REGIONAL DISTRICT
of Fraser-Fort George

Salmon River – Lakes Electoral Area A

Community Wildfire Resiliency Plan 2024

FireSmart™ Canada

UBCM

FORSITE FIRE

Registered Professional Signature and Seal

This CWRP has been prepared for the RDFFG Salmon River - Lakes 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

- **Colby Molcak**, Emergency Services Coordinator, RDFFG
- **Kenna Jonkman,** General Manager of Community and Development Services, RDFFG
- **Anita de Dreu**, Emergency Services Coordinator, RDFFG
- **Melanie Perrin,** Senior Manager of Public Safety Services, RDFFG

Forsite Fire Team

- **Lauren Shinnimin, RPF**, Fuel Management Specialist, Forsite
- **Carmen Massey,** Planner – Indigenous Engagement, Forsite
- **Richelle Parada,** GIS and E-submission Specialist, Forsite

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 area of interest, the Great Beaver Lake fire in 2023 burned over 47,000 hectares approximately 25 kilometers north of the Salmon River – Lakes (Electoral Area A) boundary. The fire resulted in numerous evacuation alerts and orders for areas located between Bear Lake and Fort St. James. Similarly, the Little Bobtail Lake fire in 2015 resulted in the evacuation of 160 properties in the neighbouring Chilako River – Nechako electoral area

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 Salmon River – Lakes (Electoral Area A) is to:

(i) identify and assess wildfire hazards within and around Electoral Area A communities including Nukko Lake/Chief Lake, Ness Lake, Salmon Valley, Goose Country Road, North Kelly, Old Summit Lake Road, and Reid Lake,
(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 Salmon River – Lakes Electoral Area is situated north/northwest of Prince George and covers approximately 140,000 hectares. The electoral area is characterized by large swaths of agricultural land and forested land impacted by decades of forest harvesting activity, interspersed with small, more densely populated communities situated around lakes, and subdivisions adjacent to Prince George.

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

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

collection of field data, and development of a risk mitigation strategy based on the unique attributes of the Salmon River – Lakes area. The following wildfire risks and associated recommended action items (Table 1) have been identified for RDFFG Electoral Area A. 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. 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. Ness Lake, Pilot Mountain, and the Salmon Valley are served by single egress routes, which leave residents vulnerable during fast-moving wildfire events. In such scenarios, the single egress routes could become compromised, posing significant evacuation challenges and increasing the risk to community safety. II. Over half of the area within the Wildland Urban Interface in Electoral Area A is occupied by private land, with many large rural private land parcels. This limits opportunities for fuel management treatments on provincial crown land adjacent to homes and structures. III. There are currently no Development Permit Areas identified for wildfire hazard within the Electoral Area A and no requirements for implementation of FireSmart principles during development. Newly built structures and future development could be at risk from wildfires if they are not built to FireSmart standards. IV. 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. V. The Prince George Natural Resource District Tactical Plan was completed in 2021, identifying high wildfire hazard areas for fuel management treatments on provincial crown land throughout the Electoral Area A; however, there have been minimal fuel management treatments completed to date.

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*.

Salmon River - Lakes Electoral Area A 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	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
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 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,

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
RDFFG has employed two part-time FireSmart Coordinator positions; one for the surrounding Prince George region, and one for the Robson Valley						Wildfire Mitigation Specialist, or Wildfire Forest Professional
3. Organize and hold a FireSmart event in Electoral Area A 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 per year within an Electoral Area A community. Participation/attendance target of 10% of the electoral area population (approximately 350 people total) for all events	Funding is available through the UBCM's Community Resiliency Investment (CRI) program to organize, host or support FireSmart events
4. Organize Community Chipper Day(s) and/or Community Waste	FireSmart Coordinator, RDFFG	Very High	Semi-annually or annually	Chipper, disposal bins, waste	Removal of hazardous debris, vegetation, invasive	Feedback from public engagement included issues relating to debris disposal

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Disposal/Pickup Day(s), particularly for more isolated areas with difficulty accessing transfer stations (only one transfer station exists in EA A – Chief Lake). This will encourage and assist residents with removal of hazardous vegetation and debris around their homes	Environmental Services			management staff or contractors	plants and other flammable materials around homes is completed on an annual basis	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
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	FireSmart Coordinator	Very High	Immediate and ongoing	FireSmart Coordinator, Local FireSmart Representative, Neighbourhood Champion, or other qualified staff to complete the HIZ and/or	Residents within Electoral Area A request FireSmart HIZ 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 and/or Farm and Ranch Assessments for property owners

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Assessments, encourage property owners to implement as many mitigation activities as possible through local rebate programs for completed eligible FireSmart activities				Farm and Ranch Assessment		
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 implement FireSmart on private land	RDFFG Emergency Preparedness staff	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
7. Inform the communities about upcoming FireSmart events and other fire/emergency management related updates via social media,	FireSmart Coordinator, RDFFG Communications Staff, RDFFG Emergency	High	Ongoing	Communication resources	FireSmart resources are available in multiple locations and platforms to reach a wide variety of residents. FireSmart	Public engagement feedback revealed that public outreach and information sharing needs to occur on a variety of platforms to capture residents of all demographics.

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
the RDFFG website, posters, community newsletters and newspapers, radio ads, etc.	Preparedness staff				events are well advertised and attended	Area A residents noted that the sign board at the Pilot Mountain Fire Hall is a good way to communicate information to residents.
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	RDFFG Emergency Preparedness staff, RDFFG Communications Staff	High	Immediate	Communication resources	A dedicated FireSmart page is developed and uploaded onto the RDFFG website by 2026	A dedicated and easy to find FireSmart webpage on the RDFFG website can help ensure consistent and targeted information is being provided to residents about how the Regional District is implementing wildfire risk reduction and how residents can be involved and help protect their own properties
9. Distribute FireSmart resources/promotional items to members of the public at community events such as events specific to	FireSmart Coordinator, RDFFG Emergency	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]

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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
FireSmart, Farmer's Markets, etc.	Preparedness staff					
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 ATV and recreational trails where starts are more likely to occur	FireSmart Coordinator, RDFFG Environmental Services (Parks) staff	Moderate	Signage installed in high use areas by 2026	Signage and installation materials	Community members and recreationalists become more aware of the role they play in preventing wildfire ignitions	Residents noted concern for the Pidherny area, which is used by recreational users such as mountain bikers, hikers, and, at the end of Christina Rd, ATV/dirt bike users. 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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
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	FireSmart Coordinator	Moderate	Within 3 years (2027), then annually	A certified Local FireSmart Representative or Neighbourhood Champion to complete Neighbourhood Wildfire Hazard Assessments	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 completed3. Funding is available through the UBCM's CRI program to complete Neighbourhood Wildfire Hazard Assessments and FireSmart Neighbourhood Plans. Residents in the Pilot Mountain area expressed interest in working towards the FireSmart Neighbourhood Recognition Program.
Legislation and Planning						
Objective: Utilize administrative tools available to local governments to implement wildfire risk reduction actions through local policies, plans, and bylaws						
12. Update the Electoral Area A Official Community Plan to include spatially delineated Wildfire Hazard Areas as a	RDFFG Community and	High	Within 3 years (2027)	Communication resources, internal staff capacity, FireSmart and	The Electoral Area A OCP is updated/amended to include Wildfire	Funding is available through the UBCM's CRI program to amend Official Community Plans, Comprehensive

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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
part of Special Management Areas and include provisions for a Wildfire Hazard Management Development Permit Area	Development Services			wildfire risk reduction guidance	Hazard Management as a Special Management Area to allow for the development of spatially delineated Wildfire DPAs	Community Plans and/or land use, engineering and public works bylaws to incorporate FireSmart principles
13. 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	Single-road access communities in Electoral Area A (Pilot Mountain area and Chief Lake Rd) are of high concern for emergency evacuation in the event of a wildfire. 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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
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.						
14. Complete FireSmart Assessments on RDFFG owned Critical Infrastructure (CI) within Electoral Area A, beginning with the highest priority CI identified	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
15. 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 A by 2028	Funding is available through the UBCM's CRI program to complete mitigation activities on assessed structures, including building materials and labour

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
16. Establish a Development Permit Area (DPA) for Wildfire Hazard Management 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	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	Funding is available through the UBCM's CRI program to establish Development Permit Areas for Wildfire Hazard to incorporate FireSmart principles

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
systems for individual structures IV. Setbacks from forested edges						
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.						
17. Continued active participation in the Prince George & Area Community Wildfire Roundtable to work towards effective and efficient emergency planning, vegetation/fuel management, and communication protocols at a regional level. The established Roundtable acts as the Community FireSmart and Wildfire Resiliency Committee that is required to receive ongoing CRI funding for	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	Funding is available through the UBCM's CRI program to support participation in and organization of interagency meetings

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
FireSmart and wildfire risk reduction activities						
18. Work collaboratively with woodlot owners and community forests with license areas adjacent/near to private residences to manage for wildfire risk 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 number of area-based forest licenses in Electoral Area A, such as woodlots and community forests, are located adjacent or near to private land and residences. Managing for wildfire risk during forest management planning and operations can help reduce hazardous fuel and vegetation surrounding communities. Funding may be available to managed forest license holders to complete fuel management activities within their tenure areas.
19. Identify rural communities within the Electoral Area that demonstrate a genuine desire to form and participate in a Cooperative Community Wildfire	FireSmart Coordinator, RDFFG Emergency Preparedness staff	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	Starting in 2025, funding will be available under the UBCM CRI program for required training and personal protective equipment for members of CCWRs.

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Response (CCWR) organization. CCWRs must be: • An incorporated business entity, such as fire brigade, that can 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						However, suppression tools/equipment such as pulaskis, shovels, chainsaws, pumps, hoses, sprinklers, etc. are not covered under the funding
20. Apply for funding through UBCM's CRI program for required training and personal protective equipment for members of eligible Cooperative Community Wildfire	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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Response (CCWR) organizations						pulaskis, shovels, chainsaws, pumps, hoses, sprinklers, etc. are not covered under the funding
21. Work collaboratively and build meaningful partnerships with Lheidli T'enneh First Nation's Emergency Management department and their affiliated companies, such as LTN Contracting and All Nations Safety, to address all levels of planning for wildfire resiliency and emergency management within the Prince George region. This also includes working as a team with other key governments and agencies such as the City of Prince George, BCWS, MOF, MOTT, and EMCR	RDFFG Emergency Preparedness staff	High	Immediate and ongoing	Communication and planning resources	Continuity of wildfire preparedness and response work for the region is achieved through meaningful relationship building	During interviews with technical staff and in-person community meetings with LTFN, there was a consistent theme regarding the need for continual interagency cooperation and strong communication between the RDFFG and LTFN

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
22. 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						
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.						
23. Continue to provide cross-training opportunities for local firefighters in the Ness Lake, Pilot Mountain and Salmon Valley Volunteer Fire Departments including the following wildfire suppression training courses:	RDFFG Public Safety	Very High	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.

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
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)						
24. Provide cross-training opportunities to RDFFG Public Safety and/or Emergency Preparedness staff to further build capacity and redundancy in the department:	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	Funding for cross-training courses for Emergency Management staff is available through UBCM's CRI program

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
A. Local FireSmart Representative (LFR) training B. EMRG-100 - Introduction to Emergency Management in Canada C. ICS-100 - Incident Command System					Preparedness departments	
25. Coordinate cross-training opportunities between the BCWS Prince George Fire Zone and RDFFG Fire Department fire fighters. Due to the size of the Regional District, cross-training opportunities with BCWS may need to occur through several different sessions based on combined geographic areas. For example, Prince George West (Beaverley, Pilot Mountain, Ness Lake)	RDFFG Public Safety staff, RDFFG Emergency Preparedness staff	Moderate	Once every two years	Facility to hold the training, potentially some basic suppression equipment	Organize one BCWS cross-training event per year	Implementation of this recommendation is dependent upon BCWS availability.

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
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.						
26. 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/**
27. Ensure strong emergency communication strategies	RDFFG Emergency	Very High	Immediate and ongoing	Communication resources	Strong communication and	During interviews with LTFN staff, they expressed the

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
are developed and maintained between the RDFFG and Lheidli T'enneh Indigenous Government regarding emergency wildfire events occurring anywhere on their traditional territory. This will ensure the Nation is informed and involved in emergency planning and response as it relates to their members, lands, and values.	Preparedness staff				working relationships are built and maintained between the RDFFG and LTFN to ensure human life and safety, and values on the landscape are protected.	importance of LTFN being notified and involved in decision making regarding emergency response on their territory. LTFN community members delineated important values on the landscape on maps provided in the accompanying Indigenous Government Engagement Summary document that can be utilized by the RDFFG.
28. Promote and encourage all Electoral Area A 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 A	N/A
29. Organize and/or participate in cross-jurisdictional meetings, tabletop exercises, or mock	FireSmart Coordinator, RDFFG Emergency	High	Annually	Communication and planning resources, facility	A minimum of one cross-jurisdictional meeting/tabletop exercise/mock	The RDFFG has been active in planning and participating in cross-jurisdictional tabletop exercises/mock scenarios

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
scenarios specifically focused on wildfire preparedness and suppression, including seasonal wildfire readiness meetings. Involvement of the Lheidli T'enneh Indigenous Government and City of Prince George is imperative to the success of emergency management planning for Prince George and surrounding area	Preparedness staff			and funds to hold meeting/exercise	scenario is held per year	relating to wildfire preparedness. Funding to hold wildfire preparedness meetings/exercises is available through UBCM's CRI program
30. Assess the number of residents throughout Electoral Area A 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	RDFFG Emergency Preparedness staff	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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
delayed or unsuccessful communication, B. Residents who are elderly, have limited mobility, or may require additional support during an evacuation						mobility or vulnerable populations
31. Apply for **UBCM's Public Notification and Evacuation Route Planning**[4] and assess areas throughout the Regional District that are vulnerable. For Electoral Area A consider the following: A. Pilot Mountain – Chief Lake Road B. Ness Lake – Ness Laker Rd C. Salmon Valley – Salmon Valley Rd	RDFFG Emergency Preparedness staff	High	Apply for 2025 intake	UBCM funding	Evacuation Route Planning completed for EA A	Public engagement in this area captured that residents were concerned about the lack of suitable egress routes from the Pilot Mountain area and that along Chief Lake Rd, a dip in the road was a significant hazard that had caused accidents/road delays in the past, which could be hazardous during an evacuation.

[4] **Public Notification and Evacuation Route Planning**. UBCM.

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
32. Assess community water delivery ability as required for suppression activities, limited to current water system evaluation and available flow analysis. Options for water storage and supply options, such as a dry hydrant system, should be considered.	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.
33. Assess and inventory FireSmart Structure Protection equipment located at the Ness Lake, Pilot Mountain and Salmon Valley Fire Rescue halls. It is recommended that Fire Departments have functioning Structure Protection Trailers, where feasible. Apply for funding to purchase any missing equipment to complete a fully stocked Structure Protection Trailer.	RDFFG Public Safety, Fire Department Chiefs	Moderate	Complete inventory assessment by spring 2025. Equipment need purchases should be fulfilled as soon as possible	Suitable space to store the trailer and equipment, trained response crew to employ Structure Protection Equipment/Trailer	Ness Lake, Pilot Mountain and Salmon Valley currently own a full Structure Protection Trailer. Can also consider sharing SPU trailer per Electoral Area	Funding is available through the UBCM CRI program to purchase FireSmart Structure Protection equipment. The equipment is funded in four phases to build a complete Structure Protection Trailer. Additionally, training is available for structural fire fighters for utilization of Structure Protection Equipment/Trailers

Salmon River - Lakes Electoral Area A 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						
34. 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
35. Work with the Lheidli T'enneh Indigenous Government during the planning and development of fuel management prescriptions and treatments. This will help ensure LTFN values on the landscape are protected,	RDFFG Emergency Preparedness staff, RDFFG FireSmart Coordinator	Very High	Immediate and ongoing	Communication and collaboration resources	Lheidli T'enneh is incorporated into the planning, development, and operational stages of fuel management on their traditional territory. This will help foster a stronger	During interviews with LTFN 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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
provide economic opportunities for the Nation and their forestry company, enhance overall forest stewardship, and provide more comprehensive wildfire risk reduction planning opportunities on the landscape.					relationship between the LTFN and RDFFG.	involvement of their forestry company in these projects whenever possible.
36. 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	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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
this CWRP overlap areas identified for treatment in the 2021 Prince George Tactical Plan.						
37. 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	Contracts 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
38. Apply for funding to complete an initial *FireSmart CSGS*	FireSmart Coordinator, RDFFG	Moderate	Within 2 years (2026)	Complete **Checklist for CRI Requirements for**	An initial FireSmart CSGS Assessment is completed for all	Funding is available through the UBCM's CRI program to complete FireSmart mitigation

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
Assessment for frequented green spaces in Electoral Area A, such as Kristian Winther and Ness Regional Parks. Once assessment is complete, apply for funding to complete the recommended eligible mitigation activities identified (limited to labour and material costs)	Environmental Services (Parks) staff			**Fuel Management Prescription before CSGS Assessment is started**, personnel qualified to complete a FireSmart CSGS Assessment	identified and qualifying green spaces within Electoral Area A. Highest priority green spaces to receive any recommended mitigation activities	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 (CSGS) Assessment* submitted to UBCM prior to commencing work
39. 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,	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

Salmon River - Lakes Electoral Area A CWRP Action Plan						
Action	**Lead(s)**	**Priority**	**Timeframe**	**Resources Required**	**Metric for Success**	**Rationale/Notes**
• Monitoring and maintenance planning for completed fuel treatment areas • Critical infrastructure assessments and associated FireSmart treatments completed • FireSmart Assessments completed for private property owners						

Contents

List of Figures

List of Tables

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. [5]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 A), the Great Beaver Lake fire in 2023 burned over 47,000 hectares approximately 25 kilometers north of the Salmon River – Lakes Electoral Area boundary. The fire resulted in numerous evacuation alerts and orders for areas located between Bear Lake and Fort St. James. Similarly, the Little Bobtail Lake fire in 2015 resulted in the evacuation of 160 properties in the neighbouring Chilako River – Nechako electoral area.

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 Salmon River - Lakes Electoral Area (Electoral Area A). 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 A communities including Nukko Lake/Chief Lake, Ness Lake, Salmon Valley, Goose Country Road, North Kelly, Old Summit Lake Road, and Reid Lake, 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

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

4. develop actionable and accountable recommendations for effectively reducing wildfire risk.[6]

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 plan 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 A 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 management. Feedback and input were utilized to inform recommended action items.
4. **Indigenous Government Engagement:** Interviews Forsite completed interviews with Indigenous Government and technical staff from the Lheidli T'enneh First Nation (LTFN), McLeod Lake Indian Band (MLIB), and Simpcw First Nation. In-person community meetings were held with Lheidli T'enneh 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 preparedness staff from each of the Indigenous Governments, and Forsite. The purpose of the meetings was 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 and 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

[6] **Community Wildfire Resiliency Plan Instruction Guide 2023**. British Columbia FireSmart.

chose not to participate in this CWRP process but will be included in CWRP report dissemination and future emergency communications.

5. **Assessment of local wildfire hazard and risk:** On the ground wildfire threat assessment were completed in forested areas on Crown land within the Wildland Urban Interface adjacent to homes and other values. The results of these assessments were utilized to identify and delineate recommended areas for fuel management treatments.
6. **Development of a risk mitigation strategy with actionable recommendations:** The data and information collected in the above phases provided the necessary content to develop an actionable CWRP that is tailored to the rural communities within RDFFG Electoral Area A. 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 Salmon River - Lakes 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 preparedness 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 • 4.1 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 section that may overlap with CWRP action items include: • B. Collaboration, Engagement, and Resources • C. Positive Operating Environment • D. Infrastructure and Transportation
Salmon River - Lakes Official Community Plan (Bylaw No. 1587)	Outlines broad land use objectives and policies for the Salmon River – Lakes Electoral 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: • 2.1.13 Environmental Objectives • 3.1.7 Environment • 3.8.8 Fire Protection • 4.2 Rural Wildfire
Ness Lake – Reid Lake Community Structural Protection Plan (MOF, 2020)	Provides response agencies with strategic framework for structure protection operations. The plan includes two main sections, the first providing general information to be use prior to an incident, and the second related to operational tactics.	Identifies a pre-plan management template for use by structure protection specialists in WUI wildfire response. It includes the community wildfire hazard rating, information on risk factors, and status of ongoing FireSmart applications.

Key Plans and Relationships to CWRP		
Plan Type	**Description**	**Relationship to CWRP**
Ness Lake – Reid Lake Community Structural Defence Plan (MOF, 2020)	Outlines sequence of operations in the event of a wildfire.	Some action items may pertain to CWRP actionable items.
Pilot Mountain Community Structural Protection Plan (MOF, 2020)	Provides response agencies with strategic framework for structure protection operations. The plan includes two main sections, the first providing general information to be use prior to an incident, and the second related to operational tactics.	Identifies a pre-plan management template for use by structure protection specialists in WUI wildfire response. It includes the community wildfire hazard rating, information on risk factors, and status of ongoing FireSmart applications.
Pilot Mountain Structural Defence Plan (MOF, 2020)	Outlines sequence of operations in the event of a wildfire.	Some action items may pertain to CWRP actionable items.

3.0 Community Description

The Regional District of Fraser-Fort George Electoral Area A, referred to as the Salmon River - Lakes area, is situated northwest of Prince George and covers approximately 140,000 hectares. Electoral Area A includes the rural communities of Nukko Lake, Chief Lake/Pilot Mountain, Ness Lake, Salmon Valley, Goose Country Road, Old Summit Lake Road, Reid Lake, and North Kelly.

Nukko Lake and Chief Lake/Pilot Mountain are located approximately 30 to 35 kilometers northwest of Prince George, accessible via Highway 97 North and Chief Lake Road. The established area includes multiple subdivisions, an elementary school, and a community hall, serving as a larger centralized area for the community.

Ness Lake is 35 kilometers west/northwest of Prince George, accessible via Highway 97 North to Ness Lake Road. The rural residential and recreational area is only accessible via Highway 97 North to Ness Lake Road, resulting in some residential areas having a single point of access and egress.

Salmon Valley is located 25 kilometers north of Prince George along Highway 97 North. It primarily consists of rural residential properties with a focus on agriculture.

Goose Country Road is recognized for Rural Residential and Rural Holdings, remaining a lower density residential area. It is accessible by Old Summit Lake Road and located 15 kilometers north of Prince George.

Reid lake is an established agricultural community located within the Agricultural Land Reserve. It is approximately 30km west/northwest of Prince George and accessible via Ness Lake Road to Reid Lake Road.

North Kelly has developed into a substantial rural residential settlement area located 10 kilometers north of Prince George, accessible from Highway 97 and Kelly Road North. It is situated just a few kilometers from the Hart area, adjacent to the northern city limits.

Most of Electoral Area A falls into the Agricultural and Settlement Resource Management Zones, with the eastern portion coinciding with the Enhanced Resource Management Zone. The northern section is designated as the General Resource Management Zone, while the Nechako River area is classified as the Special Resource Management Zone.

3.1 AREA OF INTEREST

The Community Resilience Investment (CRI) program provides guidance for defining the Area of Interest (AOI), which varies depending on the type of local government (e.g., municipality versus a regional district) and structure density. For regional districts the boundary of an electoral area can be the boundary of the AOI. The AOI for the Salmon River – Lakes CWRP was established as the boundary of Salmon River – Lakes Electoral Area “A” (Figure 1). In total, the AOI covers approximately 144,000 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 kilometre. 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 kilometre[7]. Figure 1 also illustrates the eligible WUI for this CWRP.

Within Electoral Area A, the eligible WUI landbase is approximately 34,000 hectares, constituting 24% of the total AOI. The land jurisdiction within the WUI zone is as follows:

- Crown Agency 0.3%
- Crown Provincial 20.2%
- Federal 1.1%
- Municipal 0.2%
- Private 78.3%
- Unclassified 0.1%

[7] **FireSmart Community Funding and Supports**

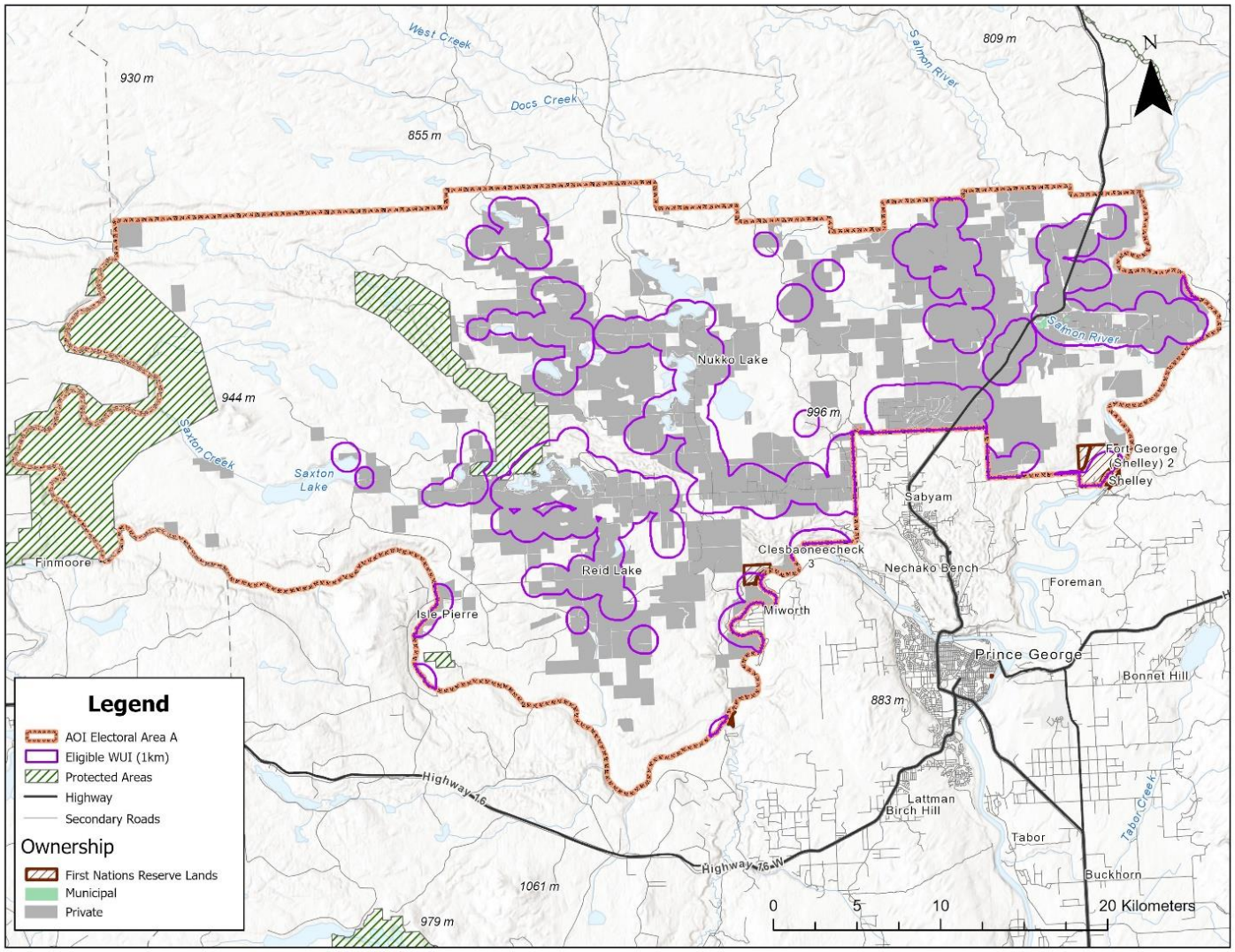


Figure 1: Electoral Area A: Area of Interest (AOI) and Wildland Urban Interface (WUI) boundary

3.3 COMMUNITY INFORMATION

Electoral Area A has a population of approximately 3400 residents with a median age of 44 years old (**Table 3**). The density distribution of the area is approximately 2.5 persons per square kilometer.

***Table 3**: Community profile of Electoral Area A*

Community Information	
Total Population (2021)	3,471
Total Population (2016)	3,463
Population Percentage Change (2016 -2021)	0.2
Median Age	44.4
Total Private Dwellings	1,506
Private Dwellings Occupied by Usual Residents	1,345
Population Density Per Square Kilometres	2.5
Land Area in Square Kilometres	1,372

Services provided by the RDFFG include:[8]

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

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 A. Values at risk are the human or natural resource values that may be negatively impacted by wildfire; this includes human life, property, critical

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

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 Salmon River - Lakes electoral area was just over 3,400 people representing an increase of 0.2% from the previous census in 2016 (Statistics Canada, 2023). The population density of Salmon River – Lakes is 2.5 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. Additional risk factors to be considered in emergency response and evacuation planning include increased dispersed population during the summer months due to recreation areas, as well as areas with limited egress routes, such as the Ness Lake community.

3.4.2 Emergency Response

Provincial legislation and policies are in place to support local governments during disasters. On November 8, 2023, the new Emergency and Disaster Management Act (EDMA) came into force, replacing the previous Emergency Program Act. The updated legislation reflects the changing nature of emergencies (e.g. global pandemics, climate change), and shifts from focusing on emergency response to the four phases of emergency management: mitigation, preparation, response, and recovery. To support the new legislation, the provincial government is updating and developing regulations in consultation and cooperation with First Nations, and informed by engagement with Indigenous governments/organizations, provincial ministries, municipalities, regional districts, critical infrastructure owners, public sector agencies, service providers, emergency management practitioners and the public.

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.

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 A is supported by the following three volunteer fire departments:

1. Ness Lake Volunteer Fire Department, located at 9770 Lakeside Drive
2. Pilot Mountain Volunteer Fire Department, located at 9070 Syms Road
3. Salmon Valley Volunteer Fire Department, located at 5155 Salmon Valley Road

The total response area for the volunteer fire departments covers 24,600 hectares of Electoral Area A, leaving some rural properties and small communities without structural fire protection services. The remaining rural areas or communities throughout the Electoral Area fall under the BC Wildfire Service (BCWS) jurisdiction for fire response. For wildfire incidents occurring outside the fire departments response areas, the BCWS may authorize additional suppression support from fire departments.

***Figure 2**. Ness Lake Volunteer Fire Department*

Electoral Area A is located within the BCWS Prince George Fire Zone. The Prince George Fire Zone office is located at 1434 Old Cariboo Hwy. As of 2024, the full seasonal staffing available during fire season is as follows:

- 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

In 2020, a Community Structure Protection Plan (CSPP) was developed for the communities of Ness Lake, Reid Lake and Pilot Mountain. These plans provide response agencies with a framework that

facilitates efficient structure protection and evacuation planning. The CSPP includes information related to resource requirements, contact information, and access availability for wildfire response.

The CSPP also outlines designated drafting and potential fill sites in the Ness Lake area which are detailed below in **Table 4**.

Table 4. *Information taken from the Pilot Mountain and Ness/Ried Lake Community Structure Protection Plan, for further details please refer to the plan*

Community	Drafting and potential fill sites	Egress and safety zones
Pilot Mountain	Designated drafting sites: • Chief Lake Rd West of Discovery Rd 20,000 gallons • North Kelly Rd 20,000 gallons • Firehall two 20,000-gallon tanks	Egress routes are limited: • Only one road in and out of community (Chief Lake Rd). • No designated escape route heading West towards Ness Lake Limited areas for safety zones: • Several fields could be considered for Safety Zones in Pilot Mountain area but caution cured grass during summer months
Ness & Reid Lake	Potential fill sites: • Ness Lake Fire Station and Community Hall: Below ground holding tank with electric pump and standpipe system (7553 Lakeside Drive) • Public Boat Launch: Accessible only by single-axle tenders, located off Lakeside Drive • Public Boat Launch: Tender access located 1.5km east of Eskers Provincial Park	Egress routes are limited: • Ness Lake has single egress route Few options exist for safety zones in these areas, two were identified: • Ness Lake Sports Field, Lakeside Dr & Sicamore Rd • Farm Field, Ness Lake Rd & Joellen Dr

3.4.4 Electric Power

Electrical power throughout the Regional District is provided by a mix of aboveground and belowground 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 A is listed below in Table 5 and Figure 3.

***Table 5**. Critical infrastructure identified within Electoral Area A*

Critical Infrastructure Type	Site	Ownership	Location
Communication Site/Tower	Salmon Valley Repeater Site	Crown	54° 6'6.81"N 122°39'28.20"W
Water/Sewer	North Kelly Water Tank Site	RDFFG	
Fire Halls	Ness Lake VFD/ Community Hall	RDFFG	9770 Lakeside Drive
	Pilot Mountain VFD	RDFFG	9070 Syms Road
	Salmon Valley VFD	RDFFG	5155 Salmon Valley Road
Community Hall	Nukko Lake Community Hall	RDFFG	23485 Chief Lake Rd
Transfer Station	Chief Lake	RDFFG	17450 Ness Laker Rd

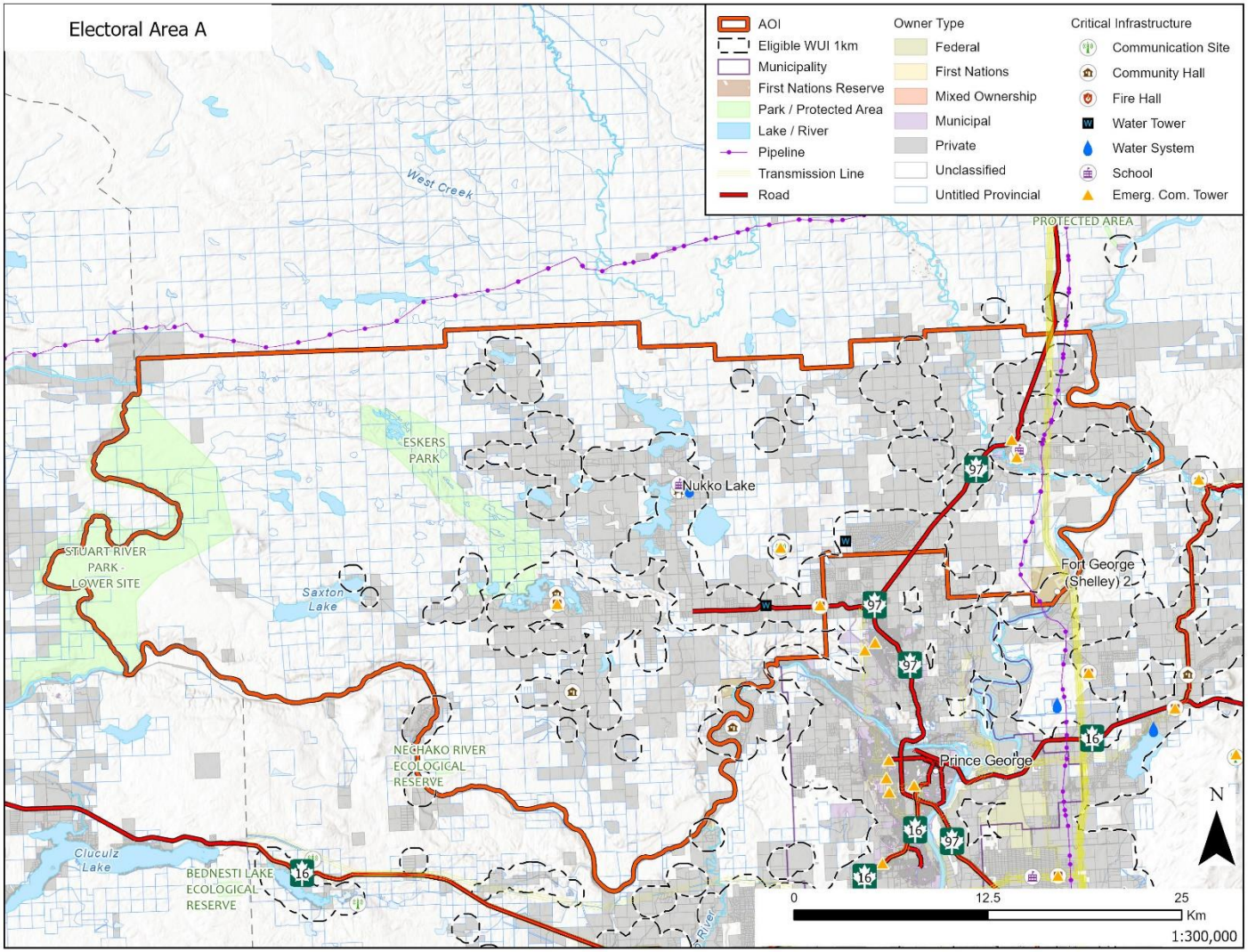


Figure 3. Electoral Area A critical infrastructure map

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.

While no delineated community watersheds were identified within the area, the Salmon River – Lakes OCP outlines the Regional Boards alignment with the Fraser Basin Management Program and commitment to responsible management of the Fraser River and its tributaries. The applicable management objectives are outlined in the following sections of the Salmon River - Lakes OCP:

- **Section 3.1.7** *Environment*
- **Section 3.5.11** *Watercourses*

Currently, the RDFFG does not own or operate any drinking water supply systems within Electoral Area A. Drinking water is supplied to private lands by individual underground water wells.

3.4.7 Cultural Values

Electoral Area A is situated within the traditional territory of the Lheidli T'enneh, 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 First Nations 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.

As part of the development of this CWRP, the RDFFG engaged with Lheidli T'enneh technical staff and hosted an engagement meeting with the Lheidli T'enneh community to better understand the values of the community, including cultural/traditional values on the landscape, and how the Regional District can effectively collaborate with the Nation to help protect these values from the impacts of wildfire and appropriately respond to emergency situations.

The Prince George Crownland Plan, Section 2.4 Recreation and Conservation Management Area, outlines objectives focused on securing Crown lands suitable for outdoor recreation and heritage conservation, facilitating the protection of regional park values that provide recreational opportunities. The Salmon River – Lakes OCP, sections 2.1.16 Recreation and 3.9.4 Heritage, also outline the commitment to promote recreation and conservation of archaeological and heritage resources. Additional known heritage features in the area include:

- Giscome Portage Heritage Trail
- Historic Huble Homestead

- Salmon Valley Catholic Church
- Campbell Homestead
- Former Isle Pierre and Miworth ferry sites

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 species and ecological communities are at risk within the electoral area have been summarized in **Table 6**.

***Table 6**: Red and blue listed species identified within Electoral Area A*

Common Name	Scientific Name	Element Type	BC List Status
White Sturgeon (Upper Fraser River population)	*Acipenser transmontanus pop. 5*	Animal	Red

Environmental values outlined in provincial land use plans guide the RDFFG in establishing coordinated objectives and policies. These include the protection of sensitive and hazardous areas to mitigate risks to people and the environment. Relevant plans include:

- **Salmon River – Lakes Official Community Plan (OCP)**:
    - **Section 2.4:** *Recreation and Conservation Management Area*
    - **Section 2.1.13:** *Environmental Objectives*
- **Prince George Sub-District Crown Land Plan**:
    - **Section 2.3:** *Wildlife Habitat Management Area* focuses on conserving Crown lands critical for wildlife habitat while balancing potential land use conflicts.

Parks and protected areas contribute significantly to habitat and ecosystem protection, enhancing biodiversity across the landscape. They also provide environmental education, stewardship, recreation, and community engagement opportunities.

The following provincial parks and protected areas are located within Electoral Area A:

- **Eskers Provincial Park**
- **Stuart River Provincial Park**
- **Nechako River Ecological Reserve**

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).

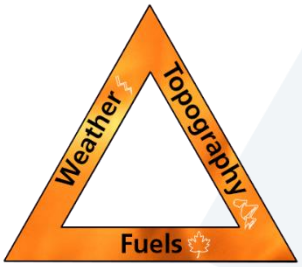


Figure 4: Fire Behaviour Triangle

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

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 A, elevations range from 600 meters to 1000 meters above sea level. Prominent land features include the Fraser River, Nechako River, and many large lakes. These key features provide corridors for human activity and development, increasing the likelihood of human caused wildfire events.

Rural communities in Electoral Area A are situated in lower elevations near transportation routes and water bodies. Given the geographic size of the total AOI, local topographic characteristics are assessed and verified at the site and WUI levels and will be addressed in subsequent sections of the CWRP.

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, natural disturbance regimes are broadly classified using five Natural Disturbance Types (NDTs) based on factors such frequency, size, and severity. Electoral Area A is classified as NDT 3, which is characterized by ecosystems experiencing frequent stand-initiating events, with fire being the primary disturbance. Although fire sizes range from small to large, this NDT is where the province historically records the largest fires, with return intervals of 100 to 150 years. Consequently, the landscape exhibits a mosaic of stand of different ages, with individual stands typically even aged.

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.[9] 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

[9] 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.

vegetation, soils, and climate. Regional subzones are further derived from relative precipitation and temperature.

Electoral Area A is situated within the Sub-boreal Spruce (SBS) BEC Zone, characterized by a region found on gently rolling plateaus in the central interior of the province (Figure 5). The SBS Zone experiences cold, snowy winters and relatively short, warm summers. More specifically, Electoral Area A is primarily composed of forested areas of the SBSdw (Dry Warm) and SBSmk (Moist Cool) subzones. Common tree species within these subzones include lodgepole pine, white spruce, black spruce, Douglas-fir, paper birch, and trembling aspen. Table 7 summarizes the BEC Zones and Subzones, along with their Natural Disturbance Types and the percentage of area they occupy within Electoral Area A.

Table 7: BEC zone and NDT summary

BEC Zone	BEC Subzone	NDT Type	Stand Initiating Event Frequency	Area (ha)	Percentage (%)
SBS	Dry Warm (dw)	NDT 3	Frequent	77,915	54
SBS	Moist Hot (mh)	NDT 3	Frequent	3,762	3
SBS	Moist Cool (mk)	NDT 3	Frequent	62,982	44

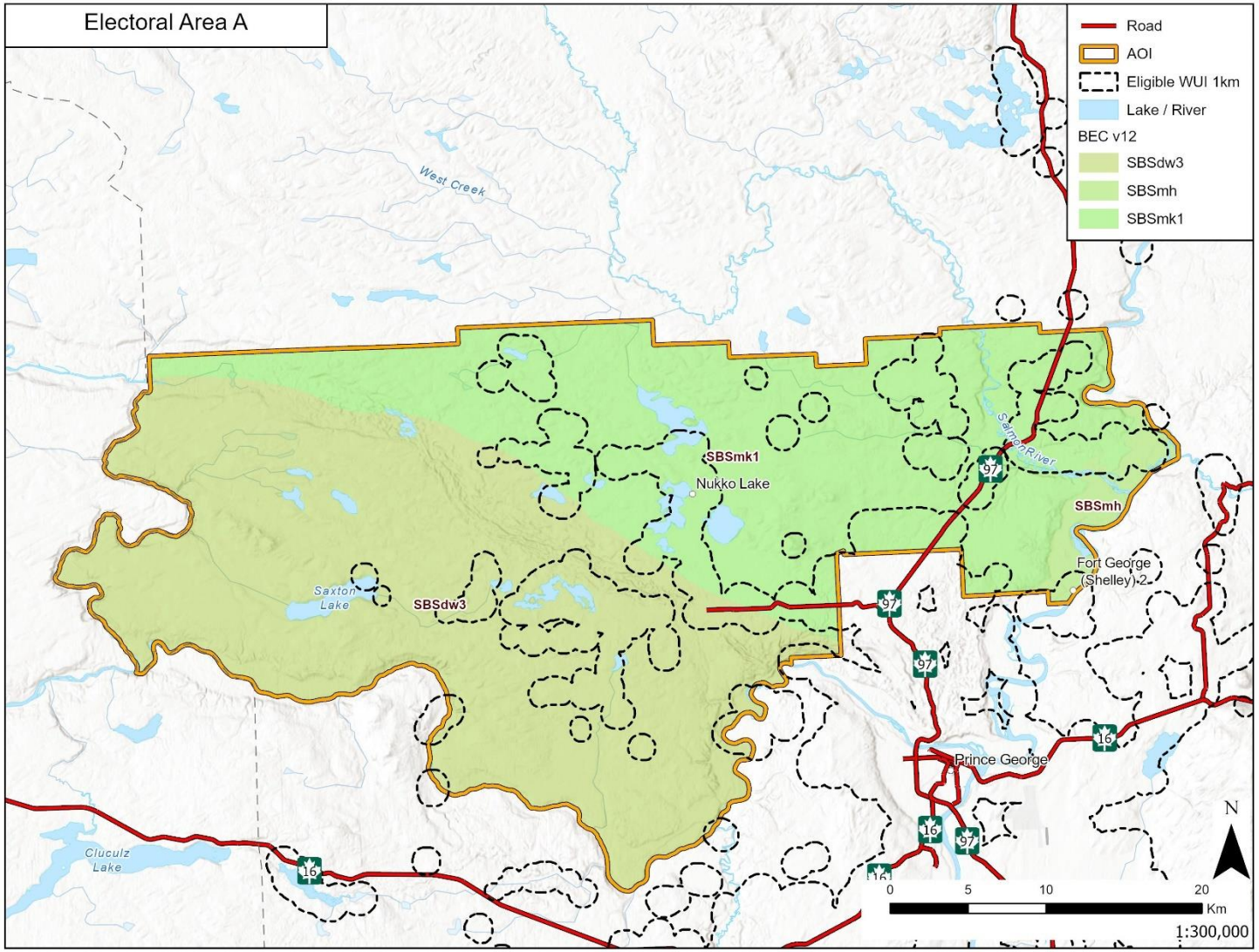


Figure 5. Electoral Area A BEC map

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 A are shown in Table 6 and Figure 7. More detailed descriptions of these fuel types can be found on the Natural Resources Canada website.[10]

Table 8: Description of fuel types identified within Electoral Area A

CFFDRS Fuel Type & Associated Fire Behaviour	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.	5%
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.	21%

[10] **FBP Fuel Type Descriptions**. Natural Resources Canada.

CFFDRS Fuel Type & Associated Fire Behaviour	Characteristics and Attributes	Percentage of Electoral Area
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.	10%
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).	10%
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 ration of the stand – a higher conifer component will increase fire intensity, spread rates, and spotting capacity.	33%
0-1a/b	The fastest rate of spread potential when cured. Lower head fire intensities than forested fuel types.	15%

The forested landbase throughout portions of Electoral Area A has been significantly altered due to considerable forest harvest activity and resource extraction throughout the region. The result is a patchwork mosaic of stands of different ages and structure and various vegetative fuel types surrounding communities. This continuous variety of vegetation can result in complex and unpredictable wildfire behaviour.

A total of six FPB fuel types occupying more than 1% of the landbase in Electoral Area A were identified, the most prominent being C3 and M1/2 accounting for 21% and 33%, respectively. C3 fuel types are characterized by well-stocked stands comprised of boreal species, capable of fast spread rates in wind-driven conditions. The M1/2 fuel type is composed of a mix of both deciduous and conifer species.

Figure 6. Example of a M1/2 Mixedwood fuel type commonly found in the AOI

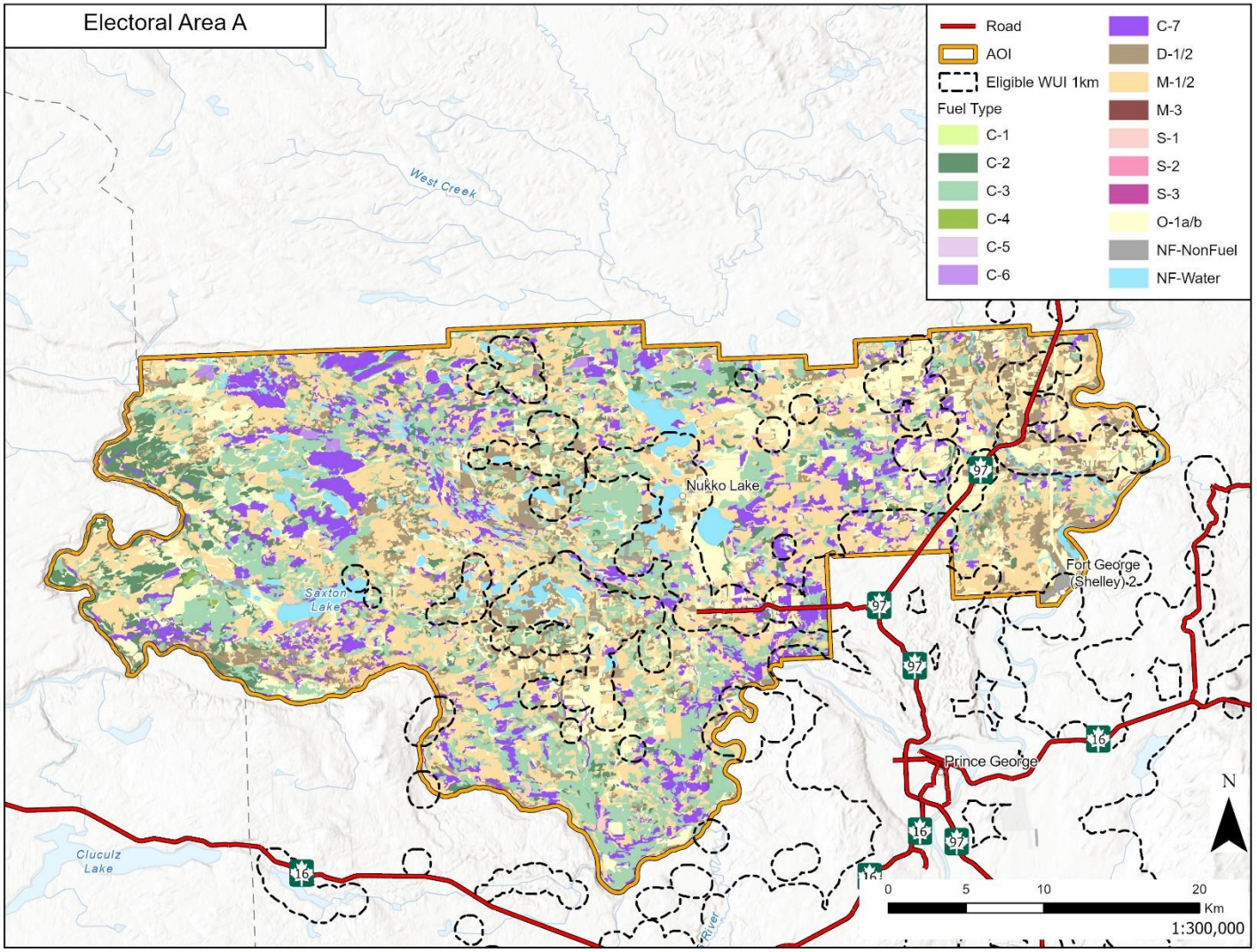


Figure 7. Electoral Area A fuel type map

4.1.2.4 Forest Health

Forest health continues to have a large impact on forest ecosystems throughout the Prince George Region. These challenges are exacerbated greatly by climate change. Eruptive bark beetle populations have shown increasing trends in frequency and severity resulting from the dynamic response of bark beetle populations to the warmer, milder winters and longer growing seasons. In 2023, bark beetle activity accounted for 53% of the total area of forest damage mapped in the Prince George Timber Supply Area[1], with the western balsam bark beetle and the spruce beetle being the most prominent. In both species, the adult bark beetle carries a fungus which is primarily responsible for the mortality associated with both western balsam and spruce 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.

Additionally, the occurrence of aspen serpentine leafminer has become a significant forest damage agent impacting aspen stands in the area. The mining of leaf tissue by the larvae causes by the leaves to dry out and turn brown, which may lead to premature leaf drop, especially in severe infestations.

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.

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 A have been utilized in the analysis for this CWRP. Weather station information is provided in Table 9.

Table 9: Weather stations used for analysis for Electoral Area A

Weather Station	**Prince George Wx**	**Bednesti Wx**
Network	BCWS	BCWS
Coordinates	53.89, -122.67	53.8654, -123.3233
Elevation (m)	680	858

Weather analysis in the following sections utilizes observed data throughout the months of **April to 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 8 indicates that on average, the Bednesti weather station records slightly higher temperatures throughout the summer than the Prince George station. In both areas, temperatures peak in July and August with daily averages around 20°C at 12:00, with June showing the greatest variability.

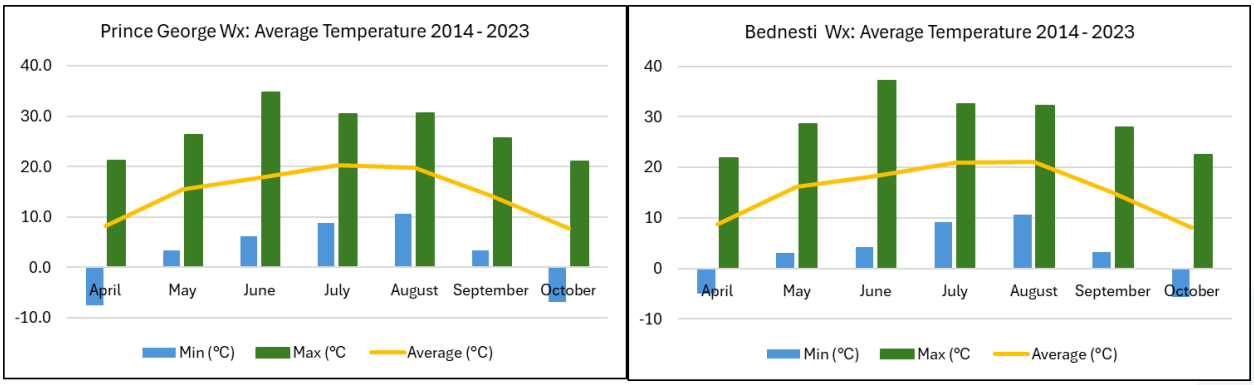


Figure 8: Average monthly temperature (2014 – 2023)

4.1.3.2 Relative Humidity

Data in Figure 9 below indicates that on average, the Bednesti weather station records lower relative humidity at 12:00 throughout the summer than the Prince George station; however, the maximum values at Bednesti station are higher, showing greater variability. Both stations show that relative humidity is at its lowest in April and May and steadily increases throughout the summer.

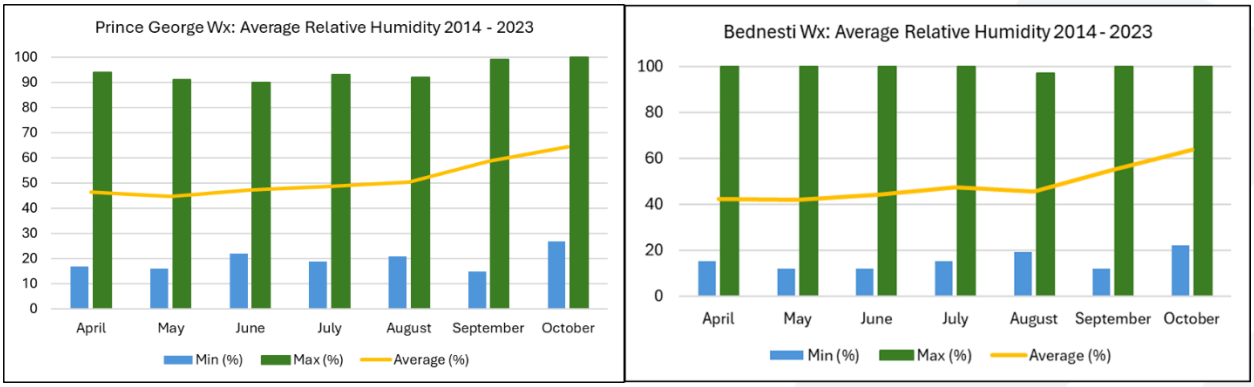


Figure 9: Average monthly relative humidity (2014 – 2023)

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 Prince George and Bednesti weather stations was used to illustrate local wind patterns for Electoral Area A from **April 2014 to August 2024.**

As shown in Figure 10 below, the predominant wind direction at the Prince George station is south-southwest while the Bednesti station records west-southwest. As indicated by the increased presence of red, orange and yellow colors on the Prince George wind rose, this area experiences higher wind speeds throughout the wildfire season than that of the Bednesti area. Although weather patterns in this area are variable due to the influence of Pacific storm activity affecting the plateau, southerly winds typically develop ahead of these systems, shifting to northerly as they move through the area.[11]

[11] The Weather of British Columbia. 2002. Nav Canada www.navcanada.ca/en/lawm-bc-en.pdf

Prince George Wx

Bednesti Wx

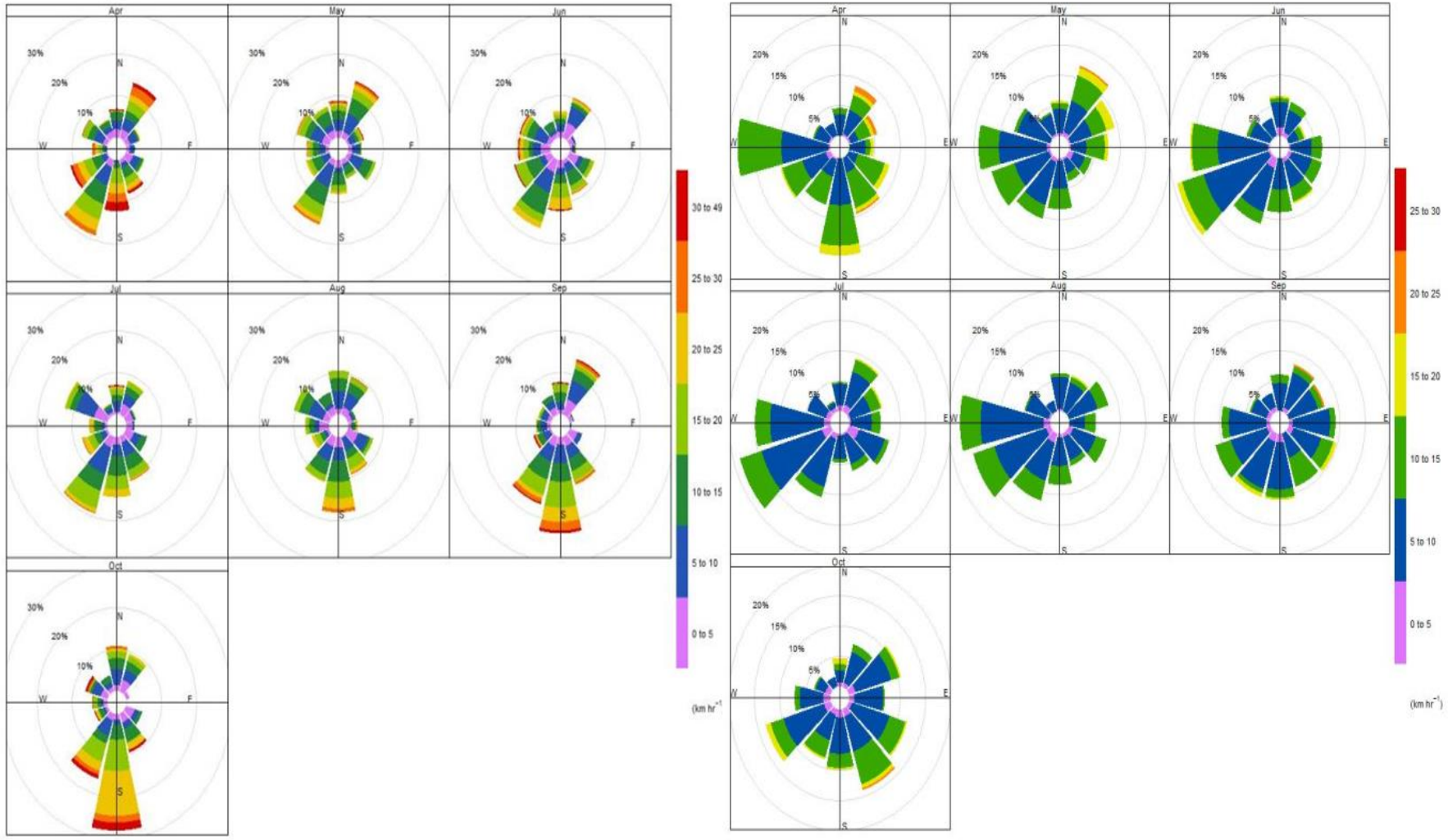


Figure 10: Wind rose analysis (2014 – 2023)

4.1.3.4 Rain

Figure 11 indicates that on average, the Prince George weather station receives more precipitation during April and May. Throughout the remainder of the season, the two stations indicate a similar trend in average where the highest precipitation is recorded in June and July. Also consistent with previous weather attribute analysis, the Bednesti station shows greater variability.

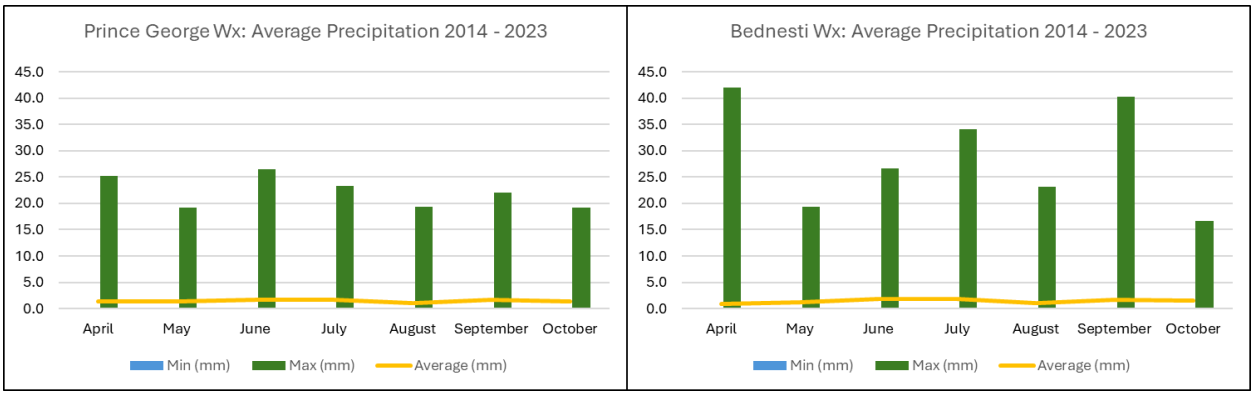


Figure 11: Average monthly precipitation (2014 – 2023)

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.

After further analysis of total precipitation recorded at both weather stations from April through October between 2014 and 2023, data shows annual variations align with broader climate patterns (Figure 12). Also notable, both locations experienced reduced precipitation in 2022 and 2023, suggesting a potential shift in climate dynamics.

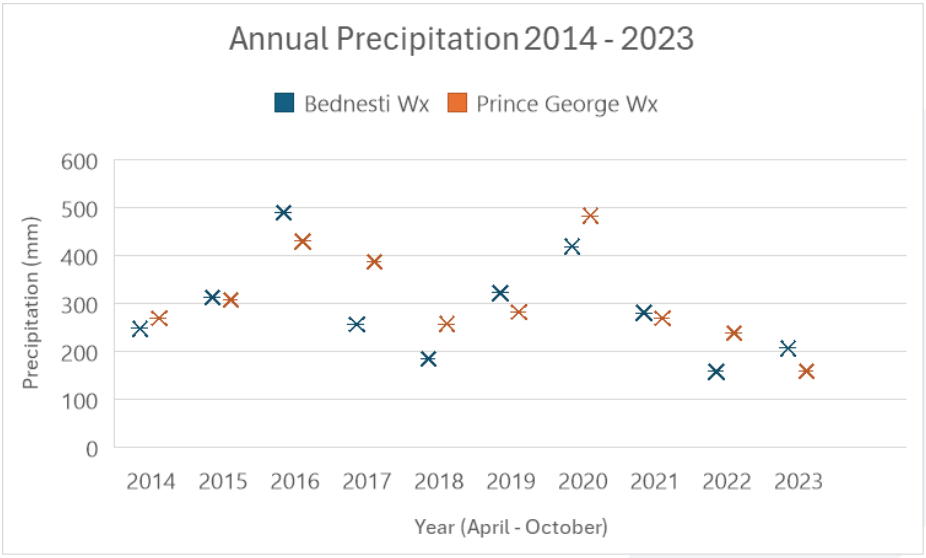


Figure 12: Annual precipitation 2014 to 2023

4.1.3.5 Climate Change

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.[12]

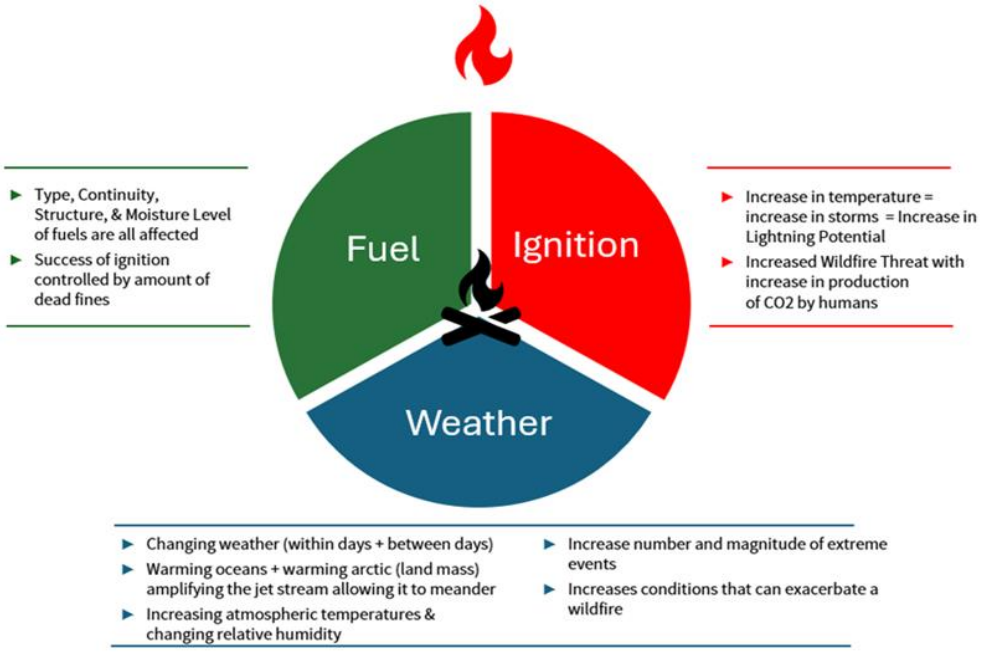


Figure 13: Potential impacts of climate change on weather, fuels/vegetation, and ignition potential

Figure 13 above 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[13]. Understanding changes in both temperature and precipitation provides insight into changes in potential wildfire.

[12] 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.
[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.

The Pacific Climate Impacts Consortium (PCIC), based at the University of Victoria, conducts quantitative studies on the impacts of climate change and variability.[14] 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 10 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 10: Projected change in average temperature and precipitation

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[15]. 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.

[14] Pacific Climate Impacts Consortium. 2024.
[15] 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.

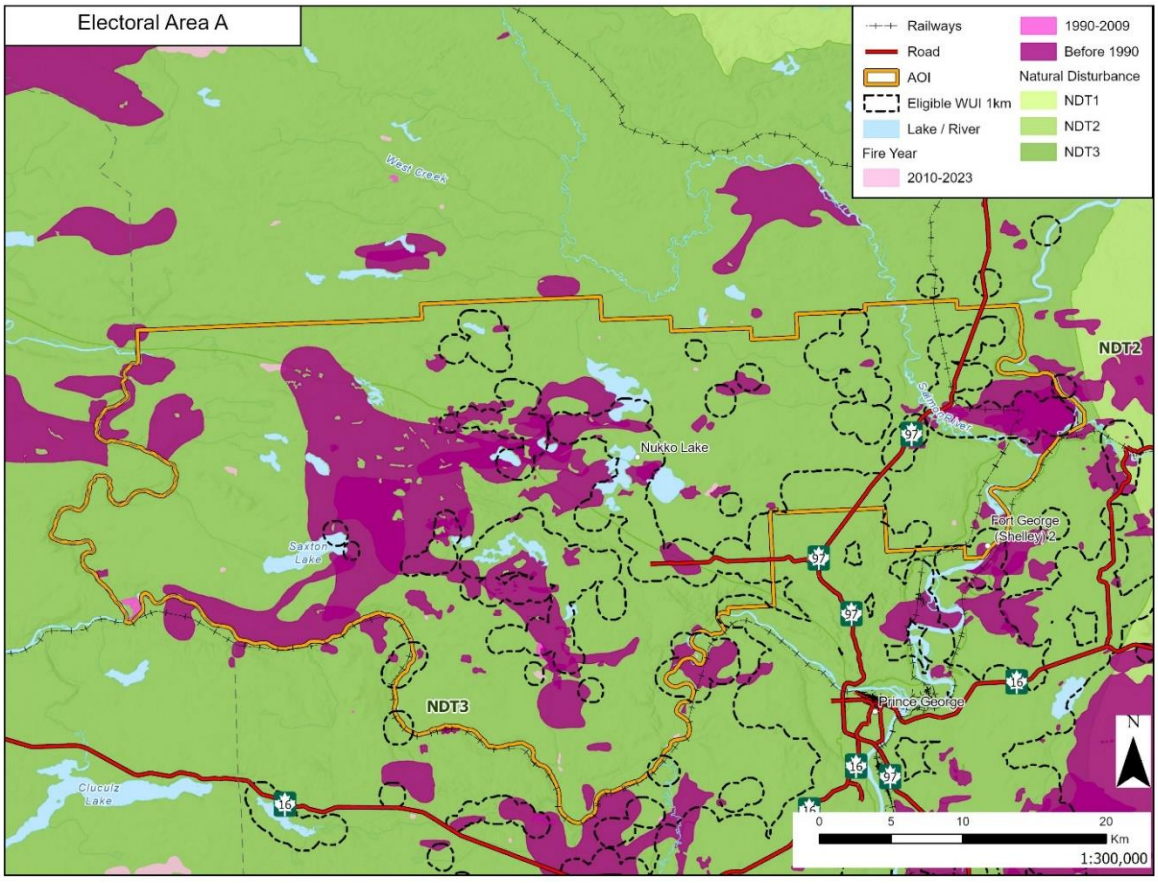
4.2 WILDFIRE HISTORY

Wildfire is a common occurrence in the Central Interior Plateau due to its rolling landscapes covered predominantly by boreal and sub-boreal coniferous forest types that support both anthropogenic and lightning ignition sources. As previously mentioned, a large portion of the Prince George Fire Zone is classified as NDT 3, characterized by frequent (forest) stand initiating events.

Although historical data shows that total area burned has decreased within the Regional District of Fraser-Fort George over the past 50 years, large wildfires have recently occurred in the neighbouring Regional District of Bulkley Nechako, which shares a similar landscape and is also primarily categorized within NDT 3 (Figure 14). Much of the pattern of decrease in burned areas over the last century throughout the province can be attributed to the increase in efficiencies and effectiveness of wildland fire fighting and suppression tactics. Since fire does not adhere to administrative boundaries, given the topographical similarities, analysis of wildfire history in adjacent regions can inform more effective decision-making for mitigating wildfire risks in Electoral Area A.

Notable landscape level wildfires that have occurred in the Fraser-Fort George and Bulkley Nechako Districts throughout the past decade include (Figure 15):

Figure 14. Electoral Area A fire history and NDT map



- **Great Beaver Lake Fire (2023):** Caused by lightning on the same day as the Tatuk Lake Fire, July 8th, and led to multiple evacuation alerts and orders as the incident expanded within the adjacent Crooked River - Parsnip Electoral Area. The fire burned over 47,000 hectares approximately 60 kilometers northwest of Prince George.
- **Little Bobtail Lake Fire (2015):** First detected on May 8th, 2015, this fire burned over 25,000 hectares affecting the electoral area of Chilako River – Nechako. The human-caused fire led to evacuation alerts and orders, impacting more than 160 properties around Norman Lake, Dahl Lake, and Bobtail Lake.
- **Plateau Fire (2017):** Started on July 7th, 2017, and grew into the largest wildfire of the season, burning over 520,000 hectares south of Quesnel. Due to multiple lightning starts and High Fire Danger, a provincial State of Emergency was declared on this day and resulted in the evacuation of over 65,000 people in BC throughout 2017.
- **Cutoff Creek Fire (2021):** Started on July 2nd, 2021, and burned over 33,000 hectares southwest of Vanderhoof. The lightning-caused fire led to area restrictions and evacuation orders issued by the Regional District of Bulkley Nechako with BC Provincial Parks and the Saik'uz First Nation. The 2021 fire season hosted also hosted the Donnie Creek Fire, which became the largest wildfire recorded in BC history.
- **Tatuk Lake Fire (2023):** Started on July 8, 2023, and burned over 44,000 hectares south of Vanderhoof in the Regional District of Bulkley Nechako. The fire was caused by lightning on July 8th, 2023, and later led to evacuation orders and alerts due to extreme wind conditions.

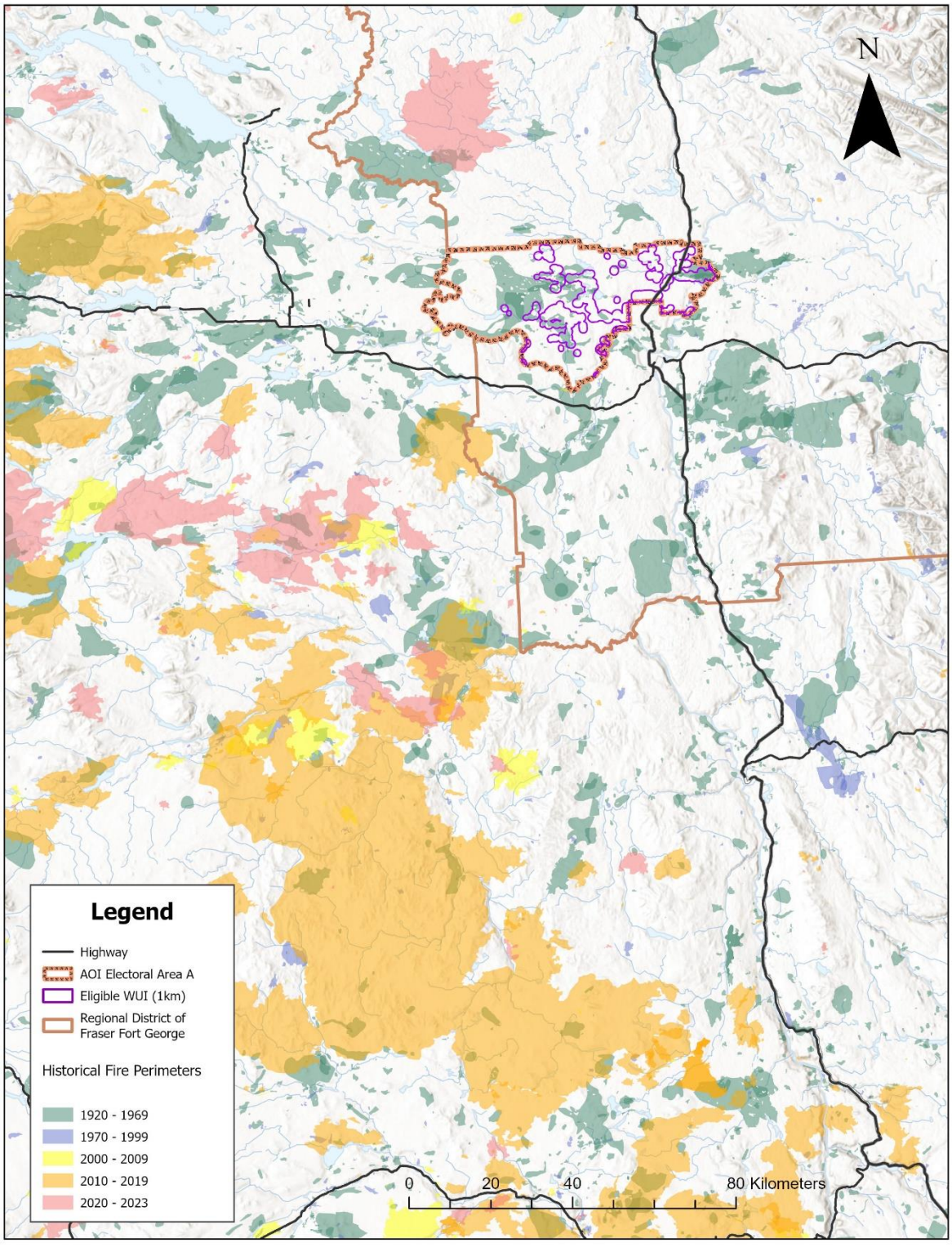


Figure 15. Historical fire map of Electoral Area A and surrounding region

Table 11 describes wildfire ignition sources and total area burned within Electoral Area A over the past century (1920 to 2023).

Table 11: Area burned summarized by ignition source

	Lightning	Person	Total
Number of Ignitions	8	114	122
Total Area Burned (Ha)	1,424	38,197	39,621
Percentage of Burned Area (%)	3.6	96.4	100
Percentage of Wildfires (%)	6.6	93.4	100

The data in Table 8 indicates that human-caused wildfires account for **over 96% of the total area burned** within Electoral Area A over the past 100 years. This data highlights the critical importance of FireSmart Principles, such as Education, to enhance communities understanding of wildfire risk and human impacts.

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 12).[16]

Figure 16. Fire Danger Rating Sign (source: FireSmart BC)

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

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

Table 12: Wildfire danger ratings and descriptions[17]

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.

Figure 17 presents a summary of the Fire Danger analysis, showing the frequency of High and Extreme Fire Danger days at the Prince George and Bednesti weather stations from 2014 to 2023. Fire Danger days are defined according to the Wildfire Act – Schedule 2 & 3. [18]. 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. The Fire Danger sign is utilized by many districts and municipalities to alert the public about the potential start and spread of a wildfire in each area.

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

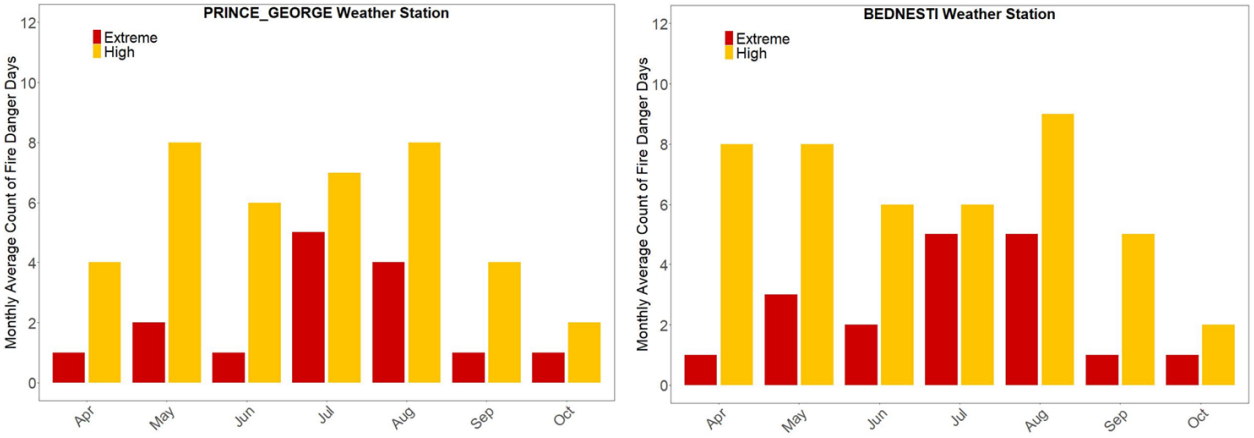


Figure 17: Fire Danger summary (2014 – 2023)

Results show that both BCWS stations recorded highest levels of High Fire Danger in May and August, while the Bednesti station also recorded High danger in April, indicating an elevated spring hazard annually in that area. High 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. 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 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.

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.[19] 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 Area A is summarized in Table 13 .

Table 13: Summary of the Provincial Strategic Threat Analysis (PSTA) in Electoral Area A Wildland Urban Interface (WUI) zone

Fire Threat Class	Area (HA)	Percentage (%)
No Data (Private Land)	24,573	74
High	2,141	6
Moderate	2,973	9

[19] 2021 Update: Provincial Strategic Threat Analysis (PSTA). Accessed March 2024.

Extreme	840	3
Water	2,308	7
Low	219	1
Total	33,056	100

The PSTA for the Electoral Area A WUI indicates that 74% of the zone presents with no data due to private landholdings. Of the remaining area, 10% is classified within the High to Extreme threat classes (Figure 18). 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 importance for a shared responsibility amongst all landowners, public education, and strategic wildfire risk reduction planning.

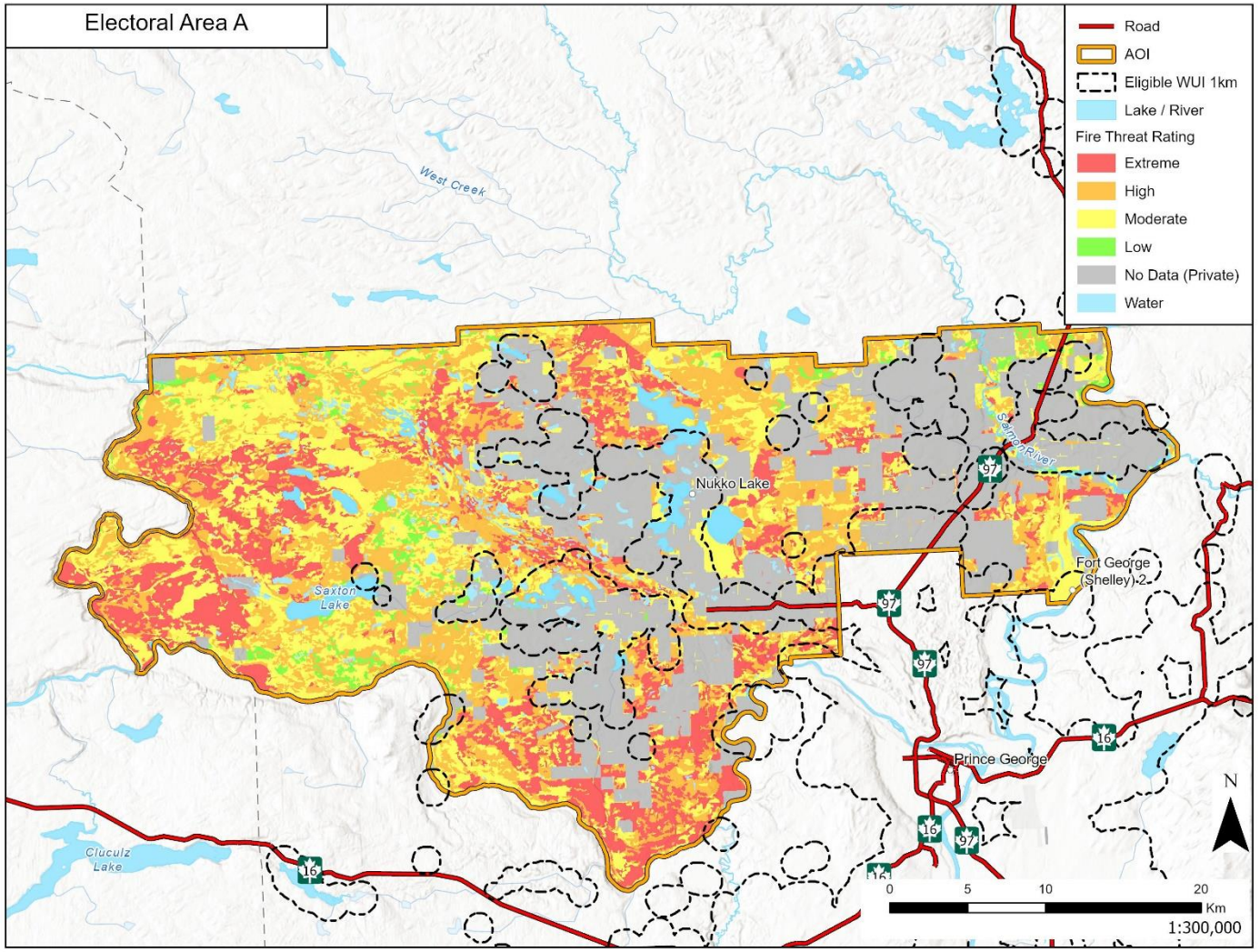


Figure 18. Electoral Area A PSTA threat rating map

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 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[20], 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 A. A total of 40 WTAs were completed within the electoral area. Table 14 outlines the results of the WTAs completed.

Table 14: Wildfire Threat Assessment within the Wildland Urban Interface (WUI) zone

Wildfire Threat Assessment Rating	Number of WTAs	Percentage of all WTAs Completed with EA
Extreme	7	18%
High	15	38%
Moderate	14	35%
Low	4	10%

Just over half of the areas assessed achieved a wildfire threat rating of High (38%) to Extreme (18%) (Figure 19). These areas were predominantly found within Mixedwood stands with >75% conifer composition and conifer understories with low fuel strata gaps (<3m). Some areas also presented with higher accumulations of elevated dead fuel, contributing to horizontal and vertical fuel continuity. Just

[20] 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

under half of the areas were assessed as Low (10%) to Moderate (35%) threat, typically associated with Mixedwood or deciduous stands with <25% dead surface fuel and mixed understory compositions.

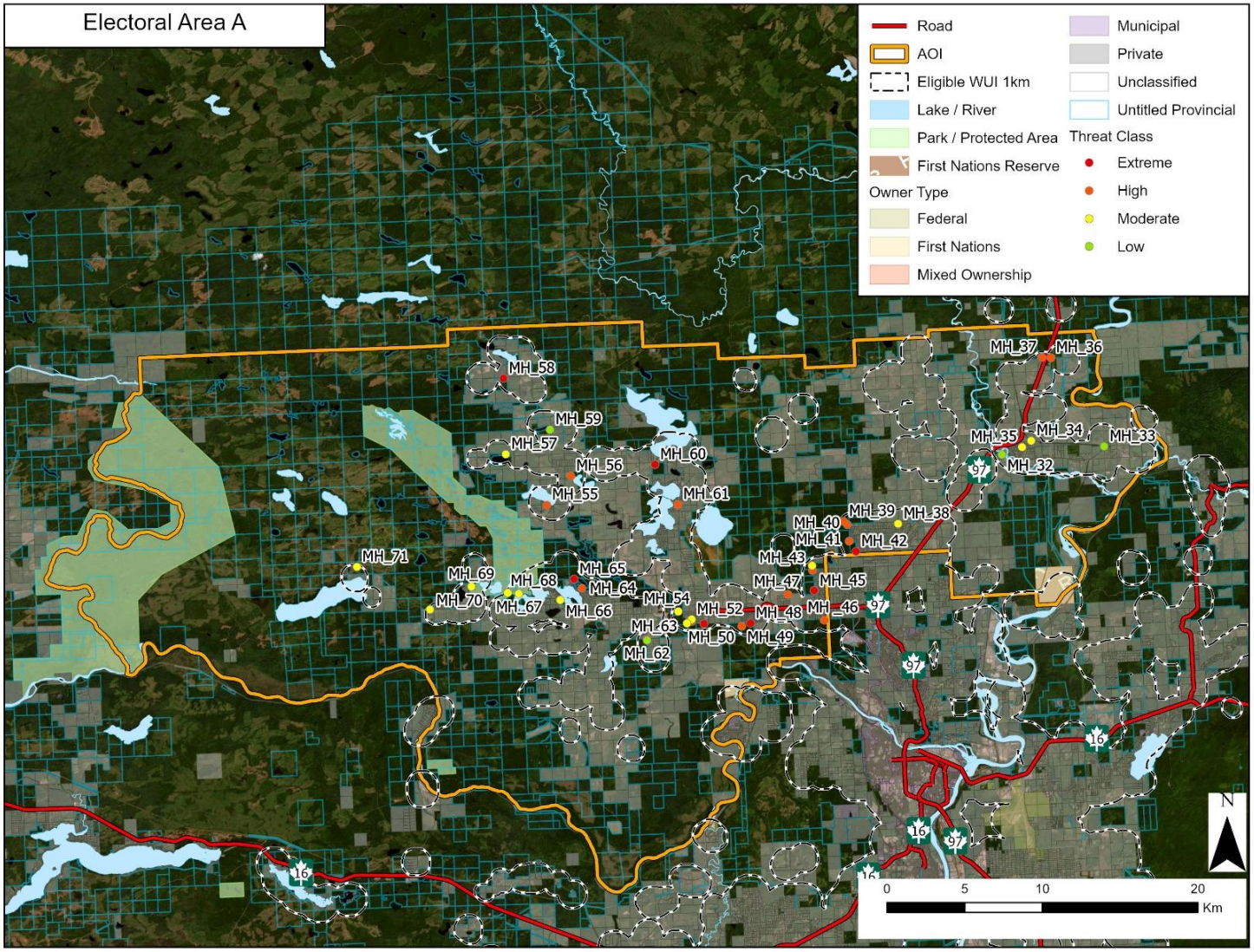


Figure 19. WTA plot locations and associated threat classes

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.[21]

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[22]

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.

[21] For more information on the BC FireSmart program, visit: **https://firesmartbc.ca/**
[22] 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 A 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 preparedness 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*.[23] 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 the one for the Robson Valley. This should also help to mediate

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

some of the apprehensions and allow the educators to assist residents with FireSmart Home Assessments moving forward.

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 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 A 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 A 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 (only one transfer station exists in EA A – Chief Lake). 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 implement 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 ATV and recreational trails 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.

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, federal legislation and higher-level plans 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 A:

Salmon River – Lakes Official Community Plan Bylaw No. 1587: Legally establishes the Salmon River – Lakes Official Community Plan as the framework for land use management objectives and development policies within Electoral Area A. All bylaws enacted or works undertaken must be consistent with the plan. The Salmon River – Lakes Official Community 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.

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.

Regional District of Fraser-Fort George Regional Parks Plan

In 2021, the RDFFG had their Regional Parks Plan updated to reflect changes in population and park use trends. The updated plan provides a roadmap to guide the planning, acquisition, development, and management of regional parks over the next 10 years. Although wildfire risk reduction is not explicitly stated as an objective to manage for in the Parks Plan, it is incorporated into the goal of addressing Climate Action, with implications for operational practices and maintenance considerations. Additionally, the Plan provides recommendations for enhancement of trails through interpretative signage, including topics such as wildfire.

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: Update the Electoral Area A Official Community Plan to include spatially delineated Wildfire Hazard Areas as a part of Special Management Areas and include provisions for a Wildfire Hazard Management Development Permit Area**.**

Action #13: 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, such as those established for Lake Protection in the Salmon River – Lakes OCP. While the Salmon River – Lakes OCP acknowledges rural wildfires as a hazard to the public, it does not address related risks through the development permitting process. Forested areas of high wildfire hazard adjacent to private lands should be identified and mapped for the establishment of Wildfire Hazard Development Permit Areas (DPAs) throughout the Regional District. 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 #14: Complete FireSmart Assessments on RDFFG owned Critical Infrastructure (CI) within Electoral Area A, beginning with the highest priority CI identified.

Action #15: 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 #16: Establish a Development Permit Area (DPA) for Wildfire Hazard Management 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, 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) 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.
- 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. [24]

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 area. Current members include:

- City of Prince George
- Regional District of Fraser-Fort George (FireSmart Coordinator and Emergency Preparedness)
- Lheidli T'enneh
- McLeod Lake Indian Band (MLIB)
- Ministry of Forests
- Ministry of Water, Land and Resource Stewardship
- Ministry of Emergency Management and Climate Readiness
- Ministry of Transportation and Infrastructure
- BC Wildfire Service and community liaisons
- First Nations' Emergency Services Society
- BC Ambulance
- BC Emergency Health Services
- Service Canada
- Utility companies such as BC Hydro, Telecommunication companies, etc.
- BC Parks
- University of Northern BC (climate science)
- Northern BC Tourism Association
- Rec Sites (Trails BC)
- BC Energy Regulator
- Oil and Gas Industry
- BC Mining Association
- Forest industry (major licensees, BC Timber Sales, woodlot licensees, community forests)
- Volunteer fire departments (whether within a local government, Improvement District, or independent)
- BC Cattlemen's Association
- Other sectors organizations, individuals or businesses that have infrastructure to protect, or resources or capacity to provide (e.g., search and rescue, agriculture organization, communications companies)

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

Going forward, this roundtable will serve as the acting Community FireSmart and Resiliency Committee for all RDFFG electoral areas to reduce the administrative burden of running multiple committees and streamline interagency coordination efforts.

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

The Lheidli T'enneh members expressed particular concern over evacuation and emergency/fire response services for the north side of Fort George IR 2. The north side of the IR where most residents live is separated from the south side by the Fraser River, with the only reliable egress route via the Canfor mill bridge along the Beaver Forest Service Road. Much of this route is surrounded by forest, increasing the risk of the road becoming compromised in a wildfire. Should this occur, the LTFN residents would need to evacuate by boat along the Fraser River.

Additionally, the LTFN does not currently have its own dedicated Fire Department, but discussions and planning with the Regional District are currently in the works to provide structural fire protection to IR 2 through expanding the RDFFG Shell Glenn Volunteer Fire Department. However, this can only occur if a secondary bridge is built connecting the north and south portions of the IR, otherwise an efficient response time/distance is not achievable. Ideally, a LTFN volunteer fire department located on reserve to respond locally would be the most effective for the Nation.

LTFN has 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.

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.

Actions: The following are recommended action items pertaining to interagency cooperation:

Action #17: Continued active participation in the Prince George & Area Community Wildfire Roundtable to work towards effective and efficient emergency planning, vegetation/fuel management, and communication protocols at a regional level. The established Roundtable acts as the Community FireSmart and Wildfire Resiliency Committee that is required to receive ongoing CRI funding for FireSmart and wildfire risk reduction activities.

Action #18: Work collaboratively with woodlot owners and community forests with license areas adjacent/near to private residences to manage for wildfire risk in forest management planning and harvest operations.

Action #19: 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 #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: Work collaboratively and build meaningful partnerships with Lheidli T'enneh First Nation's Emergency Management department and their affiliated companies, such as LTN Contracting and All Nations Safety, to address all levels of planning for wildfire resiliency and emergency management within the Prince George region. This also includes working as a team with other key governments and agencies such as the City of Prince George, BCWS, MOF, MOTT, and EMCR.

Action #22: 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 13 volunteer Fire Departments operated by the RDFFG are required to hold one training evening per week, which is an average of 2.5 hours in duration. Additionally, all these fire departments have participated in wildland fire suppression training to some degree. Electoral Area A is supported by three volunteer fire departments in Ness Lake, Pilot Mountain and the Salmon Valley. The total response area for these three volunteer departments is extensive, covering 24,600 hectares of Electoral Area A. However, this does leave some areas within Electoral A without structural fire protection services. Feedback gathered from the public survey for this area highlighted that residents support ensuring volunteer fire departments are adequately equipped and trained to respond effectively to wildfires.

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:

- **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.

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

Action #23: Continue to provide cross-training opportunities for local firefighters in the Ness Lake, Pilot Mountain and Salmon Valley Volunteer Fire Departments 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: Provide cross-training opportunities to RDFFG Public Safety and/or 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 #25: Coordinate cross-training opportunities between the BCWS Prince George Fire Zone and RDFFG Fire Department fire fighters. Due to the size of the Regional District, cross-training opportunities with BCWS may need to occur through several different sessions based on combined geographic areas. For example, Prince George West (Beaverley, Pilot Mountain, Ness Lake).

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 Preparedness 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 includes 50 different localized Community Emergency Plans and information binders specific to each community and populated area.

Localized Community Structure Protection Plans (CSPPs) exist for the following communities within Electoral Area A:

- Ness Lake
- Reid Lake

The CSPPs provide a strategic framework for the protection of identified values at risk and properties in each of the communities in the event of a wildfire, as none of the above-listed communities are located within a fire protection area with local fire response. The plans provide important community information such as:

- Population,
- Access roads,
- Utility services,
- Critical infrastructure,
- Local wildland fire suppression capacity, equipment available for use and where it is stored,
- Water fill sites, and
- Emergency contact information.

The Community Structure Protection Plans have been consulted and utilized to develop recommendations and action items within this CWRP.

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, door-to-door information visits, and phone 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[25] 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. The RDFFG, City of Prince George, and the Lheidli T'enneh currently meet monthly to communicate and coordinate emergency response concerns and strategies.

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

This has led to the planning and actioning of various joint tabletop exercises and mock emergency events which have been successful in strengthening emergency preparedness and identifying areas for improvement in emergency response. Continued involvement in these joint meetings and events to ensure everyone is on the same page is critical.

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. 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 Indigenous Government 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 Community Feedback

Community engagement and feedback surveys revealed concerns from residents in the Pilot Mountain area regarding emergency planning for the Garvin's Canyon section along Chief Lake Road. Garvin's Canyon features a substantial dip in the road, which has previously caused motor vehicle accidents, resulting in traffic delays and blockages.

This issue is particularly concerning for residents, as Chief Lake Road serves as the primary egress route for the area, making the dip a potential pinch point during emergencies. Although a secondary egress route exists via a forest service road, its condition is variable and unsuitable for residents without vehicles capable of driving on forest service roads.

5.6.3 Wildfire Preparedness Planning

As part of wildfire preparedness 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 the 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.

Table 15: 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 as recommended by BCWS.

The Regional District has been active in planning and participating in cross-jurisdictional table-top exercises and real-time mock EOC scenarios focused on wildfire preparedness with other local governments and agencies including Lheidli T'enneh and the City of Prince George.

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

Action #26: 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 #27: Ensure strong emergency communication strategies are developed and maintained between the RDFFG and Lheidli T'enneh Indigenous Government regarding emergency wildfire events occurring anywhere on their traditional territory. This will ensure the Nation is informed and involved in emergency planning and response as it relates to their members, lands, and values.

Action #28: Promote and encourage all Electoral Area A 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, including seasonal wildfire readiness meetings. Involvement of the Lheidli T'enneh Indigenous Government and City of Prince George is imperative to the success of emergency management planning for Prince George and surrounding area**.**

Action #30: Assess the number of residents throughout Electoral Area A 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 #31: Apply for **UBCM's Public Notification and Evacuation Route Planning** and assess areas throughout the Regional District that are vulnerable. For Electoral Area A consider the following:

A. Pilot Mountain – Chief Lake Road

B. Ness Lake – Ness Laker Rd

C. Salmon Valley – Salmon Valley Rd

Action #32: Assess community water delivery ability as required for suppression activities, limited to current water system evaluation and available flow analysis. Options for water storage and supply options, such as a dry hydrant system, should be considered.

Action #33: Assess and inventory FireSmart Structure Protection equipment located at the Ness Lake, Pilot Mountain and Salmon Valley Fire Rescue halls. It is recommended that Fire Departments have functioning Structure Protection Trailers, where feasible. Apply for funding to purchase any missing equipment to complete a fully stocked Structure Protection Trailer.

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 objective of fuel management treatments are 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.

Approximately 74% of the one-kilometer WUI area in Electoral Area A 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 Indigenous Government Engagement Re: Vegetation Management

Electoral Area A overlaps the traditional territories of the Lheidli T'enneh First Nation. During the interview held with technical staff at LTFN and the in-person community meeting, the following views and concerns were expressed by staff and Nation members relating to vegetation management on their territory:

- There have been instances in the region where fuel management treatments that involved overstory thinning have resulted in significant windthrow of retained trees. This has unintended consequences on ecological integrity and overall resiliency of forests around communities and values. 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.
- Any fuel management prescriptions being planned/developed within LTFNs traditional territory must ensure it goes through the referral process so that the Indigenous Government can review the proposed area and treatment activities prior to approval or commencement of work. This will help ensure that Indigenous 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.
- LTFN has an Indigenous Government-owned logging company that is qualified to complete wildfire risk reduction work. They would like to ensure that fuel management treatment work being completed on their territory is completed by their affiliated company to provide their Nation members with employment and foster greater forest stewardship benefits.
- 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 LTFNs First Nations Woodland License area that surrounds the eastern portion of Prince George.

5.7.2 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[26] 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. 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

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

priority zones, as described in the FireSmart Home Ignition Zone (HIZ) and Priority Zones (refer to Appendix C: Home Ignition Zone).

Figure 20. FireSmart Home Ignition Zone graphic

5.7.2.1 Critical Infrastructure

FireSmart BC has developed a FireSmart Critical Infrastructure (CI) Hazard Assessment Form[27] 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 surround 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

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

project; however, an important next step would be to complete FireSmart Assessments on the highest priority values throughout Electoral Area A.

5.7.3 Cultural Sites and Green Spaces

The FireSmart Cultural Sites and Green Spaces (CSGS)[28] assessment is a qualitative process that is intended for assessing vulnerability of Indigenous 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 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 A, portions of **Kristian Winther Regional Park** and **Ness Lake Regional Park,** containing picnic tables and shelters, lawns, washrooms, and other structures may be good candidate for a FireSmart CSGS project, provided the area is less than 3 hectares in size. The following steps are currently 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).
3. Complete recommended mitigation activities identified in the *FireSmart CSGS Assessment.*

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 A.

The following table identifies EA A CWRP FTUs that overlap with 2021 Prince George Tactical Plan FTUs currently being pursued by the Ministry of Forests Natural Resource District Wildfire Risk Reduction Team.

[28] https://firesmartbc.ca/resource/culturally-significant-sites-and-green-spaces-guide-assessment/

Table 16. FTU overlap between PG Tactical Plan and EAA CWRP that are currently underway

EAA CWRP FTU Identifier	Prince George Tactical Plan FTU Identifier	Status of WRR Project
TU-A18	N1_AMU_03	Prescription/AIA completed
N/A	N1_FTU_02	Prescription/AIA completed
TU-A17	N1_FTU_01	Prescription/AIA completed
N/A	N1_FTU_03 and 04	Prescription/AIA completed
TU-A14	N2_FTU_01	Prescription/AIA completed
TU-A11	WB_FTU_09	Prescription/AIA completed

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 FTUs for this CWRP were identified based on 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 A are detailed in Table 17.

The proposed FTUs in Table 17 are listed in order of general priority. Priority Ranking assignment took into consideration both the Wildfire Threat Assessment Scores and Priority Setting Scores from the *Wildfire Threat Assessment Worksheet*[29], as well as other local factors such as overlapping values 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 17 are 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 17**. 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 boundaries will require further refinement based on more intensive data collected during the fuel management prescription development phase.

[29] 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

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.

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 17 below details the proposed FTUs and includes information on their priority level, size, 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**. 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.

Table 17. Proposed fuel management treatments in Electoral Area A

FTU ID	Priority Level	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-A8	1	59.5	Community Resilience	59.5			Guide Outfitter area – Stephen Saunders; Trapline license TR0715T008	Proposed TU is located along the westernmost boundary of the Kelly Road – Hobby Ranches community, and borders a large number of private residences The area is comprised of high to extreme threat conifer stands representative of the C-4 fuel type. Stands contain an accumulation of dead fine fuels on the surface, subalpine fir and spruce trees creating continual vertical and horizontal fuels, and a dense stand of over 3,000 stems per hectare. Proposed treatment activities would include overstory and understory conifer thinning, pruning of retained conifer trees, and woody surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the Kelly Road neighbourhood and enhance potential for reduced wildfire behaviour and effective wildfire suppression. **Note:** The TU overlaps majority of proposed Fuel Treatment Units **WA_FTU_09** and **WA_FTU_10** from the *2021 Prince George Tactical Plan*. **The RDFFG must work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments.**	WTA MH_41 WTA MH_42

TU-A10	2	69.7	Community Resilience	62.0	7.7		Guide Outfitter area – John Pichette; Trapline license TR0715T007, TR0714T010	Proposed TU is located adjacent to private residences in the Pilot Mountain community. It surrounds the community on the north and west sides. The area is comprised of high to extreme threat conifer stands representative of the C-4 fuel type. Stands contain an accumulation of dead fine fuels on the surface, subalpine fir and spruce trees creating continual vertical and horizontal fuels, and a dense stand of over 3,000 stems per hectare. Proposed treatment activities would include overstory and understory conifer thinning, pruning of retained conifer trees, and woody surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the Pilot Mountain neighbourhood and enhance potential for reduced wildfire behaviour and effective wildfire suppression. **Note:** The TU overlaps a large portion of proposed Fuel Treatment Units and Assess Monitor Units from the *2021 Prince George Tactical plan* including **WA_FTU_07, WA_AMU_06, WA_FTU_08, and WA_AMU_07**. **The RDFFG must work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments.**	WTA MH_44 WTA MH_45

TU-A12	3	52.6	Community Resilience	52.6			Guide Outfitter area – John Pichette; Trapline license TR0715T007,	Proposed TU is located adjacent to the south side of private residences in the subdivision containing Honeymoon Drive, Porter Road, and Hinterland Road, off Chief Lake Road. The area is comprised of high to extreme threat conifer stands representative of the C-4 fuel type. Stands contain an accumulation of dead fine fuels on the surface, subalpine fir and spruce trees creating continual vertical and horizontal fuels, and a dense stand of over 3,000 stems per hectare. Proposed treatment activities would include overstory and understory conifer thinning, pruning of retained conifer trees, and woody surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to private residences and enhance potential for reduced wildfire behaviour and effective wildfire suppression. **Note:** The TU overlaps nearly all of proposed FTU **WA_FTU_05 and AMU WA_AMU_04** from the *PG Tactical Plan.* **The RDFFG must work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments.**	WTA MH_48 WTA MH_49

TU-A9	4	48.0	Community Resilience	48.0			Guide Outfitter area – Stephen Saunders; Trapline license TR0715T008	Proposed TU is located along the north boundary of the Kelly Road – Hobby Ranches community, and borders a large number of private residences on Muermann Road. The area is comprised of high to extreme threat conifer stands representative of the C-4 fuel type. Stands contain an accumulation of dead fine fuels on the surface, subalpine fir and spruce trees creating continual vertical and horizontal fuels, and a dense stand of over 3,000 stems per hectare. Proposed treatment activities would include overstory and understory conifer thinning, pruning of retained conifer trees, and woody surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the Kelly Road neighbourhood and enhance potential for reduced wildfire behaviour and effective wildfire suppression. Note: The TU overlaps majority of proposed Fuel Treatment Units **WA_FTU_11, and WA_FTU_12** from the *PG Tactical Plan.* **The RDFFG must work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments.**	WTA MH_40

TU-A18	5	38.6	Community Resilience		38.6		Eskers Provincial Park; Guide Outfitter area – Mark Werner; Trapline license TR0715T013 Waterworks point – 7002425, 7002485	Proposed TU is adjacent to private lakeside properties on Ness Lake Road N, northwest of the Ness Lake community. The area is comprised of a mixedwood stand with high conifer component, containing spruce, subalpine fir, birch and aspen. Proposed treatment activities would include understory conifer thinning, pruning of retained conifers, and surface fuel reduction. Treatment would help create a shaded fuel break along Ness Lake Road N and adjacent to private properties on Ness Lake. **Note:** TU overlaps Assess Monitor Unit **N1_AMU_03** from the *PG Tactical Plan* and **a fuel management prescription has been completed for the area under the WRR Program by the Ministry of Forests.** Therefore, a fuel management prescription would not be required to be developed through CRI funding. **The RDFFG should follow up with the Ministry of Forests on the operational status of this unit.**	WTA MH_67

TU-A14	6	48.7	Community Resilience	39.0		9.7	Guide Outfitter area – John Pichette; Trapline license TR0715T013	Proposed TU is located adjacent to the west side of private properties on Lambertus Road. Area is comprised of a high-density, high threat C-3 fuel type containing spruce, subalpine fir, and minor components of aspen. Proposed Treatment activities would include overstory and understory conifer thinning, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the rural private properties and enhance potential for reduced wildfire behaviour and effective wildfire suppression. **Note:** TU overlaps majority of **N2_FTU_01** from the *PG Tactical Plan* where **a fuel management prescription has been completed for the area under the WRR Program by the Ministry of Forests.** Therefore, a fuel management prescription would not be required to be developed through CRI funding. **The RDFFG should follow up with the Ministry of Forests on the operational status of this unit.**	WTA MH_63

TU_A11	7	38.9	Community Resilience	23.0	15.9		Guide Outfitter area – John Pichette; Trapline license TR0715T007, TR0714T010	Proposed TU is located south of private properties on Solitude Road, Wildrose Road, Christina Road, and McGuire Road in the Pilot Mountain community. The area is comprised of a mature C-3 fuel type containing subalpine fir and spruce. Crown base height on overstory trees is high, however understory conifers are contributing to ladder fuels. High levels of dead and down trees/woody debris. Proposed treatment activities would include understory conifer thinning, pruning of retained conifer trees, removal of dead standing trees, and removal of elevated and surface fuels. Treatment would reduce hazardous coniferous fuels adjacent to the private properties in the Pilot Mountain community and enhance potential for reduced wildfire behaviour and effective wildfire suppression. **Note**: Portions of this TU overlap **WB_FTU_09** from the *PG Tactical Plan* where **a fuel management prescription has been completed for the area under the WRR Program by the Ministry of Forests.** Therefore, a fuel management prescription would not be required to be developed through CRI funding. **The RDFFG should follow up with the Ministry of Forests on the operational status of this unit.**	WTA MH_46

TU_A17	8	34.1	Community Resilience	34.1			Guide Outfitter area – John Pichette; Trapline license TR0715T013	Proposed TU is adjacent to private residences on Camp Road, northeast of Ness Lake in the Ness Lake community. The area is comprised of a mixedwood (M-1/2) fuel type containing spruce, subalpine fir, and birch in the overstory. Understory conifer density is high. Woody surface fuel loading is high. Proposed treatment activities would include understory conifer thinning, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the private along Camp Road, enhance egress safety along Camp Road, and enhance potential for reduced wildfire behaviour and effective wildfire suppression. **Note:** TU overlaps **N1_FTU_01 and N1_AMU_01** from the *PG Tactical Plan* where **a fuel management prescription has been completed for the area under the WRR Program by the Ministry of Forests.** Therefore, a fuel management prescription would not be required to be developed through CRI funding. **The RDFFG should follow up with the Ministry of Forests on the operational status of this unit.**	WTA MH_64 WTA MH_65

TU_A13	9	38.8	Community Resilience	24.0	14.8		Guide Outfitter area – John Pichette; Trapline license TR0715T007, TR0715T006	Proposed TU is located adjacent to private residences on McPhee Road, Peterson Road, and Aquarius Road. The north end of the unit anchors into Chief Lake Road where it transitions into Ness Lake Road, adjacent to the Chief Lake Cemetery. The area is comprised of mixedwood fuel type with high conifer composition (M-1/2 75% conifer). Stands contain spruce, birch and aspen in the overstory. Understory conifer density is high. The area has waterlogged pockets and bog features. Proposed treatment activities would include thinning of understory conifers, pruning of retained conifers, and surface fuel reduction. Proposed treatment would reduce hazardous fuels adjacent to the west side of Chief Lake community, along a portion of Ness Lake Road, and around the Chief Lake Cemetery with overall goals of increasing potential for reduced wildfire behaviour and effective wildfire suppression. **Note**: Portions of the TU overlap proposed fuel treatment units and assess monitor units **WA_FTU_06, WA_AMU_04, and WA_FTU_05** from the 2021 *PG Tactical Plan.* **The RDFFG must work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments.**	WTA MH_51 WTA MH_52 WTA MH_53 WTA MH_54

TU_A21	10	91.7	Landscape Fuel Break	91.7			Guide Outfitter area – Mark Werner; Trapline license TR0715T004	Proposed treatment is located near the southwest side of Chief Lake, west/northwest of residences situated on the south end of the lake. The unit follows the start of the Teardrop FSR and existing forestry access roads, and it bound by rural private land along the south border. The area is comprised of mixedwood with high conifer composition and C-3 fuel types. Potential treatment activities could include daylighting along the FSR and forestry access road to increase width of roads for wildfire response/suppression, and thinning of adjacent stands to reduce potential fire behaviour adjacent to the roads. The objective of the treatment would be to create a fuel break for wildfire response/suppression from a fire advancing from the west/northwest of the Chief Lake residential community. **This treatment unit should be planned in collaboration with BC Wildfire Service to determine best options for enhancing tactical suppression opportunities.**	WTA MH_60

TU_A1	11	32.7	Community Resilience	32.7			Guide Outfitter area – John Pichette; Priority Old Growth Deferral Area; Trapline license TR0715T006, TR0715T007	Proposed TU is located south of private residences on Aquarius Road in the Chief Lake Road neighbourhood. The unit borders private land to the north and anchors into wetland features to the south. The area is comprised of high to extreme stands reflecting the C4 fuel type with a heavy accumulation of fine woody debris on the forest floor, and elevated dead fuel on dead trees and branches creating continuous ladder fuels. Density of the stand is high with over 3,000 stems per hectare of spruce and subalpine fir conifer trees. Proposed treatment activities would include thinning of conifers, pruning of retained conifers, removal of elevated dead wood, and woody surface fuel reduction. Treatment would reduce hazardous fuels adjacent to the south side of private rural residences. This fuel treatment can be tied into TU-A13.	WTA MH_50
TU_A4	12	11.1	Community Resilience, Critical Infrastructure, Public Education				Ness Lake Regional Park; Guide Outfitter area – John Pichette; Trapline license TR0715T013	Proposed TU encompasses Ness Lake Regional Park and is adjacent to the Ness Lake Fire Department, community centre, and private residences. This is a high use area in the Ness Lake community and could be used for public education purposes to demonstrate the purpose of fuel treatment activities. The area is comprised of a mixedwood (M-1/2 50% conifer) fuel type containing aspen, spruce and subalpine fir. Understory conifer density is high. Proposed treatment activities would include thinning of understory conifers, pruning of retained conifers, and surface fuel reduction. Although not the most tactically effective fuel treatment area, treatment would reduce fuels in a high use recreation area near critical infrastructure and residences, and is a good candidate for public education.	WTA MH_66

TU_A16	13	80.5	Community Resilience	80.5			Guide Outfitter area – Mark Werner; Trapline license TR0715T002, TR0715T013	Proposed TU is located along the west side of the Reid Lake community, tying into Isle Pierre-Reid Lake Road and McCabe Road. The unit is bordered by rural properties along the east boundary. The area is comprised of mixedwood, and C-3 fuel types containing spruce, subalpine fir, and aspen. Treatment would reduce hazardous coniferous fuels adjacent to the rural private properties and enhance potential for reduced wildfire behaviour and effective wildfire suppression along Isle Pierre-Reid Lake Road and McCabe Road from a wildfire advancing from the west.	WTA MH_63
TU_A15	14	47.3	Community Resilience	47.3			Guide Outfitter area – John Pichette; Trapline license TR0715T006, TR0715T013	Proposed TU is located adjacent to the east side of private properties on Lambertus Road. Area is comprised of a high-density, high threat C-3 fuel type containing spruce, subalpine fir, and minor components of aspen. Proposed Treatment activities would include overstory and understory conifer thinning, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the rural private properties and enhance potential for reduced wildfire behaviour and effective wildfire suppression.	WTA MH_63

TU_A5	15	104.5	Community Resilience, Critical Infrastructure	54.0	32.5	18.0	BC Hydro Electrical Transmission Line; Guide Outfitter area – Stephen Saunders; Trapline license TR0715T013; Waterwork lines – 7001279, 7001480; Waterwork points – 7001279; Range infrastructure	Proposed TU is located along Highway 97, just north of the Salmon Valley substation. The unit borders the BC Hydro electrical transmission line right of way along the east boundary, private land along the south boundary, and wetland features and the Beale gravel pit along the north. The area is comprised of mixedwood fuel type with high conifer composition, containing spruce and aspen in the overstory. Many of the mature aspen are showing signs of decline. Proposed treatment would reduce hazardous trees and fuels adjacent to important electrical transmission lines and Highway 97. Additionally, the Beale Pit access road could be utilized for enhanced wildfire response/suppression opportunities.	WTA MH_36 WTA MH_37

TU_A2	16	23.6	Community Resilience	19.0	4.6		Guide Outfitter area – John Pichette; Trapline license TR0715T007	Proposed TU is located north of rural private properties on Chief Lake Road and Mountainview Road. The area contains primarily high-density mixedwood fuel type with high conifer composition (M-1/2 75% conifer) containing spruce with components of aspen and lodgepole pine. Ladder fuels on spruce extend to the ground. Proposed treatment activities would include thinning of understory conifers, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous coniferous fuels adjacent to the rural private properties and enhance potential for reduced wildfire behaviour and effective wildfire suppression from a fire advancing from the north. This TU ties into TU-A10 to the east.	WTA MH_47
TU_A19	17	67.4	Community Resilience	67.4			Guide Outfitter area – Mark Werner; Trapline license TR0715T004, TR0715T008	Proposed TU is located east of private residences along the south end of Chief Lake Road. The overall wildfire threat was rated extreme due to high density of the stand over 3000 stems per hectare, and the presence of spruce and fir saplings creating continual vertical and horizontal fuels. Treatment activities would include thinning of understory conifers, potential thinning of overstory conifers, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous fuels along the east side of a rural community and could potentially be used to enhance wildfire suppression response. **Note**: portions of this TU overlap **N3_AMU_02, and N3_FTU_01** from the *2021 PG Tactical Plan.* **The RDFFG must work with the Ministry of Forests to collaborate on the development of those Fuel Management Prescriptions and treatments.**	WTA MH_60

TU_A6	18	53.5	Community Resilience	53.5			Guide Outfitter area – Mark Werner; Trapline license TR0714T010	Proposed TU is located along the north side of Crescent Lake and south of private residences along Chief Lake Road and Murch Lake Road. The area is comprised of primarily deciduous trees in the overstory with a smaller component of spruce. Understory is comprised of high density of spruce and fir trees, creating vertical and horizontal continuity of fuels. Proposed treatment activities would include thinning of understory conifers, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous fuels adjacent to rural properties.	WTA MH_56
TU_A20	19	24.6	Community Resilience	24.6			Guide Outfitter area – Mark Werner; Trapline license TR0715T004	Proposed TU is located south of private residences on Chief Lake Road, along the south end of Chief Lake. The area is comprised of mixedwood stands with high proportion of spruce. Understory conifer density is high with a relatively high level of woody surface fuel loading. Proposed treatment activities would include thinning of understory conifers, pruning of retained conifers, and surface fuel reduction. Treatment would reduce hazardous fuels along a short (approx. one block) length of Chief Lake Road and adjacent to some private residences.	WTA MH_60
DEMO-A1	20	4.2	Public Education, Community Resilience		4.2		Guide Outfitter Area – Stephen Saunders; Trapline License TR0724T013	Proposed TU is adjacent to the Salmon Valley Elementary School (currently not in operation), along Trout Street in the rural community of Salmon Valley. It is bordered by private land on the east and west side of the unit, and anchors into Sponaugle Road to the north. Potential treatment activities could include understory conifer thinning and surface fuel reduction. This demonstration area can be used to show local residents how a fuel treatment can lower the wildfire threat of an area and demonstrate ways for community members to low fire threat on the property.	WTA MH_35

Actions: The following are recommended action items for vegetation management within the WUI:

Action #34: 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 #35: Work with the Lheidli T'enneh Indigenous Government during the planning and development of fuel management prescriptions and treatments. This will help ensure LTFN values on the landscape are protected, provide economic opportunities for the Nation and their forestry company, enhance overall forest stewardship, and provide more comprehensive wildfire risk reduction planning opportunities on the landscape.

Action #36: 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 #37: 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 #38: Apply for funding to complete an initial *FireSmart CSGS Assessment* for frequented green spaces in Electoral Area A, such as Kristian Winther and Ness Regional Parks. Once assessment is complete, apply for funding to complete the recommended eligible mitigation activities identified (limited to labour and material costs).

Action #39: Create an inventory and monitoring system to track wildfire risk reduction and FireSmart vegetation management activities throughout the Regional District including: 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 Risk Summary and Action Pla (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 the Electoral Area A. 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 18 provides an example monitoring plan, tracking, and update summary for the Electoral Area CWRP. 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 18. Electoral Area A CWRP monitoring, tracking and update summary

Plan Version	Update Year	Update Type	Actions in Progress	Completed Actions	Notes
1.0	2024	1st iteration	Ongoing	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	-	-	-	-
3.0	-	-	-	-	-

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 three 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 A** 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 A.

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

- Salmon River – Lakes Official Community Plan Bylaw No. 1587
- Zoning Bylaw No. 2892
- Unsightly Premises Regulation Bylaw No. 3192
- 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**
- **TRU – Centre for Wildfire Research, Education, Training and Innovation**

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.