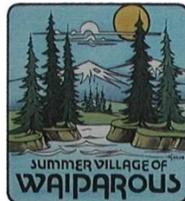


Summer Village of Waiparous Wildfire Mitigation Strategy Review



**Prepared for:
Summer Village of Waiparous**



February 2018

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1 Introduction

The Summer Village of Waiparous has been implementing FireSmart mitigation measures with their partners Alberta Wildfire Management, based on the findings and recommendations from FireSmart plans developed in 2008 and updated in 2013. The need to review and update the plan has been identified based on the accomplishment of many of the recommendations in the latest plan.

The objectives of the Summer Village of Waiparous Wildfire Mitigation Strategy Review are to:

- Update the wildfire hazard assessment
- Review FireSmart mitigation accomplishments
- Set new FireSmart implementation priorities for the next 3 to 5-year period

This review updates the wildfire hazard assessment and provides findings and accomplishments and updated recommendations for each of the seven-disciplines of wildland/urban interface.

1. Vegetation Management
2. Development
3. Legislation
4. Public Education and Engagement
5. Inter-Agency Cooperation
6. Cross-Training
7. Emergency Planning

Implementation of FireSmart mitigative options will **reduce** the threat of wildfire to structures however it will never **remove** the threat.

This plan should be reviewed and updated at approximately **five-year intervals** to ensure it is based on current conditions.

2 Planning Area

The Summer Village of Waiparous is a wildland/urban interface community. The term “wildland/urban interface” is used to define areas where combustible wildland fuels are found adjacent to human development and wildfires have the potential to interact with that development (PIP, 2003).

The planning area includes all lands within and a two-kilometre buffer surrounding the Summer Village boundary however recommendations are only for lands within the Summer Village. Land ownership within the Summer Village includes private and municipal lands.

The Summer Village has development authority and structural and wildland fire jurisdiction for all lands within the boundary. Alberta Wildfire Management holds the wildland fire jurisdiction for lands outside the Summer Village boundary.

3 Hazard Assessment

Wildfire behaviour potential is used to quantify wildfire hazard within and surrounding the Summer Village of Waiparous and can be used to identify and prioritize areas for FireSmart mitigation. Wildfire behaviour potential will require regular revision based on changes to wildland vegetation conditions within and surrounding the Summer Village.

Wildfire behaviour potential uses provincial weather data and wildland fuel types (Map 1) to analyze probable wildfire behavior potential and threat to development from direct flame impingement, radiant heat, and/or short and long-range ember transport (Beverly, 2010).

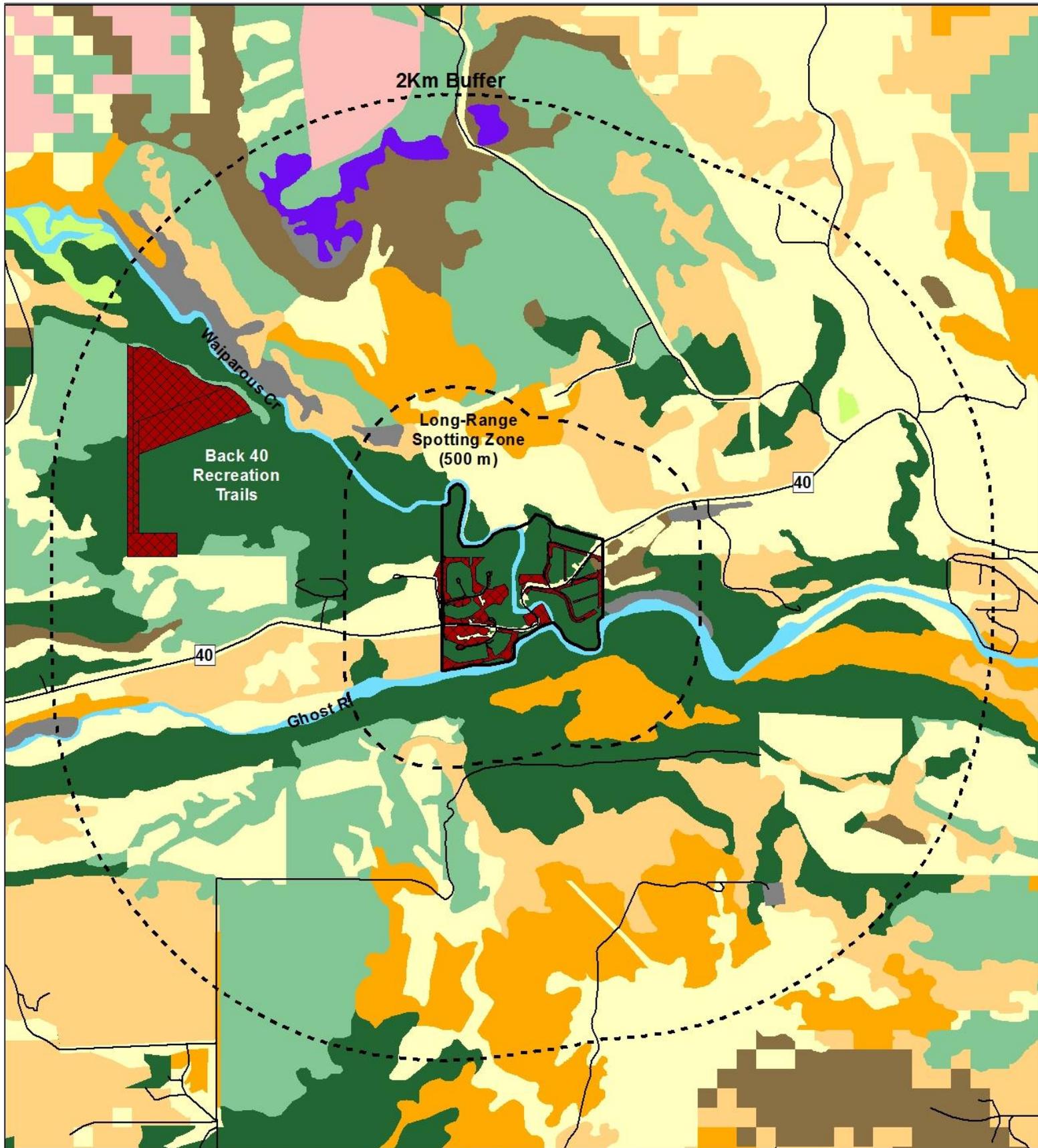
- Fire weather data for a twenty-year period from Mockingbird Lookout is used to determine average number of “spread-event days” per year and the predominant wind direction and speed on those days. A “spread-event” day is defined as “a day when the fire actively spreads with high intensity” which corresponds to a Fire Weather Index value of 19 or higher (Very High or Extreme fire danger) (Podur & Wotton, 2011).
- Fuel types from the provincial Fire Behaviour Prediction (FBP) (Taylor et.al., 1997) fuel grid and Alberta Vegetation Inventory (AVI2FBP) were used. New fuel type changes not reflected on the existing fuel type layers, including FireSmart fuel reduction areas, were added from satellite imagery analysis and field inspection. Wildfire behaviour potential does not account for the individual FireSmart vegetation management work completed by residents on their own lots.

Wildfire Behaviour Potential (Map 2) for Wildland Fuel Types

Wildland Fuel Type	Wildfire Behaviour Potential
Mature Spruce (C-2)	Extreme
Mature Pine (C-3)	Extreme
Immature Pine (C-7)	High
Mixedwood >50% Coniferous (M-1CD)	High
Mixedwood <50% Coniferous (M-1DC)	Moderate
Open Coniferous (C-1)	Moderate
Slash (S-1/S-2)	Moderate
Cured-Grass (O1)	Moderate
Deciduous (D-1)	Low

Wildfire behaviour potential analysis indicates:

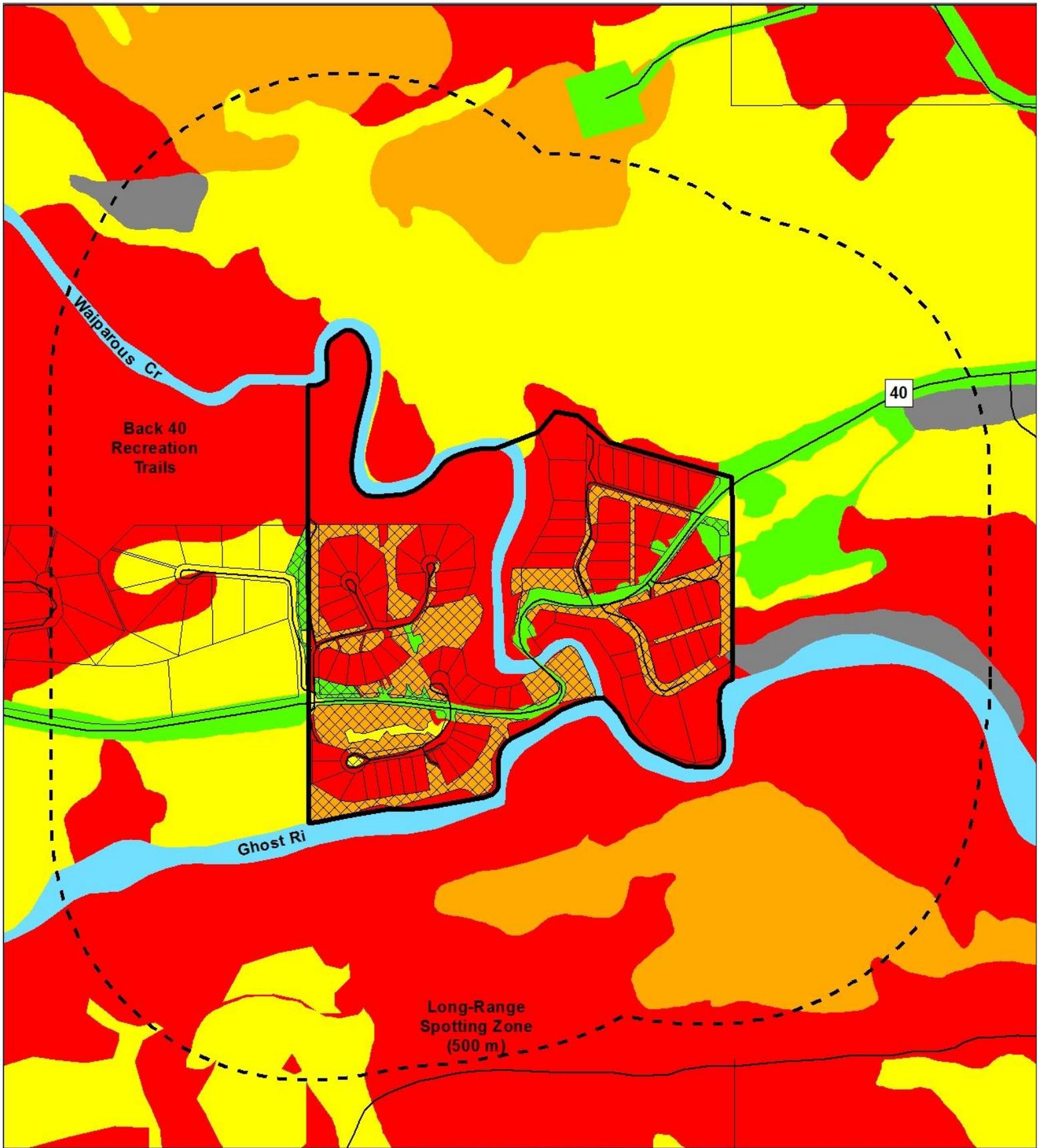
- There are approximately 15 days per year with Very High or Extreme fire danger levels and winds on those days are predominantly from the southwest and west.
- Wildland fuels:
 - Within the Summer Village consist of residential development intermixed with mature spruce and scattered patches of cured-grass. FireSmart fuel reduction conducted by the Summer Village and resident fuel reduction on private lots reduces wildfire behaviour potential on those areas.
 - Within the long-range spotting zone (500 metres) (Beverly, 2010) consist of mature spruce and mixedwood with the ability to produce extreme wildfire behaviour including short and long-range ember spotting, and patches of cured-grass and deciduous fuels that present moderate to low wildfire behaviour potential.
 - Out to the two-kilometre boundary consist of a mixture of mature spruce/pine and mixedwood with the ability to produce high and extreme wildfire behaviour potential and native grass, slash, and deciduous fuels that present moderate to low wildfire behaviour potential. The FireSmart vegetation management conducted on the “Back 40” in 2017 provides a significant reduction in wildfire behaviour potential to the west of the Summer Village.



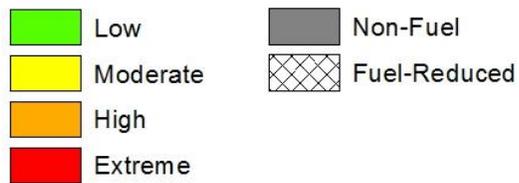
Map 1 - Wildland Fuel Types

- | | | |
|---|---|---|
|  Open Spruce (C-1) |  Deciduous (D-1) |  Cured-Grass (O-1) |
|  Mature Spruce (C-2) |  Mixedwood >50% Coniferous (M-1CD) |  Slash (S-1) |
|  Mature Pine (C-3) |  Mixedwood <50% Coniferous (M-1DC) |  Fuelbreak |
|  Open Pine/Fir (C-7) |  Non-Fuel (NF) | |





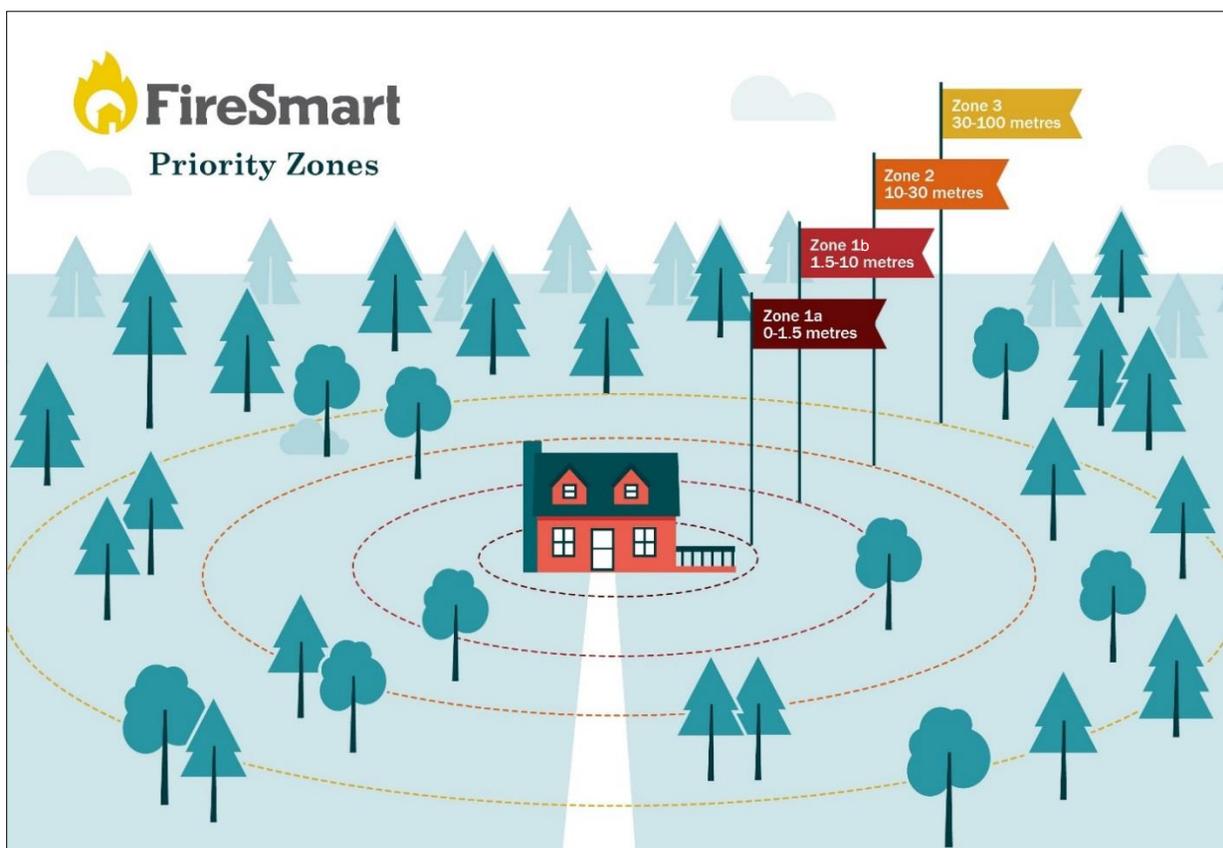
Map 2 - Wildfire Behaviour Potential



4 Vegetation Management Options

The goal of vegetation management is to create a fuel-reduced buffer between structures and flammable wildland vegetation to reduce the intensity and rate of spread of wildfire approaching or leaving the development. Vegetation management options are proposed to reduce the threat of wildfire to developed areas however **they do not ensure structure survival under all hazard conditions.**

FireSmart standards refer to three interface priority zones with vegetation management for interface structures recommended in Zones 1 and 2 at a minimum and in Zone 3 based on hazard and risk (PIP, 2003).



FireSmart Priority Zones

Priority Zone 1 is the area extending from the structure a minimum of 10 metres in all directions and is separated into Priority Zone 1a and 1b. Priority Zone 1a is the non-combustible zone 1.5 metres out from the structure and any attachments such as decks or porches. Priority Zone 1b is the area from 1.5 metres out to 10 metres from the structure.

FireSmart recommended guidelines recommend **removal or conversion** of all combustible wildland fuels with the objective to **create an environment that will not support any wildfire.**

FireSmart **Priority Zone 1** vegetation management options to reduce the wildfire threat to structures may include:

- **Removal** of all flammable forest vegetation in the immediate area of the structure and **reduction** of flammable forest vegetation away from the immediate area of the structure
- **Pruning** of all limbs to a minimum height of 2 metres from ground level on residual evergreen trees
- **Establishment** of a non-combustible surface cover around the structure **including removal of flammable ornamental landscaping species and bark mulch**
- **Removal** of all dead and down forest vegetation
- **Removal** of all combustible material piles (firewood, lumber, etc.) within 10 metres of the structure
- Regular **maintenance** to ensure that all combustible needles and leaves are removed and annual grasses are mowed to less than 10 centimetres

Priority Zones 2 and 3 are the areas beginning 10 metres from the structure and extending to 30 metres (Zone 2) and 100 metres or farther (Zone 3). FireSmart guidelines recommend **reduction** of combustible wildland fuels in Zones 2 and 3, based on hazard and risk, with the objective to **create an environment that will only support fires of lower intensity and rate of spread.**

Structures in forested areas should treat Zone 2 (10-30m) at a minimum while those structures with High/Extreme hazard levels resulting from heavy continuous evergreen forest and/or steep topography should be treated in Zones 2 and 3 (10-100m).

FireSmart **Priority Zone 2-3** vegetation management options include:

- **Thinning and/or removal** of flammable forest vegetation
- **Pruning** of all limbs to a minimum height of 2 metres from ground level on residual evergreen trees
- **Removal** of all dead and down forest vegetation from the forest floor
- Regular **maintenance** to ensure that all flammable regrowth, dead and down and dead standing are removed

4.1 Priority Zones 1-2

Many of the residential lots have been fuel-reduced by residents however most do not meet FireSmart recommended guidelines and some have not been treated at all. Additional vegetation management needs include:

- Establishment of a non-combustible surface cover surrounding the structure including removal of bark-mulch and maintenance of native-grasses
- Removal of all coniferous trees within 2 metres of and/or overhanging structures and wide spacing of any coniferous trees within 2-10 metres from structure
- Move all combustible firewood and debris piles a minimum of 10 metres from structures



Adequate Priority Zone 1 Standards



Native-Grass Next to Structure



Bark Mulch Next to Structure

Recommendations for resident education on Priority Zone 1-2 vegetation management are provided Section 6.

4.2 Priority Zones 2-3

4.2.1 Completed Vegetation Management

The Summer Village of Waiparous and Alberta Wildfire Management have worked together to complete a total of approximately 13 hectares of FireSmart vegetation management on Municipal and Provincial lands of which 12 hectares were fuel reduction thin/prune/clean and 1 hectare was hazard reduction burning of native grass (Map 3).

Additional thinning to reduce green coniferous stem density is recommended to further reduce wildfire behaviour potential and is discussed in Section 4.2.2 – Proposed Vegetation Management.



Adequate Priority Zone 2-3 Fuel Reduction Behind Community Services Bldg.



Additional Thinning Recommended

4.2.2 Proposed Vegetation Management

New FireSmart fuel reduction has been identified on Municipal, Provincial, and private lands and additional thinning is recommended for several of the completed blocks (Map 3). One additional area has been identified for hazard reduction burning.

Proposed vegetation areas in this plan are conceptual at this time and require detailed field reconnaissance and prescription development prior to implementation.

Fuel reduction is proposed for the Municipal land on the west-side of Waiparous Creek and for the Provincial land on the east-side of Waiparous Creek. Both of these blocks are steep with some inoperable sections. Detailed prescription planning will identify fuel modification method, fuel reduction standards, inoperable portions, and block boundaries. Fuel reduction is also proposed on the road allowance in the northwest corner of the Summer Village adjacent to the proposed future “Back 40” fuel reduction project.

Fuel reduction is proposed for a minimum 40-metre wide strip on the private lot in the northwest corner of the Summer Village to reduce the threat of wildfire entering the community from the north and northwest. Landowner permission will be required and the community members could complete the work during their annual FireSmart Community Recognition events.

Several of the completed fuel reduction projects require additional thinning of coniferous stems to further reduce stand density. First-pass thinning of completed blocks consisted of light thinning of green coniferous stems to reduce blowdown potential and removal of all dead and down and ladder fuels. Additional thinning should focus on smaller diameter coniferous stems to provide wider spacing between residual stems.

The grassy area on the south-facing slope behind the Community Services Building and above Wildrose Place could be a location for hazard reduction burning to reduce the threat of grass fire ignition within the community.



New Proposed Vegetation Management Area on West-Side of Waiparous Creek



Additional Thinning Recommended in Completed Block



Proposed Hazard Reduction Burn Area Above Wildrose Place

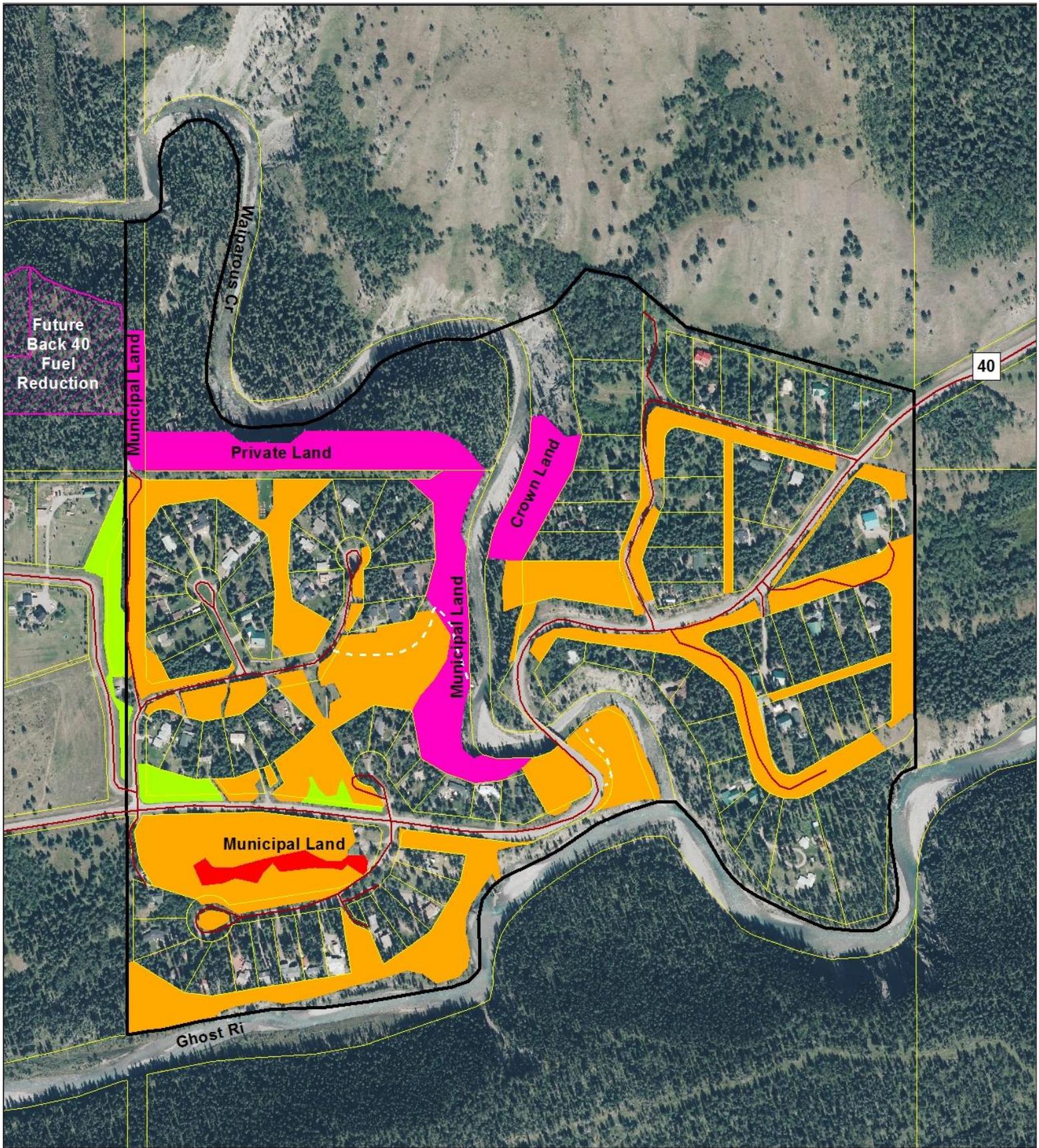
Recommendation 1: Complete proposed Zone 2-3 fuel reduction and hazard reduction burning on Municipal and Provincial lands and begin additional thinning of the completed fuel reduction blocks where required. Consider conducting fuel reduction on the private-land area in the northwest corner of the Summer Village.

4.3 Vegetation Management Maintenance

Maintenance of the completed fuel reduction blocks is not required at this time except for the recommended additional thinning.

All hazard reduction burn areas should be inspected and re-burned to limit native-grass growth.

Recommendation 2: Conduct regular inspections of all completed fuel reduction blocks and hazard reduction burn areas and implement maintenance for those that require it.



Map 3 - Vegetation Management

- Completed Fuel Reduction
- Completed Hazard Reduction Burn

- Proposed Fuel Reduction
- Proposed Hazard Reduction Burn



5. Development and Legislation Options

Consideration of wildfire at the development planning stage is encouraged to ensure that wildfire hazard is identified and the appropriate mitigation measures are implemented prior to and/or during development. FireSmart recommended guidelines for structural and infrastructure options may be implemented through resident education and engagement and through adoption of development legislation and policy that recognizes FireSmart principles for new and existing developments.

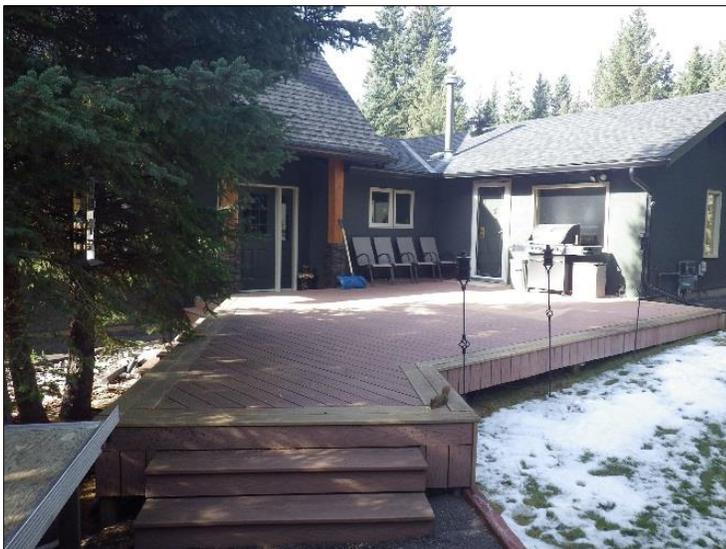
Fire-resistant exterior structure products are becoming more common in interface community development and reduce the losses during interface wildfires (CAL-FIRE, 2011). The Fort McMurray (2016) wildfire provided excellent information on the need for fire-resistant exterior structure materials in interface communities to reduce the likelihood of structure ignition from airborne firebrands and/or radiant heat (Westhaver, 2017).

5.1 Exterior Structural Materials

Roofing materials are primarily ULC-rated asphalt shingle and metal with only seven dwellings (10%) with combustible wood-shake roofing materials.

Siding materials are a mixture of combustible wood and log and fire-resistant stucco and fibre-cement board.

Combustible wooden decks with exposed undersides are common with some homes using fire-resistant composite deck materials.



Fire-Resistant Exterior Structural Features

5.2 Infrastructure

Access road standards do not meet FireSmart recommended guidelines for travelled-surface width however they are adequate for the hazard and risk and number of residents in the community. Roads are both loop and dead-end cul-de-sac design and turnarounds are adequate for fire apparatus. Driveways to many dwellings are narrow with inadequate turnaround dimensions for fire apparatus however most dwellings are less than 45 metres from the main access road and firefighters could deploy hose lines from the main road to the structure.

Fire suppression water supply includes a 20,000 imperial-gallon underground tank at the Community Services Building and portable pumps from the Ghost River and Waiparous Creek.

The Summer Village of Waiparous Property Numbering Bylaw 121-14 requires residents to install standardized address number signs meeting FireSmart recommended guidelines related to size, material, color/reflectivity, and mounting height at the entrance to the lot. The bylaw does not mandate the use of non-combustible posts. This Bylaw has resulted in address signs being mounted for all lots within the Summer Village however some have been mounted on combustible wooden posts or trees and could be destroyed during a wildfire.



Access Road and Turnaround Standards



Underground Fire Suppression Water Supply



Address Sign on Combustible Wooden Post



Address Sign on Non-Combustible Metal Post

5.3 Development Legislation and Policy

The Summer Village of Waiparous is proposing to build a Municipal Development Plan (MDP) and to update the existing Land Use Bylaw 53-97 (2000). Council has directed administration to include FireSmart in the new development legislation.

The Municipal Development Plan should recognize wildfire as hazard to development in the Summer Village and implement regulation within the Land Use Bylaw to reduce the wildfire hazard.

FireSmart regulation is recommended in the updated Land Use Bylaw for setbacks from slope, access standards, and exterior construction materials for new and retrofitted buildings where applicable. Suggestions are offered for each of these factors based on current FireSmart recommended guidelines.

Factor	FireSmart Recommended Guideline	Suggested Land Use Bylaw
Setbacks	<ul style="list-style-type: none"> ▪ Structures located at crest of forested slopes should be setback a minimum of 10 metres from the crest of slope for each story of building height. 	<ul style="list-style-type: none"> ▪ Setback regulations can be determined by Council and Administration based on acceptable risk and degree of regulation for roofing, siding, and decking materials and standards.
Access Standards	<ul style="list-style-type: none"> ▪ Main access roads should provide safe simultaneous access for emergency vehicles and public evacuation with a traveled way of not less than 6.1 metres horizontally and 4.1 metres vertically. ▪ Driveways more than 45 metres in length should be a minimum of 3.7 metres in width and provide a minimum of 4.1 metres vertical clearance. ▪ Turnarounds dimensions for dead-end roads and driveways greater than 90 metres in length should meet FireSmart standards. 	<ul style="list-style-type: none"> ▪ Standards for new or upgraded main access roads and driveways at the subdivision and/or development stage should meet FireSmart recommended guidelines.
Roofing Materials	<ul style="list-style-type: none"> ▪ Use only fire-retardant roofing materials with A, B, or C fire-rating. 	<ul style="list-style-type: none"> ▪ All roofing materials on new, replacement, or retrofitted buildings shall meet a minimum Class “C” fire-rating or as specified by the Development Authority.
Siding Materials & Standards	<ul style="list-style-type: none"> ▪ Siding material must be fire-resistant, a minimum of 12mm thick, and extend from ground level to roofline. 	<ul style="list-style-type: none"> ▪ All siding materials on new, replacement, or retrofitted dwellings shall use fire-resistant materials, as per the most recent version of FireSmart – Protecting Your Community from Wildfire (PIP, 2003) or the Wildland Urban Interface (WUI) Products listing (CALFIRE, 2011), extending from ground level to the roofline or as specified by the Development Authority.

Factor	FireSmart Recommended Guideline	Suggested Land Use Bylaw
Decking Materials & Standards	<ul style="list-style-type: none"> ▪ Balcony and deck surface materials must be non-combustible or fire-resistant. ▪ Stilts can be built from or encased in non-combustible/fire resistant materials and use of heavy timbers will increase fire resistance. ▪ Enclose exposed undersides with preferably non-combustible/fire resistant material. 	<ul style="list-style-type: none"> ▪ All exterior deck materials on new, replacement, or retrofitted buildings shall use fire-resistant materials, as per FireSmart – Protecting Your Community from Wildfire (PIP, 2003) or the Wildland Urban Interface (WUI) Products listing (CALFIRE, 2011), or as specified by the Development Authority. ▪ All new buildings with exposed undersides and/or with raised decks and porches less than 2 metres from ground level shall be sheathed from the floor level to the ground level with fire-resistant materials to prohibit the entry of sparks and embers under the structure. ▪ All new buildings with exposed undersides and/or raised decks and porches more than 2 metres from ground level shall have and maintain a non-combustible surface cover underneath and for a minimum of 1.5 metres surrounding.
Fencing Materials	<ul style="list-style-type: none"> ▪ Avoid attaching fences constructed of combustible materials directly structures. ▪ Use a metal gate or non-combustible fence panel at least 1.5 metres from the furthest projection of the house 	<ul style="list-style-type: none"> ▪ Fences constructed of combustible materials must be separated by a minimum of 1.5 metres non-combustible material from the furthest projection of the structure.

The Summer Village of Waiparous Fire Safety Bylaw No. 122-14 regulates all outdoor fire facilities including fire pit, fireplace, and portable fire receptacle standards and provides guidelines for fire permit and fire ban issuance.

Recommendation 3: Include FireSmart standards in the updated Summer Village of Waiparous development legislation for new and retrofits/renovations of existing structures.

6. Public Education & Engagement Options

FireSmart public education and awareness are a key component to taking action. Residents and Summer Village of Waiparous administration and elected officials all need to be aware of the FireSmart hazard and the solutions to minimizing the risk and become a partner in implementation of FireSmart solutions in their own backyards and communities.

6.1 FireSmart Education and Awareness

The Summer Village, in cooperation with Alberta Wildfire Management, have developed and implement an excellent public education and engagement program over the past several years.

The community received FireSmart Canada Community Recognition status in 2015 and has renewed it annually since. The FireSmart Community Plan, developed by the Summer Village FireSmart Committee in 2014 and updated in 2017, guides the community education and engagement process with the following implementation priorities and actions.

- 1.) Educate and encourage residents to complete Priority Zone 1 Vegetation Management.**
Action Plan: February 2018 - Provide FireSmart Home Assessment Day to Summer Village of Waiparous residents that request an assessment.
- 2.) Educate and encourage residents to move or eliminate combustible firewood piles to FireSmart Recommended Guidelines.**
Action Plan: February 2018 - Supply Homeowner's FireSmart Manuals Phase 1 during FireSmart Home Assessment Day.
- 3.) Educate and encourage residents to install Summer Village of Waiparous address signs at the entrance to their property.**
Action Plan: 2018 - Summer Village to inspect and ensure all locations have signage.
- 4.) Educate and encourage residents to sheath decks and open spaces to FireSmart Recommended Guidelines.**
Action Plan: February 2018 - Homeowner's FireSmart Manual Phase 3 during open house. Dialogue with homeowners and residents during FireSmart Home Assessments.
- 5.) Re-treat and maintain Priority Zone 2 Community Reserves as required.**
Action Plan: 2018 - Summer Village to continue to maintain previous treatments via work bees on Priority Zone 2 areas.
- 6.) Ensure that all residents with fire pits meet the Summer Village of Waiparous Fire Bylaw.**
Action Plan: 2018 - Publication in Waiparous Newsletter discussing fire pit standards. Fire Guardian monitoring properties in the Summer Village and continually confirming if fire pits are present and to legislated standards.
- 7.) Request power utility provider to maintain hazard vegetation for Distribution and Service power lines.**
Action Plan: 2018 - FireSmart Committee member to review and ensure annual work is undertaken by Fortis. Summer Village to incorporate and invite Fortis to FireSmart Community Workshops or events.

FireSmart community events including vegetation management, FireSmart hazard assessments, and open house public education sessions have been held at least once per year for several years and many community residents have become engaged to take action in their own backyards and to assist with municipal FireSmart projects.



2016 Wildfire Community Preparedness Day Event



2017 Community Preparedness Day Event

The Summer Village website has a comprehensive FireSmart section with FireSmart information including newsletters, plans/manuals/reports, FireSmart project updates, photos, and Phase 1, 2, and 3 resident actions to reduce the threat to their properties.

6.2 Key Messages

Field observations during this project identified some FireSmart key messages for residents that could be a focus for future public education:

- Use non-combustible/fire-resistant roofing, siding, decking, and fencing materials for new structures or renovations of existing structures
- Skirt the undersides of your decks and porches to reduce the chances of fire getting underneath and ensure that decks greater than 2 metres from ground-level have a non-combustible surface cover underneath and surrounding for a minimum of 1.5 metres
- Priority Zone 1-2 (0-30m from structure) is the most important area for residents to conduct FireSmart vegetation management. Priority Zone 1 should not support wildfire of any kind.
 - Use fire-resistant trees and shrubs for landscaping and remove flammable species such as spruce, pine, and juniper
 - Maintain a non-combustible surface cover surrounding your home
 - Do not use bark mulch or wood chips for landscaping
 - Remove ground litter and dead/down and dead standing trees annually
- Store all combustible firewood/debris piles a minimum of 10 metres from yours and your neighbours structure.
- Priority Zone 2-3 vegetation management completed by the Summer Village has reduced but not removed the wildfire threat. Additional thinning and hazard reduction burning is required and will continue on new and completed blocks.
- Completion and maintenance of FireSmart mitigative measures on your lot protects both yours and your neighbours properties and acts to build the entire community as a FireSmart fuelbreak.

Recommendation 4: Continue with all public education and engagement activities to ensure that residents are aware of options available to reduce the hazard and risk to their properties and are engaged and assisted to take action in their own backyards and on community lands.

7. Inter-Agency Cooperation and Cross-Training Options

Interagency cooperation and cross-training between all stakeholders is necessary to ensure cooperative and effective implementation of FireSmart mitigation options and to coordinate an effective multi-agency response to a wildland/urban interface fire.

7.1 Interagency Cooperation

The Summer Village of Waiparous, Alberta Wildfire Management, and MD of Bighorn Ghost River fire department have a strong partnership in the FireSmart program for the community. All have cooperated and participated in hazard reduction burns, community preparedness day events, and emergency exercises.

7.2 Cross-Training

The Summer Village has provided chosen participants with Incident Command System (I-100) and Municipal Emergency Management Plan workshops and the Ghost River fire department has provided participants to Wildland Firefighter (NFPA 1051) and Fire Operations in the Wildland/Urban Interface (S-215) training.

The Summer Village, Ghost River fire department, and Alberta Wildfire Management participated in the 2014 Summer Village of Waiparous wildland/urban interface field exercise and in the hazard reduction burn projects.



2014 Wildland/Urban Interface Field Exercise

The following cross-training opportunities are available for consideration based on the needs of the Summer Village of Waiparous and their partners:

- Wildland Fire Fighter (NFPA 1051)
- Structure and Site Preparation Workshop (S-115)
- Fire Operations in the Wildland/Urban Interface (S-215)
- Incident Command System (ICS-100 to 400)

Recommendation 5: Conduct wildland, wildland/urban interface, and incident management cross-training based on the needs of the Summer Village of Waiparous and partners.

8. Emergency Planning Options

Emergency preparedness is an important part of any disaster planning. The need for organization, clear chain of command, and an understanding of job responsibilities during a wildland/urban interface fire are of paramount importance.

8.1 Municipal Emergency Management Plan

The Summer Village revised their Municipal Emergency Management Plan in 2015 to follow the Incident Command System model for emergency management. The plan includes an action plan for wildfire in the hazard-specific section. The Summer Village wishes to update the Emergency Social Services plan and then conduct a field exercise to test the Municipal Emergency Management Plan and the Emergency Social Services Plan.

8.2 Wildfire Preparedness Guide

The Summer Village of Waiparous Wildfire Preparedness Guide was updated in 2018 and has been formatted into an 11”X17” double-sided plan that is operationally usable by personnel at the site and support/coordination levels. This plan should be exercised to test operational effectiveness.

Recommendation 6: Implement a table-top, functional and/or field exercise to test emergency management preparedness for a wildland/urban interface fire.

8.3 Structure Protection Equipment

The Summer Village keeps fire pumps, hose, hand tools and one Rainbird sprinkler kit in the Community Services building for small wildfires in the area. Significantly more pumps, hose, and sprinklers will be needed for a large wildland/urban interface fire threatening the community and those resources are listed on the 2018 Wildfire Preparedness Guide auto-order list.

9 Implementation Plan

Vegetation Management

Item	Recommendation	Responsible Agency
Priority Zone 2-3	Recommendation 1: Complete proposed Zone 2-3 fuel reduction and hazard reduction burning on Municipal and Provincial lands and begin additional thinning of the completed fuel reduction blocks where required. Consider conducting fuel reduction on the private-land area in the northwest corner of the Summer Village.	SV Waiparous
Vegetation Management Maintenance	Recommendation 2: Conduct regular inspections of all completed fuel reduction blocks and hazard reduction burn areas and implement maintenance for those that require it.	SV Waiparous

Development & Legislation

Item	Recommendation	Responsible Agency
Development Legislation & Policy	Recommendation 3: Include FireSmart standards in the updated Summer Village of Waiparous development legislation for new and retrofits/renovations of existing structures.	SV Waiparous

Public Education & Engagement

Item	Recommendation	Responsible Agency
Public Education Program	Recommendation 4: Continue with all public education and engagement activities to ensure that residents are aware of options available to reduce the hazard and risk to their properties and are engaged and assisted to take action in their own backyards and on community lands.	SV Waiparous

Interagency Cooperation & Cross-Training

Item	Recommendation	Responsible Agency
Cross-Training	Recommendation 5: Conduct wildland, wildland/urban interface, and incident management cross-training based on the needs of the Summer Village of Waiparous and partners.	SV Waiparous AB. Wildfire Mgt. Ghost River Fire Dept.

Emergency Planning

Item	Recommendation	Responsible Agency
Emergency Exercises	Recommendation 6: Implement a table-top, functional and/or field exercise to test emergency management preparedness for a wildland/urban interface fire.	SV Waiparous AB. Wildfire Mgt. Ghost River Fire Dept.

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