REGIONAL DISTRICT
of Fraser-Fort George

Robson Valley - Canoe Electoral Area H

Community Wildfire Resiliency Plan 2024

FireSmart™ Canada

UBCM

FORSITE FIRE

Registered Professional Signature and Seal

This CWRP has been prepared for the Robson Valley - Canoe Electoral Area.

RPF Printed Name	RPF #
Lauren Shinnimin	5154
Date Signed	
April 29, 2025	
I certify that the work described herein fulfills the standards expected of a registrant of the Forest Professionals British Columbia and that I did personally supervise the work.	
Registered Professional Forester Signature and Seal	

FORSITE
Forest Management Specialists

Project Acknowledgments

The Regional District of Fraser-Fort George (RDFFG) extends from the Rocky Mountains in the East to beyond the Fraser River in the West, covering a land mass of over 50,500 km². Approximately 100,000 residents call the region their home. It encompasses four municipalities – the City of Prince George (Prince George), the District of Mackenzie (Mackenzie), the Village of McBride (McBride), and the Village of Valemount (Valemount) – and seven electoral areas – Electoral Areas A, C, D, E, F, G, and H.

This Community Wildfire Resiliency Plan (CWRP) is one of seven CWRPs developed for each of the seven electoral areas located within the RDFFG. The RDFFG respectfully acknowledges this overall project is taking place on the unceded traditional territories of the Lheidli T'enneh First Nation, McLeod Lake Indian Band, Simpcw First Nation, and West Moberly First Nations.

Forsite Fire would like to acknowledge the many individuals who invested time and provided invaluable input and contributions during the development of the CWRPs, including:

Project Team

RDFFG Staff Team

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Other Contributors

- **Adam Ethier**, Emergency Management Coordinator, Lheidli T’enneh First Nation
- **Kimberly Harmison**, Emergency Management Coordinator, McLeod Lake Indian Band
- **Mike Simpson, MA, RPF**, Public Engagement Coordinator/Facilitator, M.F. Simpson, Ltd.
- **Andrea Rainey**, Wildfire Prevention Officer, BCWS Prince George Fire Centre

This report would not be possible without the Community Resiliency Investment (CRI) Program and funding from the Union of British Columbia Municipalities (UBCM)

Executive Summary

Wildfire is a natural disturbance agent on the landscape, but with warming temperatures and changing precipitation regimes due to climate change, British Columbia is experiencing a sustained increase in wildfire behaviour and events, particularly in the wildland urban interface. [1]The notable wildfire seasons of 2017, 2018, 2021, and 2023 highlight the potential impacts wildfire activity can have on communities. Specific to the Robson Valley – Canoe Electoral Area, the Teare Creek Fire in 2023 burned 1,000 hectares adjacent to the community of McBride, resulting in evacuation orders and alerts for many residents. In addition, in July of 2024, multiple wildfires - Dunster-Croydon, Beaver River, and Canoe Road – prompted evacuation orders and alerts for parts of Valemount, McBride, and Dunster.

In response to recent fire events across the province, the Regional District of Fraser-Fort George (RDFFG) acquired Forsite Consultants to develop a Community Wildfire Resiliency Plan (CWRP) for each of the electoral areas within the Regional District. The purpose of this CWRP for the Robson Valley - Canoe (Electoral Area H) is to:

(i) identify and assess wildfire hazards within and around Electoral Area H communities including Dome Creek, Crescent Spur, Dore River, Mountainview Road area, Tete Jaune Cache, Mount Robson area, McLellan, Cedarside, and Albreda,
(ii) assess potential risks and impacts to these communities and infrastructure from wildfires, and
(iii) provide effective and feasible mitigation strategies to reduce identified hazards and risk.

The CWRP utilizes the seven FireSmart Disciplines of FireSmart Canada and applies them to various aspects of wildfire management and risk reduction. The seven FireSmart disciplines/principles include:

1. Education
2. Legislation and Planning
3. Development Considerations
4. Interagency Cooperation
5. Cross-training
6. Emergency Planning
7. Vegetation Management

The Robson Valley – Canoe area is the further east/southeast electoral area within the Regional District of Fraser-Fort George and one of the largest. It is also the most geographically unique, encompassing a majority of the fertile Robson Valley situated within the Rocky Mountain Trench. It is characterized by large agricultural parcels located along the Fraser River, quickly transitioning to steep, forested mountainous terrain on either side of the Valley. Population density is scattered along the length of the Valley, with higher concentrations around the communities of McBride and Valemount. The development of this CWRP included a multi-phase approach including analysis of background data, public engagement, engagement with Indigenous Governments, local wildfire threat assessment through collection of field data, and development of a risk mitigation strategy based on the unique attributes of the

[1]British Columbia Wildfire Service. (n.d). Prevention. Retrieved July 17, 2024, from https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention

Robson Valley - Canoe area. The following wildfire risks and associated recommended action items (Table 1) have been identified for RDFFG Electoral Area H. Implementing these action items will require coordinated efforts between Indigenous Governments, provincial government agencies, adjacent municipal governments and partners, and community members/private landowners.

Summary of Identified Risks and Action Plan

Table 1: RDFFG Electoral Area H CWRP Risk Summary and Action Plan

Risk Summary
The purpose of a risk assessment is to identify the specific risks to a community and its assets. An ongoing review of the risk assessment should occur annually.
Read and understand this CWRP's identified risks and recommended actions. The risks listed below were identified based on background research, fieldwork data collection and analysis, conversations with the Regional District of Fraser-Fort George Emergency Preparedness staff, BC Wildfire Service prevention officers and staff, and feedback received from public and Indigenous Government engagement. I. Electoral Area H covers an extensive geographical area that extends the entire length of the Robson Valley, covering 1,510,165 hectares. The Robson Valley contains the small municipalities of McBride and Valemount, each of which contain a fire department for which the fire protection area extends into neighbouring Regional District communities. However, this leaves the remainder of the communities throughout the Electoral Area such as Tête Jaune Cache, Dunster, Crescent Spur and Dome Creek without dedicated fire protection and vulnerable in the event of a wildfire. II. Many communities and neighbourhoods, such as Dome Creek, Crescent Spur, and Mountainview Road, have only one single-lane egress route in and out of the community and are geographically constrained by the Fraser River and/or steep terrain. Additionally, all the communities throughout the Robson Valley are surrounded by heavily forested mountain slopes to some degree, with areas in the southeasternmost portion of the electoral dominated by hazardous pine stands. This increases the risk of wildfire entering communities from forested mountainsides and causes concern for evacuation safety. III. Over 75% of the area within the eligible Wildland Urban Interface in Electoral Area H is occupied by private land, with many large rural private land parcels and topographical constraints. This significantly limits meaningful opportunities for fuel management treatments on provincial crown land adjacent to homes and structures and throughout the Valley. IV. Currently, Development Permit Areas identified for wildfire hazard within Electoral Area H are limited to the Canoe Mountain area. However, the DPA does not specifically outline what the development requirements to reduce wildfire hazard are. The remainder of the electoral area does not contain delineated DPAs for the purpose of wildfire hazard mitigation, leaving newly built structures and future development throughout most of the electoral area at risk from wildfires if they are not built to FireSmart standards. V. FireSmart uptake among residents has been slow throughout the Regional District of Fraser-Fort George. Many private landowners expressed concern over the high costs of implementing FireSmart retrofits and activities to their homes and properties. Support and incentives through the FireSmart Rebate program should be promoted and pursued by the RDFFG. VI. The CN mainline track runs throughout the entire length of the Robson Valley, passing through nearly all of the communities as a primary method of transport. During dry conditions, there is heightened

Risk Summary
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risk of grass/forest fire ignition from CN mainline track grinding. Ignition starts from the CN railway line are a common occurrence throughout Valley, underscoring the importance of interagency cooperation and vegetation management along the railway line.

Note: Many of the recommended action items within this CWRP and associated Action Plan are fundable under the provincial Community Resiliency Investment (CRI) program during the time of development. However, eligible activities under the program are subject to change annually.

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Education						
Objective: Help community members learn about wildfire and its potential impacts to their communities and understand their role in taking action to reduce risk to their homes/properties						
1. Read and understand this CWRP's identified risks and recommended actions.	RDFFG Emergency Preparedness staff including the FireSmart Coordinator	Very High	Immediately	A completed and comprehensive CWRP	Clear understanding of actions required over the next 5 years to enhance community wildfire resiliency by Regional District staff	The CWRP acts as the roadmap for developing and enhancing wildfire resiliency within communities. It is designed to last approximately 5 years, upon which reassessment of status and progress is required

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
2. Employ a FireSmart Coordinator to promote FireSmart to communities within the RDFFG. This position runs all aspects of the FireSmart program and generally is in charge of actioning many aspects of this CWRP. Currently, the RDFFG has employed two part-time FireSmart Coordinator positions; one for the surrounding Prince George region, and one for the Robson Valley.	RDFFG Emergency Preparedness staff	Very High	Ongoing	An annual salary for the position and appropriate training and orientation. This can be covered through grant funding	Successfully retain at least one individual in the FireSmart position who is enthusiastic about promoting FireSmart.	A FireSmart Coordinator will be required to receive CRI funding beginning in 2024. Funding is available under the UBCM's CRI program to support a salary for a FireSmart Coordinator, Local FireSmart Representative, Wildfire Mitigation Specialist, or Wildfire Forest Professional

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
3. Organize and hold a FireSmart event in Electoral Area H to familiarize FireSmart concepts to regional district communities. Event types include a Wildfire Community Preparedness Day, Farm and Ranch Wildfire Preparedness Workshop, Neighbourhood Champion workshop, or Fire Hall open house.	RDFFG Emergency Preparedness staff, FireSmart Coordinator	Very High	Annually, ideally between the months of May and October	Communication and public outreach resources such as social media, webpage postings, posters, etc. Resources to run the event such as tent, food, staff/volunteers, FireSmart promotional materials.	Hold a minimum of one type of FireSmart event per year within an Electoral Area H community. Participation/ attendance target of 20% of the electoral area population for all events	Funding is available through the UBCM's Community Resiliency Investment (CRI) program to organize, host or support FireSmart events.

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
4. Organize Community Chipper Day(s) and/or Community Waste Disposal/Pickup Day(s), particularly for more isolated areas with difficulty accessing transfer stations (e.g., Crescent Spur, Dome Creek, Tête Jaune Cache). This will encourage and assist residents with removal of hazardous vegetation and debris around their homes.	FireSmart Coordinator, RDFFG Environmental Services staff	Very High	Semi-annually or annually	Chipper, disposal bins, waste management staff or contractors	Removal of hazardous debris, vegetation, invasive plants and other flammable materials around homes is completed on an annual basis.	Feedback from public engagement included issues relating to debris disposal standards for vegetation > 3 inches in diameter. Funding is available through the UBCM's CRI program to provide off-site vegetative debris disposal for residential properties who have undertaken their own residential-scale FireSmart vegetation management, including: • Provide a dumpster, chipper or other collection method. • Waive tipping fees. • Provide curbside debris pick-up.

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Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
5. Encourage residents to have a Local FireSmart Representative (LFR) complete a FireSmart Home Ignition Zone (HIZ) Assessment and/or Farm and Ranch Assessment for their home/property. Based on the outcome of the Assessments, encourage property owners to implement as many mitigation activities as possible through local rebate programs for completed eligible FireSmart activities.	FireSmart Coordinator	High	Immediate and ongoing	FireSmart Coordinator, Local FireSmart Representative, Neighbourhood Champion, or other qualified staff to complete the Home Ignition Assessment	Residents within Electoral Area H request FireSmart HIZ Assessments/Farm and Ranch Assessments be completed for their home/property. A starting target of 20 homeowners per year.	Funding is available through the UBCM's CRI program to have LFRs complete FireSmart HIZ Assessments/ Farm and Ranch Assessments for property owners.
6. Develop and offer a local FireSmart Rebate Program to residential property or homeowners that complete eligible FireSmart activities to provide incentive and assist with the financial barriers to implementing FireSmart on private land.	RDFFG Emergency Preparedness staff, FireSmart Coordinator	High	By May 2026	Program development and communication resources	Residents are aware of the FireSmart Rebate program and are actively taking part in implementing eligible FireSmart activities and applying for rebates upon completion	Funding is available through the UBCM's Community Resiliency Investment (CRI) program to support rebate programs. As of 2024, rebates are limited to 50% of the total cost of the eligible activities identified in the CRI Program Guide and up to $5,000 per property

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Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
7. Inform the communities about upcoming FireSmart events and other fire/emergency management related updates via social media, the RDFFG website, posters, community newsletters and newspapers, radio ads, etc.	FireSmart Coordinator, RDFFG Communications Staff, RDFFG Emergency Preparedness staff	High	Ongoing	Communication resources	FireSmart resources are available in multiple locations and platforms to reach a wide variety of residents. FireSmart events are well advertised and attended	Public engagement feedback revealed that public outreach and information sharing needs to occur on a variety of platforms to capture residents of all demographics
8. Update the Regional District of Fraser-Fort George website to include a dedicated FireSmart/wildfire risk reduction page with information relating to FireSmart principles/activities, resources, and links to FireSmart BC. The page should also include the completed RDFFG CWRPs.	FireSmart Coordinator, RDFFG Communications Staff	High	Immediate	Communication resources	A dedicated FireSmart page is developed and uploaded onto the RDFFG website by 2026	A dedicated FireSmart webpage on the RDFFG website can help ensure consistent and targeted information is being provided to residents about how the Reginal District is implementing wildfire risk reduction and how residents can be involved and help protect their own properties

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Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
9. Distribute FireSmart resources/promotional items to members of the public at community events such as events specific to FireSmart, Farmer's Markets, etc.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	Moderate	Ongoing	FireSmart resources and promotional items	Community members become more aware of and engaged in FireSmart principles	FireSmart resources and promotional items can be ordered on the FireSmart BC website[2]
10. Install educational/interpretive signage regarding wildfire ignition prevention and the role of wildfire in ecosystems in regional parks, recreation sites, campgrounds, etc. where appropriate within the electoral area. This could be particularly useful along high-use recreational trails or campgrounds where starts are more likely to occur.	FireSmart Coordinator, RDFFG Environmental Services (Parks) staff	Moderate	Signage installed in high use areas by 2027	Signage and installation materials	Community members and recreationalists become more aware of the role they play in preventing wildfire ignitions	Enhancement of trails with interpretive signage, including topics such as wildfire, is a recommendation in the 2021 Regional Parks Plan. Funding is available through the UBCM's CRI program to promote/distribute FireSmart educational resources and add/update signage

[2] https://firesmartbc.ca/resource-ordering-form/

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Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
11. Promote and encourage neighbourhoods to work together to implement FireSmart activities at a neighbourhood level and apply for the FireSmart Canada's Neighbourhood Recognition Program. Once recognized, annually renew for FireSmart Recognition is required. This would be particularly beneficial for more isolated communities or neighbourhoods.	FireSmart Coordinator	Moderate	Within 3 years (2027), then Annually	A certified Local FireSmart Representative or Neighbourhood Champion to complete Neighbourhood Wildfire Hazard Assessments	Work to recruit Neighbourhood FireSmart Champions in isolated communities to lead and organize FireSmart initiatives. At least one of the listed neighbourhoods achieves FireSmart Neighbourhood Recognition by the end of 2027	Application to be filled out and required actions for recognition must be completed[3]. Funding is available through the UBCM's CRI program to complete Neighbourhood Wildfire Hazard Assessments and FireSmart Neighbourhood Plans
Legislation and Planning						
Objective: Utilize administrative tools available to local governments to implement wildfire risk reduction actions through local policies, plans, and bylaws						

[3] https://www.firesmartcanada.ca/programs-and-education/neighbourhood-recognition-program/

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
12. Ensure that going forward, planning and development throughout the electoral area considers wildfire risk in all aspects. This includes ensuring all local plans and bylaws are developed, updated, or amended to align with wildfire risk reduction and FireSmart principles. For example, planning and development of future subdivisions should consider multiple access/evacuation routes, hydrant/water availability for fire suppression, and landscaping allowances	RDFFG Community and Development Services, FireSmart Coordinator	High	Immediate and ongoing	Communication resources, internal staff capacity, FireSmart and wildfire risk reduction guidance	All RDFFG plans and policies incorporate wildfire risk at multiple levels and bylaws are developed/amended to reflect higher-level goals and objectives	Funding is available through the UBCM's CRI program to amend Official Community Plans, Comprehensive Community Plans and/or land use, engineering and public works bylaws to incorporate FireSmart principles
Development Considerations						
Objective: Consider and influence development decisions and requirements, such as land use, structure density, road patterns, etc. early in the development process to help reduce wildfire risk to property and enhance safety.						

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
13. Complete FireSmart Assessments on RDFFG owned Critical Infrastructure within Electoral Area H, beginning with the highest priority CI identified by the RDFFG and residents. These include: **a.** Dunster Community Hall **b.** Dunster schoolhouse **c.** Critical communication towers	FireSmart Coordinator	Very High	Immediately	Qualified LFR or similar to complete the FireSmart Assessments	FireSmart CI Assessments have been completed on highest priority CI by 2027	Funding in available through the UBCM's CRI program to complete FireSmart assessments for publicly owned buildings, critical infrastructure, culturally significant sites and/or green spaces
14. Once completed, implement FireSmart recommendations and mitigation activities resulting from the completed Assessments with the goal of reducing hazard scores as much as feasibly possible.	FireSmart Coordinator, RDFFG Emergency Preparedness staff, RDFFG Environmental Services staff	Very High	Within 4 years (2028)	Labour, machinery, construction materials	FireSmart recommendations have been implemented for the top 1-3 highest priority CI located within Electoral Area H by 2028	Funding is available through the UBCM's CRI program to complete mitigation activities on assessed structures, including building materials and labour

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Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
15. Establish a Development Permit Area (DPA) for Wildfire Hazard for all new types of development in areas within/adjacent to moderate-high/extreme wildfire hazard. DPA requirements should incorporate FireSmart principles such as: I. Construction materials (including roof, siding, decking and windows) of all new structures to align with FireSmart recommendations II. FireSmart approved vegetation and landscaping around homes and infrastructure III. Sprinkler protection systems or other forms of suppression systems for individual structures IV. Setbacks from forested edges	RDFFG Community and Development Services	High	Within 3 years (2027)	Communication resources, internal staff capacity, FireSmart and wildfire risk reduction guidance	Areas of Moderate-High/Extreme Wildfire Hazard are identified and mapped. Development Permit Areas are designed and implemented for new development within identified wildfire hazard areas	Currently, the Canoe Mountain area is the only area containing delineated DPAs relating to wildfire hazard. Funding is available through the UBCM's CRI program to establish Development Permit Areas for Wildfire Hazard to incorporate FireSmart principles

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Interagency Cooperation						
Objective: Establish collaborative relationships among the Regional District of Fraser-Fort George staff, BC Wildfire Service, local First Nations, local municipalities, and other stakeholder groups to foster region-wide wildfire resiliency.						

16. Establish a Community FireSmart and Wildfire Resiliency Committee (CFRC) for the Robson Valley (required to receive additional CRI funding). The CFRC may involve the following parties: • RDFFG FireSmart Coordinator and Emergency Services • Valemount and McBride Fire Department Chiefs • Simpcw First Nation and First Nation Woodland License manager • Valemount, McBride, and Dunster community forests • BC Parks • Ministry of Forests • Ministry of Emergency Management and Climate Readiness • BC Cattlemen's Association • Valemount and Area Recreation Development Association • CN Rail • Telecommunications	RDFFG Emergency Preparedness staff, FireSmart Coordinator	Very High	Ongoing	Communication and organizational resources, meeting space	Hold a minimum of one meeting per year with all primary and secondary members involved	A Prince George & Area Community Wildfire Roundtable is currently established for the Prince George and surrounding areas that the RDFFG takes part in, but one does not exist for the Robson Valley. Funding is available through the UBCM's CRI program to support participation in and organization of interagency meetings

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
17. Identify rural communities within the Electoral Area that demonstrate a genuine desire to form and participate in a Cooperative Community Wildfire Response (CCWR) organization. CCWRs must be • An incorporated business entity, such as fire brigade, that is able to receive funding and has an accountable leadership structure. • Located outside of structural fire protection jurisdiction, • Willing to follow the command and direction of BC Wildfire Service in the event of a wildfire.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	Very High	Immediately	Dedicated community members willing to organize and participate in a CCWR	Any number of rural communities within the electoral area are interested and dedicated to forming a CCWR	During public engagement, the Dunster Fire Brigade/Community Association demonstrated a strong desire to be involved in training and emergency response during wildfire events. Starting in 2025, funding will be available under the UBCM CRI program for required training and personal protective equipment for members of CCWRs. However, suppression tools/equipment such as pulaskis, shovels, chainsaws, pumps, hoses, sprinklers, etc. are not covered under the funding

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
18. Work collaboratively with CN Railway regarding mitigating ignition potential along the railway line running through Electoral Area H communities, including enhanced vegetation management strategies along the railway line.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	High	Immediate and ongoing	Communication resources	Initial contact is made to CN Rail to start the discussion around increased railway corridor maintenance	Feedback from public engagement revealed that many residents in Electoral Area H are concerned about ignition potential along the tracks in the dry summer months.
19. Work collaboratively with Simpcw Resources Ltd (First Nations Woodland License N3C), the community forests (Valemount, McBride, and Dunster), and woodlot owners with license areas adjacent/near to private residences to manage for wildfire risk within the WUI in forest management planning and harvest operations.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	High	Immediate and ongoing	Communication resources, knowledge of forest management planning and operations	Identify managed forest license holders with tenures overlapping or directly adjacent to WUI areas. Reach out to woodlot and community forest license holders to discuss wildfire risk reduction activities and considerations to reduce wildfire hazard near communities.	A significant amount of provincial crown land within the WUI in Electoral Area H is under area-based forest licenses, such as the Simpcw FNWL, community forests, and woodlots. Managing for wildfire risk during forest management planning and operations can help reduce hazardous fuel and vegetation surrounding communities. Funding may be available to manage forest license holders to complete fuel management activities within their tenure areas.

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
20. Apply for funding through UBCM's CRI program for required training and personal protective equipment for members of eligible Cooperative Community Wildfire Response (CCWR) organizations.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	High	Within 2 years (2026), then annually for training needs	An inventory of eligible CCWRs within the Regional District, their members, and training requirements/ equipment needs	Any number of rural communities within the electoral area are interested and dedicated to forming a CCWR	Starting in 2025, funding will be available under the UBCM CRI program for required training and personal protective equipment for members of CCWRs. However, suppression tools/equipment such as pulaskis, shovels, chainsaws, pumps, hoses, sprinklers, etc. are not covered under the funding
21. Send staff from the RDFFG Emergency Preparedness department to attend the annual **Wildfire Resiliency and Training Summit.**	FireSmart Coordinator, RDFFG Emergency Preparedness staff	Moderate	Annually	CRI funding for attendance and disbursements. e.g. Transportation and travel costs	A minimum of two RDFFG staff attend the Wildfire Resiliency and Training Summit each year	As of 2025: Funding is available under UBCM's CRI program to send up to 4 staff per eligible applicant. Eligible costs include conference fee and travel (including accommodations and per diems), with a maximum of up to $2,200 (per attendee)
Cross-Training						

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Objective: Develop a diverse skill set within local Fire Departments, local governments, community members, and other emergency response personnel engaged in risk reduction activities and wildfire planning/response.						
22. Provide cross-training opportunities to RDFFG Public Safety and Emergency Preparedness staff to further build capacity and redundancy in the department: **a.** Local FireSmart Representative (LFR) training **b.** EMRG-100 - Introduction to Emergency Management in Canada **c.** ICS-100 - Incident Command System	RDFFG Public Safety, RDFFG Emergency Preparedness staff	High	As required based on needs of staff	CRI Funding	Redundancy of all critical skills relating to FireSmart and Emergency Management within the RDFFG Public Safety and Emergency Preparedness departments	Funding for cross-training courses for Emergency Management staff is available through UBCM's CRI program

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
23. Work with the municipalities of Valemount and McBride to provide cross-training opportunities for local firefighters in the Valemount and McBride Fire halls including the following wildfire suppression training courses: **a.** S-100 – Basic fire suppression and Safety **b.** S-185 – Fire entrapment avoidance and safety **c.** ICS-100 – Incident Command System introduction **d.** SPP-WFF1 Wildland Firefighter Level 1 (includes S-100, S-185, ICS-100) **e.** WSPP-115 - Wildland Structure Protection Program (training for structure protection unit crews)	RDFFG Public Safety, Valemount and McBride Fire Chiefs	Moderate	Annual	Facility to hold the training, potentially some basic suppression equipment	Successfully hold at least one wildfire suppression training course for local structural firefighters	Funding for cross-training courses for fire fighters is available through UBCM's CRI program

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
24. Help coordinate cross-training opportunities between the BCWS Robson Valley Fire Zone and Valemount/McBride fire fighters.	RDFFG Public Safety, RDFFG Emergency Preparedness staff	Moderate	Once every two years	Facility to hold the training, potentially some basic suppression equipment.	Help organize a minimum of one BCWS cross-training event per year	Implementation of this recommendation is dependent upon BCWS availability.
Emergency Planning						
Objective: Coordinate response efforts amongst the community, first responders, and local and provincial authorities to increase the efficiency and effectiveness of communications and evacuations in the event of an emergency, such as a wildfire event.						
25. Ensure strong emergency communication strategies are developed and maintained between the RDFFG and Lheidli T'enneh First Nation and Simpcw First Nation regarding emergency wildfire events occurring anywhere on their traditional territory. This will ensure the Nations are informed and involved in emergency planning and response as it relates to their lands and values.	RDFFG Emergency Preparedness staff	Very High	Immediate and ongoing	Communication resources	Strong communication and working relationships are built and maintained between the RDFFG and LTFN and Simpcw Nation to ensure human life and safety, and values on the landscape are protected	During interviews with LTFN and Simpcw staff, they expressed the importance of being notified and involved in decision making regarding emergency response on their territory

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
26. Assess the number of residents throughout Electoral Area H that may be more vulnerable or at higher risk during an emergency evacuation event due to: **a.** Unreliable cell phone coverage or internet bandwidth resulting in delayed or unsuccessful communication, **b.** Residents who are elderly, have limited mobility, or may require additional support during an evacuation	RDFFG Emergency Preparedness staff	Very High	Within 3 years (2027)	Communication and analysis resources	Vulnerability assessment is completed by 2027	Results from the assessment can help inform targeted wildfire mitigation and emergency planning activities needed to assist more vulnerable populations. Funding is available under UBCM's CRI program to undertake eligible residential mitigation work for seniors, elders, people with limited mobility or vulnerable populations

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
27. Promote and encourage all agricultural/farm/ranch landowners to develop a **Farm/Ranch Wildfire Preparedness Plan** for their properties. These Wildfire Plans will allow landowners/ producers to be better prepared to take efficient/effective action during wildfires, identify risk reduction priorities to complete, such as removing fuels or setting up sprinklers, and share important information with those involved in wildfire response, such as BCWS.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	Very High	Immediate and ongoing	Communication and education resources	Add resources relating to the Farm & Ranch Wildfire Preparedness Plan to the RDFFG website and utilize various communication avenues to educate farm/ranch landowners about the benefit of the Preparedness Plans	The BC Climate Change Adaptation Program has developed a guide and fillable workbook to assist landowners/producers with completing the Farm/Ranch Wildfire Plans. Both are available for download here: https://www.bcclimatechangeadaptation.ca/library/farm-ranch-wildfire-plan-guide-and-workbook/
28. Promote and encourage all Electoral Area H residents to subscribe to the RDFFG's emergency Public Alerting System (PAS). Emergency notices can be delivered via email or phone.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	High	Immediate and ongoing	Communication resources	Subscription to PAS by 90% of residents within Electoral Area H	N/A

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
29. Organize and/or participate in cross-jurisdictional meetings, tabletop exercises, or mock scenarios specifically focused on wildfire preparedness and suppression in the Robson Valley, including seasonal wildfire readiness meetings.	FireSmart Coordinator, RDFFG Emergency Preparedness staff	High	Annually	Communication and planning resources, facility and funds to hold meeting/ exercise	A minimum of one cross-jurisdictional meeting/tabletop exercise/mock scenario is held per year	The RDFFG has been active in planning and participating in cross-jurisdictional tabletop exercises/mock scenarios relating to wildfire preparedness around the Prince George area. This should be extended to include the Robson Valley as well. Funding to hold wildfire preparedness meetings/exercises is available through UBCM's CRI program.

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
30. Consider establishing a RDFFG Fire Department within Electoral Area H, such as in the Dunster or Tête Jaune Cache community.	RDFFG Public Safety	High	Within 5 years (2029)	Communication and planning resources, potential funds to build a fire hall	A new RDFFG owned and operated fire hall is built within Electoral Area H	During public engagement, the Dunster Community Association showed promising initiatives and activities they have already undertaken to protect their community, including a map of properties, community values, and equipment. This could be built upon further with the establishment of a fire hall
31. Assess community water delivery ability as required for suppression activities, limited to current water system evaluation and available flow analysis. Many of the Electoral Area H communities rely on community watersheds and creeks for water sourcing, for which supply can become limited during large wildfire events.	RDFFG Emergency Preparedness staff, RDFFG Public Safety, RDFFG Environmental Services	Moderate	Within 4 years (2028)	Water assessment and analysis services	Water availability assessments are completed for communities identified as having structural suppression limitations	Funding is available through UBCM's CRI program to complete water availability assessments

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Vegetation Management						
Objective: Proactively manage vegetation within the wildland urban interface at multiple scales such as the Home Ignition Zone, Neighbourhood Zone, and Landscape Zone to reduce the potential wildfire intensity and ember exposure to people, infrastructure, and other values						
32. Work with the Lheidli T'enneh and Simpcw First Nations during the planning and development of fuel management prescriptions and treatments in the Robson Valley. This will help ensure Indigenous values on the landscape are protected.	RDFFG Emergency Preparedness staff, RDFFG FireSmart Coordinator	Very High	Immediate and ongoing	Communication and collaboration resources	First Nation values are incorporated into the planning, development, and operational stages of fuel management on their traditional territory. This will help foster a stronger relationship between the LTFN and Simpcw and RDFFG.	During interviews with LTFN and Simpcw staff and the in-person community meeting, concerns were expressed regarding protecting traditional, cultural and ecological values on the territory when completing fuel management treatments. Additionally, LTFN requested involvement of their forestry company in these projects whenever possible

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
33. Encourage residents to remove flammable vegetation in the Immediate, Intermediate, and Extended zones on their properties. Promote the use of the *FireSmart BC Landscaping Guide* to replace flammable vegetation with more fire-resistant landscaping.	FireSmart Coordinator	Very High	Immediate and ongoing	Communication resources	Residents begin to show interest in FireSmart landscaping and actively removing flammable vegetation nearest to homes and structures on their property	Utilize the funding available through UBCM's CRI program for FireSmart Rebate Program and providing off-site vegetative debris disposal for property owners who have undertaken their own vegetation management

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
34. Apply for funding to develop fuel management prescriptions for forested areas identified on provincial crown land within the eligible WUIs. It is recommended to start with high priority proposed fuel treatment areas as identified within this CWRP. **NOTE:** This should occur in collaboration with the Ministry of Forests as many of the proposed fuel treatment units identified in this CWRP overlap areas identified for treatment in the 2021 Prince George Tactical Plan.	FireSmart Coordinator	High	Annually, ongoing	A Registered Professional Forester is required to write all fuel management prescriptions	A minimum of 2-3 fuel management prescriptions are developed for an identified fuel treatment area within the Regional District each year. This target is Regional District wide	Funding is available through UBCM's CRI program for fuel management prescription development

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
35. Apply for funding to undertake fuel management treatment operations on provincial crown land within the eligible WUIs based on completed fuel management prescription units. **NOTE**: This should occur in collaboration with the Ministry of Forests as many of the proposed fuel treatment units identified in this CWRP overlap areas identified for treatment in the 2021 Prince George Tactical Plan.	FireSmart Coordinator	High	Every 1-2 years, ongoing	Contractors must be acquired to complete treatment operations	After the prescription phase is completed, at least 2-3 fuel management treatments are operationally completed for an identified area in the Regional District every 1-2 years. This target is Regional District wide	Funding is available through UBCM's CRI program for fuel management treatment operations/ Implementation

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
36. Apply for funding to complete an initial *FireSmart CSGS Assessment* for frequented green spaces in Electoral Area H, such Cedarside Regional Park. Cedarside Park in particular contains some areas of dense pine around trails. If deemed appropriate by the assessment, apply for funding to complete the recommended eligible mitigation activities identified (limited to labour and material costs). Alternately, fuel reduction work around the trails in the park could be completed as a Demonstration Forest (see section 5.7 Vegetation Management)	FireSmart Coordinator, RDFFG Environmental Services (Parks) staff	Moderate	Within 2 years (2026)	Complete **Checklist for CRI Requirements for Fuel Management Prescription before CSGS Assessment is started**, personnel qualified to complete a FireSmart CSGS Assessment	An initial FireSmart CSGS Assessment is completed to determine the best approach to additional fuel reduction in Cedarside Regional Park	Funding is available through the UBCM's CRI program to complete FireSmart mitigation activities on vegetation for cultural sites or green spaces. To be eligible for funding, all projects must have a completed *Checklist for CRI Requirements for Fuel Management Prescription* and a completed *FireSmart Cultural Sites and Green Spaces (CSSGS) Assessment* submitted to UBCM prior to commencing work

Robson Valley - Canoe Electoral Area CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
37. Create an inventory and monitoring system to track wildfire risk reduction and FireSmart vegetation management activities throughout the Regional District including: • Areas that have had fuel management prescriptions and treatment operations completed • Monitoring and maintenance planning for completed fuel treatment areas • Critical infrastructure assessments and associated FireSmart treatments completed • FireSmart Assessments completed for private property owners	FireSmart Coordinator, RDFFG Emergency Preparedness staff	Moderate	Within 4 years (2028), updated annually	Tracking system and geospatial database	Creation of a vegetation management tracking system	Establishing an inventory will streamline the process of tracking ongoing treatments and identifying the necessary maintenance tasks needed at different intervals

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Frequently Used Acronyms

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

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

1.0 Introduction

Wildfire is a natural disturbance agent on the landscape, but with warming temperatures and changing precipitation regimes due to climate change, British Columbia is experiencing a sustained increase in wildfire behaviour and events, particularly in the wildland urban interface. [4]The notable wildfire seasons of 2017, 2018, 2021, and 2023 highlight the potential impacts wildfire activity can have on communities. Specific to the area of interest (Electoral Area H), the Teare Creek Fire in 2023 burned 1,000 hectares adjacent to the community of McBride, resulting in evacuation orders and alerts for many residents. In addition, in July of 2024, multiple wildfires - Dunster-Croydon, Beaver River, and Canoe Road – prompted evacuation orders and alerts for parts of Valemount, McBride, and Dunster.

In response to these events, as well as the recent wildfire activity in the surrounding area, a Community Wildfire Resiliency Plan (CWRP) has been developed for each of the electoral areas within the Regional District of Fraser-Fort George (RDFFG). Developed by Forsite Consultants Ltd. (Forsite), this plan provides a holistic approach to wildfire risk reduction and resilience for the Robson Valley - Canoe Electoral Area (Electoral Area H). The CWRP addresses the seven FireSmart Disciplines of FireSmart Canada and applies them to the various aspects of wildfire management. The seven FireSmart disciplines/principles include:

1. Education
2. Legislation and Planning
3. Development Considerations
4. Interagency Cooperation
5. Cross-training
6. Emergency Planning
7. Vegetation Management

1.1 PLAN GOALS

The purpose of this CWRP is to identify and assess wildfire hazards within and around the RDFFG Electoral Area H communities of Dome Creek, Crescent Spur, Dore River, Mountainview Road area, Tete Jaune Cache, Mount Robson area, McLellan, Cedarside, and Albreda, assess potential risks and impacts to these communities and infrastructure from wildfires and provide effective and feasible mitigation strategies to reduce identified hazards and risk. In accordance with the 2023 Community Wildfire Resiliency Plan Instruction Guide, this plan will aim to:

1. enhance the communities' capacity and understanding of wildfire risk,
2. promote collaboration within and across administrative boundaries,
3. address diverse community needs, and
4. develop actionable and accountable recommendations for effectively reducing wildfire risk.[5]

[4]British Columbia Wildfire Service. (n.d). Prevention. Retrieved July 17, 2024, from https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention
[5]Community Wildfire Resiliency Plan Instruction Guide 2023. British Columbia FireSmart.

1.2 PLAN DEVELOPMENT SUMMARY

The development of this plan included the following components and phases:

1. **Gathering and analysis of background information:** A thorough review of existing relevant plans and compilation of spatial data to help inform this CWRP.
2. **Identification of human and natural values-at-risk:** Development of a values-at-risk spatial database for Electoral Area H through information provided by the Regional District of Fraser-Fort George, public engagement meetings and surveys, and Indigenous Government interviews and community meetings.
3. **Public engagement:** In-person and virtual public open house meetings were held in each Electoral Area throughout the Regional District to elicit local input and feedback into the development process of this plan. A public survey was also developed to gather information and public concerns relating to wildfire risk reduction and emergency preparedness. Feedback and input were utilized to inform recommended action items.
4. **Indigenous Government Engagement:** Forsite completed interviews with technical staff from the Lheidli T'enneh First Nation, McLeod Lake Indian Band, and Simpcw First Nation. Technical staff from the Simpcw First Nation were interviewed for feedback regarding wildfire risk reduction on land throughout their traditional territory that overlaps Electoral Area H. In-person community meetings were held with Lheidli T'enneh First Nation and the McLeod Lake Indian Band. As both the LTFN and MLIB were in the process of developing their own CWRPs, these meetings were a collaborative effort between the RDFFG, emergency management staff from each of the Nations, and Forsite. The purpose of the meetings were to:
    a. Raise awareness of the CWRP planning process,
    b. Create familiarity with FireSmart principles and the language used in resiliency planning,
    c. Build relationships between RDFFG staff local Indigenous Governments.
    d. Identify opportunities for future collaboration on wildfire management and other emergency response activities.
    e. Foster mutual understanding and collaboration to support the safety and resilience of the communities.
    f. Ensure that Indigenous interests and perspectives are considered in the CWRP process and future emergency planning.

    Information and themes heard from both the technical staff meetings and community meetings were incorporated into the RDFFG CWRPs where applicable and utilized to inform recommended action items. The CWRP documents were then shared with the LTFN, MLIB, and Simpcw First Nation for review and feedback. Outreach was attempted with West Moberly First Nation, who chose not to participate in this CWRP process but will be included in CWRP report dissemination and future emergency communications.

Assessment of local wildfire hazard and risk: On the ground wildfire threat assessments were completed in forested areas on Crown land within the Wildland Urban Interface adjacent to homes and other values. The results of these assessments were utilized to identify and delineate recommended areas for fuel management treatments.

5. **Development of a risk mitigation strategy with actionable recommendations:** The data and information collected in the above phases provided the necessary content to develop an actionable CWRP that is tailored to the rural communities within RDFFG Electoral Area H. The action table provides a comprehensive list of recommendations for the RDFFG to implement and increase the wildfire resiliency of those communities.

This plan is intended for use by the RDDFG and its partners to guide efforts in wildfire risk reduction and resilience. Comprehensive data collection and public engagement processes ensure a tailored approach specific to the Robson Valley - Canoe Electoral Area and its communities and values.

1.3 COMMUNITY RESILIENCY INVESTMENT PROGRAM

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

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

2.0 Relationship to Other Plans

Wildfire can affect all aspects of a community. As a result, there are many existing plans that relate to the CWRP. These plans can help inform the CWRP by providing helpful information that guides plan content development. The plans listed in Table 2 were consulted during the development process to ensure alignment with existing community plans and objectives and identify any gaps that could be addressed by the CWRP.

Table 2: Key Plans and relationship to CWRP

Key Plans and Relationships to CWRP		
Plan Type	**Description**	**Relationship to CWRP**
Emergency Management Plan (RDFFG)	This plan establishes an Emergency Management program to oversee disaster and emergency management in the RDFFG. It provides a framework for plan development, public readiness, response activities, and recovery coordination.	The following key sections outline safety standards for emergency and wildfire response: • 3.3 Preparedness • 3.4 Response • 3.5 Recovery • Preparedness Activities • 4.4 External Public Communications • 4.6 Response Plans
Prince George Land and Resource Management Plan	A sub-regional plan providing high-level objectives for Crown land and resource use. Resource Management Zones are identified within the planning area to guide resource management related activities	Includes management direction for Resource Management Zones. Relevant sections may include: • 2.2 General Management Direction • 2.3 Resource Management Zones
Prince George Area Sub-District Crown Land Plan (Ministry of Lands, Parks and Housing, 1981)	Aligns with the provincial Sustainable Resource Management Plan (SRMP) to coordinate landscape-level land management in the Prince George Area. Plan goals include site-specific objectives related to land use, economic opportunity, and environmental conservation.	Outlines designations and policy guidelines for management areas. Relevant sections related to fire management and landscape disturbance include: • 2.4 Recreation and Conservation Management Area • 2.5 Settlement Reserve Area

Key Plans and Relationships to CWRP		
Plan Type	**Description**	**Relationship to CWRP**
Regional Parks Plan (RDFFG, 2021)	Provides strategic direction for the planning, acquisition, development, and management of regional parks within the RDFFG over a 10-year timeline.	Sections related to CWRP actionable items include: • 7.3.3 Education and Interpretation
Bulkley-Nechako and Fraser-Fort George Regional Adaptation Strategies (2019)	Plan goals include identification of climate change impacts and priorities related to agriculture. Introduces strategic actions for adaptation and resilience.	Relevant sections pertaining to wildfire include: • Impact area 1: Increasing Wildfire Risk • Impact area 3: Warmer and Drier Summer Conditions
North-eastern BC Destination Development Strategy (Ministry of Tourism, Arts, and Culture)	Strategic guide for the direction and development of regional tourism. It also provides guidance for local planning within the North-eastern BC area, fostering intercommunity dialogue and action.	Relevant sections that may overlap with CWRP action items include: • B. Collaboration, Engagement, and Resources • C. Positive Operating Environment • D. Infrastructure and Transportation
Robson Valley - Canoe Upstream Official Community Plan (RDFFG, Bylaw No. 2290)	Outlines broad land use objectives and policies for the Robson Valley – Canoe Downstream Area, guiding community planning and bylaw development. It also addresses natural resources and is further supported by Local Resource Management Plans (LRMPs) and the Protected Area Strategy.	Relevant to this CWRP through the following key sections: • 2.1 Inter-Plan Consistency Objectives • 3.4 Environment • 3.8 Fire Protection • 3.1.2 Rural Wildfire • 7.6 Resort Commercial Policies • 11.0 Rural Communities

Key Plans and Relationships to CWRP		
Plan Type	**Description**	**Relationship to CWRP**
Robson Valley – Canoe Downstream Area Official Community Plan (RDFFG, Bylaw No. 1948)	Outlines broad land use objectives and policies for the Robson Valley – Canoe Upstream Area, guiding community planning and bylaw development. It also addresses natural resources and is further supported by Local Resource Management Plans (LRMPs) and the Protected Area Strategy.	Relevant to this CWRP through the following key sections: • 2.1 Inter-Plan Consistency Objectives • 3.4 Environment • 3.7 Fire Protection • 3.1 1 Rural Wildfire • 5.0 Rural Communities
Valemount and Area Integrated Land Use Development Plan (2005)	An integrated land use development plan between the Village of Valemount, the RDFFG that outlines economic development goals with related resource management policies.	Relevant sections that may pose implications on wildfire management activities: • Maintaining Environmental Quality
Robson Valley Land and Resource Management Plan (1999)	A sub-regional plan providing high-level objectives for Crown land and resource use. Resource Management Zones are identified within the planning area to guide resource management related activities	Includes management direction for Resource Management Zones. Relevant sections may include: • 2.1 Biodiversity Emphasis • 2.2 Overall Goals, Values, Objectives, and Strategies • 2.3 Resource Management Zones • 4.2.1.1 Measures to Augment Short-term Timber Supply
Mount Robson Park Management Plan (2011)	Defines the role of the park within the BC protected areas system, establishing objectives and strategies to guide management and development.	The plan recognizes fire as fundamental ecosystem process, as well as a risk to the public and park facilities. Key sections describing relevant management objectives, actions and strategies include:

Key Plans and Relationships to CWRP		
Plan Type	**Description**	**Relationship to CWRP**
Valemount to Blue River Winter Recreational Sustainable Resource Management Plan	Addresses winter recreation challenges, aiming to promote sustainable tourism, communities, and environments.	Relevant sections that may pose implications on wildfire management activities: • 2.6 Sustaining Environment and Wildlife • 3.3 Public Education and Safety
Carrier Lumber Ltd., Dunster Community Forest Society, Valemount Community Forest Limited Partnership, Forest Stewardship Plan (2022)	Outlines Forest Development Units (FDUs), results, and strategies. Provides information such as stocking requirements and the cumulative effects of multiple Forest Stewardship Plans.	The plan includes a wildfire management strategy, relevant sections that may pertain to CWRP actions are: • 5.1 Objectives Set by Government for Wildlife and Biodiversity • 7.0 Stocking Requirements
McBride Community Forest Corporation, Forest Stewardship Plan (2007)	Outlines Forest Development Units (FDUs), higher level plans, results and strategies. Provides information regarding stocking requirements for the Community Forest.	The plan does not include objectives for wildfire management; however, the previous FSP (2003) included utilization of prescribed fire as a tool for ecological restoration, site preparation, and hazard abatement.
Valemount Community Forest Management Plan (2019)	Outlines objectives and strategies to aimed at utilizing community forest resources in sustainable, environmentally respectful, fiscally responsible, and legally compliant ways.	Sections that relate to wildfire management include: • 3. Linkage of Community Forest Program Goals to VCF Management Goals

3.0 Community Description

The Regional District of Fraser-Fort George Electoral Area H, also referred to as the Robson Valley-Canoe area, is the easternmost electoral area in the RDFFG. It encompasses the entirety of the Robson Valley and spans approximately 1,500,000 hectares. The electoral area is divided into upstream and downstream sub-electoral areas.

The downstream region includes four rural communities and the Village of McBride. Dome Creek, situated 90 kilometres west of McBride, was developed during railway construction and relies on farming and logging. Crescent Spur, another historic railway community, lies 50 kilometres west of McBride. Dore River offers rural residential lots along Highway 16, predominantly within the Agricultural Land Reserve. Mountainview Road runs upslope of McBride, featuring small residential lots and a manufactured home park.

The upstream electoral area includes five rural communities and the Village of Valemount. Tete Jaune Cache is a historical community that supports a mixture of residential lots, with some commercial uses on the north side of the river. The confluence of the McLennan River in this area serves as a crucial salmon spawning area. Mount Robson and its Approach Corridor are part of a designated World Heritage site, integral to the provincial park's experience. McLennan – Highway No.5 – North of Valemount is a community based on a concentration of existing development. Cedarside is an industrial area south of Valemount that provides economic benefits to the village. Albreda is a rural community nestled in the narrow Camp Creek valley.

Within this electoral area, there are three Community Forests: Dunster Community Forest (20,000 hectares), McBride Community Forest (60,000 hectares), and Valemount Community Forest (70,182 hectares). Community Forests are managed to ensure social, ecological, and economic sustainability, allowing communities to manage for water, visual impacts, wildlife, recreation, and wildfire risk reduction in forests adjacent to their communities.

Despite its history of prominent forestry and agricultural sectors, tourism and recreation have become important economic sectors throughout the Robson Valley. The region provides ample opportunities for backcountry hiking, heli-skiing, snowmobiling, mountain biking, and more. Mount Robson Park, located within this electoral area, is one of BC's premier destinations offering front-country camping, multi-day hikes, and attractions like the Berg Lake Trail, Mount Robson Summit, and Mount Robson Corridor.

3.1 AREA OF INTEREST

The Community Resiliency Investment (CRI) program provides guidance for defining the Area of Interest (AOI) for which funding is applicable, which varies depending on the type of local government (e.g., municipality versus a regional district). For regional districts the boundary of an electoral area can be the boundary of the AOI. For the purpose of this CWRP, the AOI for the Robson Valley-Canoe area was established as the boundary of RDFFG Electoral Area “H” (Figure 1). In total, the AOI covers approximately 1,500,000 hectares.

3.2 WILDLAND-URBAN INTERFACE

The Wildland Urban Interface (WUI) denotes the zone where flammable vegetation interfaces with homes, structures, and critical infrastructure. Wildfires occurring in the WUI present distinctive challenges for stakeholders and local authorities. Such wildfires are often perceived primarily as threats to human lives rather than natural components of the ecosystem. Additionally, jurisdictional boundaries among emergency services can be intricate, leading to coordination challenges among multiple agencies with varying training, equipment, and tactics during emergencies.

Historically, a two-kilometer buffer was assigned to areas with a structure density exceeding six structures per square kilometer. However, for the purpose of the provincial FireSmart Community Funding and Support (FCFS) structure, the eligible WUI within this CWRP is redefined as a maximum of one kilometer from where structure density is greater than six structures per square kilometer[6]. Figure 1 also illustrates the eligible WUI for this CWRP.

[6] FireSmart Community Funding and Supports

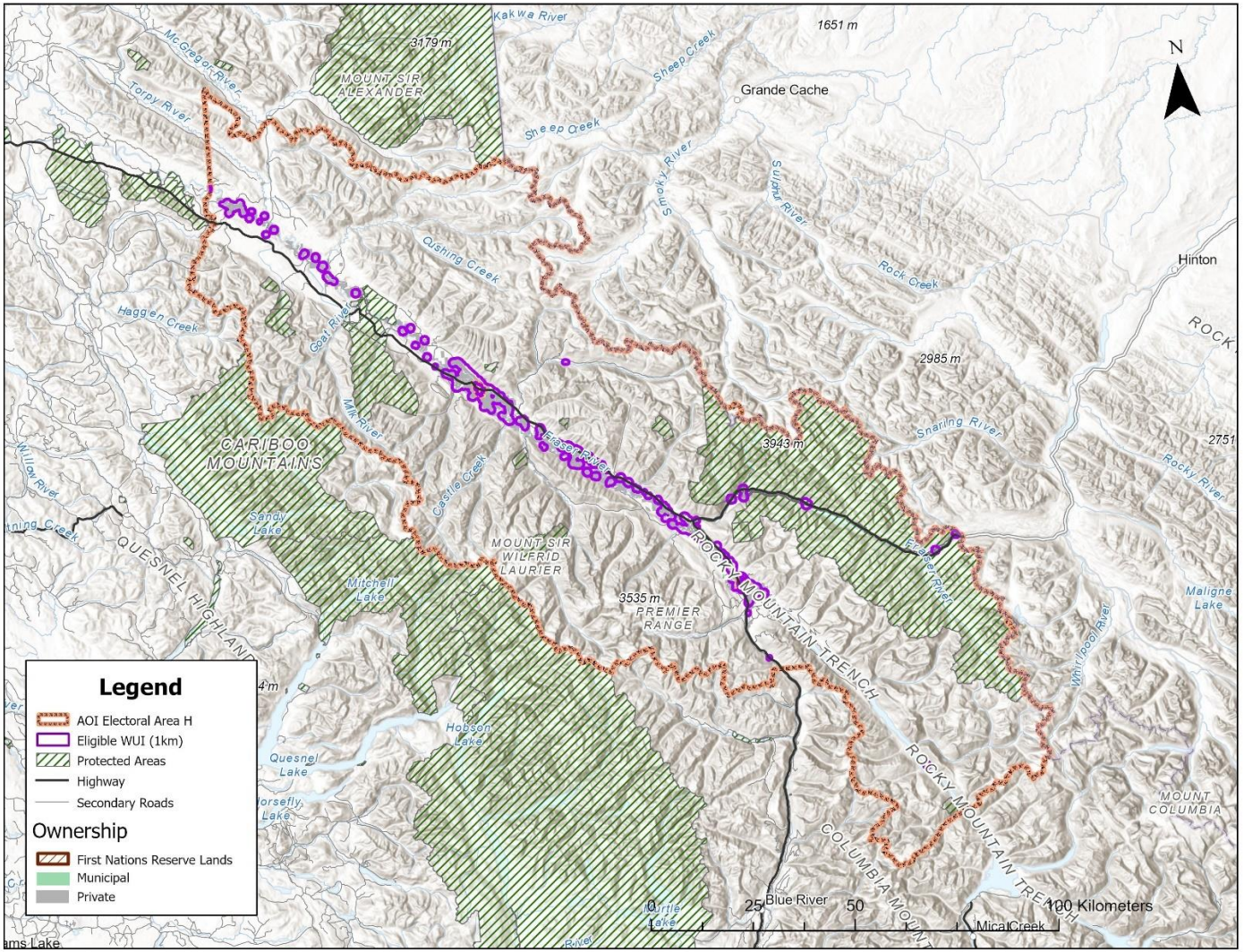

Figure 1: Electoral Area H: Area of Interest (AOI) and Wildland Urban Interface (WUI) boundary

Within Electoral Area H, the eligible WUI landbase is approximately 36,000 hectares, constituting <3% of the total AOI. The land jurisdiction within the WUI zone is as follows:

- Crown Agency 0.3%
- Crown Provincial 22.6%
- Municipal 0.2%
- Private 76.7%
- Unclassified 0.2%

3.3 COMMUNITY INFORMATION

Electoral Area H has a population of approximately 1,500 residents (Table 3). A significant proportion of the population (approximately 80%) is over the age of 50, with a very low-density distribution of 0.1 persons per square kilometer. Nearly all residences are detached single-family homes situated on large rural properties averaging over 10 hectares in size.

Table 3: Community profile of Electoral Area H

Community Information	
Total Population (2021)	1,589
Total Population (2016)	1,586
Population Percentage Change (2016 -2021)	0.2
Median Age	51.2
Total Private Dwellings	806
Private Dwellings Occupied by Usual Residents	688
Population Density Per Square Kilometres	0.1
Land Area in Square Kilometres	14,926.73

Services provided by the RDFFG include:[7]

- 911 emergency response
- Building inspection
- Cemetery facilities
- Community facilities
- Emergency preparedness
- Fire response coordination
- Heritage conservation
- Land use planning
- Parks
- Solid waste management

[7] Regional District of Fraser-Fort George. (n.d). Retrieved on September 18, 2024, https://www.rdffg.ca/your-community/community-profiles

3.4 VALUES AT RISK

The following section provides a description of the extent to which wildfire has the potential to impact the values at risk (VAR) identified within Electoral Area H. Values at risk are the human or natural resource values that may be negatively impacted by wildfire; this includes human life, property, critical infrastructure, high environmental and cultural values, and resource values. High VAR are often found within the WUI, but can also be geographically isolated, such as a remote communication tower.

3.4.1 Human Life and Safety

Human life and safety are the highest priority in the event of a wildfire. A key consideration is the evacuation and safe egress of threatened areas when necessary. Evacuations can be a complex and dynamic nature of wildfire incidents. Orderly evacuation takes time and safe egress routes can be compromised by traffic congestion and accidents, or the dynamics of the wildfire itself.

As the most recent census in 2021, the population within the Robson Valley – Canoe Electoral Area was 1,589 people representing an increase of 0.2% from the previous census in 2016 (Statistics Canada, 2023). The population density of Robson Valley - Canoe is less than one person per square kilometer.

The spread-out nature of residences in rural areas can pose increased challenges for emergency response and evacuation in the event of a wildfire. Tourism and both front- and back-country recreation in the Robson Valley during the summer months further increases the dispersed population in the region. Additionally, many of the communities and neighbourhoods throughout the electoral area have limited egress routes due to topographic constraints and few bridges established over the meandering Fraser River. Collectively, these factors must be considered for emergency response and evacuation planning.

3.4.2 Emergency Response

Provincial legislation and policies are in place to support local governments during disasters. The Emergency Program Act empowers the Regional District to establish an Emergency Management Program, and the Compensation and Disaster Financial Assistance enable eligible emergency response costs to be covered.

The RDFFG Emergency Management Plan provides guidance and direction relating to emergency mitigation, planning, preparedness, response, and recovery. In the event of a natural disaster, such as a wildfire, immediate response measures are initiated. The EOC Activation Guide details the procedures necessary for activating the Emergency Operations Centre (EOC) when required, including determining the appropriate level of activation; coordinating the mobilization of personnel and resources to establish the EOC; and disseminating crucial information to the public. The primary EOC is situated at **2259 Quinn Street in the City of Prince George.**

The RDFFG utilizes a Public Alerting System (PAS) for which residents can sign up to receive local emergency information during wildfires or other disasters. The PAS applies to all the Regional District's electoral areas and the City of Prince George. However, more isolated communities throughout the Regional District have limited cell reception and limited internet bandwidth, which can pose a concern for receiving emergency evacuation alerts or orders. The PAS is not currently utilized in the Village of McBride and Village of Valemount.

3.4.3 Fire Suppression Capabilities

The RDFFG operates 13 volunteer fire departments across the district. Each fire department within the RDFFG will have on average four fire apparatuses. At minimum, each apparatus should have the following equipment meeting ULC and Fire Underwriters Standards:

- 1 X frontline fire engine
- 1 X frontline water tender
- 1 X reserve tender or engine supporting mutual aid across RDFFG fire departments

Electoral Area H is supported by mutual aid agreements with two volunteer Fire Departments: the McBride District Volunteer Fire Department and the Valemount and District Volunteer Fire Department. The McBride Fire Department services the Village of McBride, the Eddy area southeast of the Village, Lamming Mills northwest of the Village, and the Mountainview Rd community. The Valemount Fire Department services the Village of Valemount, the Valemount north area, and Cedarside to the south. However, there are still many properties and smaller communities throughout Electoral Area H, such as Dome Creek, Crescent Spur, Dunster, and Tête Juane Cache, without fire protection services.

Fire hydrant coverage around McBride and Valemount is overall good, however the remainder of Electoral Area H does not have fire hydrant coverage. For any areas without fire hydrant coverage, the fire departments are required to shuttle water to provide water supply when responding to a structural fire incident.

The total response area for the fire and rescue department covers just over approximately 36,000 hectares in Electoral Area H. The remaining area falls under the jurisdiction of the BC Wildfire Service. For wildfire incidents occurring outside the fire departments response area, the BC Wildfire Service may authorize additional suppression support from fire departments. Electoral Area H is located within the BCWS Prince George and Robson Valley fire zones. Fire zone information is summarized in Table 4.

Table 4: BCWS fire zone information for Electoral Area H

BCWS Fire Zone	Fire Zone Office	Seasonal Staffing Complement
Prince George	1434 Old Cariboo Hwy, Prince George	• Unit Crew X 1 • Initial Attack Crew X 7 • Wildfire Officer X 1 • Wildfire Tech X 3 • Wildfire Assistant X 4 • IA Crew Supervisors X 2 • Operations Assistant X 1 • Asset Management Assistant X 1 • Air tanker base X 1 • Contract crews on standby
Robson Valley	3390 Selwyn Road, Valemount	• Wildfire Officer X 1 • Wildfire Technician X 2 • Wildfire Assistant X 3 • Operations Assistant X 1

		• Initial Attack Crew X 4

Additionally, some communities such as Dunster, have formed local fire brigades to immediately action fires within the community while waiting for BCWS to arrive.

3.4.4 Electric Power

Electrical power throughout the Regional District is provided by a mix of above-ground and below-ground lines serviced by BC Hydro. However, in the event of a power outage, most Regional District communities do not have diesel generators located within their halls or community infrastructure as backup sources of electoral power. The number of generators owned by private landowners is unknown.

3.4.5 Critical Infrastructure

Critical infrastructure (CI) assets are structures or facilities that are essential to a community's health, safety, security, economic well-being, and effective government function. Protection of these assets during a wildfire event is crucial for emergency response preparedness and effectiveness, ensuring prompt restoration of essential services and coordinated evacuations.

Critical infrastructure (CI) includes emergency and medical services, electrical and gas utilities, transportation networks, water and wastewater systems, social support services, and communication infrastructure. Implementing FireSmart activities around critical infrastructure can significantly reduce wildfire losses and impacts. Critical infrastructure identified within the RDFFG Electoral Area H is listed below in Table 5.

Table 5: Critical infrastructure identified in Electoral Area H

Critical Infrastructure Type	Site	Ownership	Location
Communication Tower	Lucille Antenna & Emergency Repeater Site	PG Amateur Radio Club	7400 Lucille Mountain FSR
	Communication Site		13864 McBride Highway 16 E
	Communication Site		15980 McBride Highway 16 W
	Communication Site - Valemount	TELUS	1700 Hillside Dr
	Communication Site - Dunster	TELUS	7055 Read Rd
	Holiday Mountain Antenna Site (Valemount FD Dispatch)	Ministry of Transportation	
Community Spaces	Dunster Community Hall	RDFFG	

Critical Infrastructure Type	Site	Ownership	Location
	Dunster Schoolhouse		8252 Dunster-Croydon Road
	Dome Creek Recreation Facility	RDFFG	
	Tête Jaune Community Hall	RDFFG	14270 Blackman Rd
Transfer Station	Dunster Transfer Station	RDFFG	7085 Read Rd
	Valemount Transfer Station	RDFFG	980 Highway 5
	Legrand Landfill	RDFFG	5755 Legrand Rd
	McBride	RDFFG	500 North East Frontage Rd

Figure 2: Dunster Community Hall - Example of Critical Infrastructure

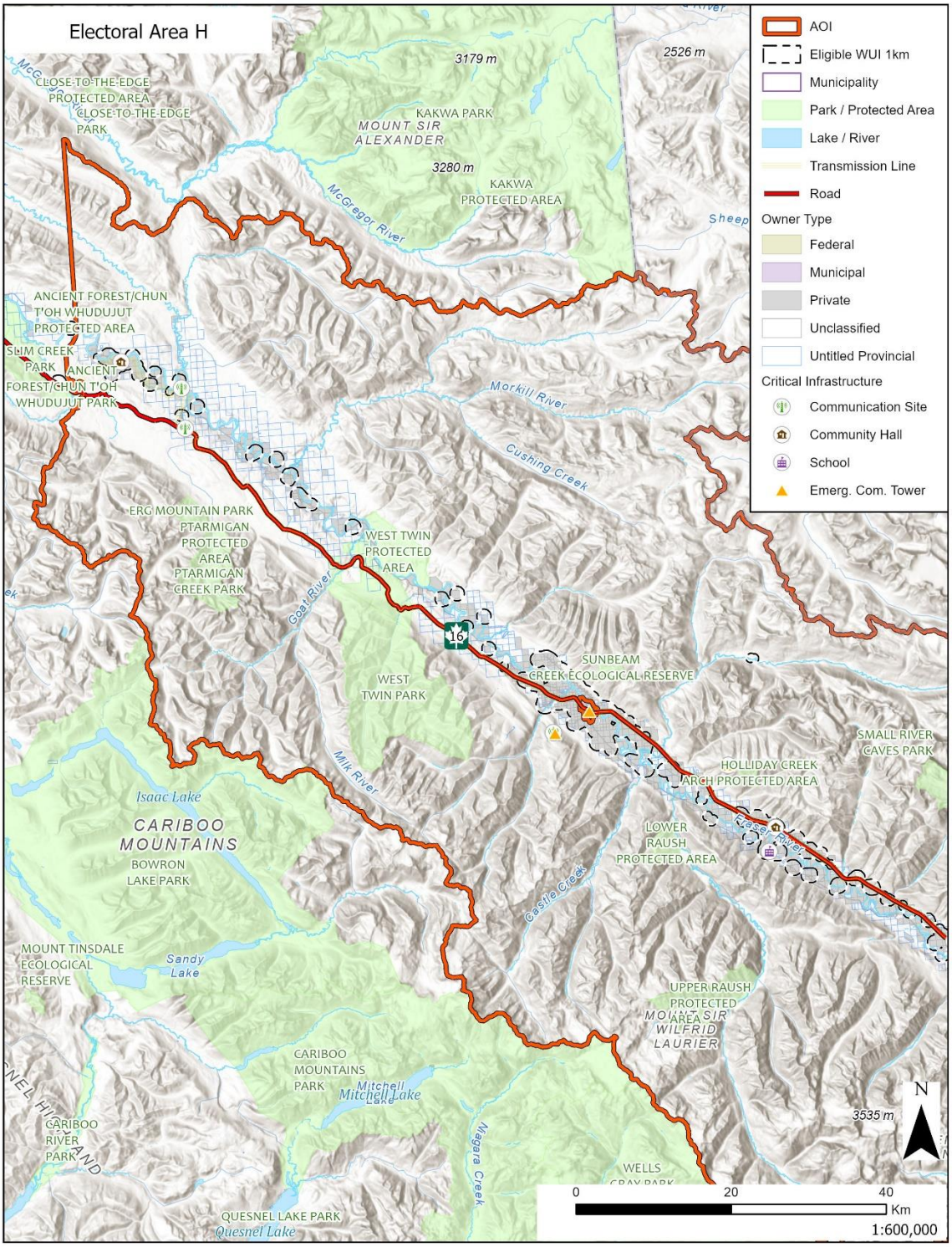

Figure 3. Electoral Area H: Critical Infrastructure Map Part 1

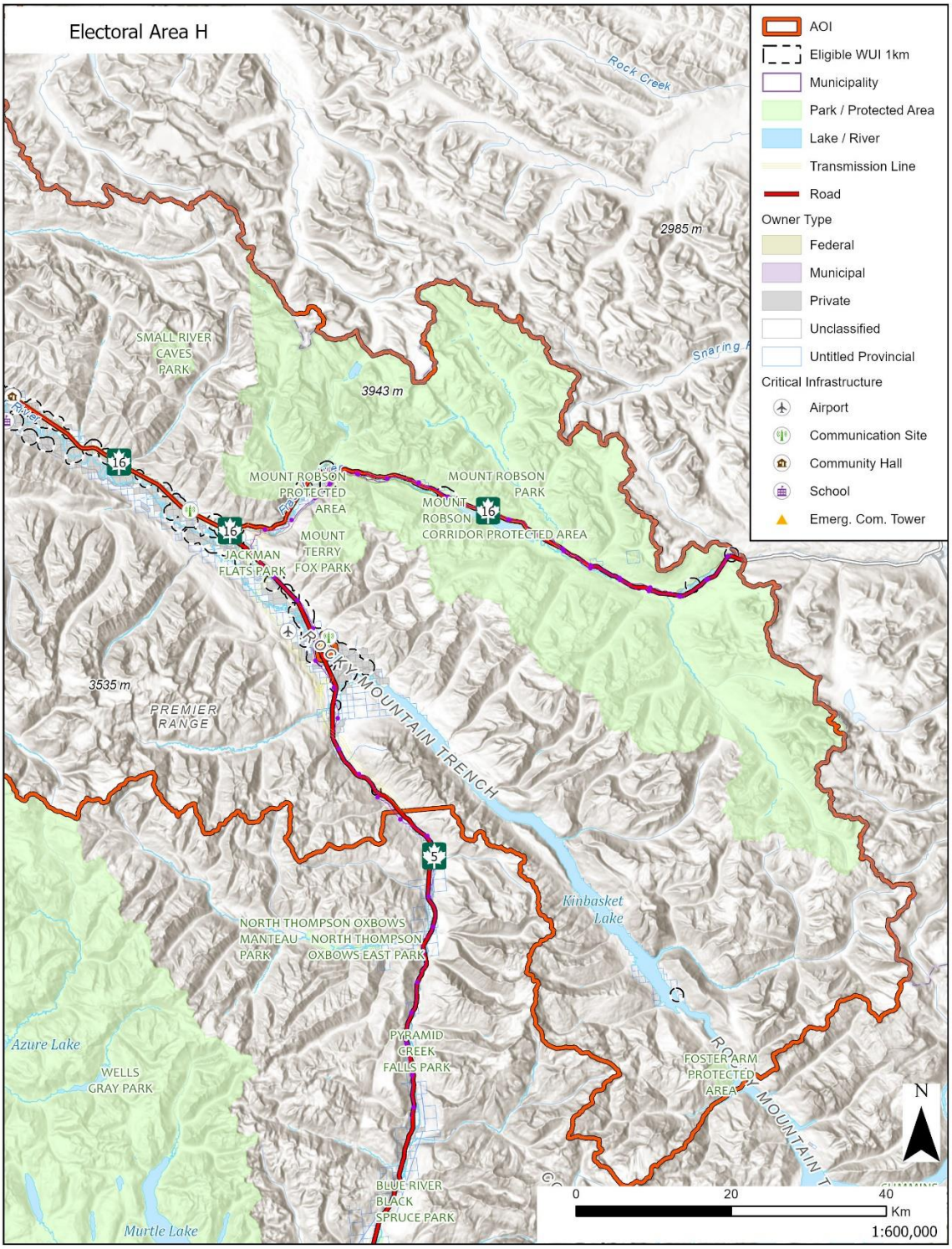

Figure 4. Electoral Area H: Critical Infrastructure Map Part 2

3.4.6 Community Watersheds and Water Supply

Potential impacts to watersheds that provide surface water resources for rural communities should be identified as wildfires may affect soil integrity and sedimentation levels, as well as increase likelihood of landslides. These effects can significantly degrade water quality for extended periods of time. In extreme scenarios, the water supply may need to be temporarily or permanently abandoned, necessitating development of new infrastructure. This process may take several years to complete and requires considerable financial investment and funding.

Four community watersheds were identified within Electoral Area H and are detailed in Table 6.

Table 6: Community watersheds identified in Electoral Area H

Community Watershed	Source	Organization and User Group
Swift Community Watershed	Swift Creek	Village of Valemount
Dominion Community Watershed	Dominion Creek	Village of McBride
Martinson Community Watershed	Martinson Creek	Village of McBride, Lucille Mountain Water Users Community
Edand Community Watershed	Edand Creek	Village of McBride (group of domestic water users)

The remainder of drinking water in Electoral Area H is primarily supplied to private lands by individual underground water wells or diversion from creeks.

3.4.7 Cultural Values

Electoral Area H is situated within the traditional territories of the Lheidli T'enneh and Simpcw First Nations, who continue to assert a strong presence in north-central BC. Indigenous cultural sites in BC are generally not shared with the public due to their sensitive and confidential nature. Local Indigenous groups have the right to keep access to these resources private. Due to an extensive and uninterrupted First Nation presence throughout the region, wildfire and associated suppression operations have the potential to inadvertently impact or destroy cultural heritage resources. Any planned activities or treatments for the purpose of wildfire mitigation must be appropriately communicated to local Indigenous Governments and allow for meaningful engagement throughout the project.

During public engagement, the **Dunster Station Museum** was identified as an important community heritage feature which has been restored by local community members.

3.4.8 High Environmental Values

The BC Conservation Data Centre (CDC) provides information about species and ecosystems at risk through the BC Species and Ecosystems Explorer, and CDC iMap. Red listed species represent any species or ecosystem that is at risk of being lost (extirpated, endangered or threatened). Blue listed

species are any species or ecosystem that is of special concern. Recorded occurrences of Red and Blue listed animals are at risk within the electoral area have been summarized in Table 7.

Table 7: Red and Blue listed species identified within Electoral Area H

Common Name	Scientific Name	Element Type	BC List Status
Caribou (Central Mountain Population)	*Rangifer tarandus pop. 18*	Animal	Red
Caribou (Southern Mountain Population)	*Rangifer tarandus pop. 1*	Animal	Red
White Sturgeon (Upper Fraser River Population)	*Acipenser transmontanus pop. 5*	Animal	Red
Michigan Moonwort	*Botrychium michiganense*	Vascular Plant	Blue
Whitebark Pine	*Pinus albicaulis*	Vascular Plant	Blue
Slender-leaf Sundew	*Drosera linearis*	Vascular Plant	Blue
Painted Turtle - Intermountain - Rocky Mountain Population	*Chrysemys picta pop. 2*	Vertebrate Animal	Blue
Cryptic Paw	*Nephroma occultum*	Fungus	Blue
Smokers Lung	*Lobaria retigera*	Plant	Blue
Yellow-banded Bumble Bee	*Bombus terricola*	Invertebrate Animal	Blue
Lesser Brown Sedge	*Carex adusta*	Vascular Plant	Blue
Great Blue Heron, herodias subspecies	*Ardea herodias herodias*	Vertebrate Animal	Blue
lodgepole pine / velvet-leaved blueberry / clad lichens	*Pinus contorta / Vaccinium myrtilloides / Cladonia spp.*	Ecological Community	Blue

Parks and protected areas play an important role in habitat and ecosystem protection, contributing to biodiversity and environmental sustainability. These environmental values also offer opportunities for environmental education and stewardship, as well as recreation and community engagement. The following provincial parks and protected areas were identified within Electoral Area H:

- **Cariboo Mountains Provincial Park**
- **Mount Robson Provincial Park (World Heritage Site)**
- **Jackman Flats Provincial Park**
- **Small River Caves Provincial Park**
- **West Twin Provincial Park**
- **Ptarmigan Creek Provincial Park**

- **Kakwa Provincial Park**
- **Wells Gray Provincial Park**
- **Bowron Lake Provincial Park**
- **Mount Terry Fox Provincial Park**
- **Rearguard Falls Provincial Park**
- **Erg Mountain Provincial Park**
- **Foster Arm Protected Area**
- **Upper Raush Protected Area**
- **Mount Robson Corridor Protected Area**
- **Mount Robson Protected Area**
- **Lower Raush Protected Area**
- **Holliday Creek Arch Protected Area**
- **West Twin Protected Area**
- **Ptarmigan Protected Area**

All site-level vegetation/fuel management activities and operational wildfire risk reduction treatment plans must follow all legal requirements set out in legislation, orders and high-level plans, or consider best management practices for identified environmental resources and species at risk and their habitats. Assistance and advice from a Registered Professional Biologist or other qualified professional may be required prior to the implementation of any wildfire risk reduction activities in the area to determine potential impacts and guide treatment activities. Additionally, any wildfire risk reduction activities within provincial parks must be developed in collaboration with BC Parks land managers

4.0 Wildfire Risk Assessment

The wildfire risk assessment provides land managers with a decision-making tool used to determine risk mitigation opportunities, increasing the overall effectiveness of wildfire risk reduction planning and activities that support community resilience. Understanding the difference between **wildfire threat** and **wildfire risk** provides context for the risk assessment process and promotes alignment and support for risk mitigation strategies. Wildfire risk differs from wildfire threat in that risk takes into consideration the likelihood and potential consequences of a wildfire event on human values.

Wildfire Risk: the likelihood of fire occurrence, fire behaviour, and its potential negative impacts on human values. Overall wildfire risk-based framework considers the combination of the following:

- Likelihood (or probability) of an unwanted wildfire event occurring,
- Associated fire behaviour; and
- Consequence – the resulting negative impacts to values

Wildfire Threat: A fire's capacity to ignite, spread, and consume fuel, influenced by environmental factors such as topography, vegetation, and weather. The three main components used to define wildfire threat and referred to as the Fire Behaviour Triangle are:

- Topography: Slope, aspect, elevation, and land features.
- Fuel: Loading, size/shape, arrangement, compactness, chemical properties, and fuel moisture; and
- Weather: Temperature, relative humidity, wind speed and direction, and precipitation (rain).

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

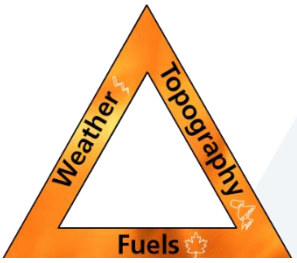

Figure 5: Fire Behaviour Triangle

4.1 LOCAL WILDFIRE ENVIRONMENT

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

4.1.1 Topography

Topography describes the components on the landscape that influence fire behaviour, including prominent land features, elevation, slope steepness, and slope aspect. These features affect fire behaviour in the following ways:

- **Slope**: Steeper slopes accelerate the preheating and combustion phases of fuels due to the rising of hot air and shorter distance between burning and unburned fuels.

- **Aspect**: Determines amount of sun exposure influencing fuel composition and moisture content. In the northern hemisphere, south-facing slopes receive more sunlight throughout the day, resulting in dryer conditions and increased flammability of fuels.
- **Elevation**: Influences weather conditions such as air temperature and seasonal moisture levels. Higher elevations generally mean cooler temperatures and slower slow melt rates.
- **Prominent land features**: Funnel and concentrate wind flows increasing fire intensity. The spatial structure of these features can also increase radiant and direct heat transfer.

In Electoral Area H, elevations range from 700 meters to 3050 meters above sea level. Prominent land features include the Rocky Mountain Range, Caribou Mountain Range, Fraser River, and Willow River, resulting in areas with steep slopes with varying aspects and degrees of sun exposure. Lower elevation areas serve as corridors for human activity and development, increasing the likelihood of human caused wildfire events in these areas.

4.1.2 Fuel

Fuel refers to any combustible material, including living or dead vegetation and organic matter. The fuel type, condition, dryness, size, arrangement and continuity influence wildfire rates of spread, size, and severity. Within the fire behaviour triangle, fuel is the only element land managers and stakeholders can manipulate and/or control. Vegetation types found within forested and non-forested ecosystems and the natural disturbance regimes that help to characterize them are major contributing factors to the type, arrangement, and continuity of fuels on the landscape.

4.1.2.1 Natural Disturbance Type

In British Columbia, fire regimes are broadly classified using five Natural Disturbance Types (NDT) based on factors such frequency, size, and severity.

Table 8: Description of Natural Disturbance Types and Proportion of NDTs found within Electoral Area H

Natural Disturbance Type	Natural Disturbance Description	Frequency	Area (%)
NDT 1	Ecosystems with rare stand-initiating events	250 – 350 years	15
NDT 2	Ecosystems with infrequent stand-initiating events	200 years	34
NDT 3	Ecosystems with frequent stand-initiating events	100 – 150 years	6
NDT 4	Ecosystems with frequent stand-maintaining events	4 – 50 years (surface) 250 (stand replacing)	0
NDT 5	Alpine Tundra and Subalpine Parkland ecosystems	4 - 50 years	46

Although nearly 60% of the total AOI (Electoral Area H) is classified as NDT 1 and NDT 5 in the alpine areas, the WUI zone in the valley is mainly classified as NDT 2. NDT 2 is characterized by infrequent stand-initiating events with a return interval of approximately 200 years, with fire being the primary disturbance. Wildfires are often of moderate size (20 to 1,000 ha). Larger fires may occur after periods of extended drought, which the area has experienced recently with the 2023 Teare Creek fire. Consequently, the landscape exhibits a mosaic of stand of different ages, with extensive areas of mature forest surrounding patches of younger forest.

The consequences of fire suppression and climate change effects are garnering growing attention. Decades of fire suppression, paired with the impacts of hotter and dryer conditions, are raising the risk of large, high-intensity wildfires.[8] These changes disrupt natural disturbance regimes and require proactive wildfire management to address the dynamic situation and associated challenges.

4.1.2.2 Biogeoclimatic Zones

The vegetation (fuels) within any given area of British Columbia can be summarized using the provincial Biogeoclimatic Ecosystem Classification (BEC) system. The BEC system categorizes ecological zones by vegetation, soils, and climate. Regional subzones are further derived from relative precipitation and temperature.

Electoral Area H is characterized by high elevation BEC zones in the montane areas including the Alpine Tundra (AT) and Engelmann Spruce – Subalpine Fir (ESSF) zones, and the Interior Cedar-Hemlock (ICH) and Sub-boreal Spruce (SBS) Zones in the valley bottoms (Table 9).

Table 9: BEC Zones identified within Electoral Area H

BEC Zone	BEC Subzone	NDT Type	Percentage (%)
Alpine Tundra (AT)	Undifferentiated (un)	NDT 5	18
Engelmann Spruce – Subalpine Fir (ESSF)	Moist Mild (mm)	NDT 2	21
	Moist Mild Parkland (mmp)	NDT 5	22
	Wet Cold (wc)	NDT 1	4
	Wet Cold Parkland (wcp)	NDT 5	4
	Wet Cool (wk)	NDT 1	3
Interior Cedar Hemlock (ICH)	Moist Mild (mm)	NDT 2	10
	Very Cool (vk)	NDT 1	2
	Wet Cool (wk)	NDT 1	7
Sub-Boreal Spruce (SBS)	Dry Hot (dh)	NDT 3	6
	Very Cool (vk)	NDT 2	3

[8] Parisien, M. A., Barber, Q. E., Bourbonnais, M. L., Daniels, L. D., Flannigan, M. D., Gray, R. W., ... & Whitman, E. (2023). Abrupt, climate-induced increase in wildfires in British Columbia since the mid-2000s. Communications Earth & Environment, 4(1), 309.

The majority of the WUI zone within Electoral Area H where people reside is located within the SBS Zone. The SBS Zone experiences cold, snowy winters and relatively short, warm summers. Common trees species within this zone include lodgepole pine, white spruce, black spruce, Douglas-fir, paper birch, and trembling aspen.

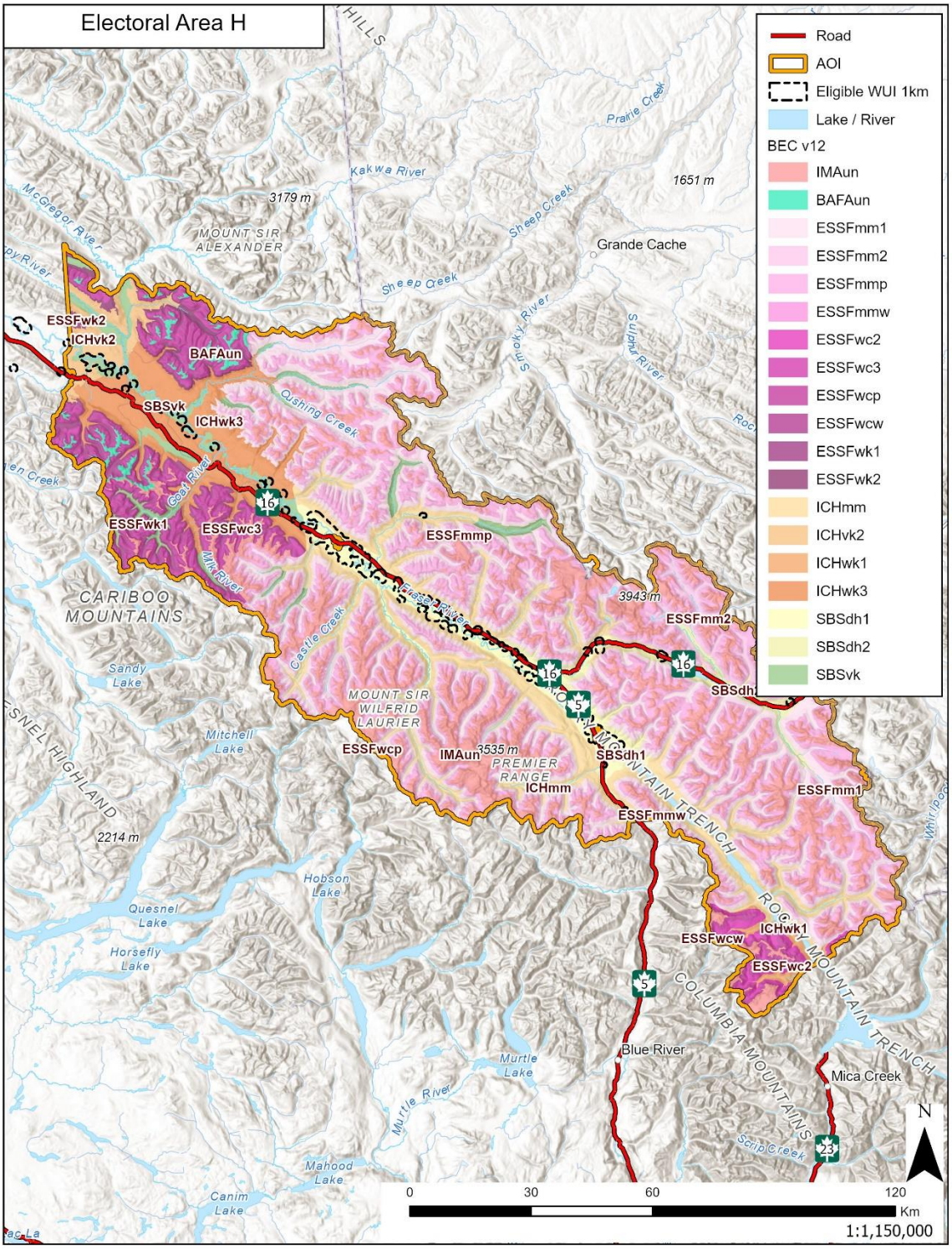

Figure 6. Electoral Area H: Biogeoclimatic Zone Map

4.1.2.3 Fuel Types

The Canadian Forest Fire Danger Rating System (CFFDRS) is used as a decision support tool for wildfire management professionals in Canada, used to assess fire behaviour under various conditions. The CFFDRS is made up of two subsystems, 1) the Fire Behaviour Prediction (FPB) System, and 2) the Fire Weather Index System. Together, these components incorporate weather inputs and fuel types to help predict fire behaviour.

The CFFDRS defines 18 benchmark fuel types based on boreal forest stand attributes. Fuel types are intended to reflect overall stand structure and fire behaviour, rather than specific tree species on the ground. For example, the C3 (Mature Lodgepole Pine) fuel type does not require exclusively mature pine trees but rather considers the overall forest and fuel complex, including stand density, arrangement, and continuity. As many of the vegetation communities within BC are not suitably represented by the boreal-based FBP fuel types, fuel types should be regarded as a 'best fit' based on best available scientific research and professional knowledge/experience.

The fuel types identified within vegetated areas of Electoral Area H are shown in Table 10 below. More detailed descriptions of these fuel types can be found on the Natural Resources Canada website[9].

Table 10: Description of fuel types identified in Electoral Area H

CFFDRS Fuel Type	Characteristics and Attributes	Percentage of Electoral Area
C2 – Boreal Spruce	Moderately well stocked black spruce stands on both upland and lowland sites; Sphagnum bogs excluded. There are continuous shrubs such as Labrador tea, with low to moderate down woody fuels. The trees have flaky bark and crowns that extend nearly to the ground and are also hosts to arboreal lichen species.	1%
C3 – Mature Jack or Lodgepole Pine	Fully stocked mature lodgepole pine stands. The forest floor is covered in a continuous moss layer with sparse to moderate shrub coverage. There is minimal coniferous understory and light and scattered dead and down fuels. Capable of spreading the fastest among fuel types but requires higher wind speeds and lower fuel moisture due to its mature attributes and higher crown base height (CBH), described as the distance the lowest branches are from the ground surface.	28%
C7 – Ponderosa Pine – Douglas Fir	Open, mature, uneven-aged stands of Ponderosa pine and Douglas-fir. The forest floor has perennial grasses except in Douglas-fir thickets. The understory is composed of multi-age Douglas-fir. Lowest fire intensity of all the coniferous fuel types. Higher fire intensity classes require for continuous crown fire to occur.	3%

[9] FBP Fuel Type Descriptions. Natural Resources Canada.

CFFDRS Fuel Type	Characteristics and Attributes	Percentage of Electoral Area
D1/2 – Deciduous (D1 leafless aspen, D2 green aspen)	Pure, semi-mature, moderately well-stocked stands of trembling aspen. The forest floor has continuous leaf litter and a well-developed medium to tall shrub layer. Lower fire intensity and spread rates than conifer fuel types. This fuel type is at its most vulnerable in its leafless condition (spring and fall).	1%
M1/2 - Mixedwood	Moderately well-stocked stands of boreal coniferous and deciduous species. The forest floor has continuous leaf litter in deciduous portions of stands. Conifer crowns will vary and may extend to the ground in some stands. Understory coniferous species will be moderately scattered. Fire intensity and spread rates are dependent on the conifer/deciduous ratio of the stand – a higher conifer component will increase fire intensity, spread rates, and spotting capacity.	1%
0-1a/b	The fastest rate of spread potential when cured. Lower head fire intensities than forested fuel types.	1%
Water; non-fuel	Water or non-flammable areas.	65%

A large portion of the area in Electoral Area H is classified as non-fuel due to the presence of rock and ice in the alpine, and water in the river valley. Of the vegetative area, the majority is classified as C3 forests, characterized by fully stocked conifer stands comprised of various mixtures of spruce, lodgepole pine, Douglas-fir, western redcedar, and sub-alpine fir, and capable of fast spread rates in wind-driven conditions.

Figure 7: Example of a C-3 Fuel Type found within Electoral Area H. C-3 Stands in this area typically composed of spruce, pine, and Douglas-fir

Although underrepresented in the overall composition due to the vast size and mountainous terrain of the AOI, M-1/2 (mixed wood) stands were found to be common along the Fraser River and its floodplains where most residences and human values are located. Fire intensity and spread rates within mixedwood stands are dependent on the conifer/deciduous ration of the stand – a higher conifer component will increase fire intensity, spread rates, and spotting capacity.

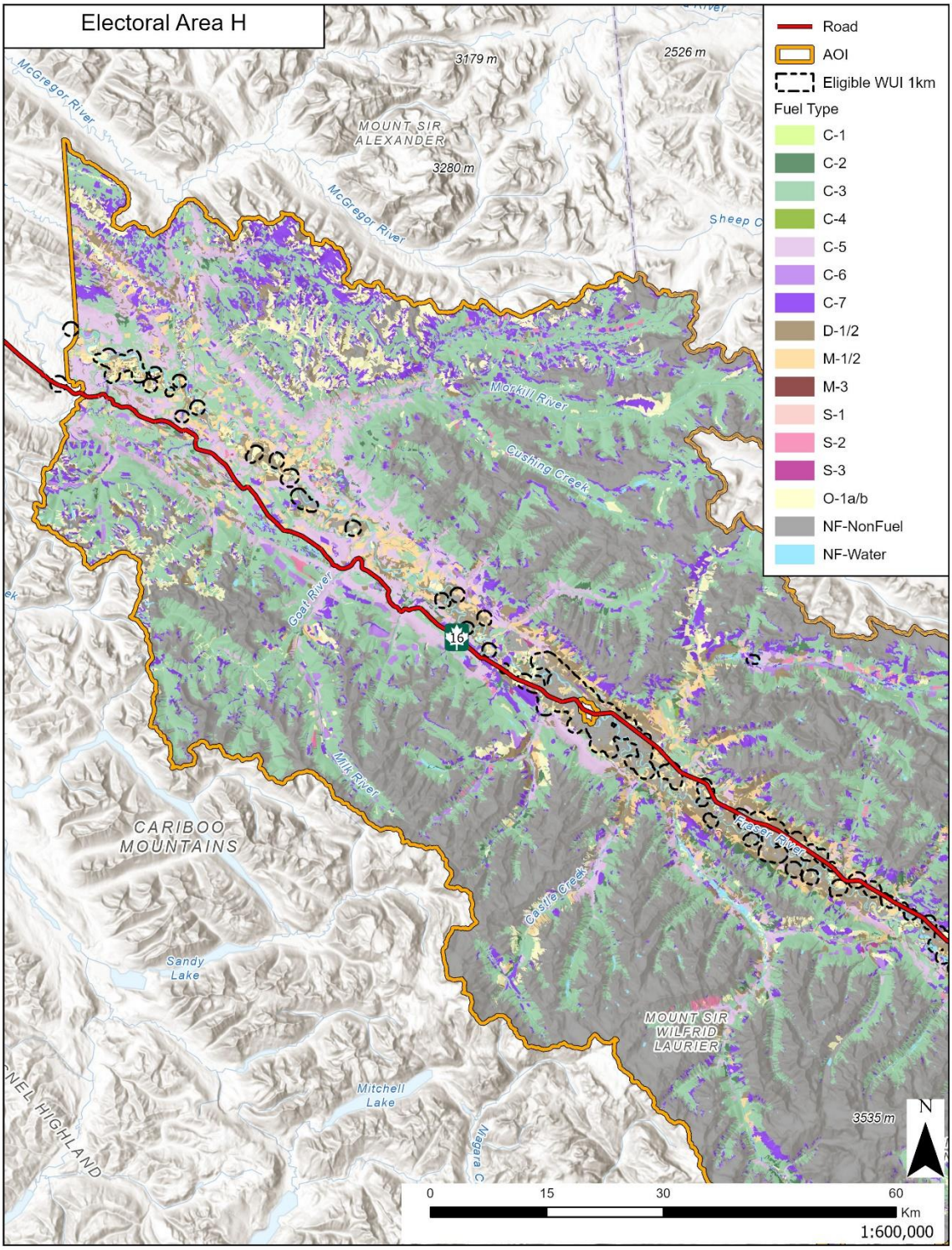

Figure 8. Electoral Area H: FBP Fuel Types Map Part 1

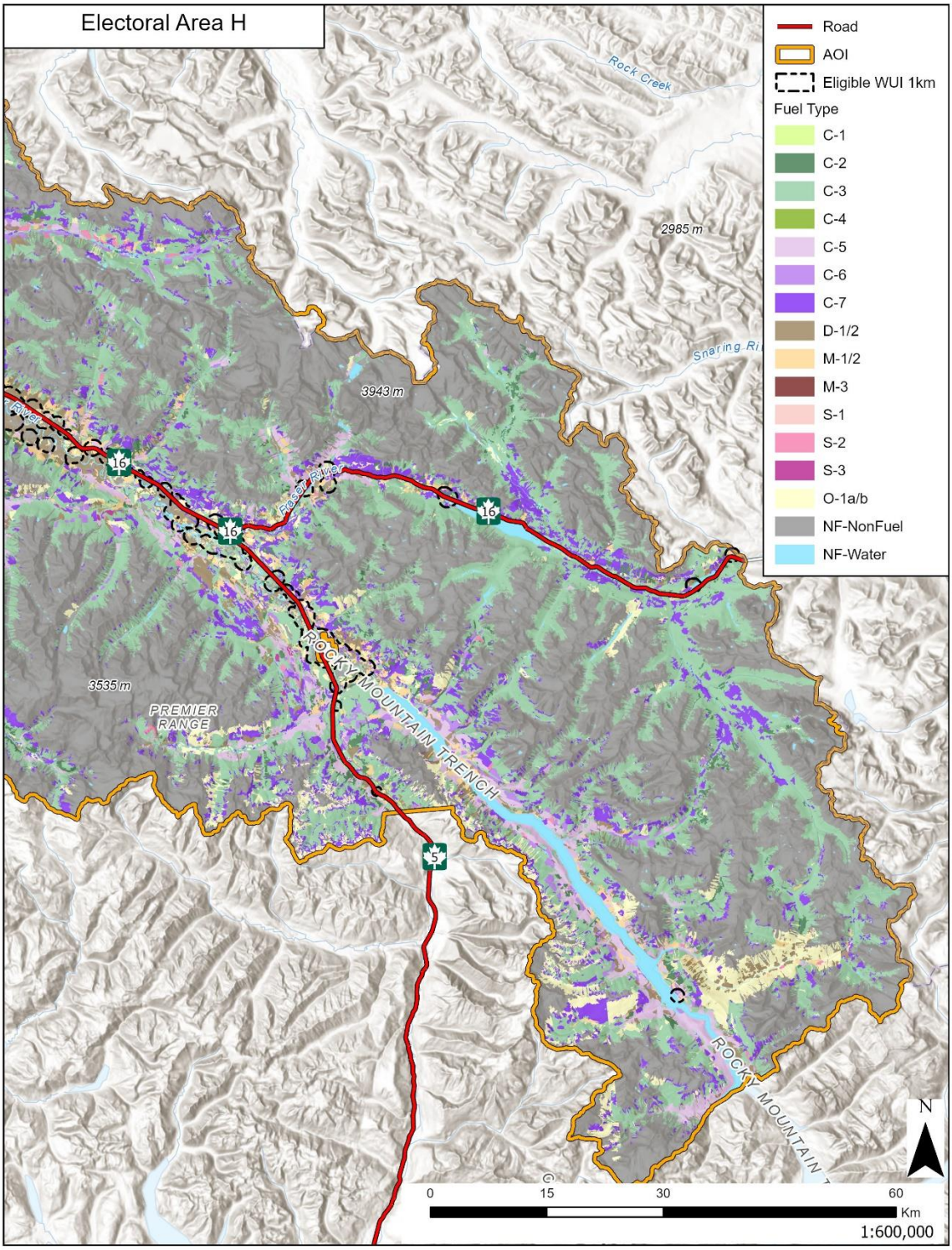

Figure 9. Electoral Area H: FBP Fuel Types Map Part 2

4.1.2.4 Forest Health

Forest health concerns can have a large impact on forest ecosystems. These challenges can be exacerbated greatly by climate change. For example, much of BC has experienced eruptive cycles of bark beetle populations resulting from the dynamic response of bark beetle populations to the warmer, milder winters and longer growing seasons. In 2023, over 90% of the mapped forest health damage in Robson Valley Timber Supply Area (TSA) was attributed to the western balsam bark beetle, which primarily attacks sub-alpine fir (*Abies lasiocarpa*). The adult bark beetle carries a fungus which is primarily responsible for the mortality associated with western balsam bark beetle attack. The fungus is transported into the sapwood where is blocks transport of nutrients and water up the tree, often leading to tree mortality under high severity attack or re-attack over a number of years. Overall, however, bark beetle infestation trends within the TSA are on the decline in recent years.

The impacts of forest health agents acting on forest stands on the landscape can result in tracts of stressed, declining, or dead trees, which increases the incidence of dry fuels and further exacerbates wildfire hazard. *Abies* species in particular, such as sub-alpine fir, are highly volatile and of great concern in dead tracts on the landscape.

4.1.3 Weather and Climate

In wildfire prediction, analysis, and risk assessment, weather is characterized by four key attributes:

1. Temperature (°C)
2. Relative humidity (%)
3. Wind speed and direction (kph and Azimuth degree)
4. Rain (mm)

These four factors interact to influence combustibility, making weather the most complex and variable element of the fire behaviour triangle and wildfire environment. Site level characteristics such as topography, fuel type and condition, and climate, also play a significant role in influencing fuel moisture content, a critical component of fire behaviour and propagation.

Active BCWS weather stations closest in distance and of representative elevations to Electoral Area H have been utilized in the analysis for this CWRP. Weather station information is provided in Table 11.

Table 11: Weather stations used in analysis in Electoral Area H

Weather Station	Valemount Airport	McBride
Network	BCWS	BCWS
Coordinates	52.859722, -119.338611	53.295, -120.1522
Elevation (m)	788	716

Weather analysis in the following sections utilizes observed data throughout the wildfire season months of **April through October** from 2014 to 2023, unless otherwise specified. Collectively, the trends align with historical wildfire data, supporting the assumptions that cured fuels in spring contribute to ease of ignition, while cumulative warming in July and August increases the availability of combustible fuels in ground, surface, and canopy forest layers.

4.1.3.1 Temperature

Figure 1 indicates that the Valemount and McBride weather stations experience similar temperatures during fire season, peaking in July with average highs of 22°C to 23°C. The greatest temperature variations in both areas occur in June.

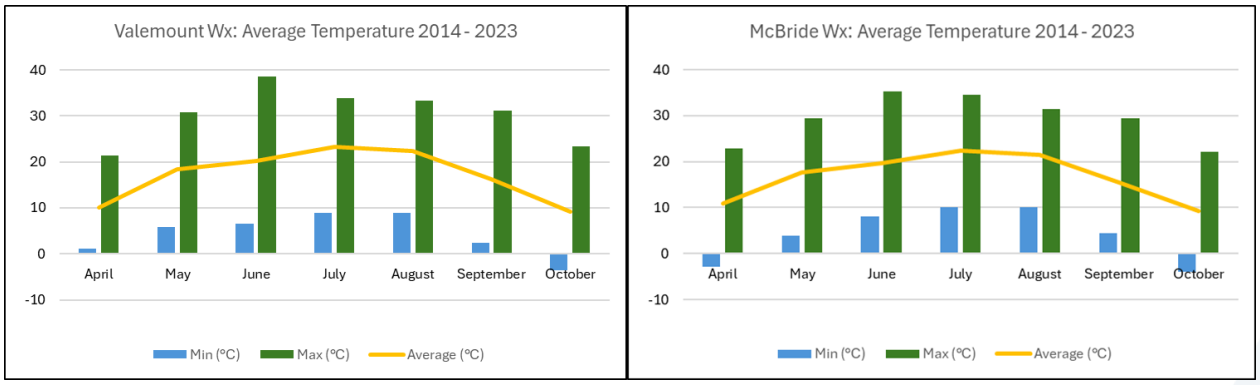

Figure 10: Average monthly temperature (2014 - 2023)

4.1.3.2 Relative Humidity

Figure 11 indicates that on average, the Valemount station records lower relative humidity during fire season. At both stations, relative humidity is lowest in April and May and steadily increases throughout the summer.

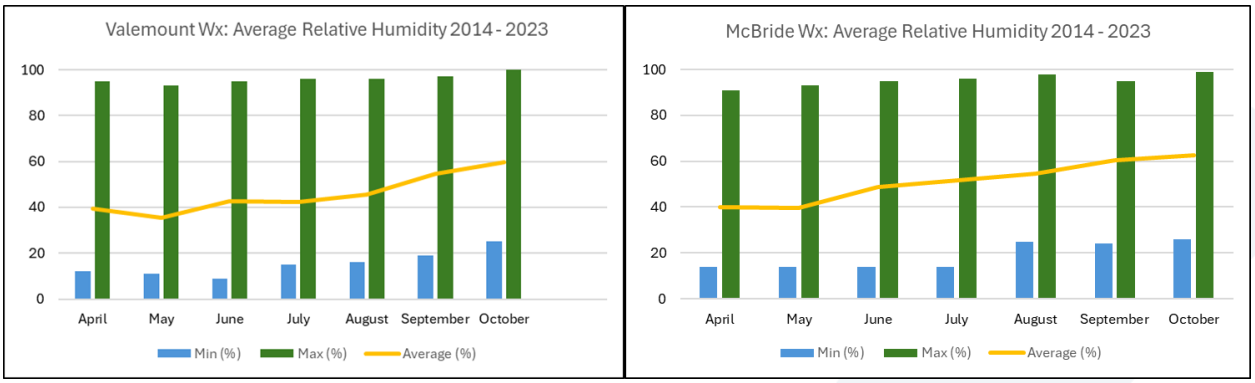

Figure 11: Average monthly relative humidity (2104 - 2023)

4.1.3.3 Wind

Wind speed and direction are the most variable factors influencing fire behaviour, contributing to the unpredictability of fire behaviour, intensity, and severity. Over the past decade, wind driven events and observations highlight the importance of readiness for high winds from any direction. While historical data can aid in prioritizing treatment's locations, communities must be prepared for wind-driven fires from any direction.

Wind roses are used as visual tools to illustrate wind speed and direction for a particular location on a monthly basis. In these diagrams, colours indicate wind speed, while the area within each cardinal quadrant represents the percentile of wind direction occurrences. Wind data from the Valemount and McBride weather stations was used to illustrate local wind patterns for Electoral Area H from April 2014 to August 2024.

As shown in Figure 12 below, the predominant wind directions at the Valemount and McBride stations reflect the topographic direction of the Robson Valley. Predominant winds recorded at the Valemount station flow from the southeast and northwest, while the McBride station experiences winds from the east and northwest. As indicated by the increased presence of red, orange, and yellow colours on the McBride wind rose, this area experiences overall higher wind speeds than Valemount.

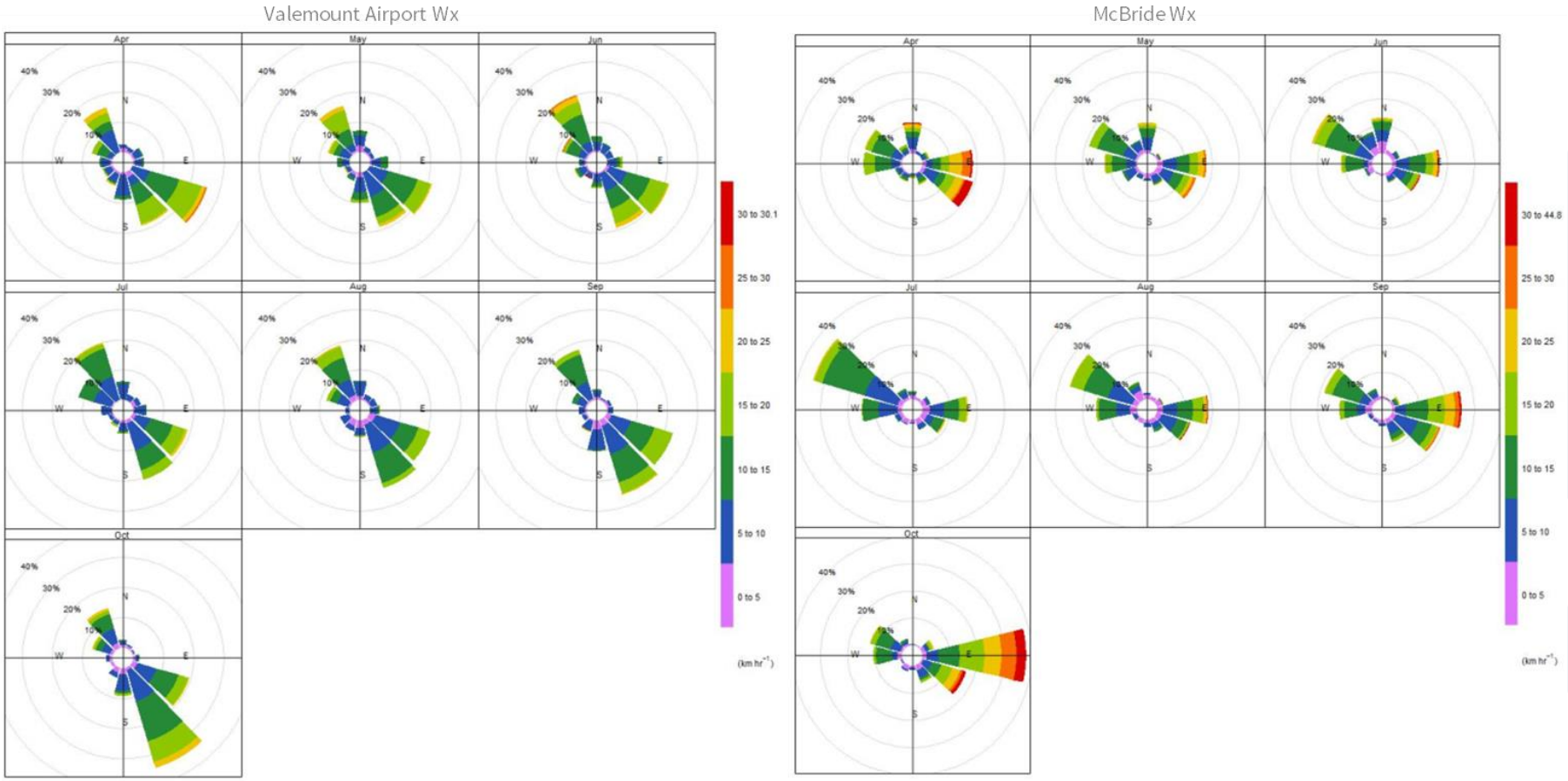

Figure 12: Wind rose analysis (2014 - 2023)

4.1.3.4 Rain

Figure 13 indicates that, on average, the Valemount station receives more rain and shows greater variability throughout the summer than the McBride area, except in May. McBride maintains a consistent, lower rainfall pattern throughout the fire season while Valemount experiences more sporadic rainfall events.

This data should be interpreted with the understanding that rain does not always occur daily but rather in intermittent events. Despite this, it still provides valuable insights into monthly trends.

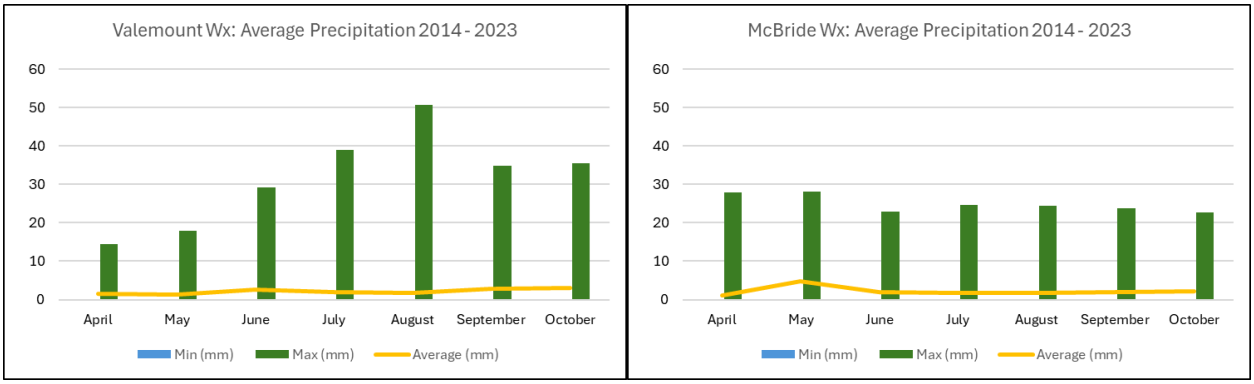

Figure 13: Average monthly precipitation (2014 - 2023)

4.1.3.5 Climate Change

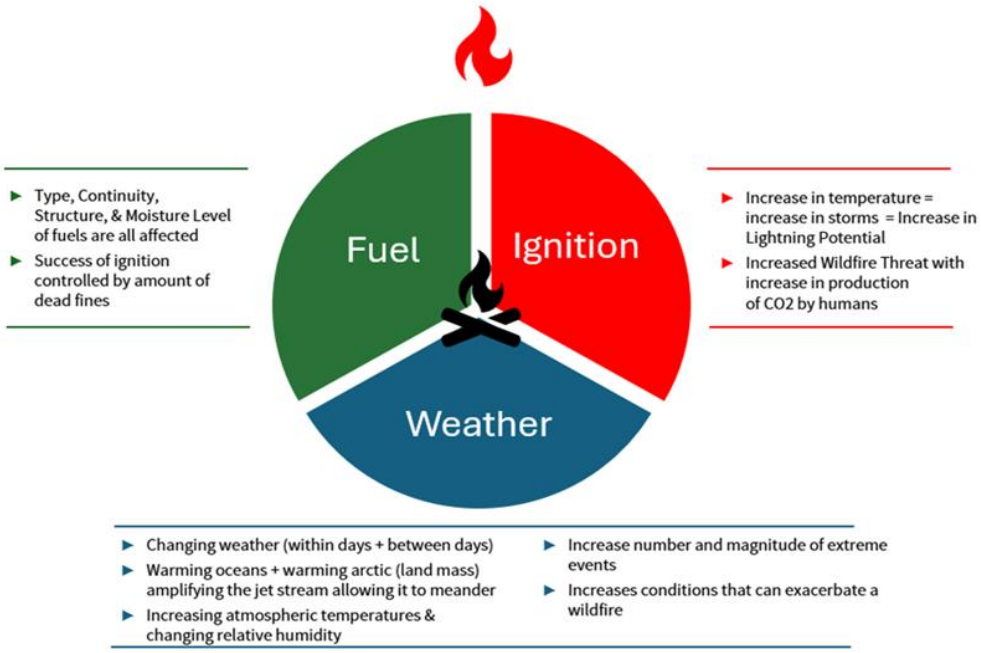

Figure 14: Potential impacts of climate change on weather, vegetation/fuels, and ignition potential

The province of BC has experienced its most severe wildfire seasons in 2017, 2018, 2021, and 2023, all characterized by extreme weather conditions. The recent surge in fire activity is not entirely unexpected given recent weather extremes. However, the emergence of increased wildfire activity and magnitude of events around 2000 occurred earlier than climate models anticipated. For instance, three of the past seven years witnessed over 1 million hectares burned, compared to only three seasons from 1919 to 2016 surpassing 0.5 million hectares burned. Additionally, the average length of the wildfire season, measured by number of frost-free days and wildfire occurrence, has increased by approximately 27 days since the early 20th century.[10]

Figure 14 demonstrates the relationship between weather, vegetation/fuels, and ignition potential, and the impacts to each of these components under a changing climate.

Changes in temperature and precipitation each have important impacts on fire weather. Changing precipitation and temperature (along with changing wind) alter the risk of extreme wildfires that can result from hot, dry, and windy conditions[11]. Understanding changes in both temperature and precipitation provides insight into changes in potential wildfire.

The Pacific Climate Impacts Consortium (PCIC) conducts quantitative studies on the impacts of climate change and variability.[12] Projected climate change data from the PCIC present a comprehensive view of potential climate change risks and impacts due to inputs from many raw data sources. Table 12

[10] Parisien, M. A., Barber, Q. E., Bourbonnais, M. L., Daniels, L. D., Flannigan, M. D., Gray, R. W., ... & Whitman, E. (2023). Abrupt, climate-induced increase in wildfires in British Columbia since the mid-2000s. Communications Earth & Environment, 4(1), 309.
[11] Zhang, X., Flato, G., Kirchmeier-Young, M., Vincent, L., Wan, H., Wang, X., Rong, R., Fyfe, J., Li, G., Kharin, V.V. (2019): Changes in Temperature and Precipitation Across Canada; Chapter 4 in Bush, E. and Lemmen, D.S. (Eds.) Canada's Changing Climate Report. Government of Canada, Ottawa, Ontario, pp 112-193.
[12] Pacific Climate Impacts Consortium. 2024.

summarizes the projected change in average temperature and precipitation in the Fraser-Fort George region for the period of 2021 to 2050, using a baseline average from observed data collected from 1981 to 2010.

Table 12: Projected change in temperature and precipitation in the Fraser-Fort George region

Climate Variable	Season	Average from 1981 – 2010	Projected change from 2021 - 2050	
			Low (10th percentile)	High (90th percentile)
Temperature	Annual	1.7	+1.3	+2.4
	Summer	11.9	+1.4	+2.8
	Winter	-8.3	-0.0	+2.2
Precipitation	Annual	3.0mm/day	+2.8%	+8.8%
	Summer	2.7mm/day	-9.4%	+9.4%
	Winter	3.3mm/day	+7.7%	+19.8%

Based on the above predictions from the PCIC, by the year 2050 the region will very likely experience an overall increase in temperature annually, and in both the summer and winter months. Average precipitation is projected to increase annually and during the winter months, with variable predictions for the summer months. It is important to note, changes in precipitation exhibit more temporal and regional variation than changes in temperature; therefore, projection results for precipitation have less confidence than projection results for temperature[13]. Overall, winters in the Fraser-Fort George region can be expected to become warmer and wetter, while summers will become warmer with uncertainty around changes in precipitation patterns.

Although an increase in precipitation may sound like a potential mitigation outlet to warming temperatures, increasing temperatures will simultaneously increase the rate of evaporation. The increase in precipitation that would be required to offset moisture deficits from evaporation exceeds both projected and reasonable precipitation changes. Therefore, despite an overall predicted increase in annual precipitation, if summers become warmer with similar precipitation patterns, this will lead to drier conditions and have substantial impacts on terrestrial communities and increase drying potential and fire danger.

4.2 WILDFIRE HISTORY

Wildfire is a common occurrence in the Central Interior and mountain regions due to landscapes dominated by boreal and sub-boreal coniferous forest types that support both anthropogenic and lightning ignition sources.

Although historical data shows that total area burned has decreased within the Regional District of Fraser-Fort George over the past 50 years, there have been numerous recent wildfires near communities

[13] Zhang, X., Flato, G., Kirchmeier-Young, M., Vincent, L., Wan, H., Wang, X., Rong, R., Fyfe, J., Li, G., Kharin, V.V. (2019): Changes in Temperature and Precipitation Across Canada; Chapter 4 in Bush, E. and Lemmen, D.S. (Eds.) Canada's Changing Climate Report. Government of Canada, Ottawa, Ontario, pp 112-193.

in Electoral Area H and adjacent regions. In July 2024 alone, three wildfires resulted in emergency evacuation measures in the Robson Valley – Canoe Electoral Area:

1. **The Dunster – Croydon Fire** – occurred within the Dunster Community Forest and issued an evacuation alert for the community of Dunster. This event prompted the community to push for more wildfire risk reduction work during harvest planning and operations of the community forest.
2. **The Beaver River Fire** - a lightning-caused fire east of McBride, which led to an evacuation order for 10 properties and additional evacuation alerts along Highway 16. Leading up to the fire event, the region experienced weeks of drought conditions and high temperatures.
3. **The Canoe Road Fire near Cedarside** - a lightening fire resulting in evacuation orders and alerts for the Cedarside neighbourhood south of Valemount. The fire came close to the Cedarside residences, though no structures were lost. Lake skimmers and retardants were deployed immediately as resources were already in place and ready to go. This was critical to controlling the fire and keeping it contained.

Other notable and recent wildfires that have occurred in the broader area include:

- The Jasper Complex Fire (2024): The fire burned over 32,000 hectares in the neighbouring Jasper National Park after multiple lightning caused ignitions on July 22, 2023. An evacuation order was issued within hours of the fires being reported and remained in effect for 30 days. Approximately 35% of the community was lost or damaged, including industrial, commercial, municipal, and residential structures.
- The Teare Creek Fire (2023): The human-caused fire started as a result of spring grass burning. Weather conditions that spring were abnormal, with temperatures in May reaching sustained 30°C and large wind events causing rapid drying. Deciduous trees had not yet leafed out. It burned 1,000 hectares adjacent to the community of McBride and directly upslope of the Mountain View Road neighbourhood. An evacuation order was implemented for over 60 residences, with hundreds more placed on evacuation alert. Many rural properties on evacuation order chose not to leave. Flames and embers came within 100 feet of homes and other values at risk, but no structures were lost.

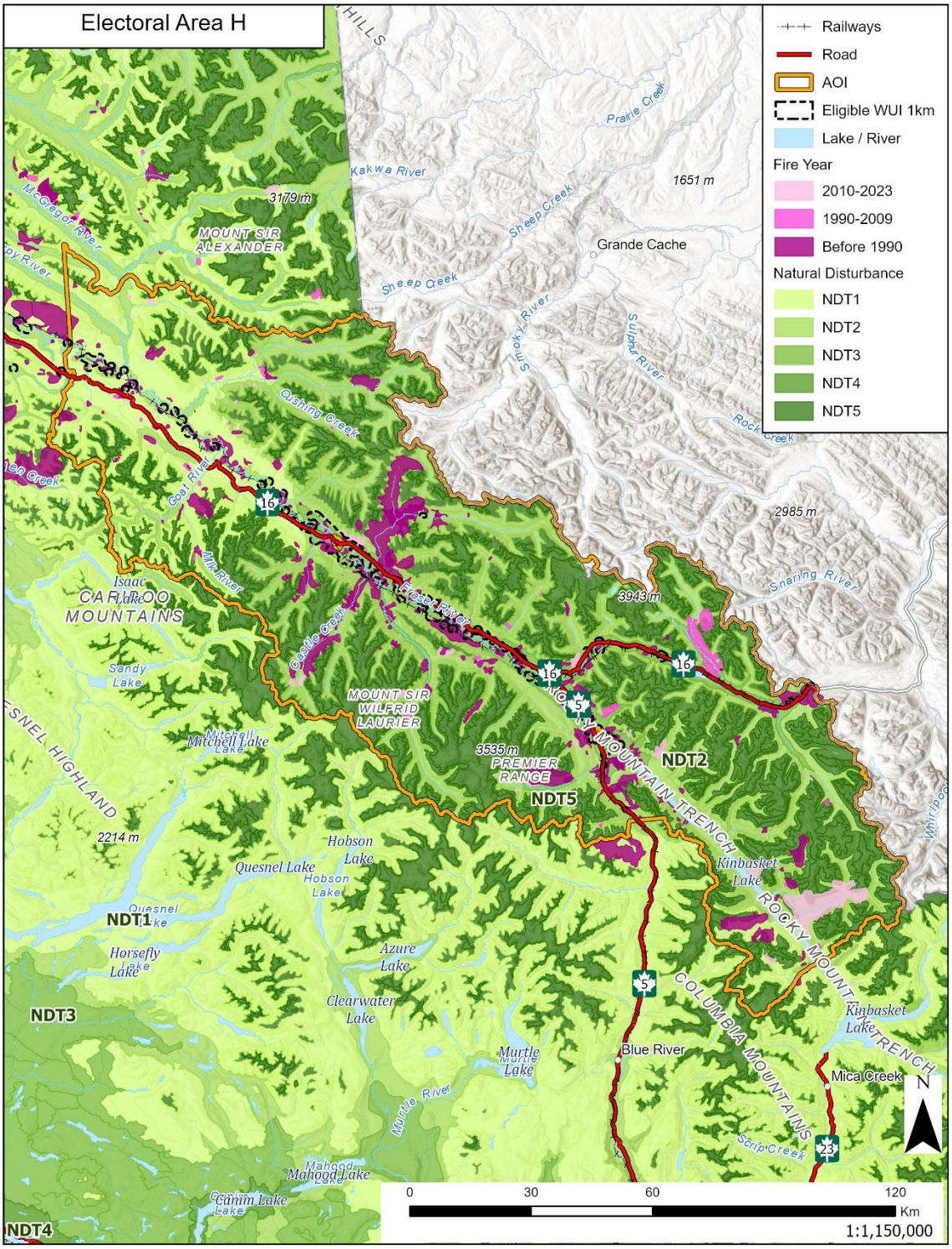

Figure 15. Electoral Area H: Wildfire History and NDT Map

Table 13 describes wildfire ignition sources and total area burned within Electoral Area H over the past century (2014 to 2023).

Table 13: Area burned summarized by ignition source

	Lightning	Person	Total
Number of Ignitions	193	301	494
Total Area Burned (Ha)	60,001	58,357	118,358
Percentage of Burned Area (%)	51	49	100
Percentage of Wildfires (%)	39	61	100

The data in Table 12 indicates that human-caused wildfires occur more frequently overall than lightening fires and account for **49% of total area burned** within Electoral Area H over the past 100 years. This highlights the critical importance of FireSmart Principles, such as Education, to enhance communities understanding of wildfire risk and the related potential impacts to human values.

4.3 WILDFIRE DANGER RATING

A Fire Danger Rating sign informs the public about the likelihood of wildfire ignition and spread in a specific area. These signs are commonly displayed on fire boards outside local fire departments or at the Ministry of Forests office. The rating is determined using three key elements of the Canadian Forest Fire Weather Index (FWI) System, which evaluates fire potential and categorizes the danger level as Low, Moderate, High, or Extreme (Table 14).[14]

Figure 16: Wildfire Danger Rating Sign

[14] What we talk about when we talk about the fire danger rating system. FireSmart BC

For further details about how fire danger ratings are calculated, please refer to the FireSmart BC website.

Table 14: The Four Wildfire Danger Rating Classes and Descriptions[15]

WildFire Danger	Description
Low	Low means that fires may start easily and spread quickly, but are unlikely to involve deeper fuel layers or larger fuels. While the risks may be low, fire is still possible, so be prepared for conditions to change.
Moderate	Moderate means forest fuels are drying and there is an increased risk that surface fires could start and spread. At this level, it's important to monitor the danger rating in your area and carry out all forest activities with caution.
High	High means forest fuels are dry and fire risks are serious. Fires may start easily, burn quickly, and challenge fire suppression efforts. Use extreme caution during any forest activities and check evacuation alerts and orders regularly.
Extreme	Extreme means surrounding forests are dry and contain fuels that make the risk extremely serious. Fires can start easily, spread rapidly, and may be challenging to contain, so be ready for an emergency situation. Forest activities like campfires and operating gas-powered vehicles will likely be restricted.

The Bednesti and Hixon BCWS weather stations are the most representative weather stations for Electoral Area H, located near the northwest and southeast of the electoral area respectively. Figure 17 presents a summary of the Fire Danger analysis, showing the frequency of High and Extreme Fire Dangers days at the Bednesti and Hixon weather stations from 2014 to 2023. Fire Danger days are defined according to the *Wildfire Act* – Schedule 2 & 3[16]. As outlined in Schedule 2, High Fire Danger days are defined for Danger Index Region 1 and require a Build-Up Index greater than 17 and a Fire Weather Index (FWI) greater than 8.

Results indicate that the Valemount weather station experiences more Extreme Fire Danger days from May to August than the McBride weather stations. High Fire Danger days are also experienced most frequently between the period of May to August for both weather stations.

High-Extreme Fire Danger in the spring months of April and May are indicative of the period after the snow melts due to warming temperatures but before significant spring rains or foliar leaf out. During this time, grasses and forest fuels are cured and dry, and more likely to burn, which can result in significant potential fire behaviour despite generally mild average temperatures. This is particularly the case for the

[15] What we talk about when we talk about the fire danger rating system. FireSmart BC
[16] Wildfire Act. Wildfire Regulation.

McBride area, which sees the highest number of High and Extreme Fire Danger days in the month of May.

For the Valemount area, High-Extreme Fire Danger is most often experienced during the peak summer months of July and August, when temperatures are at their highest on average. It is also during this time that summer recreation and tourism in this region is at its highest, but many activities such as campfires and operating ATVs are likely restricted due to an increases probability of fire ignition and spread.

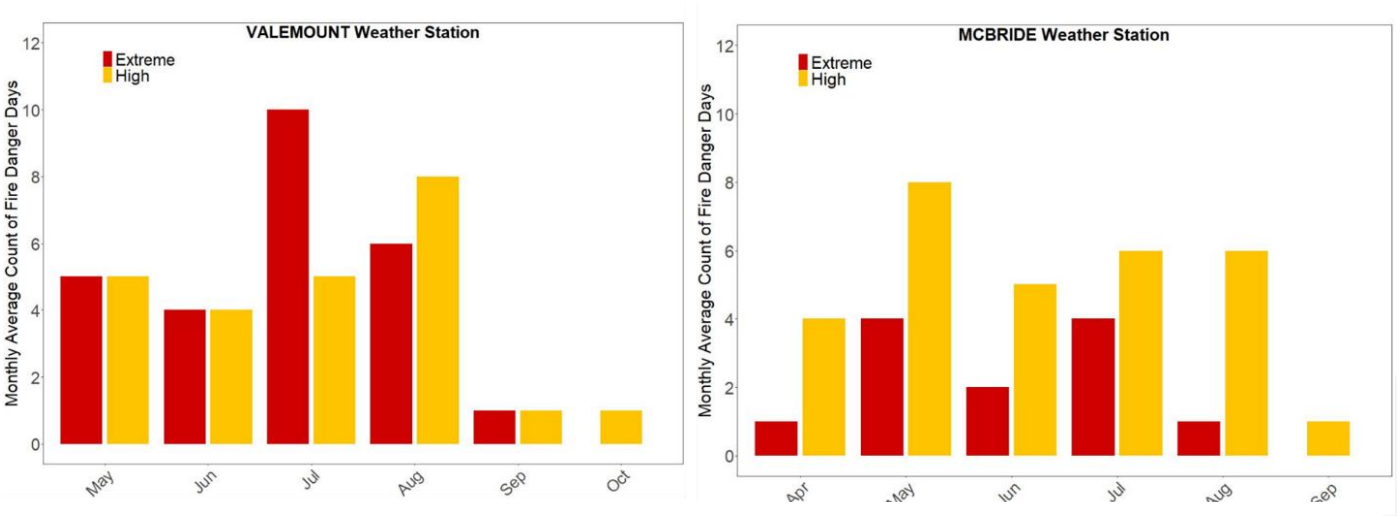

Figure 17: Summary of High and Extreme Fire Danger Days experienced between April and October (2014-2023) for the Valemount and McBride BCWS Weather Stations

4.4 PROVINCIAL STRATEGIC THREAT ANALYSIS (PSTA)

The BC Wildfire Service developed the Provincial Strategic Threat Analysis (PSTA) and Risk Class framework to assess and map relative wildfire threat to values on the provincial landscape.[17] The PSTA considers fire density, fire intensity, and spotting impacts. Values and associated threat classes are generated and assigned based on an average weighting process of the aforementioned three inputs. The PSTA spatial data for the eligible WUI in Electoral H is summarized inTable 15.

[17] 2021 Update: Provincial Strategic Threat Analysis (PSTA). Accessed March 2024.

Table 15: PSTA Threat Class Rating Breakdown for Electoral Area H Wildland Urban Interface

Dire Threat Class	Area (HA)	Percentage (%)
No Data (Private Land)	23,583	66
High	3,074	9
Moderate	3,408	9
Extreme	2,097	6
Water	2,412	7
Low	1,369	4
Total	35,942	100

The PSTA for the Electoral Area H WUI indicates that 66% of the zone is classified as “no data” due to large private landholdings. Of the remaining area, 15% is classified within the High to Extreme threat classes. Provincial PSTA data does not assess fire threat on private property; as a result, there is lack of data depicting the potential threat of the vegetative areas within the WUI. This highlights the critical importance for a shared responsibility amongst all landowners, public education, and strategic wildfire risk reduction planning.

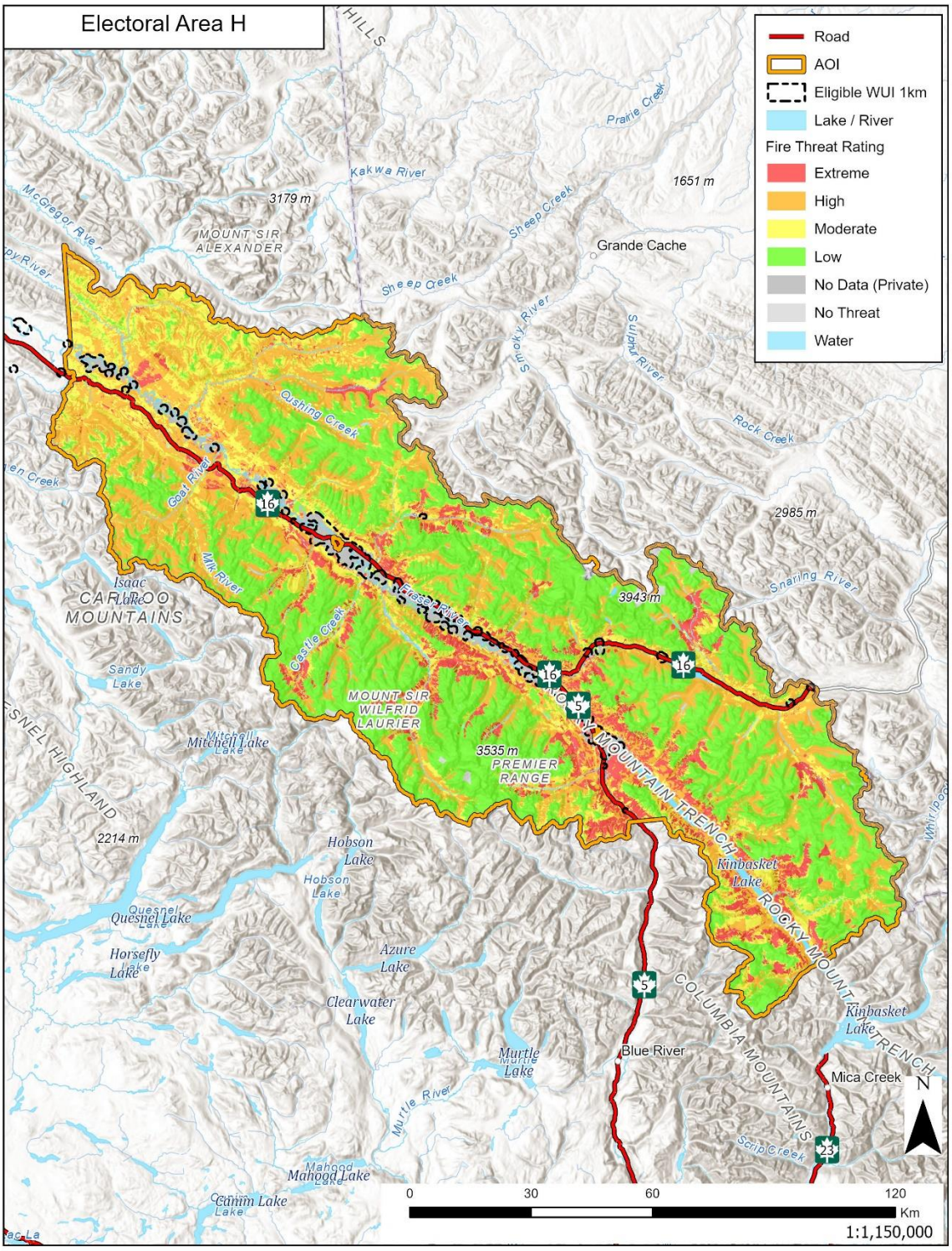

Figure 18. Electoral Area H: Provincial Strategic Threat Analysis Map

4.5 HAZARD, RISK, AND VULNERABILITY ASSESSMENT

The Hazard, Risk, and Vulnerability Analysis (HRVA) is an organized process to identify hazards that may trigger an emergency response and assign a hazard rating based on the likelihood and potential consequences of those hazards. Understanding local hazards and risks helps a community establish priorities, plans and strategies to prevent or reduce the risks. Hazard-specific guides provide additional guidance for responding to specific emergency situations and address the essential operational actions to facilitate effective response to that specified emergency event.

Wildland fire is identified in the RDFFG Emergency Management Plan as a primary hazard that has previously triggered an emergency activation and that the Regional District expects to continue to respond to. However, a detailed HRVA for wildfire has not been completed for any of the Electoral Areas within the RDFFG.

4.6 LOCAL WILDFIRE THREAT ASSESSMENT

Part of the process of developing this CWRP involves on-the-ground verification and assessment of local vegetation types and the inherent wildfire threat of forested areas within and around the WUI. Wildfire threat is assessed using the Wildfire Threat Assessment (WTA) tool developed by BC Wildfire Service[18], which focuses on assessing forest stand attributes and fuel structure that contribute to wildfire intensity and spread, independent of fire weather. Wildfire threat differs from wildfire risk in that fire threat does not take into account proximity to values or the consequence of damage to those values in a wildfire event.

Field verification and wildfire threat analyses were completed on provincial crown land found within the 1 km WUI throughout Electoral Area H. A total of 28 WTAs were completed throughout Electoral Area H. Table 16 outlines the results of the WTAs completed.

Table 16: Summary of Wildfire Threat Assessment in Electoral Area H

Wildfire Threat Assessment Rating	Number of WTAs	Percentage of all WTAs Completed with EA
Extreme	0	0%
High	4	14%
Moderate	17	60%
Low	8	28%

Over half of the areas assessed fell within a Moderate wildfire threat rating class, characterized by low-density conifer dominant stands (C-3 or C-5) or mixedwood stands with a moderate conifer component (M-1/2 with 50% conifer). Approximately 15% of areas surveyed achieved a High wildfire threat rating. These areas were characterized by higher density conifer stands or mixedwood stands with a high conifer

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

component. Understory density in these stands were typically high, with low fuel strata gaps (<3m) and/or accumulations of elevated dead fuel, contributing to horizontal and vertical continuity within the stand.

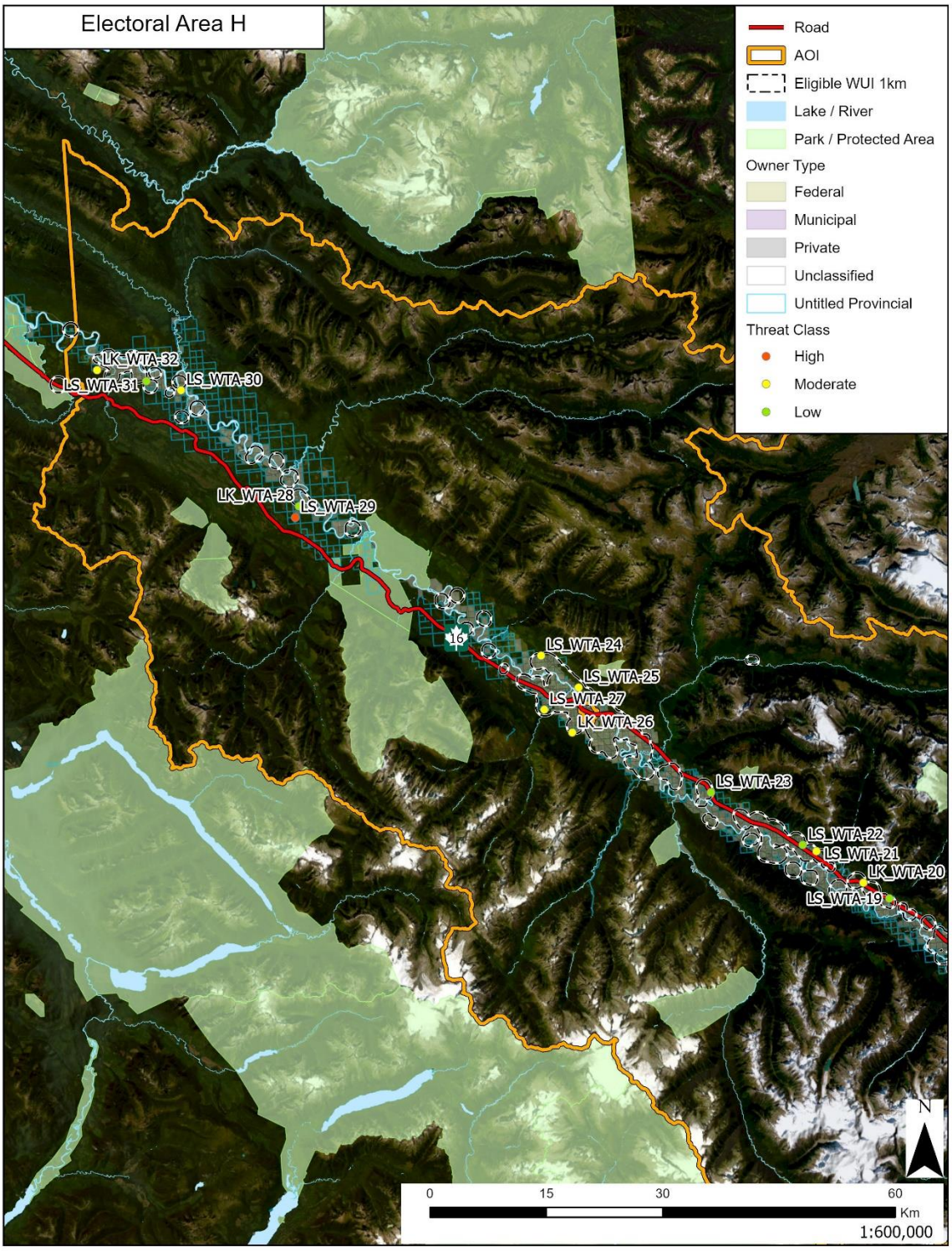

Figure 19. Electoral Area H: WTA Plot Location Map Part 1.

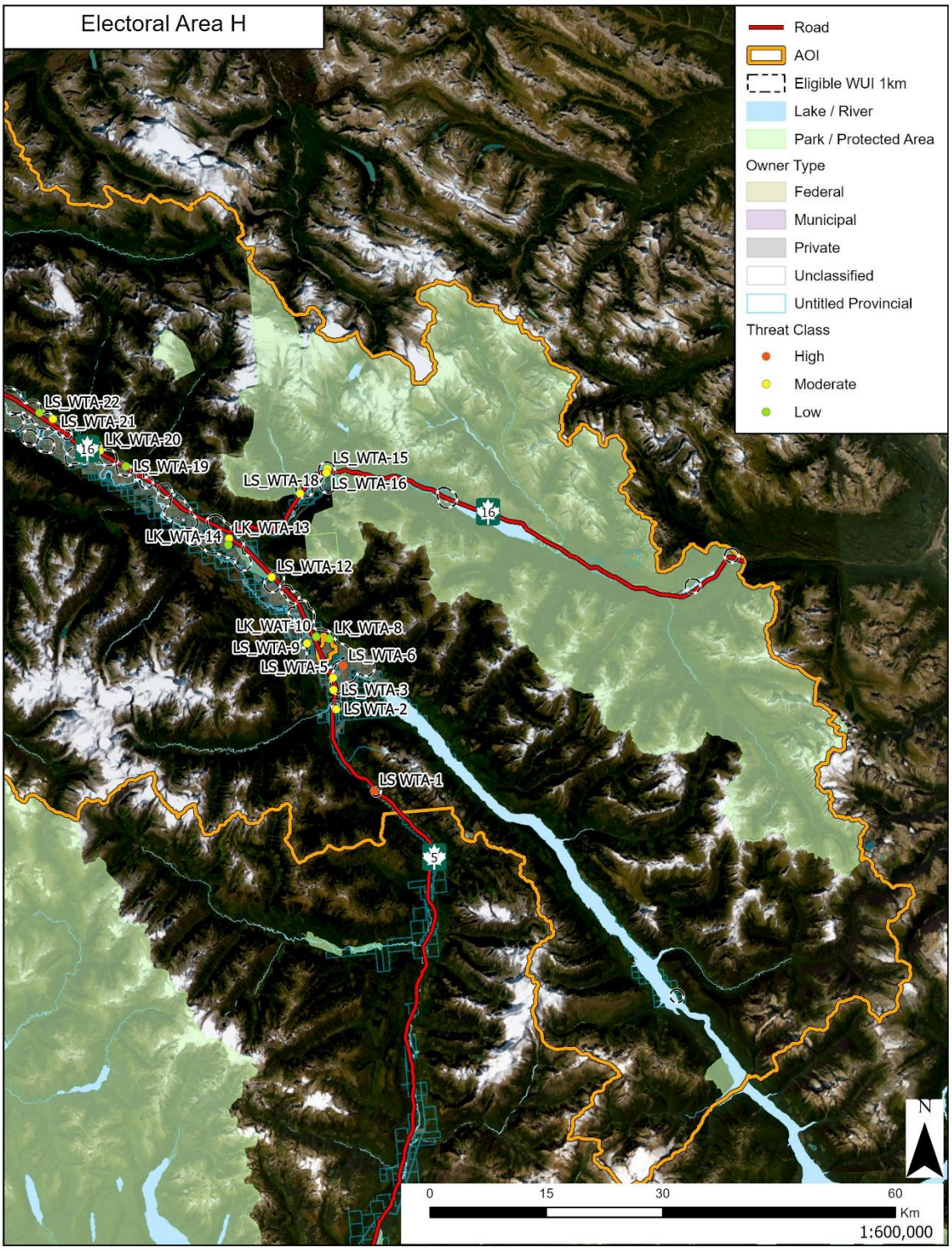

Figure 20. Electoral Area H: WTA Plot Location Map Part 2.

5.0 FireSmart Disciplines

This CWRP is designed to comprehensively plan for all aspects of community wildfire planning by structuring strategies based on the seven FireSmart disciplines:

1. Education
2. Legislation and Planning
3. Development Considerations
4. Interagency Cooperation
5. Cross – Training
6. Emergency Planning
7. Vegetation Management

Each FireSmart discipline and their role in resiliency planning for the Regional District of Fraser-Fort George is outlined in the subsequent sections below.[19]

NEW in 2024: Starting in 2024 as per the FireSmart Community Funding & Supports Program and Application Guide it will be required for all applicants to have the following FireSmart components developed/active in their community to be eligible for additional CRI funding opportunities:

- FireSmart Coordinator Position
- Community FireSmart and Resiliency Committee
- Current Community Wildfire Resiliency Plan[20]

The purpose of the FireSmart Coordinator is to ensure that FireSmart activities are supported, developed, and implemented in accordance with Provincial guidelines as well as with the direction and policy provided by the Regional District. FireSmart Coordinators are an integral part of wildfire risk reduction and act as the main point of contact linking local government, the public, and the provincial FireSmart Program. The FireSmart Coordinator is responsible for organizing and implementing the action items and initiatives identified within this CWRP.

[19] For more information on the BC FireSmart program, visit: https://firesmartbc.ca/
[20] For more information regarding FireSmart Community Funding & Supports Program visit: https://www.ubcm.ca/cri/firesmart-community-funding-supports

5.1 EDUCATION

Public education and outreach efforts help community members learn about wildfire and its potential impacts to their communities. In addition, these efforts should be designed to help individuals understand their role in taking action to reduce risk. Education and outreach activities are designed for all groups to benefit, including elected officials, community planners, residents, visitors, businesses, land managers, first responders, and more.

Goal: The Community Wildfire Resiliency Plan (CWRP) is only successful if community members and stakeholders are engaged in taking action to reduce the wildfire risk. This CWRP aims to establish effective communication and develop educational activities so that each member of the community understands the potential for interface wildfire in RDFFG Electoral Area H and can play their role to reduce that risk.

Context: FireSmart education efforts throughout the RDFFG have been variable to date. Many communities have recently begun to take FireSmart initiatives on, while others have not. Education efforts by the RDFFG have taken the form of community events, sharing of education resources, media messaging, and community chipper days. Public engagement in the form of in-person and virtual meetings and online surveys was conducted during the development of this CWRP to inform RDFFG residents of the purpose of this plan and gather input and feedback relating to local emergency management and wildfire risk reduction concerns. Information pertaining to the public engagement process and methodology, as well as the full suite of feedback received, can be found in **Annex B Engagement Summaries**.

Currently, there are no RDFFG communities enrolled in the *FireSmart Canada Neighbourhood Recognition Program*.[21] The Regional District has some high-level management strategies in place to support community programs, but overall, it has been primarily left to community groups to organize and implement FireSmart initiatives and programs in their neighbourhoods.

General information and supporting links relating to FireSmart are included on the RDFFG website, but are generally difficult to find. As of June 2024, a news release was posted on the Regional District website advertising complementary FireSmart Home Ignition Zone Assessments for residents upon request. However, there is some hesitance from residents about allowing Regional District employees on their properties to complete assessments. To help promote and advance FireSmart uptake with residents, the Regional District has hired two FireSmart educators who are locals to their respective area; one for the area surrounding Prince George, and one for the Robson Valley. This should also help to mediate some of the apprehensions and allow the educators to assist residents with FireSmart Home Assessments moving forward.

[21] To learn more about the FireSmart Canada Neighbourhood Recognition program visit https://firesmartbc.ca/firesmart-canada-neighbourhood-recognition-program-fcnrp/

To enhance community engagement and education, several outreach tools and tactics can be employed, including:

- Hosting **community workshops or events** on FireSmart principles and practices.
- **Distributing informational** pamphlets or brochures to residents.
- Utilizing **newsletters or social media** platforms to share FireSmart tips and updates.
- Organizing **neighbourhood meetings or events** focused on wildfire preparedness.
- Collaborating with **local schools** to integrate FireSmart education into curriculum or extracurricular activities.
- Conducting **FireSmart Home Ignition Zone Assessments/ Farm & Ranch FireSmart Assessment** and providing personalized recommendations for wildfire mitigation measures.
- Promoting the establishment of community **FireSmart committees** to spearhead local education and mitigation efforts.

Actions: The following are recommended action items for the Regional District of Fraser-Fort George to increase FireSmart awareness, education, and action within the Electoral Area H communities:

Action #1: Read and understand this CWRP's identified risks and recommended actions.

Action #2: Employ a FireSmart Coordinator to promote FireSmart to communities within the RDFFG. This position runs all aspects of the FireSmart program and generally is in charge of actioning many aspects of this CWRP. Currently, the RDFFG has employed two part-time FireSmart Coordinator positions; one for the surrounding Prince George region, and one for the Robson Valley.

Action #3: Organize and hold a FireSmart event in Electoral Area H to familiarize FireSmart concepts to regional district communities. Event types include a Wildfire Community Preparedness Day, Farm and Ranch Wildfire Preparedness Workshop, Neighbourhood Champion workshop, or Fire Hall open house.

Action #4: Organize Community Chipper Day(s) and/or Community Waste Disposal/Pickup Day(s), particularly for more isolated areas with difficulty accessing transfer stations (e.g., Crescent Spur, Dome Creek, Tête Jaune Cache). This will encourage and assist residents with removal of hazardous vegetation and debris around their homes.

Action #5: Encourage residents to have a Local FireSmart Representative (LFR) complete a FireSmart Home Ignition Zone (HIZ) Assessment and/or Farm and Ranch Assessment for their home/property. Based on the outcome of the Assessments, encourage property owners to implement as many mitigation activities as possible through local rebate programs for completed eligible FireSmart activities.

Action #6: Develop and offer a local FireSmart Rebate Program to residential property or homeowners that complete eligible FireSmart activities to provide incentive and assist with the financial barriers to implementing FireSmart on private land.

Action #7: Inform the communities about upcoming FireSmart events and other fire/emergency management related updates via social media, the RDFFG website, posters, community newsletters and newspapers, radio ads, etc.

Action #8: Update the Regional District of Fraser-Fort George website to include a dedicated FireSmart/wildfire risk reduction page with information relating to FireSmart principles/activities, resources, and links to FireSmart BC. The page should also include the completed RDFFG CWRPs.

Action #9: Distribute FireSmart resources/promotional items to members of the public at community events such as events specific to FireSmart, Farmer's Markets, etc.

Action #10: Install educational/interpretive signage regarding wildfire ignition prevention and the role of wildfire in ecosystems in regional parks, recreation sites, campgrounds, etc. where appropriate within the electoral area. This could be particularly useful along high-use recreational trails or campgrounds where starts are more likely to occur.

Action #11: Promote and encourage neighbourhoods to work together to implement FireSmart activities at a neighbourhood level and apply for the FireSmart Canada's Neighbourhood Recognition Program. Once recognized, annually renew for FireSmart Recognition is required. This would be particularly beneficial for more isolated communities or neighbourhoods.

5.2 LEGISLATION AND PLANNING

Legislation and Regulation can be a very effective tool for reducing wildfire risk on provincial crown lands and within the administrative boundaries of a local government or First Nation communities. Provincial acts and regulations provide the means for local governments and First Nation communities to implement wildfire risk reduction actions through bylaws.

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

Context: Several types of local, provincial and federal legislation, including bylaws, acts, and regulations, play an important role in supporting or influencing the CWRP process. A comprehensive list of existing relevant provincial and federal regulations and legislation is available in more detail in Appendix F: Key Provincial and Federal Acts and Regulations, and Additional Resources for FireSmart Disciplines.

Official Community Plans (OCPs) manage all aspects of community planning and development and establish objectives and policies used to guide land use decisions. They are important planning documents for establishing proactive mitigation measures for local hazards such as wildfire through the establishment of policies, development permits, and bylaws. The following local Plans or bylaws relating to wildfire risk reduction currently exist for the Regional District of Fraser-Fort George and Electoral Area H:

Robson Valley – Canoe Downstream Official Community Plan Bylaw No. 1948: Legally establishes the Robson Valley – Canoe Downstream Official Community Plan as the framework for land use management objectives and development policies within the Downstream area of Electoral Area H, including surrounding the rural communities of Dome Creek, Crescent Spur, Dore River, and the Mountainview Road area. All bylaws enacted of works undertaken must be consistent with the plan. The Robson Valley – Canoe Downstream OCP outlines the following objectives and policies relating to wildfire/emergency management:

- *Environmental Objectives* for identifying areas with potential hazardous conditions and implementing policies that are directed at minimizing public exposure to potential damage to property, threats to human life and negative impacts to the natural environment in areas subject to hazardous conditions.
- *Fire Protection Policies* to assist in the establishment or extension of fire protection services where feasible with public support on a local service area basis.
- *Rural Wildfire Policies* to work with the Ministry of Forests to identify areas of high risk for rural wildfire hazard and work to reduce this hazard through programming, development considerations, and vegetation management.

Despite the abovementioned objectives and policies within the OCP, there are no identified or spatially delineated areas pertaining specifically to wildfire hazard. Special Management Areas are identified within

the OCP for Lake Protection, Watercourses and riparian areas, and Slope Instability that regulate new development in these areas.

Robson Valley – Canoe Upstream Official Community Plan Bylaw No. 2290: Legally establishes the Robson Valley – Canoe Upstream Official Community Plan as the framework for land use management objectives and development policies within the Upstream area of Electoral Area H, including surrounding the rural communities of Tete Jaune Cache, McLennan, Cedarside, Albreda, and the Mount Robson Approach Corridor area. All bylaws enacted of works undertaken must be consistent with the plan. The Robson Valley – Canoe Upstream OCP outlines the following objectives and policies relating to wildfire/emergency management:

- *Environmental Objectives* for identifying areas with potential hazardous conditions and implementing policies that are directed at minimizing public exposure to potential damage to property, threats to human life and negative impacts to the natural environment in areas subject to hazardous conditions.
- *Fire Protection Policies* to assist in the establishment or extension of fire protection services where feasible with public support on a local service area basis.
- *Rural Wildfire Policies* to work with the Ministry of Forests to identify areas of high risk for rural wildfire hazard and work to reduce this hazard through programming, development considerations, and vegetation management.
- *Canoe Mountain Development Permit Area* is designated to protect the natural environment and enable safe development in areas subject to wildfire hazards. The Canoe Mountain Development Permit Area is spatially delineated east of the Yellowhead Highway No. 5, south of Canoe River, and west of the Canoe West Forest Service Road. The Plan states the Development Permit will evaluate the siting of buildings and structures with respect to the risk of wildfire. However, there are no specific requirements detailed beyond this.

Zoning Bylaw 2892: Sets out regulations and restrictions relating to land use in specified zones throughout the RDFFG. The Zoning Bylaw sets out requirements relating to setbacks on watercourses and regulations for buildings to conform to BC Building Code requirements. There are no requirements within the Zoning Bylaw relating to setbacks from forested wildlands or FireSmart building materials.

Unsightly Premises Regulation Bylaw 3194: Sets out prohibitions for the visible collection/accumulation of trash, derelict vehicles, etc. on private property. This Bylaw can be utilized as a mechanism for promoting removal of flammable materials and debris in Home Ignition Zones. However, this Bylaw does not apply to overgrown grass or weeds and therefore cannot be utilized to regulate overgrown vegetation.

Actions: The RDFFG should consider developing and implementing additional local bylaws and regulatory requirements relating to planning that incorporates FireSmart principles. The following are a list of recommended actions:

Action #12: Ensure that going forward, planning and development throughout the electoral area considers wildfire risk in all aspects. This includes ensuring all local plans and bylaws are developed, updated, or amended to align with wildfire risk reduction and FireSmart principles. For example, planning and development of future subdivisions should consider multiple access/evacuation routes, hydrant/water availability for fire suppression, and landscaping allowances.

5.3 DEVELOPMENT CONSIDERATIONS

Development decisions, such as land use types, structure density, road patterns, and other considerations, shape the built and natural environments. These decisions can bring lasting impacts to the WUI and wildfire risk by affecting public and first responder safety and survivability of homes, critical infrastructure, and other community features. Considering these factors early in the development process can reduce wildfire risk to life safety and property.

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

Context: A development permit (DP) is a land use permit that regulates how new developments are built and where they are located. While both the Robson Valley – Canoe Upstream and Downstream OCPs acknowledge wildfire as a threat and/or hazard, the Downstream OCP does not address associated risks through the development permitting process. The Upstream OCP identifies four Development Permit Areas (DPAs), two of which consider protection of development from hazardous conditions, and one specifically considers wildfire; the *Canoe Mountain Development Permit Area*. However, there are no specifications detailing wildfire risk reduction requirements for development permit approval in this DPA.

For the remainder of the Electoral Area, all forested areas of moderate-high wildfire hazard adjacent to private lands should be identified and mapped for the establishment of Wildfire Hazard Development Permit Areas (DPAs). FireSmart guidelines and other wildfire risk reduction requirements should then be incorporated into the development permitting process for Wildfire Hazard DP Areas. Examples of development permit considerations for wildfire hazard could include the following:

- **Wildfire Hazard Assessment**: Required completion of a wildfire hazard assessment by a qualified professional (e.g. Registered Forest Professional) prior to the development of new neighbourhoods, subdivisions, or primary residences.
- **Landscaping:** Utilize FireSmart approved vegetation and spacing in landscaping within the Home Ignition Zones. Prohibit the use of cedar hedging as a form of privacy screening.
- **Building Materials**: Utilize fire-resistant building materials and construction techniques recommended by FireSmart, such as non-combustible roofing materials, fire-rated siding, and ember-resistant vents.
- **Sprinkler Protection Systems:** Require installment of roof sprinkler systems on all newly constructed primary residences or commercial buildings.
- **Access and Water Supply**: When developing new subdivisions, ensure multiple egress options, adequate access for emergency vehicles, and maintain a reliable water supply for firefighting efforts, including installing fire hydrants and water storage tanks at strategic locations.

In addition to new developments, it is important to assess and address the vulnerability of existing critical infrastructure, facilities, and homes to wildfire. The state of the structure in question and the immediate 30-meter vicinity are crucial in determining the likelihood of ignition and potential damages from a wildfire. FireSmart BC has developed Hazard Assessments for both Critical Infrastructure and the Home Ignition Zone. The assessments should be undertaken by an individual who has the appropriate knowledge and experience in wildfire vulnerability, such as a Local FireSmart Representative (LFR). Recommendations from the assessments can then be implemented to help reduce the spread, intensity, and associated damages to structures from wildfire.

Actions: The following are recommended action items regarding incorporating FireSmart and wildfire hazard into new development considerations and existing infrastructure:

Action #13: Complete FireSmart Assessments on RDFFG owned Critical Infrastructure within Electoral Area H, beginning with the highest priority CI identified by the RDFFG and residents. These include:

a. Dunster Community Hall**,**

b. Dunster schoolhouse**,**

c. Critical communication towers**.**

Action #14: Once completed, implement FireSmart recommendations and mitigation activities resulting from the completed Assessments with the goal of reducing hazard scores as much as feasibly possible.

Action #15: Establish a Development Permit Area (DPA) for Wildfire Hazard for all new types of development in areas within/adjacent to moderate-high/extreme wildfire hazard. DPA requirements should incorporate FireSmart principles such as:

I. Construction materials (including roof, siding, decking and windows) of all new structures to align with FireSmart recommendations**,**

II. FireSmart approved vegetation and landscaping around homes and infrastructure**,**

III. Sprinkler protection systems or other forms of suppression systems for individual structures**,**

IV. Setbacks from forested edges**.**

5.4 INTERAGENCY COOPERATION

It takes the collaborative efforts of multiple stakeholders working together to achieve a fire resilient community. These people include the local fire departments, local government staff, elected officials, First Nations representatives, industry representatives and provincial government residents in your area. Individually they are responsible to their own organizations, but all the stakeholder organizations are dependent upon each other to develop an effective Community Wildfire Resiliency Plan and undertake a successful wildfire response.

Goal: To encourage and establish collaborative relationships among the Regional District of Fraser-Fort George, BC Wildfire Service, local Indigenous Governments, local municipalities, and other stakeholder groups to foster a wildfire resilient community.

Context: As of 2024, as per the *FireSmart Community Funding & Supports Program and Application Guide*, it is a requirement for all applicants to participate in a Community FireSmart and Resiliency Committee (CFRC) in order to be eligible for further funding. The CFRC involves the collaborative efforts of multiple stakeholders and agencies working together to achieve a wildfire resilient community. This can provide the missing link and bring partners together under a common vision connected to the seven FireSmart disciplines. Some suggested activities that could be part of a Community FireSmart Resiliency Committee include:

- Collaborate on a communication and **public education strategy** with multiple local governments.
- Develop/update, implement and monitor the success of your **Community Wildfire Resiliency Plan**.
- **Streamline FireSmart Home Assessment** and **FireSmart grant programs** by sharing capacity between multiple local authorities.
- Develop a network of **Local FireSmart Representatives** in the area and coordinate their activities within the region.
- Provide collaboration and coordination **on Community Funding and Supports Projects** and **Crown Land Wildfire**, in particular, fuel management treatment projects.
- Create an advocacy program for participation in the **FireSmart Canada Neighbourhood Recognition Program** and work towards increasing the number of recognized neighbourhoods in the region each year.
- Identify FireSmart activities that should be undertaken to best build **wildfire resiliency** in higher risk areas.
- Connect and share via social media.
- Identify **funding sources** to access and support priority projects from Provincial, Federal and Regional Programs.
- Ensure **information sharing** of project initiatives that span multiple jurisdictions and scales over space and time.

- Share information to help identify **Wildfire Risk Reduction** project initiatives that reduce risk to First Nation and Municipal communities and support critical infrastructure. [22]

The Fraser Basin Council began the Prince George & Area Community Wildfire Roundtable in November of 2023. The aim of the Roundtable is to support effective coordination and communication of roles among the organizations responsible for different aspects of wildfire preparedness in the region including, but not limited to, FireSmart education, fuel management treatment planning, emergency response resources and capacity, prescribed burning, and land management. The Roundtable is composed of representatives of organizations involved in all aspects of wildfire preparedness and risk reduction in the Prince George area. However, given the unique terrain and location of the Robson Valley communities, many groups and representatives from the Robson Valley region are not a part of the Prince George Community Wildfire Roundtable. A Community FireSmart and Resiliency Committee (CFRC) is therefore required for the Robson Valley to address the unique concerns in the Robson Valley relating to wildfire risk and emergency management. The CFRC could include the following members:

- Regional District of Fraser-Fort George (FireSmart Coordinator and Emergency Preparedness)
- Village of Valemount
- Village of McBride
- Valemount and McBride Fire Department Chiefs
- Simpcw First Nation and First Nation Woodland License manager
- Community Forest managers including those from the Valemount, McBride, and Dunster community forests
- BC Parks
- Ministry of Forests
- Ministry of Emergency Management and Climate Readiness
- BC Cattlemen's Association
- Robson Valley Region tourism
- Valemount and Area Recreation Development Association
- CN Rail
- Telecommunications
- Community groups and stakeholders eg. Dunster Community Wildfire Brigade

Feedback from public engagement revealed that many residents in Electoral Area H that live in communities near the CN railway line, such as Dunster, Crescent Spur, and Dome Creek, are concerned about ignition potential along the tracks in the dry summer months. This highlights the importance of interagency communication and cooperation to reduce wildfire hazards across the landscape.

5.4.1 Indigenous Government Engagement Re: Interagency Cooperation

During interviews with technical staff and in-person community meetings with local First Nations, there was a consistent theme regarding the need for continual interagency cooperation and strong communication between the RDFFG and Nation's governments, as well as key provincial agencies including Ministry of Forests, BC Wildfire Service, Ministry of Transportation, and Ministry of Emergency Management and Climate Readiness. This cooperation and relationship building is key for addressing

[22] For more information regarding the Community FireSmart and Resiliency Committee, visit: https://firesmartbc.ca/cfrc/

large scale wildfire emergency preparedness and response and overall wildfire resiliency within the region.

The Lheidli T'enneh have been experiencing capacity constraints when it comes to emergency management planning and administration. They are in the early process of creating an initial containment crew, with limited capacity, trained to contain the spread of fire while waiting for a fire suppression crew to arrive. Additionally, there are a number of Nation-owned businesses, such as All Nation Safety and LTN Contracting Ltd., that could provide useful services relating to wildfire preparedness and suppression activities. Continued collaboration and integration of wildfire and emergency management planning with the RDFFG can help ensure that both parties are receiving mutually beneficial support and receiving the same emergency information.

Simpcw First Nation staff stated that they currently could not identify any meaningful opportunities for interagency cooperation with the RDFFG, but that they would be interested in new collaborative opportunities as their CWRP and the RDFFG CWRPs are completed and FireSmart coordinators are established.

5.4.2 Cooperative Community Wildfire Response

Wildfires pose the greatest risk to rural and remote communities lacking the resources for fast and effective fire suppression and emergency response. Local community members know their own geographies best and what landowners value most. The Cooperative Community Wildfire Response pilot project is a partnership between the BC Wildfire Service, the First Nations Emergency Services Society, Indigenous Services Canada, the University of British Columbia, Fraser Basin Council, and the BC Cattlemen's Association. This project aims to leverage cooperation with remote communities to establish fire preparedness and response capacity and support improved coordination and consistency between the BCWS and community groups. Starting in 2025, Regional Districts in BC will have access to funding to help build a cooperative pathway for wildfire response by undertaking training and purchasing Personal Protective Equipment for local community members in areas that do not fall within a structural fire protection jurisdiction area. This could be a critical step for increasing wildfire resiliency in isolated communities throughout the RDFFG.

For the purpose of receiving funding through UBCM, a Cooperative Community Wildfire Response (CCWR) organization is an incorporated business entity, such as a non-profit society or fire brigade, that is able to receive funding, has an accountable leadership structure, and that operates outside of structural fire protection jurisdiction. Within Electoral Area H, the Dunster community has already started to build an active community fire brigade and acquire protective equipment. During public engagement sessions, the Dunster community expressed keen interest in being involved in wildfire suppression around their community.

Actions: The following are recommended action items pertaining to interagency cooperation for Electoral Area H:

Action #16: Establish a Community FireSmart and Wildfire Resiliency Committee (CFRC) for the Robson Valley (required to receive additional CRI funding). The CFRC may involve the following parties:

Action #17: Identify rural communities within the Electoral Area that demonstrate a genuine desire to form and participate in a Cooperative Community Wildfire Response (CCWR) organization. CCWRs must be

Action #18: Work collaboratively with CN Railway regarding mitigating ignition potential along the railway line running through Electoral Area H communities, including enhanced vegetation management strategies along the railway line.

Action #19: Work collaboratively with Simpcw Resources Ltd (First Nations Woodland License N3C), the community forests (Valemount, McBride, and Dunster), and woodlot owners with license areas adjacent/near to private residences to manage for wildfire risk within the WUI in forest management planning and harvest operations.

Action #20: Apply for funding through UBCM's CRI program for required training and personal protective equipment for members of eligible Cooperative Community Wildfire Response (CCWR) organizations.

Action #21: Send staff from the RDFFG Emergency Preparedness department to attend the annual **Wildfire Resiliency and Training Summit.**

5.5 CROSS-TRAINING

Wildland-Urban Interface resiliency planning and incident response draw on many different professions who do not typically work in wildfire environment. Cross-training of fire fighters, public works staff, utility workers, local government and First Nations administration, planning and logistics staff, and other key positions will help support the development of comprehensive and effective wildfire risk reduction planning and activities, as well as a safe and effective response.

Goal: Develop a diverse skill set within District staff members and local Fire Departments to facilitate understanding across participants engaged in emergency management planning and response.

Context: All of the 13 volunteer Fire Departments operated by the RDFFG are required to hold one training evening per week that is an average of 2.5hrs in duration. Additionally, all these fire departments have participated in wildland fire suppression training to some degree. However, there are no Regional District owned fire departments located within Electoral Area H; the two volunteer fire departments are located in the Village of McBride and the Village of Valemount. These fire departments provide emergency response services to regional district residences surrounding each village respectively. The level of training and cross training provided to each of the Village fire departments is unknown.

In May 2024, a group of Dunster locals partook in the S100 and S185 basic fire suppression and entrapment avoidance training courses that was provided by the BC Wildfire Service & Fraser Basin Council.

Volunteer fire departments are encouraged to participate in ongoing cross-training opportunities relating to wildland fire suppression, such as the SPP-WFF1 - Wildland Firefighter Level 1 (includes S100, S-185, and ICS-100) training, the Wildland Structure Protection Program, or opportunities to train with BCWS staff in the Prince George Fire Zone. A complete list of current eligible training courses available to fire department members is below. Some of these courses may also be eligible to be offered to residents involved in Cooperative Community Wildfire Response organizations:

- **Wildfire Risk Reduction Basics Course** - free, online course for non-forest professionals that provides an introduction to the key concepts to minimize the negative impacts of wildfires in BC.
- **Fire Life and Safety Educator** - public education course for fire safety education.
- **ICS-100 (Incident Command System)** - introduction to an effective system for command, control, and coordination of response at an emergency site.
- **S-100** - Basic fire suppression and safety and S-100A (annual refresher).
- **S-185** - Fire entrapment avoidance and safety.
- **SPP-WFF1** - Wildland Firefighter Level 1 (includes S100, S-185, and ICS-100).
- **Wildland Structure Protection Program (WSPP-115)** - training for structure protection unit crews and WSPP-FF1(train the trainer).
- **S-231** - Engine Boss (training for structure protection program in a WUI event).

Cross-training opportunities also exist for RDFFG Emergency Services staff and the FireSmart Coordinator position. Eligible training courses available to these local government personnel include:

- **Local FireSmart Representative (LFR) training** – free online course to enhance understanding of current Wildland Urban Interface concepts and wildfire hazard assessments.
- **Introduction to Emergency Management in Canada (EMRG-1100)** - Basic concepts and structure of emergency management.
- **ICS-100 (Incident Command System)** - introduction to an effective system for command, control, and coordination of response at an emergency site.
- Attend the annual BC **Wildfire Resiliency and Training Summit** - Up to four staff per year

More information regarding FireSmart training courses can be found on the FireSmart BC website.

Actions: The following are recommended action items relating to FireSmart and wildfire response cross training:

Action #22: Provide cross-training opportunities to RDFFG Public Safety and Emergency Preparedness staff to further build capacity and redundancy in the department:

a. Local FireSmart Representative (LFR) training

b. EMRG-100 - Introduction to Emergency Management in Canada

c. ICS-100 - Incident Command System

Action #23: Work with the municipalities of Valemount and McBride to provide cross-training opportunities for local firefighters in the Valemount and McBride Fire halls including the following wildfire suppression training courses:

a. S-100 – Basic fire suppression and Safety

b. S-185 – Fire entrapment avoidance and safety

c. ICS-100 – Incident Command System introduction

d. SPP-WFF1 Wildland Firefighter Level 1 (includes S-100, S-185, ICS-100)

e. WSPP-115 - Wildland Structure Protection Program (training for structure protection unit crews)

Action #24: Help coordinate cross-training opportunities between the BCWS Robson Valley Fire Zone and Valemount/McBride fire fighters.

5.6 EMERGENCY PLANNING

Community preparations for a wildfire emergency requires a multi-pronged approach. Individuals and agencies need to be ready to react by developing plans, mutual-aid agreements, resource inventories, training, and emergency communication systems. All of these make it possible for a community to respond effectively to the threat of wildfires.

Goal: The goal of emergency planning is to coordinate response efforts amongst the community, first responders, and local and provincial authorities to increase the efficiency and effectiveness of communications and evacuations in the event of an emergency, such as a wildfire event. Emergency management programs should focus on the four pillars of emergency management planning:

1. Prevention and mitigation,
2. Emergency preparedness,
3. Response activities, and
4. Recovery.

This CWRP aims to increase the number of community members who:

- Understand the hazard and risk associated with wildfire in their community,
- Know what to do to in the event of an emergency,
- Take action to increase individual preparedness and mitigate damage to their properties, and
- Participate in community resiliency planning.

Context: As observed in recent busy fire seasons, simultaneous wildfire emergencies across the province can strain resources, leading to shortages in heavy equipment, BCWS staff, contractors, and equipment. Resource availability may be severely limited or scarce during such times, necessitating the triage or prioritization of emergencies province wide. Therefore, local governments, resources, and individuals must be prepared and proactive in their response efforts.

The following local bylaws within the RDFFG establish the Regional District's Emergency Management Program and subsequent Emergency Management Plan:

- **Emergency Preparedness Service Establishment Bylaw No. 2162** - establishes the Emergency Preparedness Service within Electoral Areas A, C, D, E, F, G and H.
- **Emergency Management Program Administration Bylaw No. 2960** - establishes an Emergency Management Program to develop a plan and implement emergency measures within the Electoral Areas and provide for the management of disasters and emergencies

The RDFFG Emergency Management Plan is a comprehensive plan pertaining to all Electoral Areas. It contains a long list of external and internal annexes to support emergency preparedness, response (both immediate and sustained), recovery, and continuous improvement. The internal support annexes include 50 different localized Community Emergency Plans and information binders specific to each community and populated area.

Dunster Wildfire Emergency Response Plan: The Dunster Community Forest is heading the initiative to develop a localized Wildfire Emergency Response Plan and to secure mobile firefighting equipment for the Dunster community. This initiative is still in its infancy and is in the process of collecting resident information to help inform the plan.

Communication methods utilized by the Regional District to inform residents during an emergency event differs based on the demographic and unique characteristics of each community. Communication methods utilized during previous events include the public alerting system (PAS), media releases, social media messaging, and phone, door-to-door information visits and radio communication.

A large portion of residents throughout the RDFFG own and operate agricultural or ranch land. These types of properties are unique in that they are larger in size and typically contain a number of assets such as outbuildings, machinery, livestock, etc. that are essential to the livelihood of the landowner. Landowners/producers are ultimately responsible for protecting their operations through planning and mitigation, and, as applicable, must consider employees, visitors and animals/livestock in planning for emergencies. The BC Climate Change Adaption Program has developed a Farm & Ranch Wildfire Preparedness Guide & Workbook[23] for completing a *Farm/Ranch Wildfire Preparedness Plan.* These Plans aim to help producers be better prepared to take efficient/effective action during wildfire, identify risk reduction priorities, such as removing fuels, reducing fuel sources or setting up sprinklers, and share information with those involved in wildfire response such as BC Wildfire Service before or during a wildfire.

5.6.1 Indigenous Government Engagement Re: Emergency Planning

Effective emergency planning and response to wildfire at a regional level will require good communication between governments and parties involved. During technical staff interviews, the LTFN expressed that wildfire is one their community's greatest concerns and priorities for emergency planning, and they want to be informed and involved. The Simpcw technical staff also expressed the same concern. They would like to be notified and potentially engaged in decision-making when there is an emergency event happening anywhere on their territory, especially if there is operational response. Staff interviewed reiterated that the Nation doesn't want to get in way of emergency response but want to ensure cultural values and sacred areas are protected. Historically, the Regional District would only reach out when an emergency was occurring adjacent to a reserve but are now committed to being more communicative and taking a joint approach to emergency planning and response.

5.6.2 Wildfire Preparedness Planning

As part of pre-incident planning, the Regional District may consider developing local daily action guidelines based on expected wildfire conditions. The table below provides a template that can be tailored specifically to Regional District operations outlining actions that staff, fire department members, and other emergency staff can take as fire danger levels change throughout the year. Some of these actions are already undertaken annually, (e.g. during Extreme fire danger, EOC staffing availability information is updated, and natural area closures occur), while other actions have not yet been initiated.

[23] https://www.bcclimatechangeadaptation.ca/library/farm-ranch-wildfire-plan-guide-and-workbook/

Table 17: Wildfire Response Preparedness Condition Guide

Wildfire Response Preparedness Condition Guide	
Prep-Con Level	**Action Guidelines**
(I) LOW	• All RD/Community staff on normal shifts.
(II) MODERATE	• All RD/Community staff on normal shifts.
(III) HIGH	• All RD/Community staff on normal shifts. • Daily BCWS fire behavior advisory (request to be added to the Prince George Fire Centre distribution list) • Prince George Fire Centre fire situation reviewed (request for weekly or daily fire situation update from the Prince George Fire Centre). • Wildland fire-trained RD/Community staff and EOC staff notified of Prep-Con level. • Establish weekly communications with local wildland fire agency contacts • Hourly rain profile for all weather stations after lightning storms.
(IV) EXTREME	• Daily BCWS fire behavior advisory (request to be added to the Prince George Fire Centre distribution list). • Prince George Fire Centre fire situation reviewed (request for weekly or daily fire situation update from the Prince George Fire Centre). • EOC staff considered for stand-by. • Designated RD/Community staff: water tender and heavy machinery operators, arborists may be considered for stand-by/extended shifts. • Consider initiating Natural Area closures to align with regional situation. • Provide regular updates to media Services members/Community staff on fire situation. • Update public website as new information changes.
(V) FIRE(S) ONGOING	• All conditions apply as for Level IV (regardless of actual fire danger rating). • Provide regular updates to media/structural fire departments/park staff on fire situation. • Mobilize EOC support if evacuation is possible, or fire event requires additional support. • Mobilize emergency management trained staff under the direction of the Emergency Preparedness Coordinator and fire staff. • Implement Evacuation Alerts and Orders based on fire behaviour prediction and under the direction of the Emergency Preparedness Coordinator and direction from BCWS.

Actions: The following are recommended action items to improve emergency planning and preparedness relating to wildfire:

Action #25: Ensure strong emergency communication strategies are developed and maintained between the RDFFG and Lheidli T'enneh First Nation and Simpcw First Nation regarding emergency wildfire events occurring anywhere on their traditional territory. This will ensure the Nations are informed and involved in emergency planning and response as it relates to their lands and values.

Action #26: Assess the number of residents throughout Electoral Area H that may be more vulnerable or at higher risk during an emergency evacuation event due to:

a. Unreliable cell phone coverage or internet bandwidth resulting in delayed or unsuccessful communication,

b. Residents who are elderly, have limited mobility, or may require additional support during an evacuation**.**

Action #27: Promote and encourage all agricultural/ farm/ranch landowners to develop a **Farm/Ranch Wildfire Preparedness Plan** for their properties. These Wildfire Plans will allow landowners/ producers to be better prepared to take efficient/effective action during wildfires, identify risk reduction priorities to complete, such as removing fuels or setting up sprinklers, and share important information with those involved in wildfire response, such as BCWS.

Action #28: Promote and encourage all Electoral Area H residents to subscribe to the RDFFG's emergency Public Alerting System (PAS). Emergency notices can be delivered via email or phone.

Action #29: Organize and/or participate in cross-jurisdictional meetings, tabletop exercises, or mock scenarios specifically focused on wildfire preparedness and suppression in the Robson Valley, including seasonal wildfire readiness meetings.

Action #30: Consider establishing a RDFFG Fire Department within Electoral Area H, such as in the Dunster or Tête Jaune Cache community.

Action #31: Assess community water delivery ability as required for suppression activities, limited to current water system evaluation and available flow analysis. Many of the Electoral Area H communities rely on community watersheds and creeks for water sourcing, for which supply can become limited during large wildfire events.

5.7 VEGETATION MANAGEMENT

The general goal of vegetation management is to reduce the potential wildfire intensity and ember exposure to people, infrastructure, structures and other values through manipulation of both the natural and cultivated vegetation that is within or adjacent to a community. A well-planned vegetation management strategy that is coordinated with development, planning, legislation and emergency response wildfire risk reduction objectives can greatly increase fire suppression effectiveness and reduce damage and losses to structure and infrastructure.

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

Context: Fuel management, also referred to as vegetation management or fuel treatment, is an important element of wildfire risk reduction within the WUI. The primary objective of fuel management treatments is to reduce fuels available to burn and alter aspects of wildfire behaviour, such as decreasing potential intensity, to help limit damage to infrastructure and allow for safer and more effective suppression strategies.

Over 75% of the one-kilometer WUI area in Electoral Area H is occupied by large, rural private land parcels in which funded fuel management treatments are ineligible. Completing fuel management treatments on Crown land without similar wildfire risk reduction activities and treatment on adjacent private land will ultimately reduce the effectiveness of Crown land fuel treatments. This highlights the critical importance of private landowners to implement FireSmart treatments on their homes/structures and extending out into the Immediate, Intermediate, and Extended Zones. This is particularly important for large, forested private land parcels often found in rural communities. Public engagement with RDFFG residents revealed that many private landowners are seeking more support and informative direction for FireSmart activities on private land through education and awareness, programming, and rebate opportunities.

5.7.1 FireSmart Landscaping (Residential and Critical Infrastructure)

FireSmart landscaping is the removal, reduction, or conversion of flammable plants (such as landscaping for residential properties, parks, open spaces, and critical infrastructure) in order to create more fire – resistant areas in the Intermediate and Extended Zones around homes, structures, and infrastructure. The FireSmart BC Landscaping Guide[24] is an excellent tool to help residents and planners make informed choices about how to manage their lawns and gardens to increase resilience to wildfire on their properties. The guide provides a diverse list of fire-resilient plants suitable for different areas of the Province based on cold-hardiness, drought tolerance, and avoidance of harmful invasive species.

[24] https://firesmartbc.ca/wp-content/uploads/2021/04/FireSmartBC_LandscapingGuide_Web_v2.pdf

Additionally, it provides tips for spacing and pruning of vegetation, mulch considerations, and maintenance.

Vegetation management at the residential scale is further delineated by the FireSmart priority zones, as described in the FireSmart Home Ignition Zone (HIZ) and Priority Zones (refer to Appendix C: Home Ignition Zone).

5.7.1.1 Critical Infrastructure

FireSmart BC has developed a FireSmart Critical Infrastructure (CI) Hazard Assessment Form[25] for assessing the vulnerability of critical infrastructure to wildfire. Results of the assessment can help provide mitigation recommendations to enhance wildfire resiliency, including upgrades to structure components or vegetation management in the Ignition Zones surrounding the structure. In many cases, the assessment and subsequent mitigation may extend beyond the legal land parcels on which the critical infrastructure occupies and may require collaboration with adjacent land managers. Completion of FireSmart Critical Infrastructure Hazard Assessments on CI identified for the RDFFG was beyond scope of this CWRP project; however, an important next step would be to complete FireSmart Assessments on the highest priority values throughout Electoral Area H.

5.7.2 Cultural Sites and Green Spaces

The FireSmart Cultural Sites and Green Spaces assessment is a qualitative process that is intended for assessing vulnerability of First Nation cultural sites and local government green spaces. These can include sacred or traditional use sites, cultural features, parks, cemeteries, trails, and greenways. Implementing FireSmart activities in cultural sites and green spaces (CSGS) involves managing vegetation and adopting fire-resistant landscaping practices to reduce wildfire risk and enhance resilience. FireSmart vegetation management focuses on intentionally removing or reducing flammable plants and vegetation, both natural and cultivated. This minimizes potential fuel sources, lowers wildfire intensity, and decreases overall risk in CSGS from embers and flames.

Completing FireSmart CSGS Assessments was beyond the scope of this CWRP. However, funding is currently available for FireSmart activities within these spaces should the Regional District be interested in implementing FireSmart landscaping in any of their regional or community parks, or other important green spaces. Within Electoral Area H, portions of **Cedarside Regional Park** containing picnic tables and well-utilized trails may be good candidate for a FireSmart CSGS project, provided the area is less than 3 hectares in size.
The following steps are required under the CRI program for FireSmart CSGS projects:

1. *Checklist for CRI Requirements for Fuel Management Prescription* is required to be completed before CSGS Assessment is started (completed checklist must be submitted at time of application but the cost is an eligible expense provided the assessment is completed within six months prior to the date of application submission).
2. Completion of *FireSmart CSGS Assessment* before mitigation work is started (completed assessment must be submitted at time of application but the cost is an eligible expense provided the assessment is completed within six months prior to the date of application submission).

[25] https://firesmartbc.ca/wp-content/uploads/2021/04/07.23.24_FireSmart_CriticalInfrastructureHazardAssessmentForm.pdf

3. Complete recommended mitigation activities identified in the *FireSmart CSSGS Assessment.*

5.7.3 Indigenous Government Engagement Re: Vegetation Management

Electoral Area H overlaps the traditional territories of the Lheidli T'enneh First Nation (LTFN) and Simpcw First Nation. Interviews were held with technical staff at LTFN and Simpcw First Nation. Additionally, an in-person community meeting was held with LTFN members. The following views and concerns were expressed by staff and Nation members relating to vegetation management on their territory:

- Ecological integrity must be greatly considered during fuel management prescription development and treatment operations to avoid causing more damage than benefits when completing treatments for wildfire risk reduction.
- The Simpcw First Nation does not have any reserve lands or established communities living within the Regional District. However, Simpcw territory and areas of importance within Electoral Area H include upper Fraser and Columbia rivers, Robson Valley, and Raush River Valley. If fuel management work is proposed within the Traditional Territory, Simpcw must be informed; all proposed projects within Simpcw territory should be referred to the Simpcw Natural Resources Department for review and comment.
- Any fuel management prescriptions being planned/developed within LTFNs traditional territory must ensure it goes through the referral process so that the Nation can review the proposed area and treatment activities prior to approval or commencement of work. This will help ensure that Nation values on the landscape, such as cultural sites, sacred sites, traplines, cabins, etc. are being considered and managed for. Since the location of many of these sites must remain protected, LTFN staff have stressed it is important they are given the opportunity to review the proposed fuel treatment units from the RDFFG CWRPs prior to finalizing to ensure none of these sites may be compromised.
- Wildfire risk reduction can be strategically incorporated into the location and planning of harvest operations. Therefore, there should be greater collaboration with forestry licensees harvesting on the land base near the wildland urban interface. This includes Simpcw's First Nations Woodland License area that encompasses the Canoe River valley.

5.7.4 Completed or Active Fuel Treatment Units

In 2021, the Prince George Tactical Plan was developed for the Prince George Natural Resource District under the Crown Land Wildfire Risk Reduction (CLWRR) funding stream. Currently, the Prince George Tactical Plan is the primary wildfire risk reduction planning mechanism for Provincial Crown land in the Wildland Urban Interface throughout the Prince George District. As a part of the Tactical Plan, Fuel Treatment Units (FTUs) representing high wildfire hazard were identified on the landscape. Many of these FTUs were adjacent to RDFFG neighbourhoods and values throughout Electoral Area H. However, to date there have been no fuel treatments from the Prince George Tactical Plan completed by the Ministry of Forests within Electoral Area H.

Where a fuel management prescription has been completed for a proposed area under the WRR Program by the Ministry of Forests, **a prescription would not be required to be initiated and developed by the RDFFG through CRI funding. The RDFFG should follow up with the Ministry of Forests on the operational status of these units.**

5.7.5 Proposed Fuel Treatment Units

The proposed fuel management treatment units (FTUs) for this CWRP were identified based on field work completed, available provincial crown land located within the eligible WUI, proximity to values, accessibility, and forest fuel types. The areas identified for potential treatment within Electoral Area H are detailed in Table 18.

The proposed FTUs in Table 18 are listed in order of general priority. Priority Ranking assignment took into consideration a multitude of factors including both the Wildfire Threat Assessment Scores and Priority Setting Scores from the Wildfire Threat Assessment Worksheet completed in the field, as well as other local factors such as accessibility, anchoring features, overlapping values, and/or constraints to fuel management activities. Prioritization ranking did NOT consider political or public appetite for fuel treatment activity within specific communities/neighbourhoods.

Additionally, the priority ranking column in Table 18 colour coded to symbolize general Priority Levels of **High**, **Moderate**, **or Low**. As assigning priority levels and rankings can be a subjective process based on best available information and an imperfect science, the RDFFG withholds the right to complete proposed fuel treatment activities in whatever order they see fit and are not required to complete FTUs in the order listed in Table 18. The Priority Ranking of FTUs within this CWRP is intended to guide the Regional District is pursuing fuel treatment activities based on overall wildfire threat of a stand, risk to values, and efficacy of treatment. Furthermore, the FTUs identified as part of this CWRP are only **proposed** and require further boundary refinement based on more intensive data collected during the fuel management prescription development phase.

Once an area is identified as a proposed fuel treatment unit, completing the vegetation/fuel management on the land base is a two-phase approach; the first phase involves the development of a Fuel Management Prescription (FMP) by a BC Registered Professional Forester (RPF). The FMP details the site-specific attributes and ecology of the identified forest area and prescribes appropriate strategies for fuel reduction that meet objectives for wildfire risk reduction, as well as other important overlapping values such as wildlife habitat, ecological restoration, or recreation. Concerns were voiced during the public engagement meetings held throughout the RDFFG electoral areas regarding fuel management treatments and their impacts on ecological integrity, particularly in old growth forest stands. It is the responsibility of the prescribing forester during the FMP development phase to ensure the proposed fuel treatment activities are ecologically suitable for the existing forest stand and site conditions, and promote long-term forest resilience. Additionally, it is during the FMP development phase where further information sharing is completed with Indigenous governments and stakeholders to ensure all concerns are identified and addressed/incorporated.

The final phase is the implementation of the FMP where treatment operations occur on the ground. Operational contractors must be acquired to complete the treatment specifications as outlined in the FMP.

Many of the proposed fuel treatment units identified in this CWRP overlap existing previously identified and proposed units from the 2021 *Prince George District Tactical Plan*. Note that polygon shape/size/location of CWRP proposed FTUs may not be identical to proposed/prescribed FTUs from the Tactical Plan. **In cases where a unit has already been previously identified under a Tactical Plan, it**

is important the Regional District work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments under the Crown Land Wildfire Risk Reduction funding stream that is available to the Ministry, wherever possible. FTUs that overlap proposed Fuel Treatment Units or Assess Monitor Units from the 2021 Prince George Tactical Plan are identified under the 'Treatment Rationale' column.

Additionally, for proposed treatments overlapping the jurisdiction of other land managers, the Regional District MUST work in collaboration with those land managers at the fuel prescription development phase to determine suitability of treatment and funding options. Other land managers include but are not limited to:

- ***Woodlot owners*** – funding is available through Woodlots BC and the Forest Enhancement Society of BC (FESBC) for fuel treatments within woodlots
- ***Community Forests*** – funding is available through FESBC for fuel treatments within community forests
- ***First Nations Woodland Licenses (FNWL)*** – funding is available through FESBC and other avenues for fuel treatments within FNWLs.
- ***Provincial Parks and Protected Areas*** - it is the jurisdiction of BC Parks to fund and implement fuel treatments within their parks and protected areas**.**

Table 18**Error! Reference source not found.** below details the proposed FTUs and includes information on their priority ranking and level, general size, local wildfire threat, overlapping values, rationale for treatment, and overall status. Maps outlining the location of the FTUs can be found in accompanying **Annex E: Maps.**

Table 18: Proposed Fuel Treatment Units for Electoral Area H

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
TU-H15	1	23.8	Community Resilience	20.3	3.5		**McBride Community Forest K1H**; Guide Outfitter area - Eugene Rizzoli, Grizzly Gulch Contracting Ltd.; Trapline license TR0705T001; Species at Risk Critical Habitat - Woodland Caribou (Southern Mountain population); Old Growth Priority Deferral Area - ID: 86170, 232597	Proposed TU surrounds the south and west side of private residential properties on Little Bell Road southwest of the community of McBride. The TU also includes Dore River Road Subdivision Park and overlaps the McBride Community Forest. Equine recreation trails run through the unit. **The RDFFG must work collaboratively with the McBride Community Forest manager regarding any fuel management treatments within their tenure area.** The area is comprised of a mix of immature and mature C-3 and C-5 fuel types with cedar, Douglas-fir, subalpine fir. Multilayered stands with understory, intermediate layer, and larger vets. Proposed treatment activities would include understory thinning, pruning of retained trees, and surface fuel reduction. The treatment would reduce hazardous coniferous and woody surface fuels adjacent to private residences, within the subdivision park, and along frequently used trails.	LS_WTA-27

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
TU-H9	2	49.7	Community Resilience	38.9	10.8		**Simpcw First Nations Woodland License N3C;** Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz; CN Railway line	Proposed TU is located adjacent to and surrounding private residences on Blackman Road in the Tete Jaune Cache community, and overlaps First Nations Woodland License N3C. **The RDFFG must work closely with the Simpcw First Nations regarding any fuel management works within their FNWL.** The unit is anchored by the CN Railway line along the southeast boundary, the Fraser River along the north boundary, and wetland complexes to the west. The area is comprised of a mature C-3 fuel type with components of C-7 containing Douglas-fir and lodgepole pine. Understory conifers are present in thickets where canopy closure is more open. Surface fuels are relatively continuous. Proposed treatment activities would include understory thinning, pruning of retained conifers, and surface fuel reduction. Treatment would reduce coniferous and surface fuels adjacent to private residences and the railway line, and provide for safer egress along Blackman Road north towards Highway 16. **Note:** TU overlaps proposed Fuel Treatment	LK_WTA-13

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								Units **T2_FTU_02, T2_FTU_01** from the *2021 Prince George Tactical Plan*.	
TU-H6	3	33.5	Community Resilience, Critical Infrastructure	29.5		4.0	**Valemount Mountain Bike Recreation Area;** **Valemount Community Forest K2T;** TELUS Communications Site; Swift Community Watershed; Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz	Proposed TU encompasses a portion of the Valemount Mountain Bike Recreation Area near the parking lot, and surrounds the TELUS communication site. It also overlaps with the Valemount Community Forest. **The RDFFG must work collaboratively with the Valemount Community Forest and the Valemount and Area Recreation Development Association regarding any fuel management works within their management areas**. The unit surrounds private land parcels along the west boundary and anchored to the Swift Mountain FSR along the east side. The area is comprised of a mix of C-7 and mixedwood (M-1/2) fuel types, with areas of	LK_WTA-8

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								denser C-3 along the FSR and around the communication tower with ladder fuels that could initiate crown fire. Proposed treatment activities include understory thinning, pruning of retained conifer branches, surface fuel and debris clean up, and potential for prescribed fire in the C-7 areas. Treatment would reduce hazardous coniferous and ladder fuels, and potential for fire ignition along heavily used bike trails, the FSR, and around the communication tower.	
TU-H19	4	34.4	Community Resilience	20.4	14.0		**Mount Robson Provincial Park and Protected Area**; Species at Risk Critical Habitat - Whitebark Pine; Guide Outfitter area - Vincent Lorenz; Trapline license TR0702T006, TR0703T002	Proposed TU is located within Mount Robson Provincial Park, surrounding private residential properties on Swift Current Creek Road and Howard Road off of Highway 16. Swift Current Creek bisects the unit. **The RDFFG must collaborate with BC Parks regarding all fuel management works within the jurisdiction of parks and protected areas.** The area contains a mix of mixedwood (M-1/2 50% conifer) and C-5 fuel types comprised of spruce, aspen, and subalpine fir with a well-developed shrub understory.	LS_WTA-18

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								Conifer understory density is high. Proposed treatment activities would include understory thinning, pruning of retained conifers, and surface fuel reduction. The treatment would reduce hazardous coniferous fuels directly adjacent to private residences.	
TU-H3	5	23.9	Community Resilience	23.9			**Valemount Community Forest K2T**; Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz	Proposed TU is located adjacent to private residences/properties on Cypress Road and Birch Road in the Cedarside area, and overlaps the Valemount Community Forest. **The RDFFG must work collaboratively with the Valemount Community Forest manager regarding all fuel management works within their tenure area.** The unit is comprised of a mature mixedwood stand containing 70% conifer with a mix of spruce, lodgepole pine, and black cottonwood. Stand contains a relatively high amount of dead standing and down, elevated debris. Unit is located in a water-receiving depression, downslope of residences. Access is difficult. Proposed treatment activities would include removal of dead standing and down debris,	LS_WTA-6

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								surface fuel clean up, and pruning of retained conifers. Windthrow hazard is high and soils are likely sensitive due to high water content. These constraints must be considered during site prescription development. Treatment would reduce hazardous coniferous fuels adjacent to residential properties.	
TU-H8	6	35.2	Community Resilience	17.2		18.0	**Simpcw First Nations Woodland License N3C;** Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz; CN Railway line	Proposed TU is located behind private residences on Glacier Road, Crown Road, and Old Tete Jaune Cache in the Tete Jaune Cache community. The CN Railway line bisects the unit and unit is easily accessible by Blackman Road that runs through it. The unit overlaps First Nations Woodland License N3C. **The RDFFG must work closely with the Simpcw First Nations regarding any fuel management works within their FNWL.** The area is comprised of a mix of immature mixedwood (M-1/2 50% conifer) and C-3 fuel types. Proposed treatment activities would include	LK_WTA-14

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								thinning of understory conifers, pruning of retained conifers, and debris clean up. Treatment would reduce hazardous conifer/ladder fuels and potential for crown fire in stands adjacent to the railway line and private residences. **Note:** TU overlaps proposed fuel treatment unit **T1_FTU_02** from the *2021 Prince George Tactical Plan*	
TU-H12	7	32.5	Community Resilience, Egress Safety		32.5		Guide Outfitter area - Vincent Lorenz; Range Tenure RAN077849 (14 ha); Trapline license TR0703T004; Species at Risk Critical Habitat - Whitebark Pine	Proposed TU is located along the upslope side of Read Road, between private properties, north of the Dunster community. The area is comprised of a mixedwood (M-1/2 50% conifer) fuel type with moderate density of aspen, spruce, and Douglas-fir in the overstory. The understory is relatively dense at 1000 sph of spruce. Stand is multilayered with minimal fuel strata gap. Proposed treatment activities would include understory thinning, pruning of retained conifers, and surface fuel/debris clean up. The treatment would reduce hazardous coniferous fuels along Read Road, a single primary egress road for private residences located along it.	LS_WTA-22

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
TU-H14	8	34.4	Community Resilience		34.4		**McBride Community Forest K1H**; Guide Outfitter area - Eugene Rizzoli; Trapline license TR0703T007; Species at Risk Critical Habitat - Whitebark Pine	Proposed TU is located adjacent to and upslope of private residences on Mountainview Road north of the community of McBride. The area is comprised of a mixedwood (M-1/2 50-75% conifer) fuel type containing moderately stocked Douglas-fir, birch, and spruce. Fuel strata gap is minimal due to an intermediate layer of cedar in the understory. Proposed treatment activities would include understory thinning, pruning of retained conifers, and surface fuel reduction. The treatment would reduce coniferous and woody surface fuels adjacent to private residences.	LS_WTA-25
TU-H16	9	45.0	Egress Safety, Landscape Fuel Break		45.0		**McBride Community Forest K1H** (3.7 ha); **Woodlot License W0213 (**41.3 ha); Guide Outfitter area - Eugene Rizzoli; Trapline license TR0703T007; Range Tenure RAN076270 (26 ha)	Proposed TU runs along both sides of Mountainview Road, northwest of private residences, and then follows a forestry spur road that runs west. It overlaps the McBride Community Forest and Woodlot License W0213. **The RDFFG must work collaboratively with the McBride Community Forest manager and Woodlot License holder regarding any fuel**	LS_WTA-24

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								management treatments within their tenure area. The TU contains a mix of mature C-3 stands comprised of cedar and spruce, and immature plantations from previously harvested blocks along the spur road. The mature stands contain a high prevalence of dead understory stems and large and fine woody surface fuels. Proposed treatment activities would include thinning and surface fuel removal to create a fuel break along the primary and spur roads to act as a linear response/suppression feature against a wildfire advancing from the north/northwest	
TU-H17	10	25.2	Egress Safety	15.2	10.0		**McBride Community Forest K1H** (9 ha); Guide Outfitter area - 1245218BCLTD; Trapline license TR0703T010, TR0705T005; Species at Risk Critical Habitat - Woodland Caribou	Proposed TU runs along both sides of Loos Road, which acts as the primary egress road for the Crescent Spur community. It is bound by private land at the north and south ends. It overlaps the McBride Community. **The RDFFG must work collaboratively with the McBride Community Forest manager regarding any fuel management treatments within their tenure area.**	LK_WTA-28

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
							(Southern Mountain population), Whitebark Pine;	The area contains a mix of mature mixedwood (M-1/2 75% conifer) and C-3 fuel types, primarily comprised of spruce and birch. Proposed treatment activities would include understory thinning, pruning of retained trees, and surface fuel reduction. The treatment would reduce hazardous coniferous fuels along an important egress route for the Crescent Spur community.	
TU-H20	11	20.1	Community Resilience, Critical Infrastructure, Egress Safety	12.1	8.0		**Mount Robson Provincial Park**; Trapline license TR0702T006	Proposed TU surrounds the north side of the Mount Robson Store within Mount Robson Provincial Park. The unit follows along Kinney Lake Road. **The RDFFG must collaborate with BC Parks regarding all fuel management works within the jurisdiction of parks and protected areas.** The area contains mature mixedwood (M-1/2 50-70% conifer) and C-3 fuel types comprised of spruce, lodgepole pine, and aspen. Understory conifers are relatively high. Branches on mature spruce are low near ground. Shrubs and herbs are well-developed. Proposed activities would include understory	LS_WTA-15

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								thinning, pruning of retained conifer trees, and surface fuel reduction. The treatment would reduce hazardous coniferous fuels near the Mount Robson Store infrastructure and increase egress safety along Kinney Lake Road to Highway 16.	
TU-H13	12	38.0	Community Resilience, Egress Safety		38.0		**Dunster Community Forest K3O**; Guide Outfitter area - Vincent Lorenz; Range Tenure RAN077849 (20 ha), RAN076275 (16.7 ha) Trapline license TR0703T004; Species at Risk Critical Habitat - Whitebark Pine	Proposed TU is located along the upslope side of Read Road, between private properties, north of the Dunster community. It overlaps the Dunster Community Forest. **The RDFFG must work collaboratively with the Dunster Community Forest manager regarding any fuel management treatments within their tenure area.** The area is comprised of a mix of mature C-5 and mixedwood (M-1/2 50% conifer) fuel types with moderate density of aspen, spruce, and Douglas-fir in the overstory. The understory is relatively dense at 1000 sph of spruce. Stand is multilayered with minimal fuel strata gap. Proposed treatment activities would include understory thinning, pruning of retained	LS_WTA-22

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								conifers, and surface fuel/debris clean up. The treatment would reduce hazardous coniferous fuels adjacent to private residences, and along Read Road, a single primary egress road for the private residences located along it. Access to some portions of the unit would require permission to cross through private property.	
TU-H1	13	11.0	Community Resilience		11.0		**Simpcw First Nations Woodland License N3C**; Woodland Caribou critical habitat; Woodland Caribou occurrences; Trans Mountain Pipeline RoW; Trapline license TR0702T005; Guide Outfitter area - Vincent Lorenz	Proposed TU is located along the south border of private land/rural residences on Sunnyview Road, south of Valemount. The Transmountain Pipeline RoW clearing bisects the unit. The unit overlaps First Nations Woodland License N3C. **The RDFFG must work closely with the Simpcw First Nations regarding any fuel management works within their FNWL.** The unit is comprised of C-3 even-aged, immature lodgepole pine stand. Density is >1500 sph. Crown Base Height is moderate at 5-6m. There is no distinct understory layer and woody surface fuels are minimal. Proposed treatment activities would include a pre-commercial thin to reduce overall stand density and crown bulk density.	LS_WTA-2

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								Treatment would reduce coniferous fuels adjacent to private property on Sunnyview Road and pipeline infrastructure.	
TU-H4	14	40.9	Community Resilience, Egress safety		40.9		Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz	Proposed TU is located along Pine Road, northwest of Valemount, and adjacent to a recently complete fuel management treatment. The area is surrounded by large residential properties and contains unofficial trails. The area is comprised of mature lodgepole pine and spruce stand, characteristic of a mature C-3 or C-5 fuel type due to high crown-base height, shrub understory component, and mature stand structure. Minimal understory component, approx. 1000 sph in overstory. Relatively high amount of dead standing and down, elevated debris. Proposed treatment activities would include removal of dead standing and down debris and surface fuel clean up. Windthrow hazard is high which must be considered during site	LS_WTA-9

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								prescription development. Treatment would reduce hazardous coniferous fuels adjacent to the south side of Pine Road and widen the existing adjacent fuel treated area. TU overlaps proposed PG Tactical Plan FTU: VB_FTU_01	
TU-H5	15	13.7	Community Resilience	3.5		10.2	Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz	Proposed TU is adjacent to residences on Starview Road. The TU borders the Valemount transfer station to the north and the railway line to the east. Unit is easily accessible via Loseth Road. Portions of the TU appear to have been previously salvaged for mountain pine beetle and are lower wildfire threat. The easternmost portion of the unit adjacent to the railway line is high threat C-3 stand comprised of high density immature lodgepole pine and continuous ladder fuels into the crown. Proposed treatment activities would include thinning of overstory and understory pine, pruning of retained conifer trees, and debris removal. Treatment would reduce hazardous coniferous fuels adjacent to the railway line, private residences, and the Valemount transfer station.	LK_WTA-10

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
TU-H11	16	25.1	Egress Safety		25.1		**Dunster Community Forest K3O**; Guide Outfitter area - Vincent Lorenz; Range Tenure RAN077849 (2 ha); Trapline license TR0704T006; Species at Risk Critical Habitat - Whitebark Pine	Proposed TU is located along the west side of a portion of Dunster-Croydon Road in the community of Dunster, a primary access road for rural private properties. It overlaps the Dunster Community Forest. **The RDFFG must work collaboratively with the Dunster Community Forest manager regarding any fuel management treatments within their tenure area.** The area is comprised of mature C-3 and C-5 fuel type. Proposed treatment activities would include reducing hazardous coniferous fuels along the primary access road to enhance egress safety in the event of a wildfire advancing from the west/southwest/south/southeast.	LK_WTA-26
TU-H10	17	40.8	Community Resilience; Landscape Fuel Break	40.8			**Simpcw First Nations Woodland License N3C;** Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz;	Proposed TU is located along the west side of large rural properties on Old Tete Jaune Road and Harvey Road in the community of Tete Jaune Cache. The unit follows/anchors along forest tenure road MT651-6 MAINLINE. The unit overlaps First Nations Woodland License N3C. **The RDFFG must work closely with the Simpcw First Nations regarding**	LK_WTA-14

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								any fuel management works within their FNWL. The area is a comprised of a mix of C-7 and C-3 fuel types. Proposed treatment activities would include creating a landscape fuel break along the existing forest access road to act as a linear response/suppression feature against a wildfire advancing from the west/southwest/south/southeast.	
DEMO-H1	18	3.8	Recreation Area, Public Education		3.8		Cedarside Regional Park; **Valemount Community Forest K2T;** Trapline license TR0702T005	Proposed TU encompasses portions of Cedarside Regional Park and wraps around the south/southwest side of Little Cranberry Lake. The area is forested with a mix of immature C-3 and C-7 lodgepole pine stands. Density is high in some areas exceeding 5000 sph. Minimal woody surface fuels or shrub component. Ladder fuel branches present from low crown-base height. Portions of the area have been previously harvested with a retention system. A number of unofficial recreation trails run through the treatment area in the park. Proposed treatment activities would include	LS_WTA-5

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								overstory and/or understory removal in dense stands, pruning of retained trees, and debris removal. Treatment would help reduce fuels along recreation trails and reduce the potential for fire ignitions from recreationalists. This unit is suitable for a Demonstration Forest project under CRI because it is less than 5 ha in size. Fuel reduction educational signage may be utilized.	
TU-H18	19	73.5	Community Resilience, Landscape Fuel Break	22.0	51.5		**McBride Community Forest K1H;** Guide Outfitter area - Eugene Rizzoli; Trapline license TR0704T007; Species at Risk Critical Habitat - Woodland Caribou (Southern Mountain population); Recreation polygon - Lucille Parking Lot and Alpine Cabin; Old Growth Priority	Proposed TU is located adjacent to the southwest of larger rural properties southwest of McBride. It is situated off the Lucille Mountain-Mainline FSR, which is also used as a snowmobile/recreation trail. The unit overlaps the McBride Community Forest. **The RDFFG must work collaboratively with the McBride Community Forest manager regarding all fuel management works within their tenure area.** The area contains mature C-3 and C-5 fuel types comprised of cedar, subalpine fir, spruce, and hemlock. Low laying branches and relatively high density of conifers in	LK_WTA-26

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
							Deferral Area - ID: 5094, 232586	understory contributing to ladder fuels and minimal fuel strata gap. Proposed treatment would include understory thinning, pruning of retained conifers, and surface fuel reduction to create a shaded landscape fuel break adjacent to the rural community.	
TU-H7	20	35.3	Community Resilience	35.3			**Valemount Mountain Bike Recreation Area;** **Valemount Community Forest K2T;** Swift Community Watershed; Trapline license TR0702T006; Guide Outfitter area - Vincent Lorenz	Proposed TU is located within the Valemount Mountain Bike Recreation Area, upslope of private properties and TU-H6. It also overlaps with the Valemount Community Forest. **The RDFFG must work collaboratively with the Valemount Community Forest and the Valemount and Area Recreation Development Association regarding any fuel management works within their management areas.** The area is comprised of a mix of C-7 and C-3 fuel types. Proposed treatment activities would include understory thinning, pruning of retained conifer branches, surface fuel and debris	LK_WTA-8

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								clean up, and potential for prescribed fire in the C-7 areas. Treatment would reduce hazardous coniferous and ladder fuels, and potential for fire ignition along heavily used bike trails and the FSR.	
TU-H2	21	16.9	Community Resilience	8.6	8.3		**Valemount Community Forest K2T** (9.3 ha); Valemount Gun Club Range; Trapline license TR0702T005	Proposed TU is located on the west side of Highway 5 in the Cedarside area. The Upper Canoe Mainline FSR and Transmountain Pipeline RoW run through the unit. It is bordered by private land along the east boundary and contains an open shooting range. The unit overlaps the Valemount Community Forest. **The RDFFG must work collaboratively with the Valemount Community Forest manager regarding all fuel management works within their tenure area.** The area is comprised of patchy C-7 stands containing mature lodgepole pine, and areas of dense immature C-3 lodgepole pine stands. Woody surface fuels are patchy, with areas containing higher components of dead large and fine woody debris. Proposed treatment activities would primarily include understory thinning to reduce ladder fuel continuity and surface	LS_WTA-3

FTU ID	Priority Rank	Total Area (ha)	Treatment Unit Type	Local Fuel Threat (Hectares)			Overlapping Values / Treatment Constraints	Treatment Rationale	Associated Wildfire Threat Assessment ID
				Extreme / High	Mod	Low			
								fuel clean up. Treatment would reduce coniferous fuels adjacent to private property and pipeline infrastructure.	

Actions The following are recommended action items regarding FireSmart Vegetation Management and fuel treatments:

Action #32: Work with the Lheidli T'enneh and Simpcw First Nations during the planning and development of fuel management prescriptions and treatments in the Robson Valley. This will help ensure Indigenous values on the landscape are protected.

Action #33: Encourage residents to remove flammable vegetation in the Immediate, Intermediate, and Extended zones on their properties. Promote the use of the *FireSmart BC Landscaping Guide* to replace flammable vegetation with more fire-resistant landscaping.

Action #34: Apply for funding to develop fuel management prescriptions for forested areas identified on provincial crown land within the eligible WUIs. It is recommended to start with high priority proposed fuel treatment areas as identified within this CWRP.

Action #35: Apply for funding to undertake fuel management treatment operations on provincial crown land within the eligible WUIs based on completed fuel management prescription units.

Action #36: Apply for funding to complete an initial *FireSmart CSGS Assessment* for frequented green spaces in Electoral Area H, such Cedarside Regional Park. Cedarside Park in particular contains some areas of dense pine around trails. If deemed appropriate by the assessment, apply for funding to complete the recommended eligible mitigation activities identified (limited to labour and material costs). Alternately, fuel reduction work around the trails in the park could be completed as a Demonstration Forest (see section 5.7 Vegetation Management)**.**

Action #37: Create an inventory and monitoring system to track wildfire risk reduction and FireSmart vegetation management activities throughout the Regional District including:

- Areas that have had fuel management prescriptions and treatment operations completed,
- Monitoring and maintenance planning for completed fuel treatment areas,
- Critical infrastructure assessments and associated FireSmart treatments completed,
- FireSmart Assessments completed for private property owners.

6.0 Implementation

6.1 PLAN MONITORING TRACKING AND REPORTING

The CWRP action plan (Table 1) should be reviewed annually to capture any significant changes that could affect implementation or priority levels, as well as to track which actions have been completed or are in progress. Completed actions should be summarized, including information on specific measurable outcomes that demonstrate reduced wildfire risk in Electoral Area H. In addition, a five-year comprehensive review/update should take place in 2029 including specific updates on:

- How wildfire risk has changed based on recent wildfires;
- Relevant additions or consideration regarding the new Emergency and Disaster Management Act (EDMA):
- Progress made with regards to FireSmart activities;
- Which vegetation management activities have been completed; and
- Any significant changes to the built environment due to growth and development, economic changes, or other factors.

Table 19 provides an example monitoring plan, tracking, and update summary for Electoral Area H. Annual updates should consider renaming the plan version as 1.1, 1.2, 1.3, etc. Five-year comprehensive updates should consider renaming the plan version as 2.0, 3.0, etc. Columns for actions in progress or completed actions may refer to the action numbers listed in Table 1. Annual tracking is useful for creating accountability, as well as reporting accomplishments and successes. Summaries of specific measurable outcomes are useful for reporting to decision makers and applying for future funding.

Table 19. Electoral Area H CWRP monitoring, tracking and update summary

Plan Version	Update Year	Update Type	Actions in Progress	Completed Actions	Notes
1.0	2024	1st iteration	Ongoing N/A	Start with items identified as “Very High” or “High” in the Action Plan Table	Review CWRP in 2026 and reassess priority action items for implementation
2.0	2029				

7.0 Appendices

7.1 APPENDIX A: GLOSSARY OF TERMS

Area of Interest: The AOI for a CWRP includes the area that lies within the municipal boundary, regional district boundary, or First Nations land, including First Nation reserve land, land owned by a Treaty First Nation (as defined by the Interpretation Act) within treaty settlement lands, or land under the authority of an Indigenous National Government boundary. The AOI should reflect how the community is organized and how it approaches other similar planning projects within its jurisdictional boundaries. When communities are located close together and are geographically aligned, a “regional” approach may be most effective.

Critical Infrastructure (CI): are assets owned by the Provincial government, local government, public institution (such as health authority or school district), First Nation or Treaty First Nation that are essential to the health, safety, security or economic wellbeing of the community and the effective functioning of government, or assets identified in a Local Authority Emergency Plan Hazard, Risk & Vulnerability, and Critical Infrastructure assessment.

FireSmart Landscaping: is the removal, reduction, or conversion of flammable plants (such as landscaping for residential properties, parks, open spaces, and critical infrastructure) in order to create more fire-resistant areas in FireSmart Non-combustible Zone and Priority Zones 1 and 2 (refer to the FireSmart Guide to Landscaping).

Fuel Management Treatment: is the manipulation or reduction of living or dead forest and grassland fuels to reduce the rate of spread and fire intensity, and enhance the likelihood of successful suppression, generally outside of FireSmart Non-combustible Zone and Priority Zones.

Values at Risk (VAR): are the human or natural resources that may be impacted by wildfire. This includes human life, property, critical infrastructure, high environmental and cultural values, and resource values.

Wildfire Risk:

Likelihood of a fire occurring
Associated fire behaviour
Impacts of the fire (consequence)

Wildfire Threat: The ability of a wildfire to ignite, spread, and consume organic material (trees, shrubs, and other organic materials) in the forest. The major components used to define wildfire threat are fuel, weather, and topography.

Wildland Urban Interface (WUI): The WUI is defined in the FireSmart manual as any area where combustible forest fuel is found adjacent to homes, farm structures, or other outbuildings. This may occur at the interface, where development and forest fuel (vegetation) meet at a well-defined boundary, or in the intermix, where development and forest fuel intermingle with no clearly defined boundary.

7.2 APPENDIX B: ENGAGEMENT

See accompanying **Annex B.1 RDFFG CWRP Indigenous Government Engagement Summary** and **Annex B.2 RDFFG CWRP Summary of Public Engagement.**

7.3 APPENDIX C: HOME IGNITION ZONE

FireSmart describes three Priority Zones around a building, collectively named the Home Ignition Zone (Figure 21) alongside descriptions of what these zones should look like, starting from the edge of a building and moving outwards.

- Immediate Zone (0 – 1.5 m) Non-combustible surface should extend around the entire home and any attachments, such as decks.
- Intermediate Zone (1.5 – 10 m) This should be a fire-resistant area, free of all materials that could easily ignite from a wildland fire.
- Extended Zone (10 – 30 m) Thinned and pruned coniferous trees, alongside routine dead surface fuel cleanup.

Figure 21. FireSmart Home Ignition Zone, which is comprised of four priority zones, as illustrated in the BC FireSmart Begins at Home Manual

Of particular importance are neighbourhoods where homes and buildings are situated close together in a relatively higher density than more rural areas. This means that FireSmart Priority Zones frequently overlap with one another (i.e., Immediate Zone or Intermediate Zone from one building may encroach into an adjacent building's Zone Immediate or Intermediate). This highlights the importance of community resilience towards wildfire though working together to reduce wildfire hazard, especially within the WUI.

7.4 APPENDIX D: WILDFIRE THREAT ASSESSMENTS

See accompanying **Annex D: RDFFG CWRP Wildfire Threat Assessment EA H** spreadsheet and associated photos.

7.5 APPENDIX E: MAPS

See accompanying **Annex E: RDFFG CWRP AOI/VAR, Fire Risk, and Treatment Unit Maps** for Electoral Area H.

7.6 APPENDIX F: KEY PROVINCIAL AND FEDERAL ACTS AND REGULATIONS, AND ADDITIONAL RESOURCES FOR FIRESMART DISCIPLINES

Education

- FireSmart BC website
- BC Wildfire Prevention website
- First Nations' Emergency Services Society
- Programs FireSmart Canada
- Wildfire Preparedness Guide
- First Nations Forestry Council
- BC Wildfire Service
- BC Government - Wildfire
- Emergency Management in BC
- Destination BC - Emergency Preparedness
- Educational Messages Desk Reference (the National Fire Protection Association)
- BC Hydro - be prepared for emergencies

Local Bylaws

- Robson Valley – Canoe Upstream Official Community Plan Bylaw No. 2290
- Robson Valley – Canoe Downstream Official Community Plan Bylaw No. 1948:
- Zoning Bylaw 2892
- Unsightly Premises Regulation Bylaw 3194
- Building Bylaw No. 3239, 2021

Provincial Acts and Regulations

- Emergency Management and Disaster Act (2024)
- BC Local Government Act (2015)
- BC Open Burning and Smoke Control Regulations (2023)
- BC Wildfire Act and Regulations (2005)
- Forest and Range Practices Act (2021)

Federal Acts

- Forestry Act (1985)
- Migratory Birds Convention Act (1994)
- Canadian Environmental Protection Act (1999)
- Species At Risk Act (2002)
- Fisheries Act (2019)

Development Considerations

- Information on Development Permit Areas is available at FireSmart BC - Development Considerations

- Additional guidance on land use planning tools and strategies for the Wildland-Urban Interface include the American Planning Association's PAS Report 594 Planning the Wildland-Urban Interface (2019), which available at no charge through the association's website.
- The National Research Council (NRC) Wildland-Urban Interface Technical Committee has also published National Guide for Wildland-Urban Interface (WUI) Fires (2021); this guide provides guidance to Canadian local governments and First Nations on WUI land use planning and regulation implementation.

Interagency Cooperation

- FireSmart BC
- Indigenous Services Canada
    - Emergency Management Assistance Program (EMAP), which supports communities in accessing emergency assistance services. Will provide funding for communities to build resiliency and prepare and respond to natural hazards.
- First Nation Health Authority
    - Emergency Management Branch – ensures FN communities are effectively incorporated into emergency preparedness, prevention, response and recovery initiatives.
- First Nation Emergency Services Society
    - Emergency Management department provides community-based emergency management guidance, support, and assistance to BC First Nation communities.
    - Fire Services Department assists communities to increase level of fire protection.
    - Forest Fuel Management Department liaises with governments and other agencies to assist with wildfire prevention activities.
- Emergency Management BC
    - BC Wildfire Service and Emergency Management BC (EMBC), along with several other Ministries and agencies, are working in close collaboration to provide First Nation training, equipment, and capacity support

Cross-Training

- UNBC - Wildland Firefighting Training Certificate
- OH&S (06) - Fire Safety Planning & Systems
- FireSmart training courses
- Recognized British Columbia S-100 instructors

Emergency Planning

The following resources are available for reference and to assist with emergency planning:

- National guide for Wildland-Urban-Interface Fires - which provides guidance to Canadian local governments and First Nations on WUI land use planning and regulation implementation, as well as guidance on wildfire response preparedness planning.
- FireSmart BC Emergency Planning
- Emergency Management in B.C. – which contains several valuable resources including fire services, education and toolkits, and preparedness and recovery information.

Vegetation Management

- The BCWS Fire and Fuel Management web page offers a number of tools that support fuel management planning and implementation and can be accessed here.
- Contact your local BC Wildfire Service Fire Centre office to learn more about, engage and collaborate on Landscape Zone vegetation management planning.
- FireSmart Guide to Landscaping
- Funding resources for fuel management treatments can vary from year to year as funding pots change over time. Current available funding opportunities can be initiated through conversation with First Nation Emergency Services Society (FNESS) prior to completion of treatments.

Appendix A FTU Maps