses employee compensation adjustments during emergency operations.

However, the bylaw does not clearly outline procedures for termination of a SOLE once conditions no longer warrant extraordinary authority. Under the Emergency Measures Act, a SOLE automatically expires seven days after declaration unless renewed by Council. If the emergency ends prior to the seven-day period, Council must formally rescind the declaration by resolution. These statutory requirements should be clearly articulated within the municipal bylaw to eliminate ambiguity during active incidents.

A comprehensive update of the Emergency Management Bylaw is recommended to reflect amalgamation, current provincial legislative references, procedures for declaration, renewal, and termination of a SOLE, and clear governance structure aligned with contemporary emergency management practice.

5.4.3. DANGEROUS PROPERTIES / UNSIGHTLY PREMISES AND RESIDENTIAL STANDARDS

The Dangerous Properties / Unsightly Premises Bylaw S-1 was enacted in April 2009 and references Sections 190.001–190.07 of the former Municipalities Act as its enabling authority. This legislation was repealed in 2017. As a result, the bylaw should be reviewed and updated to align with current provincial legislation.

There are limited enforceable tools available to ensure private property maintenance consistent with FireSmart™ principles. Vegetation accumulation, firewood storage, combustible debris buildup, and roof or yard maintenance is primarily addressed through voluntary compliance and public education.

Development of enhanced property maintenance provisions, either through amendment of the existing bylaw or adoption of a broader Community Standards Bylaw, could provide authority to address wildfire relevant risk factors such as unmanaged vegetation near structures, accumulation of flammable materials, and unsafe firewood storage practices. Any regulatory approach should remain proportionate to the overall Low to Moderate wildfire threat rating and emphasize education first, with enforcement applied in high risk or repeat non-compliance situations.

5.4.4. OFF HIGHWAY VEHICLE REGULATION

Southern Victoria does not have a municipal Off Highway Vehicle Bylaw. Off highway vehicles can represent a potential source of wildfire ignition, particularly during spring curing and extended dry conditions. Regulation and enforcement primarily fall under provincial jurisdiction.

While municipal authority may be limited, coordination with provincial agencies and reinforcement of seasonal fire danger messaging may help reduce ignition risk associated with recreational vehicle activity near forested and rural interface areas.

5.4.5. BYLAW AND POLICY RECOMMENDATIONS

To support implementation of wildfire risk reduction measures identified in this plan, the following actions are recommended:

- Update and reissue the Fire Department Bylaw under the current municipal name and legislative framework.
- Clarify authority for proactive property entry and defensive actions undertaken in advance of structural involvement during wildfire incidents.
- Broaden terminology from “fires” to “incidents” to reflect the full scope of emergency response activities.
- Amend the Emergency Management Bylaw to clearly define declaration, renewal, and termination procedures for a SOLE.
- Update the Dangerous Properties / Unsightly Premises Bylaw to reflect current provincial legislation and consider additional property maintenance provisions supportive of FireSmart™ objectives.

These measures will improve legal clarity, operational authority, and alignment between municipal governance tools and the wildfire mitigation strategies outlined in this CWRP.

5.5. Prevention of Human-Caused Fires

Human activity remains the primary ignition source for wildfires in Southern Victoria, particularly during the spring curing period and extended dry conditions in summer. Although overall wildfire threat is Low to Moderate and spatially variable, reducing human-caused ignitions represents the most immediate and controllable opportunity to lower wildfire occurrence and consequence. Prevention efforts should prioritize education, consistent messaging, and practical risk reduction behaviours, particularly within identified WUI areas.

Based on site observations, fire department experience, and regional trends, the most common potential ignition sources in Southern Victoria include:

- Open burning of yard debris and brush, particularly during spring and fall.
- Recreational activities, including campfires and roadside ignitions.
- Roadway and equipment-related ignitions, such as sparks from machinery, vehicles, or roadside maintenance.
- Debris accumulation and unmanaged vegetation near homes, outbuildings, and access routes.

While most incidents are small and quickly contained, they can escalate rapidly under dry and windy conditions, particularly in areas with continuous fuels, slope alignment, or limited access.

Public Education and Awareness

Education remains the most effective and proportionate prevention tool given the predominantly human-caused ignition profile. Messaging should be seasonal, practical, and aligned with provincial fire danger ratings.

- Promote safe alternatives to open burning, including composting, chipping, and appropriate disposal options for yard waste.
- Deliver seasonal wildfire prevention messaging focused on:
    - Spring curing risks and debris burning hazards
    - Summer fire restrictions and equipment use
    - Fall clean-up practices that reduce fuel accumulation
- Reinforce FireSmart™ principles related to yard maintenance, debris removal, and safe storage of combustible materials.
- Use municipal communication channels to share fire danger ratings, burn restrictions, and Red Flag warnings in a timely and consistent manner.

Signage and Risk Communication

Visible and consistent risk communication reinforces behaviour change during elevated fire danger periods. Signage should align with provincial wildfire messaging to avoid confusion.

- Install or update Fire Danger Rating signage at community entrances, parks, trailheads, and high-use recreation areas.
- Post temporary signage during elevated fire danger to reinforce burn restrictions and safe practices.
- Ensure signage is clear, visible, and seasonally maintained.

Regulation and Enforcement Support

While prevention should remain education-first, regulatory tools provide necessary support during high-risk periods. Enforcement should be proportionate and focused on conditions that materially increase ignition risk.

- Encourage compliance with provincial burn permit requirements and temporary fire restrictions.
- Utilize existing dangerous or unsightly premises provisions to address significant debris accumulation or hazardous vegetation conditions where appropriate.
- Coordinate with provincial agencies to support enforcement during elevated fire weather events.

Targeted Prevention in Higher-Risk Areas

Prevention efforts should be concentrated where ignition consequences are greatest, particularly within identified WUI corridors. Outreach should reflect local use patterns, including recreation and rural residential activity.

- Focus prevention messaging in WUI areas east of the Saint John River, including Woodland Drive, Beech Glen Road, and portions of the Route 109 corridor.
- Prioritize outreach near trails, access routes, and recreation corridors where ignition likelihood is higher.
- Incorporate wildfire prevention messaging into community events, FireSmart™ workshops, and neighbourhood clean-up initiatives.

Reducing human-caused ignitions in Southern Victoria requires consistent seasonal communication, practical alternatives to open burning, and reinforcement of responsible land use behaviours. By aligning prevention efforts with how residents and visitors use the landscape, the community can meaningfully reduce ignition frequency while maintaining rural and recreational access.

5.6. Risk Reduction Summary and Implementation Matrix

This chapter transitions from wildfire hazard and exposure assessment to the coordinated actions required to reduce wildfire risk within Southern Victoria. Given the Low to Moderate and spatially variable wildfire threat profile, recommended measures emphasize:

- Prevention of human-caused ignitions
- Home Ignition Zone mitigation in identified WUI areas
- Targeted vegetation management and defensibility-focused fuel treatments
- Improved evacuation planning and operational readiness in single-access areas
- Governance clarity and legislative alignment
- Interagency coordination and structured FireSmart™ implementation

The following implementation matrix (Table 5-1) consolidates the mitigation strategies identified throughout Chapter 5 into strategic implementation streams. Actions may be phased based on capacity, funding availability, regulatory requirements, and evolving risk conditions.

Table 5-1 Summary of Mitigation Recommendations

Category	Strategic Action	Priority	Lead	Timeline
Vegetation Management	Implement defensibility-focused vegetation management in identified WUI areas (Woodland Drive, Beech Glen Road, Route 109 corridor)	High	Municipality / Landowners	Short (1-2 years)
	Coordinate vegetation management along roadways, trails, and utility corridors	Medium	Municipality / Utilities	Medium (2-3 years)
Development & Land Use Planning	Integrate FireSmart™ principles into subdivision review, setbacks, driveway standards, and ignition-resistant construction practices	Medium	Planning Authority	Medium (2-3 years)
Education & FireSmart™ Implementation	Establish structured FireSmart™ programming and expand public education efforts	High	Municipality / Fire Department	Short (1-2 years)
	Deliver seasonal wildfire awareness messaging aligned with provincial fire danger ratings	Ongoing	Municipality	Ongoing
Emergency Planning	Map higher-risk WUI areas and develop tactical evacuation plans for single-access and constrained neighbourhoods	High	Municipality / EMO	Short (1-2 years)
	Integrate wildfire-specific triggers, refuge planning, and communication protocols into the Municipal Emergency Plan	High	Municipality / EMO	Short (1-2 years)
Interagency Cooperation	Formalize cooperation with DNR and finalize the Central Valley Mutual Aid Agreement	High	Municipality	Short (1-2 years)
	Conduct annual pre-season coordination meetings	Ongoing	Municipality / Fire Department	Ongoing
Cross-Training &	Enhance wildfire and WUI operational	Medium	Fire Department	Medium

Category	Strategic Action	Priority	Lead	Timeline
Operational Readiness	capacity through supplemental training and joint exercises			(2-3 years)
Targeted Fuel Management	Conduct phased, site-specific fuel treatments in Priority Treatment Areas	Medium	Municipality / Landowners / Province	Medium (2-3 years)
Fuel Management Mapping & Planning	Maintain updated fuel and priority treatment mapping to guide planning and response	Ongoing	Municipality / Fire Department	Ongoing
Landowner & Multi-Tenure Coordination	Coordinate fuel management across private lands, provincial lands, utilities, and trail organizations	Medium	Municipality	Medium (2-3 years)
Legislative & Policy Alignment	Update and reissue the Fire Department Bylaw and clarify proactive property entry authority	High	Municipality	Short (1-2 years)
	Amend the Emergency Management Bylaw to clarify SOLE declaration, renewal, and termination procedures	High	Municipality	Short (1-2 years)
	Review and update property maintenance bylaws to align with FireSmart™ objectives	Medium	Municipality	Medium (2-3 years)
Prevention of Human-Caused Fires	Implement structured human-caused ignition prevention strategy including debris burning alternatives and visible fire danger signage	High	Municipality	Short (1-2 years)
	Concentrate prevention messaging within identified WUI corridors and high-use recreation areas	Ongoing	Municipality	Ongoing

6. Emergency Preparedness and Response

Wildfire mitigation measures reduce structure ignition potential and limit human-caused ignitions over time; however, wildfire events may still occur during periods of elevated fire weather. Operational readiness, evacuation planning, and governance clarity remain essential components of community resilience, particularly in areas where WUI conditions are present.

This chapter reviews emergency preparedness and response capacity in Southern Victoria as it relates specifically to wildland and WUI fire scenarios.

6.1. Emergency Management and Evacuation Planning

This section does not represent a comprehensive review of the Municipal Emergency Plan. The plan was reviewed specifically in relation to wildfire risk, WUI preparedness, and operational readiness during a rapidly evolving interface fire event.

Southern Victoria operates under a Municipal Emergency Plan written in January of 2003. The plan was last updated in 2021 to ensure current contact information. The plan is structured using the Emergency Site Management Model. Given the age of the original document, several components require modernization to align with current emergency management standards and contemporary wildfire risk considerations.

Risk Assessment and Hazard Identification

The current plan does not contain a formal hazard and risk assessment. A structured hazard and risk assessment is foundational to emergency planning and ensures that annex development, resource allocation, and response priorities align with the municipality's most credible threats.

Although Southern Victoria's overall wildfire risk is characterized as Low to Moderate, localized WUI conditions exist, particularly in rural areas and in pockets west of the village toward the United States border. Homes located adjacent to or intermixed with forest fuels present scenario-specific evacuation and structure protection considerations. Completion of a formal hazard and risk assessment would strengthen alignment between documented WUI exposure and operational planning.

Wildland Urban Interface Planning Considerations

The current Emergency Plan does not contain a wildfire-specific or WUI response annex. While wildfire may not represent the municipality's highest overall hazard, localized interface areas warrant scenario-specific planning.

A practical WUI Response Plan should provide operationally usable information that allows incident commanders to initiate protection measures quickly. Such a plan would typically include:

- Identification of highest-concern WUI areas and values at risk
- Critical infrastructure and access constraints
- Radio communication procedures for arriving fire companies
- Initial auto-order lists for apparatus, personnel, and specialty resources
- Sprinkler deployment plans and equipment requirements for priority areas

- Evacuation procedures for high-risk neighbourhoods, including safe refuge considerations for residents unable to self-evacuate

A wildfire-specific annex would improve operational clarity during fast-moving incidents influenced by wind, slope, and fuel continuity.

Emergency Governance and State of Local Emergency

The Municipal Emergency Plan does not clearly outline procedures for declaring a SOLE. The declaration process identified within the Emergency Management Bylaw, requiring the Mayor and two members of Council, or three members of Council, should be clearly articulated within the Emergency Plan itself.

Clarity regarding declaration authority, renewal requirements, and termination procedures is essential during rapidly evolving incidents. Given that wildfire behaviour can escalate quickly under extreme fire weather conditions, governance processes must be operationally practical and unambiguous.

Public Notification and Alerting Systems

The Western Valley Regional Service Commission has implemented the Voyent Alert platform to support municipal emergency notifications. This system provides an effective mechanism for public alerting where resident enrollment is strong. Continued efforts to increase sign-up rates will improve reliability and complement the provincial Alert Ready system.

The Western Valley Regional Service Commission has also developed an Emergency Preparedness Guidance document for the public that addresses a range of hazards, including wildfire. From a wildfire preparedness perspective, the document provides clear and practical guidance and represents a strong foundation for community education.

Special Evacuation Considerations

Southern Victoria faces unique evacuation considerations. The area includes as Amish community that does not utilize modern communication technologies. Notification strategies within the Emergency Management Plan should reflect practical methods for reaching residents without reliance on electronic alert systems.

In addition, the area contains nursing homes, special care facilities, and a hospital. Evacuation planning for these facilities should be addressed through a dedicated annex within the Emergency Plan, including transportation coordination, staffing protocols, and shelter-in-place decision criteria where appropriate.

Given the age of the current Emergency Plan, contact lists, roles, and agency information require updating to ensure operational reliability.

Recommendations

- Redraft and update the Municipal Emergency Plan to reflect current emergency management standards and updated municipal structure.
- Complete a formal hazard and risk assessment to guide plan development and annex prioritization.
- Develop a wildfire or WUI-specific annex addressing high-exposure areas and operational response procedures.

- Clearly articulate procedures for declaration, renewal, and termination of a SOLE within the Emergency Plan.
- Develop evacuation annexes for special care facilities, the hospital, and other vulnerable populations.
- Establish notification procedures for residents without access to modern communications.
- Update contact lists, roles, and communication procedures to ensure operational clarity.
- Continue promoting enrollment in municipal emergency notification systems to strengthen public alerting capacity.

6.2. Water Supply for Fire Suppression

Adequate and reliable water supply is a critical component of structural fire suppression and WUI operations. Southern Victoria includes both hydrant village areas and rural portions that rely on draft sites and mobile water shuttle operations. The village areas of Perth-Andover and Aroostook are serviced by municipal hydrant systems, while surrounding rural areas depend on tanker operations and identified water draft locations.

Although hydrant coverage is available within the village cores, rural water supply locations within the broader municipal boundary are limited. Table 6-1 summarizes known water supply sites.

Table 6-1 Rural Water Supply Locations

Type	Location / Description	Capacity / Flow	Accessibility	Notes
Hydrants	Village of Southern Victoria (Perth-Andover)	400-1000 gpm	Roadside	Flow varies within town system
Hydrants	Village of Aroostook	400-700 gpm	Roadside	Flow varies within town system
River Draft Site	Aroostook River – 531 Tinker Road	Unlimited	Roadside	Portable pump access

Hydrant flow rates vary depending on location within each village system. Rural draft capability is currently concentrated at the identified river access point. Additional rural water supply locations may be required to improve operational flexibility in outlying WUI areas.

Seasonal conditions, safe apparatus positioning, and portable pump deployment requirements should be considered when planning for rural draft operations.

Rural Water Supply Apparatus

The Perth-Andover Fire Department operates a 2,300-gallon tactical tanker. In addition, two primary engines configured for tanker operations carry approximately 1,500 gallons and 1,100 gallons respectively. This configuration provides strong mobile water shuttle capacity for rural and interface operations where hydrant infrastructure is unavailable.

The department's rural water supply capability is further supported through its mutual aid network, which provides access to additional tanker capacity from neighbouring departments. This mutual aid

framework strengthens operational reliability during extended suppression events or simultaneous incidents.

A detailed apparatus inventory is provided in Section 6.3.

Recommendations

- Periodically verify operational access and seasonal suitability of the identified river draft site.
- Evaluate opportunities to identify or develop additional rural draft locations within higher-exposure WUI areas.
- Ensure all rural water supply locations are accurately mapped and integrated into pre-incident planning materials.
- Maintain and exercise rural water shuttle capability through training and mutual aid coordination.

6.3. Fire Department Readiness for Wildfire and WUI Events

The Perth-Andover Fire Department provides fire protection services for all Southern Victoria. The department consists of 24 volunteer members operating from a single station and responds to approximately 150 calls annually, of which roughly 30 are wildland related.

Apparatus Overview

The department maintains a modern fleet oriented primarily toward structural response. The current frontline apparatus is summarized below in Table 6-2:

Table 6-2 Frontline Apparatus Operated by the Perth-Andover Fire Department

Unit ID	Year / Make / Model	Pump (gpm)	Water (gal)	Foam	Notes
Engine 1	2016 Spartan / Metalfab	1050	1500	60	Secondary engine
Engine 5	2025 International / Metalfab	1250	1200	30	Primary Engine
Engine 4	1994 GMC Topkick / Metalfab	1050	1100	30	Reserve engine, wildland gear
Tanker 3	2009 Freightliner / Allain	1050	2300	30	Tanker
Truck 7	2011 Ford F-150	—	—	—	Support truck with wildland pumps
Truck 8	2011 Chevrolet Tahoe	—	—	—	Traffic / support
Truck 9	2016 Ford F-250	—	—	—	Utility / rescue equipment
Ladder 6	1991 Pierce Ladder	1050	400	—	Aerial
Rescue 2	2006 Sterling / Dynamic	—	—	—	Heavy rescue
Side by Side	2016 Polaris Ranger 900 XP	—	—	—	Wildland access / rescue

The department also operates two boats.

The apparatus configuration provides strong structural capacity and adequate rural water shuttle capability. Basic wildland equipment is carried, including hand tools, hose, and portable pumps. There is no dedicated wildland unit or skid package currently in service.

Training and Wildland Capability

Members train to NFPA standards for structural firefighting and utilize the provincial DNR Emergency Firefighter program for wildland training. This provides a foundational level of wildfire competency but does not fully address the operational complexity of WUI incidents, particularly engine operations, structure triage, and defensive sprinkler deployment.

The department operates on the provincial TMR radio system and reports no interoperability concerns with mutual aid partners or DNR.

The department participates in the Central Valley Mutual Aid system; however, the agreement remains unsigned.

Recommendations

- Maintain the existing apparatus complement.
- Consider acquisition of a wildland skid package for seasonal deployment on a pickup truck.
- Consider a skid package for the Side by Side to improve mobility and rapid initial attack capability.

6.4. Mutual Aid and Interagency Cooperation

Effective wildfire and WUI response in Southern Victoria depend on coordinated action between municipal fire services, neighbouring departments, and the provincial wildfire agency. Given the volunteer staffing model, rural interface exposure areas, and potential for extended operations during elevated fire weather, mutual aid and clear role definition are essential components of operational readiness.

Municipal and Regional Mutual Aid

The Perth-Andover Fire Department participates in mutual aid arrangements with Carleton North, Tobique Valley, Hartland, Lakeland Ridges, and the Western Valley Rural District. These arrangements allow firefighting personnel, apparatus, and specialized resources to be shared when local capacity is exceeded. This is particularly important given the volunteer staffing model and the potential for extended operations during wildfire events.

Mutual aid is coordinated through 911 dispatch as well as direct communication between fire chiefs. Operational relationships between departments are established and functional in practice.

The Central Valley Mutual Aid Agreement formalizes this cooperation; however, the agreement remains unsigned. While departments are operating within the spirit of the agreement, formal execution would clarify liability, cost recovery, command integration, and administrative protections during complex or multi day incidents. Finalizing and signing the agreement is recommended to ensure governance and operational clarity.

Provincial Wildfire Coordination

Wildfire suppression in New Brunswick is led by the DNR. Municipal departments provide initial response and structure protection, while DNR leads forest suppression, air resources, and technical wildfire operations.

Operational coordination functions effectively in practice; however, it is largely informal. There is currently:

- No formal wildfire response agreement with DNR
- No documented agreement outlining command integration or unified command procedures
- No pre-season coordination meetings or joint training sessions to prepare for the upcoming wildfire season
- No defined reimbursement or cost recovery process
- No structured notification protocol for red flag warnings

While established working relationships support incident level coordination, the absence of formalized agreements may create uncertainty during complex or extended wildfire events, particularly where command structure, jurisdictional authority, or resource prioritization becomes critical.

Recommendations

- Finalize and sign the Central Valley Mutual Aid Agreement.
- Conduct annual pre-season coordination meetings with mutual aid partners and include DNR representation to clarify command integration, escalation thresholds, and communication procedures.
- Implement periodic joint training or exercises with mutual aid departments and DNR focused on wildfire and WUI scenarios, including unified command, resource deployment, and structure protection operations.
- Pursue a formal agreement with DNR outlining roles, responsibilities, command structure, communication procedures, and cost recovery.

6.5. Structure Protection Readiness

Although the core village areas in Southern Victoria's AOI are considered lower wildfire risk, several corridors including Gulch Road, Woodland Crescent, Beech Glen Road, Tinker Road, and portions of Route 190 present exposure concerns. These areas warrant structured planning and operational preparation.

Equipment and Operational Readiness

The department carries basic wildland tools but does not maintain a dedicated cache of structure protection equipment such as exterior sprinklers, portable pumps, water bladders, or specialized hose kits. Provincial Structure Protection Units are in Fredericton and may require mobilization time. During rapidly evolving events, reliance solely on provincial resources could delay defensive setup.

Exterior sprinkler deployment functions as a force multiplier during WUI incidents. Pre-wetting structures reduces ember ignition potential and allows limited personnel to protect multiple properties simultaneously. Early access to sprinkler kits to protect 4-5 homes simultaneously is critical, especially in rural and interface areas with extended response times.

Training and Competency

The department has not undertaken formal WUI specific training beyond foundational wildland instruction.

The Province of New Brunswick has adopted provincially recognized WUI training programs, including:

- SPP-115 Structure Protection Program, which focuses on exterior sprinkler application and structure protection techniques using FireSmart™ principles; and
- S-215, which provides classroom-based instruction on WUI operations, safety, pre-incident planning, structure triage, tactics, and post-incident review.

These programs provide an appropriate foundation for WUI capacity building in New Brunswick and are consistent with approaches used in other Canadian jurisdictions. Additional WUI training programs delivered in British Columbia, Alberta, and through the IAFF are nationally recognized and cross-border equivalent. A structured training pathway, matched to Southern Victoria's risk profile and volunteer capacity, would strengthen readiness over time. Additional training options are detailed in Appendix B.

Given identified exposure areas, training must include WUI engine operations, structure triage, and tactical evacuation coordination.

Planning and Deployment

The department does not maintain a WUI specific response plan or auto order list. While initial response capacity is strong, WUI events are frequently multi day operations requiring early escalation planning, staging considerations, and resource rotation.

There is also no formal Standard Operating Procedure governing multi day wildfire or WUI deployments, either within or outside municipal boundaries. In the absence of a deployment framework, uncertainty may arise regarding notification processes, compensation, rest cycles, and member support during extended operations.

Pre-planning for areas such as Woodland Crescent and Gulch Road would improve readiness and reduce initial incident complexity.

Recommendations

- Purchase and maintain a minimum cache of structure protection equipment including sprinklers, hose kits, portable pumps, and water bladders sufficient for initial operations.
- Implement formal WUI training for all members and incorporate WUI competencies into annual training requirements.
- Develop a WUI Response Plan including auto order lists, staging areas, safe refuge areas, and communication procedures.
- Develop a Standard Operating Procedure governing multi day wildfire and WUI deployments, including notification, compensation, rest, and member support processes.

Table 6-3 provides a consolidated summary of the priority actions identified throughout Chapter 6. Related recommendations have been grouped to highlight strategic implementation themes and clarify leadership responsibilities.

Table 6-3 Summary of Emergency Preparedness and Response Actions

Focus Area	Key Actions	Priority	Lead
Emergency Management Planning	Replace the 2003 Municipal Emergency Plan with a modernized version that includes a formal hazard and risk assessment, a wildfire annex, evacuation annexes for vulnerable facilities, defined SOLE procedures, updated contacts, and clear operational roles.	High	Council / EMO
Public Notification & Alerting	Strengthen emergency notification reliability by increasing Voyent Alert enrollment, integrating non-digital notification methods, and aligning procedures with provincial alert systems.	Medium	EMO / District
Water Supply Preparedness	Confirm reliability of existing draft site; identify additional rural water supply options in higher exposure areas; maintain mapped pre-incident water supply inventory; sustain rural water shuttle capability through training and coordination.	Medium	Fire Department
Fire Department Capacity (Wildland & WUI)	Sustain current apparatus fleet and enhance initial attack mobility through acquisition of deployable wildland skid units.	Medium	Fire Department
Mutual Aid & Provincial Coordination	Execute the Central Valley Mutual Aid Agreement; formalize wildfire coordination with DNR through annual planning meetings, joint exercises, and a defined command and cost recovery framework.	High	District / Fire Department
Structure Protection Readiness	Establish a local structure protection equipment cache; implement department-wide WUI training; develop a pre-incident WUI Response Plan for identified exposure corridors.	High	Fire Department
Deployment Readiness	Adopt a Standard Operating Procedure governing multi-day wildfire deployments, including staffing rotation, compensation, and member welfare provisions.	Medium	Fire Department

7. Community Engagement and Education

Purpose

The Public Engagement Plan (tabulated in Table 7-1) is designed to increase community understanding, acceptance, and adoption of wildfire resiliency practices, with a particular emphasis on **FireSmart™ principles**. The plan focuses on **education, behaviour change, and sustained engagement**, ensuring residents, businesses, schools, and partner organizations understand their role in reducing wildfire risk. The Plan is designed to integrate seamlessly with the community's overall communications strategy. Engagement initiatives can be coordinated with existing community events, festivals, school programs, and local outreach campaigns to maximize participation and reinforce wildfire resiliency messaging. This approach ensures consistent messaging, broad reach, and alignment with both FireSmart™ Canada recognition requirements and New Brunswick CWPP guidance.

Table 7-1 Public Engagement Plan to Advance Community Understanding and Adoption of FireSmart™ Principles

Objective	Actions / Activities	FireSmart™ Canada Discipline	NB CWRP / Provincial Alignment	Lead / Partners	Outputs / Indicators
7.1. Public Awareness and Outreach					
Increase public awareness of wildfire risk and FireSmart™ responsibilities	Promote FireSmart™ 101 online training through municipal websites, social media, newsletters, and community associations	Education	Public education and risk awareness (DNR / CWPP guidance)	Municipality; Fire Department; Emergency Management	Number of residents completing FireSmart™ 101; promotional materials published
	Deliver seasonal FireSmart™ messaging (spring clean-up, summer preparedness, fall mitigation) via social and local media	Education	Alignment with NB wildfire season and provincial prevention messaging	Municipality; DNR; Local media	Campaign reach; engagement metrics; consistency with provincial messaging
	Host an annual FireSmart™ / Wildfire Preparedness Day aligned with FireSmart™ Canada Wildfire Community Preparedness Day	Education	Community preparedness and public engagement	Municipality; Fire Department; Community groups	Event held annually; attendance numbers; FireSmart™ materials distributed

Objective	Actions / Activities	FireSmart™ Canada Discipline	NB CWRP / Provincial Alignment	Lead / Partners	Outputs / Indicators
7.2. Signage and Communication Tools					
Improve visibility of wildfire risk and preparedness information	Install Fire Danger Rating boards at high-traffic locations (community entrances, parks, trailheads)	Emergency Planning	Use of NB wildfire danger ratings and public risk communication	Municipality; DNR	Number of signs installed; frequency of updates during fire season
	Update Fire Danger Rating boards regularly during wildfire season	Emergency Planning	Consistent, real-time risk communication	Municipality; Fire Department	Timely updates; alignment with provincial danger ratings
	Promote and utilize the municipal emergency notification system (e.g., Connect Rocket) for wildfire alerts, bans, and preparedness messaging	Emergency Planning	Emergency communication and evacuation readiness (NB EMO)	Municipality; Emergency Management	Increase in registered users; successful test notifications
7.3. School and Youth Engagement					
Build long-term wildfire resilience through youth education	Deliver school-based wildfire education using FireSmart™ and NB-approved resources	Education	Long-term community resilience and prevention	Fire Department; Schools; Emergency Management	Number of school presentations; students reached
	Implement FireSmart™ youth challenges (yard clean-up, posters, videos)	Education	Behaviour change and community involvement	Municipality; Schools; Youth groups	Participation rates; completed projects
	Encourage youth volunteer and ambassador initiatives (e.g., community clean-up days)	Education	Community stewardship and preparedness	Municipality; Community organizations	Volunteer participation; events completed
7.4. Collaboration and Partnerships					
Strengthen wildfire	Engage Indigenous communities to incorporate	Interagency Cooperation	Indigenous engagement and	Municipality; Indigenous	Meetings held; collaborative initiatives implemented

Objective	Actions / Activities	FireSmart™ Canada Discipline	NB CWRP / Provincial Alignment	Lead / Partners	Outputs / Indicators
resiliency through coordinated action	traditional knowledge and culturally appropriate education		inclusive planning	communities	
	Collaborate with forestry companies, utility providers, and landowners on wildfire prevention and mitigation messaging	Interagency Cooperation	Shared responsibility and risk reduction	Municipality; Industry partners	Joint initiatives; coordinated messaging
	Participate in regional wildfire and emergency management networks	Interagency Cooperation	Regional coordination and consistency	Municipality; NB EMO; DNR; neighbouring communities	Participation in regional meetings; shared resources
7.5. Monitoring and Reporting					
Support FireSmart™ recognition and CWPP implementation tracking	Track participation in training, events, and emergency notification registration	Education / Emergency Planning	CWPP reporting and FireSmart™ documentation	Municipality	Annual metrics reported; data used for plan updates

8. Implementation Plan and Funding

Chapters 1 through 7 of this Community Wildfire Resiliency Plan (CWRP) establish Southern Victoria's wildfire risk profile, identify values at risk, and define proportionate mitigation, preparedness, and response measures aligned with FireSmart™ principles and provincial wildfire management practices

The overall wildfire threat in Southern Victoria is assessed as Low to Moderate, with higher localized exposure concentrated east of the Saint John River, particularly in areas where mixedwood and conifer fuels intersect with residential development and constrained access.

Implementation priorities focus on:

- Reducing human-caused ignitions;
- Lowering structure ignition potential in identified interface areas;
- Strengthening evacuation planning and emergency governance clarity;
- Enhancing wildfire and WUI operational readiness;
- Formalizing interagency coordination with provincial and regional partners; and
- Sustaining structured FireSmart™ education and engagement.

This chapter establishes the governance structure, leadership roles, funding alignment, and monitoring processes required to move from recommendation to sustained action.

8.1. Governance, Leadership, and Roles

Effective implementation of this CWRP requires clear delineation of policy authority, operational leadership, and administrative coordination. Wildfire resilience in Southern Victoria is a shared responsibility; however, accountability must be structured to avoid ambiguity during both implementation and emergency response.

The following governance framework aligns responsibilities with existing municipal and regional structures.

Council

Council provides policy direction, legislative authority, and budget oversight. Its role is strategic rather than operational.

Primary responsibilities include:

- Formally endorsing the CWRP and incorporating wildfire resilience into strategic planning;
- Establishing annual wildfire resilience priorities during budget planning
- Advancing recommended governance improvements, including:
    - Review of the Fire Department Bylaw
    - Emergency Management Bylaw updates
    - Property maintenance and FireSmart™-supportive provisions where appropriate
- Authorizing applications for external wildfire and emergency management funding
- Exercising emergency authorities, including declaration of a SOLE, where required

Council's leadership ensures wildfire risk reduction remains visible in policy and budgeting processes while maintaining proportionality to overall municipal risk.

Municipal Administration

Municipal administration coordinates implementation across departments and ensures alignment with operational realities.

Responsibilities include:

- Integrating CWRP actions into annual municipal work plans
- Coordinating with the Fire Department and Emergency Management personnel
- Supporting funding applications and compliance reporting
- Tracking implementation progress and maintaining documentation
- Integrating wildfire mitigation into asset management and infrastructure planning

Administrative leadership ensures wildfire resilience actions are sustained beyond the initial adoption phase and embedded in routine operations.

Perth-Andover Fire Department

The Perth-Andover Fire Department is the primary operational lead for wildfire and WUI response readiness.

Responsibilities include:

- Expanding wildland and WUI training to align with NFPA 1140 competencies and provincially recognized programs
- Developing WUI Response Plans for identified higher-exposure neighbourhoods (e.g., Woodland Drive, Beech Glen Road, Route 109 corridor)
- Establishing and maintaining a structure protection equipment cache
- Maintaining rural water supply mapping and drafting site verification
- Participating in pre-season coordination with mutual aid partners and provincial wildfire authorities
- Supporting public FireSmart™ education initiatives

The department's role is operational and tactical, focusing on preparedness, structure protection, and coordinated response capability.

Emergency Management Organization (EMO)

Emergency management leadership supports governance clarity and evacuation readiness.

Responsibilities include:

- Completing a formal hazard identification and risk assessment
- Redrafting and Modernizing the Municipal Emergency Plan
- Integrating a wildfire/WUI annex
- Clarifying evacuation trigger thresholds and decision-making processes
- Coordinating public alerting systems (e.g., Voyent Alert and Alert Ready alignment)
- Supporting evacuation planning for vulnerable populations and special care facilities

Clear emergency governance strengthens decision-making during fast-moving wildfire events and reduces procedural delays.

Regional and Provincial Partners

Wildfire resilience in Southern Victoria requires coordination beyond municipal boundaries.

Key partners include:

- Western Valley Regional Service Commission
- New Brunswick Department of Natural Resources (DNR) – Wildfire Management
- New Brunswick Emergency Measures Organization
- Central Valley mutual aid fire departments

These partners support:

- Unified command integration during wildfire incidents
- Specialized wildfire suppression resource
- Training and capacity building
- Regional communications coordination
- Funding program administration

Formalizing coordination mechanisms (e.g., signed mutual aid agreements and structured pre-season meetings) will strengthen operational clarity and reduce uncertainty during complex incidents.

Shared Responsibility Framework

While municipal leadership and emergency services play central roles, wildfire resilience is ultimately a shared responsibility.

Residents, property owners, industry operators, recreation groups, and infrastructure providers all influence:

- Ignition risk
- Structure vulnerability
- Access reliability
- Suppression effectiveness

Implementation success depends on aligning governance authority, operational capacity, and community participation within a coordinated and proportionate framework.

8.2. Prioritization and Phasing of Recommendations

Implementation of the mitigation efforts recommended for Southern Victoria reflects the Regional Community's Low to Moderate overall wildfire risk, with localized areas of higher exposure in identified WUI corridors and select infrastructure sites.

Because wildfire occurrence in Southern Victoria is predominantly human-caused, prevention and FireSmart™ awareness are identified as immediate, high-priority actions. Governance clarity, evacuation readiness, and WUI operational preparedness are also short-term priorities due to their direct life-safety implications.

Implementation is organized as follows:

- **Short-term (1-2 years); Table 8-1:** Foundational actions that deliver immediate life-safety benefit, reduce ignition risk, and strengthen WUI response readiness.
- **Medium-term (2-5 years); Table 8-2:** Capability-building, targeted mitigation, infrastructure protection, and long-term resilience measures.
- **Ongoing:** Actions that should be sustained annually or integrated into routine municipal operations.

The tables below summarize all recommendations made throughout this CWRP, grouped into strategic action categories. The Notes column highlights key elements of each action and is not intended to be a comprehensive list.

Table 8-1 Short-Term Implementation Actions (1-2 Years)

ACTION	Objective	Priority	Primary Leads	Notes
Launch and formalize structured FireSmart™ programming	Reduce human-caused ignitions and structure vulnerability in identified WUI areas	High	Municipality, Fire Department	Expand 2025 engagement into a sustained program; prioritize Woodland Drive, Beech Glen Road, Route 109 corridor; promote Home Ignition Zone mitigation; deliver seasonal prevention messaging aligned with provincial fire danger ratings.
Modernize Emergency Management governance and planning	Ensure operational clarity and life-safety decision-making during fast-moving wildfire events	High	Council, EMO, Administration	Redraft the Municipal Emergency Plan; complete formal hazard and risk assessment; develop wildfire/WUI annex; clarify SOLE declaration, renewal, and termination procedures; update contact lists and notification protocols.
Improve evacuation planning and notification reliability	Strengthen evacuation timing, public alerting, and protection of vulnerable populations	High	EMO, Council	Establish evacuation trigger thresholds for WUI areas; increase Voyent Alert enrollment; integrate non-digital notification procedures; develop evacuation annexes for hospital and special care facilities; address communication gaps for residents without modern technology access.
Enhance wildfire and WUI operational readiness	Improve initial attack coordination and structure protection capability	High	Fire Department	Develop WUI pre-incident response plans; define auto-order triggers; establish a local structure protection equipment cache; initiate WUI-specific training (SPP-115 / S-215 aligned).
Formalize mutual aid and provincial coordination	Reduce operational ambiguity during extended or complex wildfire incidents	High	Municipality, Fire Department	Execute Central Valley Mutual Aid Agreement; conduct annual pre-season coordination meetings; clarify unified command integration and cost recovery processes with provincial wildfire authorities.
Strengthen rural water supply preparedness	Improve reliability of suppression operations in non-hydranted areas	Medium	Fire Department, Municipality	Verify seasonal access to existing draft sites; map and GPS rural water sources; evaluate need for additional draft locations in higher-exposure WUI corridors; maintain water shuttle training.
Advance governance clarity for wildfire response authority	Ensure clear legal authority for proactive and defensive wildfire actions	High	Council, Administration	Update and reissue Fire Department Bylaw; clarify proactive property entry authority; update Dangerous/Unsightly Premises provisions to align with current legislation and FireSmart™ objectives.
Initiate defensibility-focused interface fuel reduction	Reduce ember exposure and surface fire intensity in priority WUI pockets	Medium	Municipality, Property Owner	Promote defensible space (0–30 m); reduce ladder fuels and dead/down material in higher-exposure corridors; coordinate vegetation management along roadways and access routes.

Table 8-2 Medium- and Long- Term Implementation Actions (2-5 Years)

ACTION	Objective	Priority	Primary Leads	Notes
Expand wildfire and WUI training depth	Improve firefighter safety, endurance, and multi-day deployment capability	Medium	Fire Department	Expand WUI and structure protection training; conduct joint exercises with mutual aid and provincial partners; formalize multi-day deployment procedures.
Implement phased, targeted fuel management in identified WUI corridors	Reduce fire intensity and ember production near residential intermix areas	Medium	Municipality, Landowners, Province	Conduct site-specific selective thinning; reduce ladder fuels; remove blowdown and heavy dead/down material; integrate mapping and field verification into treatment planning.
Integrate wildfire risk into planning and development processes	Prevent creation of new high-exposure interface conditions	Medium	Council, Administration	Incorporate FireSmart™ principles into development review; encourage ignition-resistant construction; address driveway standards and single-access considerations in subdivision planning.
Strengthen protection of moderate-risk infrastructure	Reduce wildfire exposure to key facilities and utility assets	Medium	Municipality, Infrastructure Owners	Maintain defensible space at critical infrastructure sites; coordinate with utilities and facility operators; integrate mitigation into routine maintenance cycles.
Formalize and sustain a FireSmart™ working structure	Maintain long-term behavioural change and community participation	Medium	Municipality, Fire Department	Establish a FireSmart™ working group or committee; track participation metrics; pursue neighbourhood-level initiatives where interest exists.
Expand rural water supply and access planning	Improve suppression flexibility across geographically dispersed areas	Medium	Fire Department, Municipality	Evaluate additional draft site development in eastern WUI areas; incorporate water supply improvements into capital planning where feasible.
Maintain, monitor, and update wildfire risk data	Ensure long-term effectiveness and adaptability of mitigation measures	Medium	Municipality, Fire Department, EMO	Conduct annual implementation review; update fuel and priority mapping; revise CWRP every five years or following a significant wildfire or evacuation event.

8.3. Funding Opportunities

Implementation of this plan will require a combination of municipal investment, external funding, and interagency collaboration. A number of funding programs may support actions identified in this plan, depending on eligibility, timing, and program objectives. Funding opportunities identified below reflect programs available to municipalities in New Brunswick. Where actions involve coordination with neighbouring First Nations or provincial agencies, complementary funding sources may also be pursued collaboratively.

Potential funding sources include, but are not limited to:

Federal – Resilient Communities / FireSmart™ Expansion Funding

For Southern Victoria, this funding stream aligns with expanded FireSmart™ education in identified WUI corridors east of the Saint John River, including Woodland Drive, Beech Glen Road, and portions of the Route 109 corridor. It supports Home Ignition Zone outreach, development of WUI pre-incident response plans, integration of a wildfire/WUI annex into the Municipal Emergency Plan, and targeted defensibility-focused mitigation in localized interface areas identified in this CWRP.

Federal-Provincial Equipment and Capacity Funding (New Brunswick-Specific)

Southern Victoria, this funding aligns with establishment of a local structure protection equipment cache, expansion of WUI and structure protection training, rural drafting and water supply improvements in non-hydranted areas, and operational readiness enhancements identified in Chapter 6.

Provincial and Federal Emergency Management Funding (Municipal)

For Southern Victoria, this funding aligns with completion of the formal hazard identification and risk assessment, redrafting of the Municipal Emergency Plan, development of a wildfire/WUI annex, clarification of evacuation trigger thresholds, enhancement of public notification systems, and delivery of evacuation exercises for higher-exposure WUI areas and vulnerable facilities.

FireSmart™ Canada – Community Project Funding

These grants are well suited to localized interface neighbourhoods in Southern Victoria, particularly those east of the Saint John River where residential development is adjacent to mixedwood and conifer fuels. Community clean-up events and Home Ignition Zone demonstration projects would directly reduce ember exposure and human-caused ignition risk in identified WUI pockets.

While formal designation is not required for implementation of this CWRP, participation in the Neighbourhood Recognition Program may be considered where there is strong local interest. The program can serve as a voluntary pilot initiative to strengthen community awareness without creating regulatory obligations.

Climate Resiliency and Adaptation Grants

For Southern Victoria, applications may emphasize adaptation to climate-driven increases in wildfire risk through structured FireSmart™ implementation, targeted fuel reduction in higher-exposure interface areas, protection of moderate-risk infrastructure sites, and strengthened evacuation and emergency governance planning.

Insurance and Non-Governmental Funding Sources

Wawanesa Fire Prevention Grant

Applications from rural, forest-adjacent, or disproportionately exposed communities may be prioritized. For Southern Victoria, this funding may support acquisition of structure protection equipment, implementation of targeted Home Ignition Zone initiatives in higher-exposure corridors, expansion of WUI training for volunteer firefighters, or demonstration mitigation projects consistent with this CWRP.

Regional and Municipal Climate Funding Resources

These sources can support planning, pilot projects, and capacity-building initiatives. For Woodstock, this funding aligns with wildfire planning updates, FireSmart™ education expansion, evacuation preparedness improvements, and targeted mitigation in identified WUI areas.

8.4. Monitoring and Review

Wildfire risk, land use patterns, climate conditions, and community capacity change over time. To remain effective and practical, this CWRP should be monitored and reviewed on a regular basis.

It is recommended that the Southern Victoria:

- Track implementation progress annually using the phased implementation tables in Chapter 8
- Review and update the CWRP at least every five years, or following a significant wildfire, evacuation, or emergency event
- Incorporate completed actions, new data, changes in legislation or policy, and evolving best practices as they arise
- Align CWRP updates with other municipal planning processes, including emergency management, development planning, and climate adaptation initiatives

Regular monitoring and periodic review will help ensure the CWRP remains current, relevant, and responsive to changing conditions, while supporting steady progress toward reduced wildfire risk and improved community resilience.

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10. Acronyms

AOI	Area of Interest
ATV	All-Terrain Vehicle
BUI	Build Up Index
CAFS	Compressed Air Foam System
CI	Critical Infrastructure
CIFFC	Canadian Interagency Forest Fire Centre
CWRP	Community Wildfire Resiliency Plan
CWPP	Community Wildfire Protection Plan
DNR	Department of Natural Resources (New Brunswick)
EFF	Emergency Firefighters Program
EMO	Emergency Measures Organization
EOC	Emergency Operations Centre
FBP	Fire Behaviour Prediction System
FCM	Federation of Canadian Municipalities
FWI	Fire Weather Index
GIS	Geographic Information System
HIZ	Home Ignition Zone
IAFF	International Association of Fire Fighters
ICS	Incident Command System
LGA	Local Governance Act
MEMP	Municipal Emergency Management Plan
MERP	Municipal Emergency Response Plan
MOU	Memorandum of Understanding
NB EMO	New Brunswick Emergency Measures Organization
NFPA	National Fire Protection Association
NRCan	Natural Resources Canada
OHV	Off-Highway Vehicle
PFAS	Per- and Polyfluoroalkyl Substances
PFOS	Perfluoro octane Sulfonate
QR	Quick Response
RCMP	Royal Canadian Mounted Police
RH	Relative Humidity
SOLE	State of Local Emergency
SOP	Standard Operating Procedure
SPP	Structure Protection Program
TMR	Trunked Mobile Radio
TSI	Transitional Solutions Inc.
WUI	Wildland–Urban Interface

APPENDICES

COMMUNITY WILDFIRE RESILIENCY PLAN

Regional Community of Southern Victoria - Community Fuels - Map Sheet 1

N

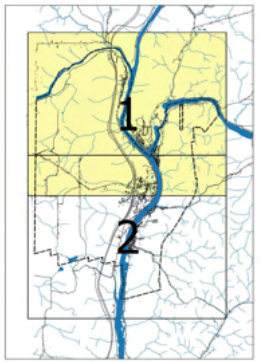
Scale: 1:50,000

Legend

- Regional Community of Southern Victoria
- Building
- Road
- Water

CFFDRS FBP Fuel Types

- Coniferous Fuels (C-1 thru C-6)
- Deciduous Fuels (D-1, D-2)
- Slash Fuels (S-1, S-2)
- Grass Fuels (O-1a, O-1b)
- Non-Fuel
- Water
- Mixedwood Fuels (M-1, M-2) 15 and 25% Conifer
- Mixedwood Fuel (M-1, M-2) 50 & 75% Conifer



Regional Community of Southern Victoria - Community Fuels - Map Sheet 2

N

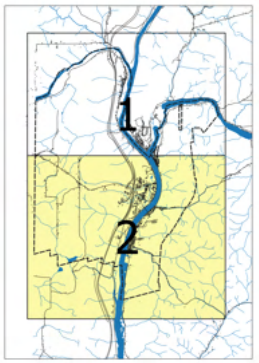
Scale: 1:50,000

Legend

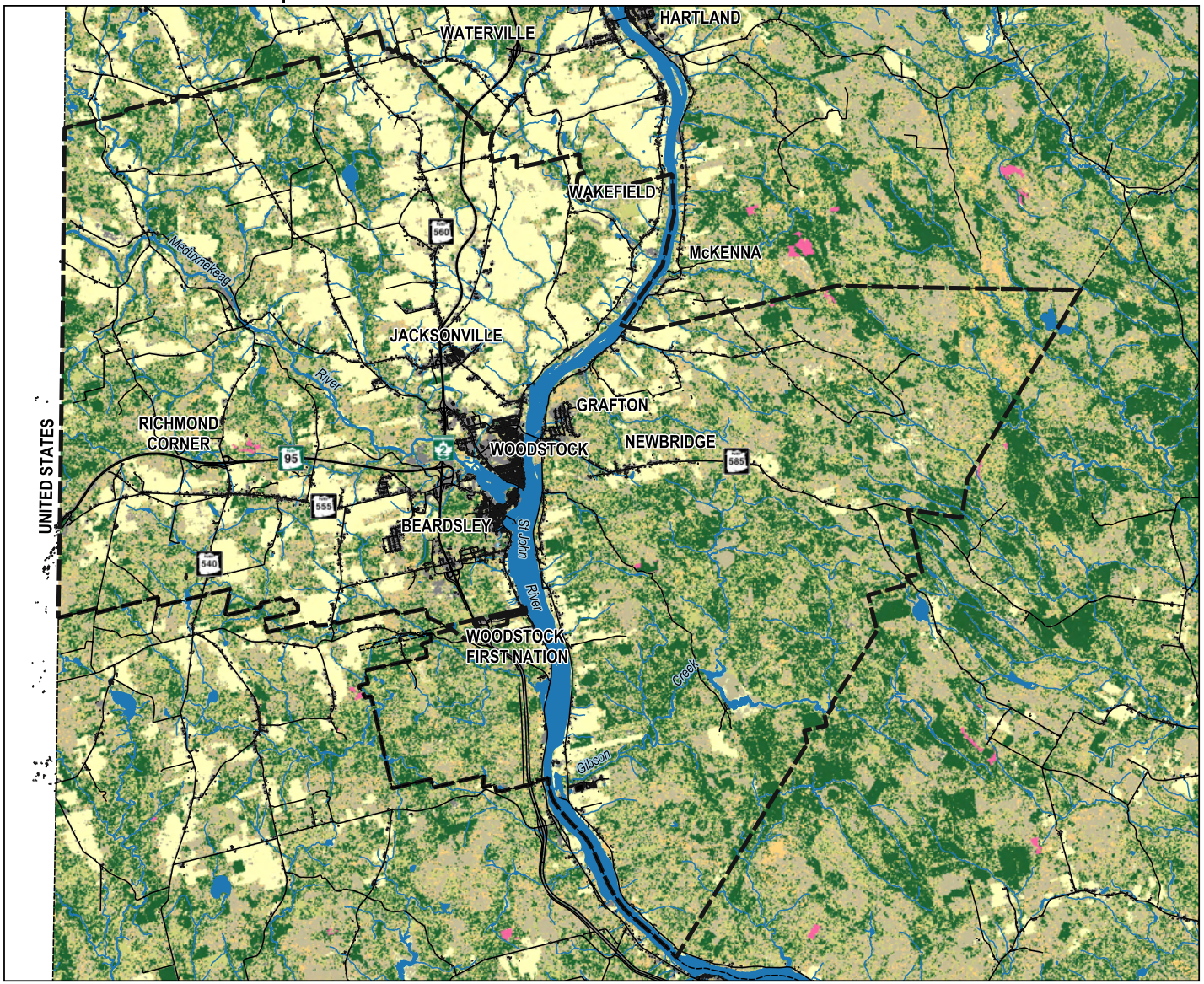
- Regional Community of Southern Victoria
- Building
- Road
- Water

CFFDRS FBP Fuel Types

- Coniferous Fuels (C-1 thru C-6)
- Deciduous Fuels (D-1, D-2)
- Slash Fuels (S-1, S-2)
- Grass Fuels (O-1a, O-1b)
- Non-Fuel
- Water
- Mixedwood Fuels (M-1, M-2) 15 and 25% Conifer
- Mixedwood Fuel (M-1, M-2) 50 & 75% Conifer



Woodstock - Landscape Fuels



N

Scale: 1:175,000

Legend

- Woodstock Boundary
- Building
- Road
- Water

CFFDRS FBP Fuel Types

- Coniferous Fuels (C-1 thru C-6)
- Deciduous Fuels (D-1, D-2)
- Slash Fuels (S-1, S-2)
- Grass Fuels (O-1a, O-1b)
- Non-Fuel
- Water
- Mixedwood Fuels (M-1, M-2) 15 and 25% Conifer
- Mixedwood Fuel (M-1, M-2) 50 & 75% Conifer

Wildland Urban Interface (WUI) Training Available In Canada

Alberta

Alberta has a well rounded Wildland Urban Interface response and training program. Programs in Alberta are managed by the Alberta Emergency Management Agency. Instruction in Alberta is provided to departments at no cost taught by Alberta Wildland Urban Interface Teams and Specialists. The following are the descriptions of the Alberta Programs. Alberta programs are also available outside of the province provided by approved contract agencies. Contact the Alberta Emergency Management Agency for more information.

Alberta WUI Members Program

Foundational WUI program designed for the firefighter on the ground responding to Wildland Urban Interface Fires. This program is a theory and practical program concentrating on Fire behaviour, Fuels, Firefighter Safety and WUI tactics such as site preparation, sprinklers, and engine operations.

Alberta WUI Boss

Designed for Fire Department Officers, this program dives into Roles & Responsibilities, Safety & Risk Management, Operations, Administration & Documentation in the Wildland Urban Interface. Combined with mid-scale structure protection resource planning managing engine and sprinkler crews and enhanced tactical decision making.

Alberta Strike Team/Task Force Leaders

Secific issues related to structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students will be evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available.

Alberta Division/ Group Supervisor

Structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available. Safety is the primary focus while understanding the operating environment in which a DIVS may be deployed.

International Association of Firefighters (IAFF)

The IAFF provides a first responder Wildland Urban Interface Program called **Responding to the Interface (RTI)**.This program was funded by the federal government and is hosted through qualified IAFF Departments.

IAFF Responding to the Interface Program: This is a US based program concentrating on initial response to a WUI Event utilizing engines. The program, offered by IAFF departments covers, Structure Triage, Engine Operations and Tactics, Tactical Evacuations and Firefighter Safety.

https://www.alberta.ca/wildland-urban-interface-program

https://www.iaff.org/wildfire/training-canada/

Wildland Urban Interface (WUI) Training Available In Canada

British Columbia

British Columbia has a well established Structure Protection Program. Managed by the BC Wildfire service, courses are hosted in British Columbia at fire departments upon request. BC Wildfire also hosts a training summit each year.

SPP-115-Structure Protection Program

This course is intended for Fire Department personnel, and wildland firefighters. Participants learn exterior sprinkler application and other structure protection techniques utilizing FireSmart principles.

SPP-S231 - Engine Boss Program

Designed for Engine Officers, topics include position overview; pre-deployment responsibilities; concept of the position; pre-dispatch preparation; incident responsibilities; administration and reporting; supervision; response; assignment; demobilization; tactics and safety; risk management; entrapment avoidance; WUI; case studies; scenarios; and appropriate action vs. freelancing.

SPP-S339 Division/Group Supervisor

This course covers specific issues related to structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students will be evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available. Safety will be the primary focus while understanding the operating environment in which a DIVS may be deployed.

SPP-S330 Strike Team/Task Force Leader

A program covering the role of the Strike Team or Task Force Leader in BC WUI Operations. This course covers specific issues related to structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students will be evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available.

SPP-S280 Structure Protection Crew Leader

Designed for Structure Protection Crew leaders, Fire Department Officers and Provincial Single Resources, this course provides the foundational Leadership concepts centred around Roles & Responsibilities, Safety & Risk Management, Operations, Administration & Documentation in the Wildland Urban Interface. Combined with mid-scale structure protection resource planning and enhanced tactical decision making.

SPP-SPS

This classroom-based course introduces fire service leaders to the role and responsibilities of a Structure Protection Specialist (SPS). Participants will gain an understanding of how the SPS supports local, in-jurisdiction response during Wildland Urban Interface (WUI) incidents, including coordination, resource integration, and operational planning. The course also highlights the broader scope of the position by addressing non-fire assignments and program responsibilities undertaken when not deployed, such as training support, equipment readiness, and inter-agency coordination.

BC and Alberta Programs are cross border recognized as equivalent programs. The Alberta programs are also being used in the NWT and Manitoba. BC Programs are being utilized in the Yukon.

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/employment-and-contracts/bc-wildfire-service-fire-services/bcws-fire-services-training-opportunities

11.3. Appendix C: FireSmart™ Resources

The Seven Principles of FireSmart Canada

FireSmart is a national program that helps Canadians reduce the risk of wildfire to their homes and communities. It is based on **seven key disciplines** that work together to build wildfire resilience. A strong program addresses all seven, not just vegetation management.

1. **PRINCIPLE 1: Public Education.** Build awareness, understanding, and motivation for action. Residents learn how wildfires start, why embers are the greatest threat, and what actions they can take on their own property. **Examples:** Workshops, school programs, and homeowner guides.

2. **PRINCIPLE 2: Emergency Planning.** Ensure communities are prepared before wildfire threatens. This discipline focuses on life safety and continuity, including evacuation planning and alerting systems. **Examples:** Evacuation templates and response plans.

3. **PRINCIPLE 3: Vegetation Management.** Modify fuels to reduce fire intensity and spread. Key concepts include reducing ladder fuels, increasing tree spacing, and managing vegetation by distance zones. **Examples:** Pruning, thinning, and fuel breaks.

4. **PRINCIPLE 4: Legislation.** Embed wildfire risk reduction into enforceable rules to ensure sustainability. Legislation ensures FireSmart principles are consistent and not dependent on voluntary action alone. **Examples:** Burning by-laws and development regulations.

FireSmart™ Canada

#FireSmartCanada

Source: firesmartcanada.ca. Learn how to protect your home and community from wildfire risk.

The Seven Principles of FireSmart Canada

5 **PRINCIPLE 5: Development.** Prevent creation of new wildfire risk. This discipline integrates wildfire considerations into planning and growth, including road width, access, and turnaround design, water supply and hydrant placement, setbacks from forested areas, lot layout and building orientation. **Examples:** FireSmart subdivision design standards, risk-based development approvals and WUI overlays in municipal planning documents.

6 **PRINCIPLE 6: Interagency Coordination.** Break down silos between organizations. Wildfire resilience requires collaboration among government, NGOs, critical infrastructure owners, Indigenous governments and industry partners. **Examples:** Joint training and exercises, MOUs and Agreements, data and GIS sharing, coordinated fuel management.

7 **PRINCIPLE 7: Cross Training.** Ensure responders and partners understand each other's roles. Cross-training bridges the gap between structural and wildland firefighers, emergency managers, planners, foresters and engineers . **Examples:** WUI opertations training, structural protection and sprinkler systems, and ICS alignment between agencies.

Why It Matters

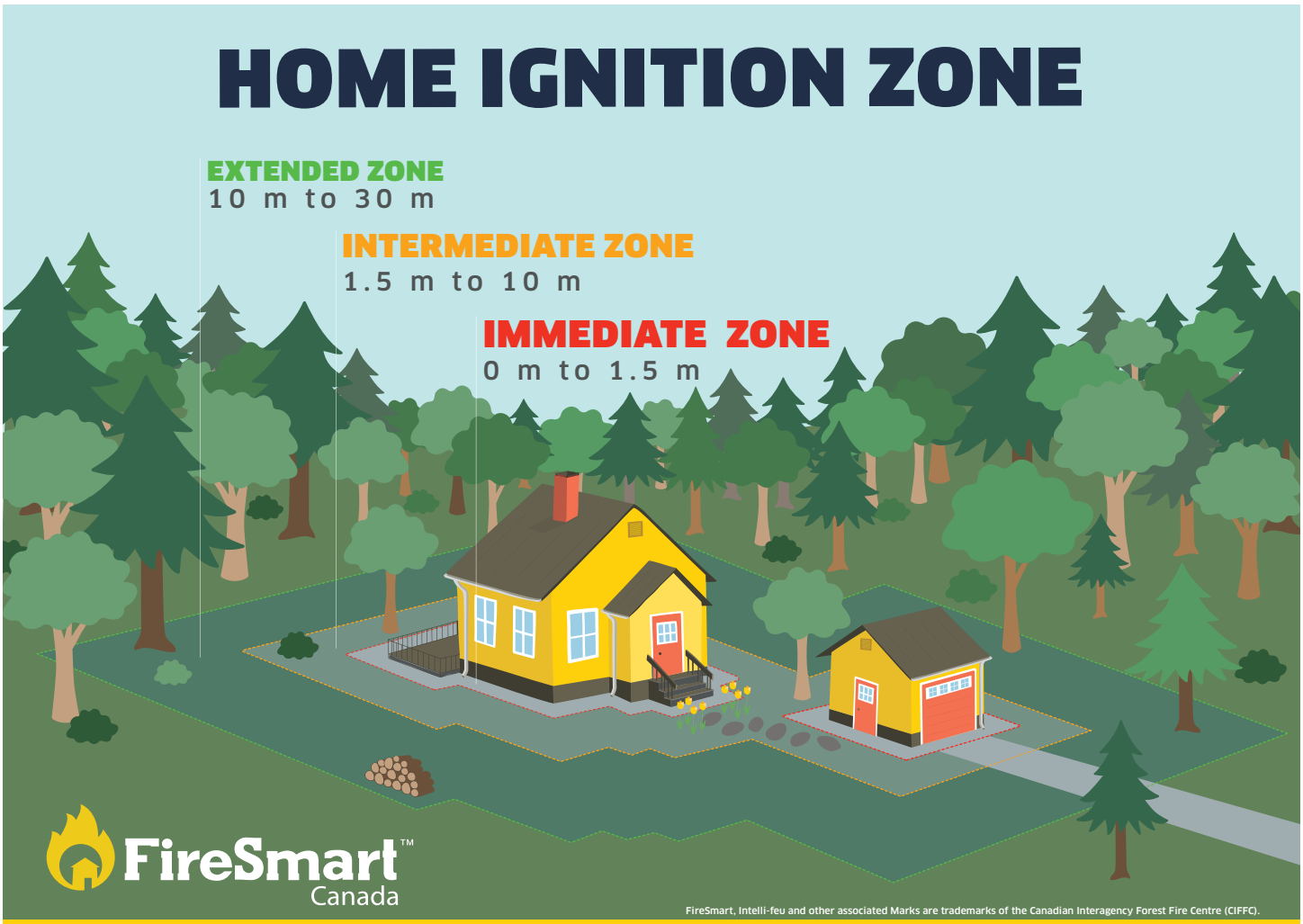
- Education drives voluntary compliance, reduces resistance to mitigation work, and creates long-term culture change.
- Even with mitigation, wildfire may still occur. Prepared communities evacuate faster, safer, and with less panic.
- Vegetation management reduces flame length, rate of spread, and radiant heat, making suppression safer and more effective.
- Without legislative backing, mitigation efforts can be undone by future development or land-use decisions.
- It is far cheaper and safer to build smart than to retrofit later.
- Wildfire does not respect jurisdictional boundaries. Unified planning leads to unified response.
- During wildfire, confusion costs time and safety. Shared training builds trust, competence, and operational efficiency.
- No single discipline works in isolation.

FireSmart is a comprehensive, science-based framework for living with wildfire, not fighting against it. It shifts communities from a reactive mindset to a proactive, resilient approach where wildfire impact is anticipated, reduced, and managed.

#FireSmartCanada

Source: firesmartcanada.ca. Learn how to protect your home and community from wildfire risk.

HOME IGNITION ZONE



THERE ARE MANY FACTORS THAT MAY IMPACT YOUR PROPERTY'S RISK TO WILDFIRE

Check out the *FireSmart Begins at Home Guide* for an in-depth look at how you can build wildfire resiliency.

YOU ARE NOW ENTERING THE IMMEDIATE ZONE

0m to 1.5m

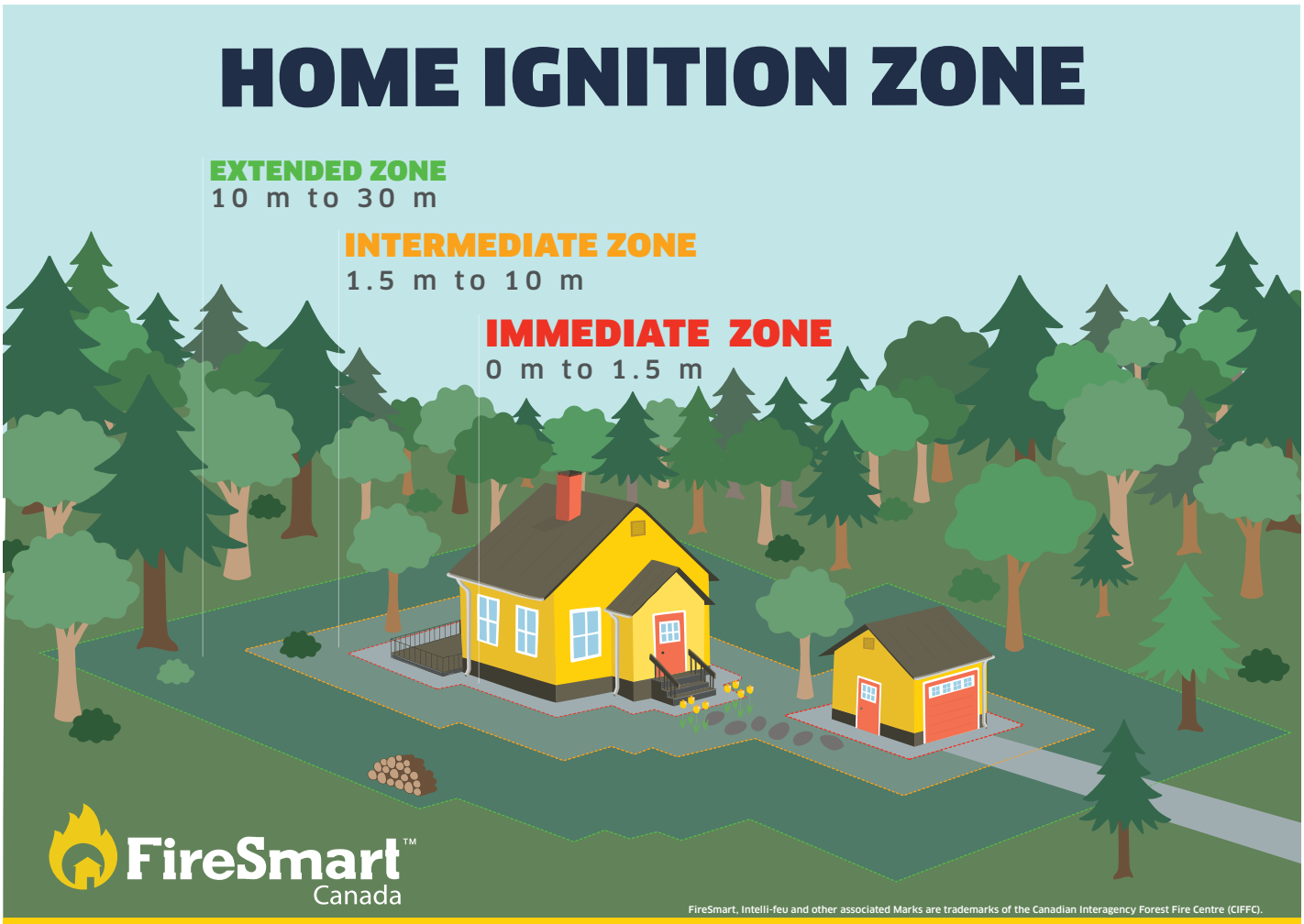
The Immediate Zone is a non-combustible area that starts at the house and extends to a 1.5 metre perimeter around the home and attached structures, including decks. Reduce the chance of wind-blown embers igniting your home by starting with these proactive steps:

- Choose non-combustible building materials when contrycting or renovating your home.
- Clear vegetation and combustible material down to mineral soil and cover with non-combustible materials like gravel, brick, or concrete.
- Avoid planting woody shrubs or trees. If any are present, prune and maintain them regularly.

Get started on your FireSmart journey!

WWW.FIRESMARTCANADA.CA

HOME IGNITION ZONE



THERE ARE MANY FACTORS THAT MAY IMPACT YOUR PROPERTY'S RISK TO WILDFIRE

Check out the *FireSmart Begins at Home Guide* for an in-depth look at how you can build wildfire resiliency.

YOU ARE NOW ENTERING THE INTERMEDIATE ZONE

1.5m to 10m

Elements in the Intermediate Zone are managed so they don't transmit fire to your home. Here are a few actions you can take to reduce your home's vulnerability:

- Plant fire-resistant vegetation and select non-combustible landscaping materials.
- Avoid incorporating any woody debris, including mulch.
- Keep combustible items like firewood piles, construction materials, patio furniture, tools, and decorative pieces out of this zone.
- Move trailers, recreational vehicles, storage sheds, and other combustible structures into the Extended Zone. If that is not possible, store firewood inside your mitigated garage, shed, or other ember-resistant structures.
- Create a non-combustible ground cover, like a gravel pad, underneath and 1.5 metres around trailers, recreational vehicles, and sheds.

Get started on your FireSmart journey!

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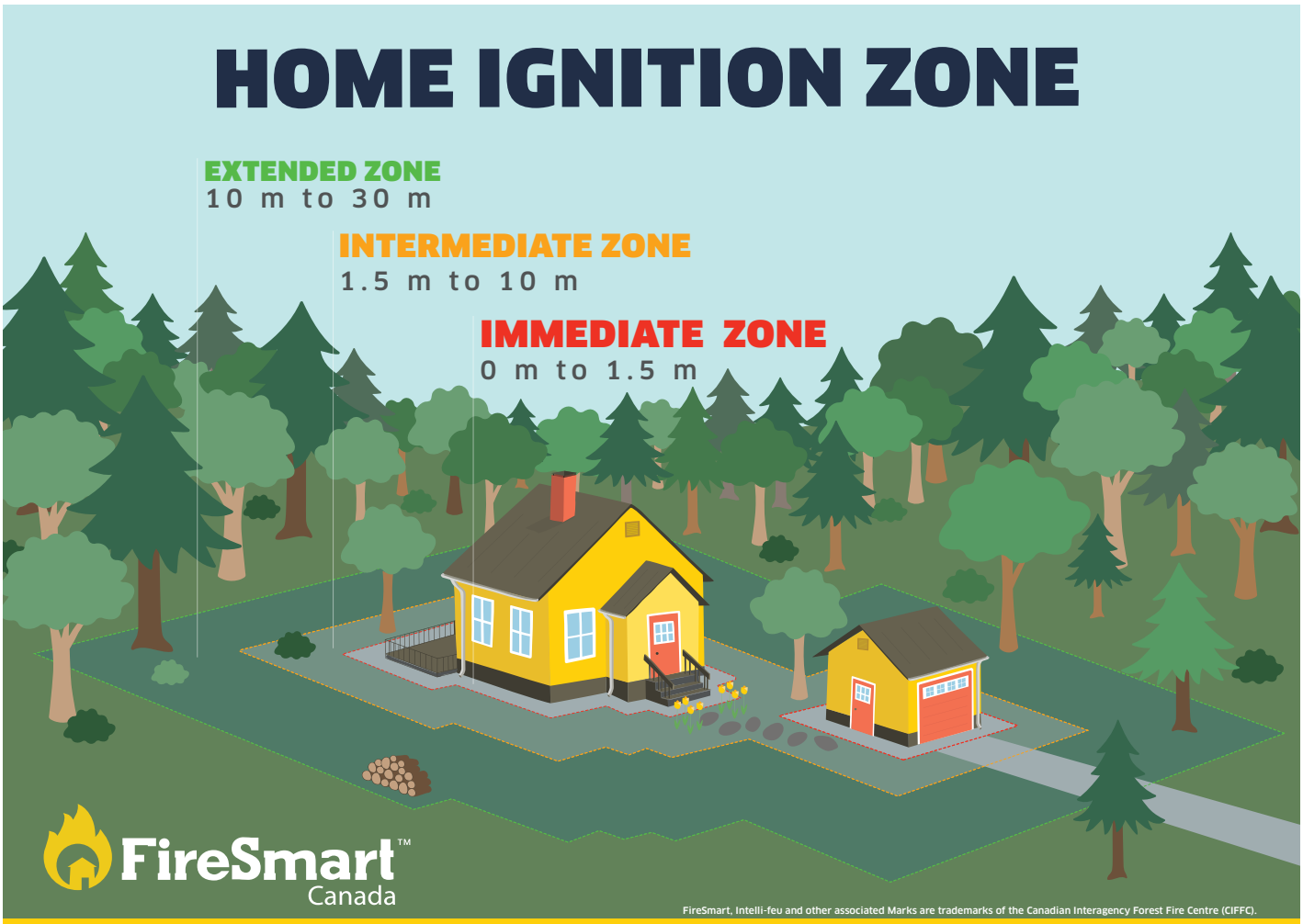
HOME IGNITION ZONE



THERE ARE MANY FACTORS THAT MAY IMPACT YOUR PROPERTY'S RISK TO WILDFIRE

Check out the *FireSmart Begins at Home Guide* for an in-depth look at how you can build wildfire resiliency.

YOU ARE NOW ENTERING THE EXTENDED ZONE

10m to 30m

The goal in the Extended Zone is not to eliminate fire, but to reduce its intensity. If your property extends into this zone, a few important steps you can take include:

- Selectively remove evergreen trees to create at least 3 metres of horizontal space between the single or grouped tree crowns.
- Remove all branches to a height of 2 metres from the ground.
- Regularly clean up accumulations of fallen branches, dry grass, and needles to eliminate potential surface fuels.
- Continue to apply these principles if your property extends beyond 30m. Work with your neighbours in overlapping zones and seek guidance of a forest professional if affected by other conditions, like steep slopes.

Get started on your FireSmart journey!

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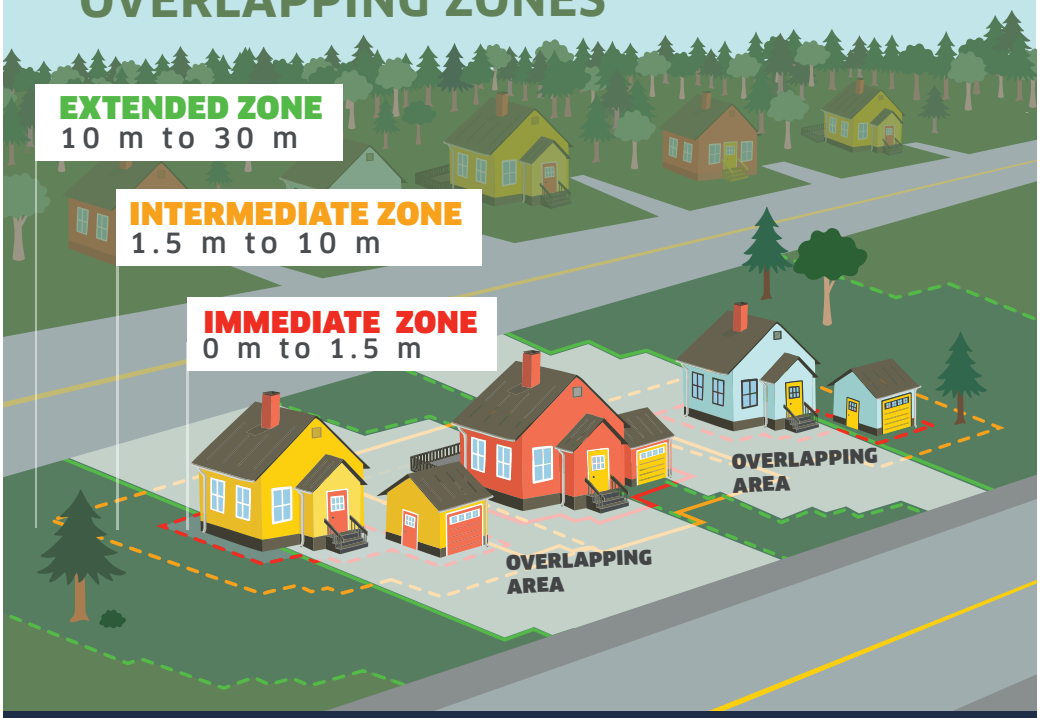
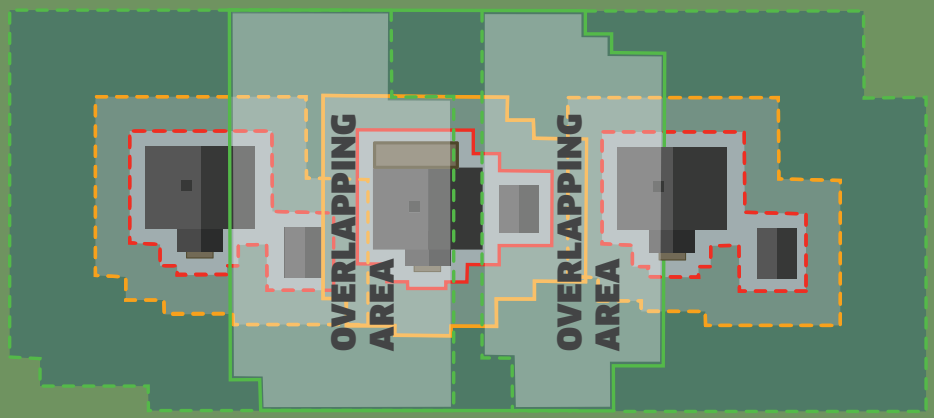
HOME IGNITION ZONE

FireSmart™ Canada

OVERLAPPING ZONES





Get started on your FireSmart journey!

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11.4. Appendix D: Fire Resistant Plant Species

MARITIME FIRESMART PLANT GUIDE

LEGEND INFORMATION			
PRIORITY ZONES			SUN USE
0-1.5M (Immediate)	Perenial/Annual or Ground Cover Only		FS — FULL SUN
1.5-10m (Intermediate)	Leafy trees, grasses and shrubs		PSH — PARTIAL SHADE
10-30M (Extended)	Needled trees		SH — SHADE
WATER USE CATEGORY			LOCAL, VISITOR OR INVASIVE
LOW	DROUGHT TOLERANT		NON — NON NATIVE
LOW-MEDIUM	WELL DRAINED SOILS		NATIVE — RESIDENT
MEDIUM	DOES NOT LIKE DRY SOIL		INVASIVE — SPREADS
MEDIUM-HIGH	LIKES WET FEET		HYBRID — MIX OF SPECIES
HIGH	LIKES POND LIFE		NA/NON — SPP. SOME NATIVE SOME NOT
(S)	SALT TOLERANT		

PLANTS WITHIN THIS GUIDE ARE MARITIME FRIENDLY

DISCLAIMER: No plants are fire-proof and this guide is meant to be general. Please take into consideration the risk of wildfire for your individual property and follow all FireSmart landscaping best practises. Visit: www.firesmartcanada.ca for more information.

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
SHRUBS							
Abelia mosanensis	Abelia	FS/PSH		0.2-3.5M	NON	LOW-MEDIUM	1.5-10M
Abeliophyllum distichum	White Forsythia	FS		2.5-3m	NON	LOW-MEDIUM	1.5-10M
Actaea rubra	Red Baneberry	FS-PSH	Pollinators	1m	NATIVE	LOW-MEDIUM	1.5-10M
Amelanchier canadensis	Canada Serviceberry	FS-PSH	Birds/Pollinators	8m	NATIVE	MEDIUM	1.5-10M
Amelanchier laevis	Smooth Serviceberry	FS-PSH	BIRDS	12m	NATIVE	MEDIUM	1.5-10M
Arctostaphylos uva-ursi	Common Bearberry	FS		1ft	NATIVE	LOW	1.5-10M

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
SHRUBS							
Aronia arbutifolia	Red Chokeberry	FS-PSH	Birds/Pollinators	1.8-3M	NATIVE	MEDIUM	1.5-10M
Aronia melanocarpa	Black Chokeberry	FS-PSH	Birds/Pollinators	1.8-3M	NATIVE	MEDIUM	1.5-10M
Berberis thunbergii	Barberry	FS		0.45-1.5M	INV	LOW	1.5-10M
Buddleia x	Butterfly Bush	FS		1-4M	NON	MEDIUM	1.5-10M
Calycanthus floridus	Carolina Allspice/Sweetshrub	FS/PSH		1.8-3.5M	NA	LOW-MEDIUM	1.5-10M
Caragana arborescens	Peashrub	FS/PSH	Pollinators	2-6M	NON	MEDIUM	1.5-10M
Cephalanthus occidentalis	Buttonbush	FS/PSH	Pollinators	1-3M	NATIVE	MEDIUM-HIGH	1.5-10M
Chaenomeles japonica	Flowering Quince	FS-PSH		0.6-3M	NON	MEDIUM	1.5-10M
Clethra alnifolia	Summersweet	FS-PSH	Pollinators	1-3M	NATIVE	LOW-MEDIUM	1.5-10M
Comptonia peregrina	Sweet Fern	FS		0.5-1.5M	NATIVE	LOW	1.5-10M
Cornus alternifolia	Pagoda Dogwood	FS		2.1-3M	NATIVE	MEDIUM	1.5-10M
Cornus sericea	Red Osier Dogwood	FS		2.1-3M	NATIVE	MEDIUM	1.5-10M
Cornus spp.	Dogwoods	FS		2.1-3M	NA/NON	MEDIUM	1.5-10M
Corylus avellana 'contorta'	Corkscrew Hazel	FS		1.2-2.4M	NON	LOW	1.5-10M
Corylus cornuta	Beaked Hazelnut	FS	ALL	1.2-2.4M	NATIVE	LOW	1.5-10M
Cotinus coggygria	Smokebush	FS		3-4.5M	NON	LOW	1.5-10M
Daphne caucausica	Caucasian Daphne	FS-PSH		0.6-1.2M	NON	MEDIUM	1.5-10M
Daphne mezereum	February Daphne	FS-PSH		0.6-1.2M	NON	MEDIUM	1.5-10M
Dasiphora (formerly Potentilla) fruticosa	Shrubby Cinquefoil/Potentilla	FS	Pollinators	0.1-1M	NATIVE	MEDIUM-HIGH	1.5-10M
Deutzia spp.	Deutzia	FS-PSH	Birds	0.5-3M	NON	LOW	1.5-10M
Diervilla lonicera	Bush Honeysuckle	FS-PSH	Birds	0.5-1M	NATIVE	LOW-MEDIUM	1.5-10M
Elaeagnus angustifolia	Russian Olive	FS	Birds	11M	INV	LOW	1.5-10M
Enkianthus campanulatus	Redvein Enkianthus	FS/PSH		2-4M	NON	MEDIUM	1.5-10M
Euonymus alatus	Burning Bush	FS-PSH		1.2-1.8M	INV	HIGH	1.5-10M
Exochordia x macrantha	Pearlbush	FS-PSH			NON	MEDIUM	1.5-10M

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
SHRUBS							
Forsythia spp.	Forsythia	FS		2.5-3M	NON	LOW-MEDIUM	1.5-10M
Fothergilla gardenii	Fothergilla	FS-PSH	Pollinators	1M	NON	LOW	1.5-10M
Halesia carolina	Silverbell	PSH		8M	NA	MEDIUM - HIGH	1.5-10M
Hamamelis spp.	Witch Hazel	FS-PSH		1.8-9M	INV	MEDIUM	1.5-10M
Heptacodium miconiodes	Seven Son Tree	PSH		4-9M	NON	LOW -MEDIUM	1.5-10M
Hibiscus syriacus	Rose of Sharon	FS-PSH	Pollinators	2.5-3.5M	NON	MEDIUM	1.5-10M
Hydrangea spp.	Hydrangea	FS-PSH		1.2-1.8M	NA	MEDIUM	1.5-10M
Hypericum kalmianum	St. John's Wort	FS-PSH		0.25m	NON	MEDIUM	1.5-10M
Ilex verticillata	Winterberry	PSH	Pollinators/Birds	1-5M	NATIVE	MEDIUM-HIGH	1.5-10M
Itea virginica	Sweetspire	FS-PSH	Pollinators	1-3M	NATIVE	MEDIUM-HIGH	1.5-10M
Kerria japonica	Kerria	PSH-FULL		1.5-3M	NON	MEDIUM	1.5-10M
Kolkwitzia amabilis	Beauty Bush	FS-PSH		2.4M	NON	MEDIUM	1.5-10M
Ligustrum spp.	Privet	FS-PSH		1.8-4.5M	INV	MEDIUM	1.5-10M
Lindera benzoin	Spice Bush	PSH-FULL	Pollinators/Birds	2-4M	NATIVE	MEDIUM	1.5-10M
Lonicera tatarica	Honeysuckle (shrub)	PSH	ALL	3M	INV	MEDIUM	1.5-10M
Morella pensylvanica	Northern Bayberry	FS	BIRDS	1-3m	NATIVE	LOW (S)	1.5-10M
Morus alba	Mulberry	PHS	BIRDS	10-20M	NON	MEDIUM	1.5-10M
Myrica gale	Bayberry	FS-PSH		2M	NATIVE	MEDIUM - HIGH	1.5-10M
Nandina domestica	Sacred Bamboo	PSH-FULL		1-3M	NON	MEDIUM	1.5-10M
Philadelphus spp.	Mockorange	FS-PSG	Pollinators	1.8-2.4M	NA/NON	MEDIUM	1.5-10M
Physocarpus opufolius	Ninebark	FS-PSH	Pollinators	1.5-3M	NATIVE	LOW-MEDIUM	1.5-10M
Prunus cistena	Sandcherry	FS-PSH		2-3M	NON	MEDIUM	1.5-10M
Prunus triloba	Flowering Almond	FS-PSH	Pollinators	2.5-4m	NON	MEDIUM	1.5-10M
Prunus virginiana	Chokecherry	FS-PSH	Pollinators	5.5-7.5M	NATIVE	MEDIUM	1.5-10M
Rhododendron groenlandicum	Labrador Tea	FS	Pollinators	0.2M	NATIVE	MEDIUM-HIGH	1.5-10M
Rhododendron spp.	Rhodora and Azaleas	FS-PSH		1.5M	NA/NON	HIGH	1.5-10M
Ribes alpinum	Flowering Currant	FS-PSH	Pollinators	0.9-1.8M	NON	LOW-MEDIUM	1.5-10M

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
SHRUBS							
Rosa spp.	Rose	FS-PSH	Pollinators	1.5-1.8M	NA/NON	LOW	1.5-10M
Rubus allegheniensis	Allegheny Blackberry	FS	Pollinators	2M	NATIVE	MEDIUM	10-30M
Rubus chamaemorus	Cloudberry	FS	Pollinators	1m	NATIVE	MEDIUM	1.5-30M
Rubus occidentalis	Black Raspberry	FS	Pollinators	2M	NATIVE	MEDIUM	10-30M
Rubus idaeus	Wild red Raspberry	FS	Pollinators	2m	NATIVE	LOW-MEDIUM	10-30M
Salix alba	Flame Willow	FS	Pollinators	1.8-4M	NON	LOW-MEDIUM	1.5-10M
Salix discolor	Pussy Willow	FS	Pollinators	1.8-6M	NATIVE	LOW-MEDIUM	1.5-10M
Salix integra	Dappled Willow	FS-PSH		1.8-6M	NON	LOW-MEDIUM	1.5-10M
Salix purpurea	Arctic Willow	FS-PSH		3-6M	NON	LOW-MEDIUM	1.5-10M
Salix repens	Creeping Willow	FS		1.5M	NON	MEDIUM-HIGH	1.5-10M
Sambucus canadensis	Black Elderberry	FS-PSH	Pollinators	1.5-9M	NATIVE	LOW	1.5-10M
Sambucus nigra	Elderberry	FS	Pollinators	6M	NON	MEDIUM	1.5-10M
Sambucus racemosa	Red Elderberry	FS	Pollinators	2-4M	NATIVE	MEDIUM	1.5-10M
Shepherdia canadensis	Buffaloberry	FS		1.8-3M	NATIVE	LOW	1.5-10M
Sorbaria sorbifolia	False Spirea	FS		1.5-2.5M	NON	LOW-MEDIUM	1.5-10M
Spiraea japonica	Spiraea	FS		1.5-2M	NON	LOW-MEDIUM	1.5-10M
Spiraea nipponica	Snowmound Spirea	FS		1.5-2M	NON	LOW-MEDIUM	1.5-10M
Spiraea tomentosa	Steeplebush	FS	Pollinators	1.5m	NATIVE	MEDIUM	1.5-10M
Spiraea x bumalda	Spiraea	FS		1.5-2M	NON	LOW-MEDIUM	1.5-10M
Spiraea x vanhouttei	Bridalwreath Spiraea	FS		1.5-2M	NON	LOW-MEDIUM	1.5-10M
Spirea alba	Meadowsweet	FS	Pollinators/Birds	1-1.5M	NATIVE	HIGH	1.5-10M
Stephanandra incisa	Stephanandra	FS-PSH		0.2-1M	NON	MEDIUM	1.5-10M
Symphoricarpos albus	Snowberry	FS-PSH		1-1.5M	NON	MEDIUM	1.5-10M
Symphoricarpos orbiculatus	Coralberry	FS-PSH		0.2-1.2M	NON	MEDIUM	1.5-10M
Syringa hybrids	Dwarf Lilac	FS		2.5-3.5M	NON	MEDIUM	1.5-10M
Syringa vulgaris	Lilac	FS		4-6M	NON	MEDIUM	1.5-10M

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
SHRUBS							
Vaccinium spp.	High/low Blueberry	FS-PSH	Pollinators/Birds	0.15 - 3.5M	NATIVE	LOW	1.5-10M
Viburnum carlesii	Korean Spice Viburnum	FS-PSH		1-2.5M	NON	MEDIUM	1.5-10M
Viburnum dentatum	Arrowood Viburnum	FS-PSH		2-3M	NATIVE	MEDIUM	1.5-10M
Viburnum lantana	Wayfaring Tree	FS-PSH		1-2.5M	NON	MEDIUM	1.5-10M
Viburnum lentago	Nannyberry Viburnum	FS-PSH	Pollinators/Birds	3.5-6M	NATIVE	MEDIUM	1.5-10M
Viburnum nudum var. cassinoide	Wild Raisin/Witherod Viburnur	FS-PSH	Pollinators/Birds	4M	NATIVE	MEDIUM	1.5-10M
Viburnum opulus	Snowball Viburnum	FS-PSH		1-2.5M	NON	MEDIUM	1.5-10M
Viburnum opulus var. Americanu	Highbush Cranberry	FS	Pollinators/Birds	1.8-2.5M	NATIVE	MEDIUM	1.5-10M
Viburnum plicatum tomentosum	Doublefile Viburnum	FS-PSH		1-2.5M	NON	MEDIUM	1.5-10M
Viburnum x bodnantense	Pink Dawn Viburnum	FS-PSH		1.5-3M	HYBRID	MEDIUM	1.5-10M
Viburnum x burkwoodii	Burkwoodii Viburnum	FS-PSH		1.5-3M	HYBRID	MEDIUM	1.5-10M
Viburnum x carlcephalum	Fragrant Snowball Viburnum	FS-PSH		1.5-3M	HYBRID	MEDIUM	1.5-10M
Weigela florida	Weigela	FS-PSH	Hummingbirds	1-2.5M	NON	LOW	1.5-10M
X Calycanthus	Sweetshrub hybrids	FS-PSH		1.5-3M	HYBRID	MEDIUM	1.5-10M
TREES							
Acer Palmatum	Japanese Maple	PSH	Pollinators	4.5-7.5m	NON	HIGH	10-30M
Acer rubrum	Red Maple	FS	Pollinators	15-20m	NATIVE	MEDIUM	10-30M
Acer saccharum	Sugar Maple	FS	Pollinators	25-35m	NATIVE	MEDIUM	10-30M
Alnus incana	Speckled Alder	FS		8M	NATIVE	MEDIUM	10-30M
Betula alleghaniensis	Yellow birch	FS		18-24m	NATIVE	MEDIUM	10-30M
Betula papyrifera	White birch	FS		20-40m	NATIVE	MEDIUM	10-30M
Betula populifolia	Gray Birch	FS		6-9m	NATIVE	MEDIUM	10-30M
Catalpa speciosa	Catalpa	FS		12-15m	NON	MEDIUM	10-30M
Fagus grandifolia	American Beech	FS		15-18m	NATIVE	HIGH	10-30M
Fraxinus nigra	Black Ash	FS		12-18m	NON	MEDIUM	10-30M
Fraxinus americana	White Ash	FS		12-18m	NATIVE	MEDIUM	10-30M

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
TREES							
Ginkgo biloba	Ginkgo	FS		15-25m	NON	MEDIUM	10-30M
Gymnocladus dioicus	Kentucky Coffee Tree	FS		12-15m	NON	MEDIUM	10-30M
Juglans cinerea	Butternut	FS		12-18m	NON	MEDIUM	10-30M
Laburnum watereri	Golden Chain Tree	FS-PSH		3.5-4.5m	NON	MEDIUM	10-30M
Liriodendron tulipifera	Tulip Tree	FS	Pollinators	21-27m	NON	HIGH	10-30M
Malus spp.	Crab Apple	FS	Pollinators	4.5-6m	NATIVE	LOW-MEDIUM	10-30M
Ostrya virginiana	Hop Hornbeam	FS-PSH	Birds	15m	NATIVE	LOW	10-30M
Populus tremuloides	Trembling Aspen	FS-PSH	Pollinators	9-12m	NATIVE	MEDIUM HIGH	10-30M
Prunus serotina	Black Cherry	FS	Pollinators/Birds	20m	NATIVE	MEDIUM	10-30M
Quercu rubra	Red Oak	FS		18-23m	NATIVE	MEDIUM	10-30M
Quercus macrocarpa	Bur Oak	FS		21-24m	NON	MEDIUM	10-30M
Rhus typhina	Staghorn Sumac	FS-PSH		4.5-7.5m	NATIVE	MEDIUM	10-30M
Salix babylonica	Weeping Willow	FS	Pollinators	20-25m	NATIVE	HIGH	30M
Sorbus americana	Mountain Ash	FS-PSH	Pollinators	10m	NATIVE	MEDIUM	10-30M
Tilia americana	Basswood	FS-PSH	Pollinators	20m	NATIVE	MEDIUM	10-30M
Tilia spp.	Linden	FS	Pollinators	18-20m	NON	MEDIUM	10-30M
FLOWERS							
Achillea millifolium	Yarrow	FS	Pollinators	0.3-1m	NATIVE	LOW	0-1.5m
Anaphalis margaritacea	Pearly Everlasting	FS	Butterfly	1ft	NATIVE	LOW	0-1.5M
Asclepias incarnata	Swamp Milkweed	FS	Pollinators	1.5m	NATIVE	MEDIUM-HIGH	10-30M
Aquilegia spp.	Columbine	FS-PSH	Birds	1.5ft	NATIVE	LOW	0-1.5M
Eutrochium maculatum	Spotted Joe Pye Weed	FS	Pollinators	1.8m	NATIVE	MEDIUM-HIGH	0-1.5M
Geranium spp.	Geranium	FS		1ft	NATIVE	MEDIUM	0-1.5M
Lobelia spp.	Lobelia	FS	Birds	1.5m	NA/NON	MEDIUM	0-1.5M
Maianthemum spp.	Solomons Seal	PSH		2ft	NA/NON	MEDIUM	0-1.5M
Penstemon spp.	(Foxglove) Penstemon	FS-PSH	Birds	1.2m	NON	MEDIUM	0-1.5M

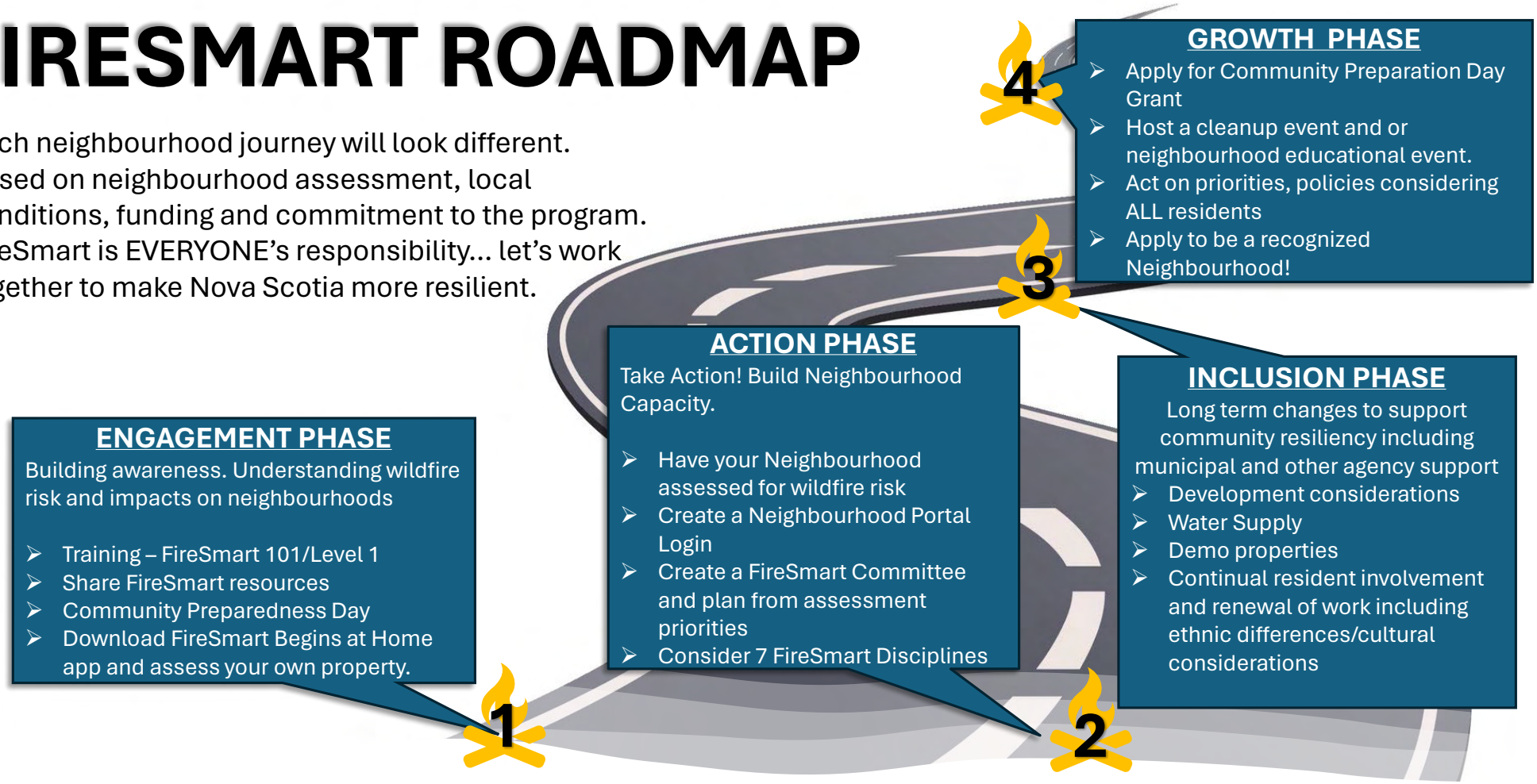
LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
FLOWERS							
Rudbeckia spp.	Black Eyed Susan	FS	Pollinators	2.2m	NA/NON	LOW-MEDIUM	0-1.5M
Symphyotrichum spp.	Aster	FS	Butterfly	1m	NA/NON	MEDIUM	0.1.5m
Verbena spp.	Verbena (hastata native)	FS	Pollinators	1.8m	NON	HIGH	0-1.5M
PERENNIALS IN GENERAL	Are fire resistant depending on watering but pose little to no threat to structures						0-1.5m
ANNUALS IN GENERAL	Are fire resistant depending on watering but pose little to no threat to structures						0-1.5m
GROUND COVER							
Ajuga reptans	Ajuga	SH/PSH		0.2ft	NATIVE	MEDIUM	0-1.5M
Anemonastrum canadense	Canada Anemone	PSH		1.5ft	NATIVE	MEDIUM	0-1.5M
Arctostaphylos uva-ursi	Bearberry	FS-PSH		0.2ft	NATIVE	LOW	0-1.5M
Asarum canadense	Canada Wild Ginger	FS-PSH		0.5ft	NATIVE	MEDIUM-HIGH	0-1.5M
Berberidaceae	Epimedium	SH/PSH		0.2ft	NATIVE	LOW	0-1.5M
Calluna Vulgaris	Heath/Heather	FS-PSH		0.2ft	NATIVE	LOW	1.5-10M
Eurybia macrophylla	Large Leaved Aster	PSH		1ft	NATIVE	LOW	0-1.5M
Fragaria virginiana	Virginia Strawberry	FS-PSH		0.5ft	NATIVE	LOW-MEDIUM	0-1.5M
Gaultheria procumbens	Eastern Teaberry	PSH		0.5ft	NATIVE	MEDIUM	0-1.5M
Halerpestes cymbalaria	Seaside Buttercup	FS	Pollinators	0.5FT	NATIVE	HIGH (S)	1.5-10M
Matteuccia struthiopteris	Ostrich Ferns	PSH		1.5m	NATIVE	MEDIUM	0-1.5M
Pachysandra	Pachysandra	SH/PSH		0.2ft	NATIVE	LOW-MEDIUM	0-1.5M
Phlox stolonifera	Creeping Phlox	FS-PSH		0.2ft	NATIVE	LOW-MEDIUM	0-1.5M
Rhodiola rosea	Roseroot	FS		0.5ft	NATIVE	LOW (S)	0-1.5M
Sedum & Hylotelephium	Creeping Sedums	FS-PSH		0.2ft	NATIVE	LOW	0-1.5M
Tiarella cordifolia	Heart Leaved Foamflower	FS		1ft	NATIVE	MEDIUM	0-1.5M
Thymus	Creeping Thyme	FS		0.2ft	NATIVE	LOW	0-1.5M
Viola palustris	Yellow Marsh Marigold	PSH		1.5ft	NATIVE	HIGH	0-1.5M
Viola pubescens	Downy Yellow Violet	PSH	Butterfly	1FT	NATIVE	MEDIUM	0-1.5M
Zizia aurea	Golden Alexanders	FS-PSH	Butterfly	1m	NATIVE	LOW	0-1.5M

LATIN NAME	COMMON NAME	SUN SHADE	ATTRACTS	HEIGHT	NATIVE NON INV	WATER USE (See Legend) (s) - Salt Tolerant	PLACEMENT WITHIN HOME IGNITION ZONE
VINES							
Apios americana	American Groundnut	FS	Butterfly	3m	NATIVE	MEDIUM	10-30M
Asclepias tuberosa	Butterfly Milkweed	FS	Butterfly	1m	NATIVE	LOW-MEDIUM	10-30M
Celastrus scandens	Climbing Bittersweet	FS		5m	NATIVE	MEDIUM	10-30M
Clematis virginiana	Virginia Clematis	FS-PSH		5m	NATIVE	LOW-MEDIUM	10-30M
GRASSES							
Andropogon, Carex, Polystichum, Panicum, Hybrid Calamagrostis, Elymus	Sedge, Ferns, Switchgrass, Bluestem, Feather Reedgrass, Wild Rye	FS		0.5-1.5m	NA/NON	LOW-MEDIUM	1.5-10M

11.5. Appendix E: FireSmart™ Road Map

FIRESMART ROADMAP

Each neighbourhood journey will look different. Based on neighbourhood assessment, local conditions, funding and commitment to the program. FireSmart is EVERYONE's responsibility... let's work together to make Nova Scotia more resilient.



For more information on the FireSmart Program and it's fit into your wildfire resiliency plan Visit www.firesmartcanada.ca for more information.

11.2 Appendix B

Wildland Urban Interface (WUI) Training Available In Canada

Alberta

Alberta has a well rounded Wildland Urban Interface response and training program. Programs in Alberta are managed by the Alberta Emergency Management Agency. Instruction in Alberta is provided to departments at no cost taught by Alberta Wildland Urban Interface Teams and Specialists. The following are the descriptions of the Alberta Programs. Alberta programs are also available outside of the province provided by approved contract agencies. Contact the Alberta Emergency Management Agency for more information.

Alberta WUI Members Program

Foundational WUI program designed for the firefighter on the ground responding to Wildland Urban Interface Fires. This program is a theory and practical program concentrating on Fire behaviour, Fuels, Firefighter Safety and WUI tactics such as site preparation, sprinklers, and engine operations.

Alberta WUI Boss

Designed for Fire Department Officers, this program dives into Roles & Responsibilities, Safety & Risk Management, Operations, Administration & Documentation in the Wildland Urban Interface. Combined with mid-scale structure protection resource planning managing engine and sprinkler crews and enhanced tactical decision making.

Alberta Strike Team/Task Force Leaders

Secific issues related to structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students will be evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available.

Alberta Division/ Group Supervisor

Structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available. Safety is the primary focus while understanding the operating environment in which a DIVS may be deployed.

International Association of Firefighters (IAFF)

The IAFF provides a first responder Wildland Urban Interface Program called **Responding to the Interface (RTI).**This program was funded by the federal government and is hosted through qualified IAFF Departments.

IAFF Responding to the Interface Program: This is a US based program concentrating on initial response to a WUI Event utilizing engines. The program, offered by IAFF departments covers, Structure Triage, Engine Operations and Tactics, Tactical Evacuations and Firefighter Safety.

https://www.alberta.ca/wildland-urban-interface-program

https://www.iaff.org/wildfire/training-canada/

Wildland Urban Interface (WUI) Training Available In Canada

British Columbia

British Columbia has a well established Structure Protection Program. Managed by the BC Wildfire service, courses are hosted in British Columbia at fire departments upon request. BC Wildfire also hosts a training summit each year.

SPP-115-Structure Protection Program

This course is intended for Fire Department personnel, and wildland firefighters. Participants learn exterior sprinkler application and other structure protection techniques utilizing FireSmart principles.

SPP-S231 - Engine Boss Program

Designed for Engine Officers, topics include position overview; pre-deployment responsibilities; concept of the position; pre-dispatch preparation; incident responsibilities; administration and reporting; supervision; response; assignment; demobilization; tactics and safety; risk management; entrapment avoidance; WUI; case studies; scenarios; and appropriate action vs. freelancing.

SPP-S339 Division/Group Supervisor

This course covers specific issues related to structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students will be evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available. Safety will be the primary focus while understanding the operating environment in which a DIVS may be deployed.

SPP-S330 Strike Team/Task Force Leader

A program covering the role of the Strike Team or Task Force Leader in BC WUI Operations. This course covers specific issues related to structure protection design and the use of strike teams and task forces to protect communities from wildfires. Students will be evaluated and present their reasoning for tactical operations based on safety zones, expected fire behaviour, water supplies, interface environment, and resources available.

SPP-S280 Structure Protection Crew Leader

Designed for Structure Protection Crew leaders, Fire Department Officers and Provincial Single Resources, this course provides the foundational Leadership concepts centred around Roles & Responsibilities, Safety & Risk Management, Operations, Administration & Documentation in the Wildland Urban Interface. Combined with mid-scale structure protection resource planning and enhanced tactical decision making.

SPP-SPS

This classroom-based course introduces fire service leaders to the role and responsibilities of a Structure Protection Specialist (SPS). Participants will gain an understanding of how the SPS supports local, in-jurisdiction response during Wildland Urban Interface (WUI) incidents, including coordination, resource integration, and operational planning. The course also highlights the broader scope of the position by addressing non-fire assignments and program responsibilities undertaken when not deployed, such as training support, equipment readiness, and inter-agency coordination.

BC and Alberta Programs are cross border recognized as equivalent programs. The Alberta programs are also being used in the NWT and Manitoba. BC Programs are being utilized in the Yukon.

https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/employment-and-contracts/bc-wildfire-service-fire-services/bcws-fire-services-training-opportunities

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