

# Planning Wildfire Resilient Communities in British Columbia

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Electoral Area Directors Forum

February 4, 2020



# AGENDA

## Community Resiliency Investment (CRI)

- Community Funding and Supports
- Crown Land Wildfire Risk Reduction
- Co-ordinated planning for community resiliency



# COMMUNITY RESILIENCY INVESTMENT PROGRAM



Community Resiliency Investment (CRI) program funding is intended to reduce the risk of wildfires and mitigate their impacts on B.C. communities, through community funding, supports and priority fuel management activities on provincial Crown land.

The program was launched in September 2018 and has two main streams: community funding and supports, and Crown land wildfire risk reduction. Two intakes have occurred with over 200 applicants.





# COMMUNITY FUNDING AND SUPPORTS: FUNDING ELIGIBILITY



## Eligible applicants:

- municipalities
- **Regional Districts**
- First Nations

## Funding amounts:

- Applicants with a lower wildfire risk are eligible for funding up to \$25,000. And can apply for the full amount with a Rationale.
- Applicants with a demonstrated higher wildfire risk are eligible for funding up to \$150,000.



*\*The funding maximum may be exceeded for applications that include vegetation management on Crown land.*

# COMMUNITY FUNDING AND SUPPORTS BASED ON THE SEVEN FIRESMART DISCIPLINES



- education
- vegetation management
- legislation and planning
- development considerations
- inter-agency co-operation
- emergency planning
- cross-training





# FIRESMART FOCUS



- living with and managing wildfire risks in your area
- reducing the risk of damage to structures and infrastructure in extreme wildfire conditions
- raising awareness of FireSmart benefits to homeowners, neighbourhoods and communities
- alignment with provincial fire prevention strategies
- the seven FireSmart disciplines (framework for prevention)





# DOES FIRESMART WORK?



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COLUMBIA

The findings from the **Horse River wildfire** (Fort McMurray, Alberta) in 2016 suggest that the use of **FireSmart** principles was one of the main reasons why some houses survived.



*\*Photo credit: Regional Municipality of Wood Buffalo*

# EXAMPLES OF ELIGIBLE ACTIVITIES



Education	<ul style="list-style-type: none"><li>▪ host community FireSmart events and workshops</li></ul>
Planning	<ul style="list-style-type: none"><li>▪ develop FireSmart policies for design and maintenance of publicly owned buildings</li><li>▪ develop plans that include the assessment and identification of FireSmart and/or fuel management priorities</li></ul>
Development considerations	<ul style="list-style-type: none"><li>▪ amend bylaws to incorporate FireSmart policies</li></ul>
Inter-agency co-operation	<ul style="list-style-type: none"><li>▪ develop regional FireSmart planning tables</li></ul>
Emergency planning	<ul style="list-style-type: none"><li>▪ develop cross-jurisdiction meetings and exercises</li></ul>
Cross-training	<ul style="list-style-type: none"><li>▪ support professional development to increase capacity for FireSmart activities</li></ul>
FireSmart demonstration projects	<ul style="list-style-type: none"><li>▪ undertake FireSmart demonstration projects for publicly owned buildings or critical infrastructure</li></ul>
FireSmart activities for residential areas	<ul style="list-style-type: none"><li>▪ offer local rebate programs to homeowners who complete FireSmart activities on their properties</li></ul>
Fuel management	<ul style="list-style-type: none"><li>▪ undertake fuel management and/or vegetation management on publicly owned land</li></ul>



# CROWN LAND WILDFIRE RISK REDUCTION



This category of the Community Resiliency Investment program complements the **FireSmart Community Funding and Supports** category, which is administered by the Union of B.C. Municipalities.

- The Crown Land Wildfire Risk Reduction (WRR) category includes:
  - prescribed fire (including planning and operational treatments) and the development of a comprehensive provincial prescribed fire program
  - risk reduction activities targeting provincially identified critical infrastructure, beginning with critical response infrastructure such as government-owned radio repeaters, weather stations and airtanker bases
  - fuel management planning and treatment activities focusing on provincial Crown land located around communities

# CROWN LAND WILDFIRE RISK REDUCTION



- The Crown Land Wildfire Risk Reduction (WRR) funding will be implemented by government. In many cases, this will be done in partnership with First Nations, local governments, and working with industry, other stakeholders.
- The Crown Land WRR funding targets areas facing a higher wildfire risk near communities or critical infrastructure.

## Funding sources:

- The Community Resiliency Investment program has two funding categories:
  - Funding for the **FireSmart Community Funding and Supports** category is available for First Nations, municipalities and regional districts to help mitigate wildfire threats in their communities. This funding category is administered by the Union of B.C. Municipalities. For more information, visit [www.ubcm.ca/cri](http://www.ubcm.ca/cri) or contact your local BC Wildfire Service fire centre or local First Nations' Emergency Services Society of B.C. representative.
  - Funding for the **Crown Land Wildfire Risk Reduction** (WRR) category is administered and implemented by the B.C. government to mitigate wildfire threats in higher-risk areas around communities and critical infrastructure.



# CROWN LAND WILDFIRE RISK REDUCTION



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## Landscape

- landscape-scale assessment of risk to values
- includes tools such as the Provincial Strategic Threat Analysis (PSTA) and Burn P3 Modeling for likelihood, consequence to values analysis (fire response functions) and land manager/local authority prioritization of values
- **The outcome is a map of prioritized operational areas for specific planning and tactics to reduce harm to values from wildfire, which could include different scales for Community Wildfire Protection/Resiliency Plans (CWPP/CWRP)**

## Defined Planning Unit

- planning strategies and tactics for operational areas, including communities, based on identified risk
- includes landscape fuel breaks, Wildland-Urban Interface (WUI) treatments including FireSmart and fuel treatments
- **The outcome is a plan for specific activities in a defined unit of area (e.g. CWPP, watersheds unit, Natural Resource District plan around a community).**

## Site

- site-specific fuels treatment(s)
- prescriptions – FireSmart Critical Infrastructure hazard assessments.
- **The outcomes are site or neighborhood level (e.g FireSmart) specific plans, prescriptions, actions – leading to activities that will reduce wildfire threat.**

2019 Provincial Strategic Threat Analysis  
BC Wildfire Service

**Fire Threat and Wildland Urban Interface Area**

**2019 Fire Threat Rating**

- No Data (Private Land)
- No Data (Private Managed Forest Land)
- Water
- No Threat
- 1 - Low
- 2 - Low
- 3 - Low
- 4 - Moderate
- 5 - Moderate
- 6 - Moderate
- 7 - High
- 8 - High
- 9 - Extreme
- 10 - Extreme

**2017 Wildland Urban Interface**

- 2 km Interface Buffer
- >= 5 Structures/km<sup>2</sup>

**Base Data**

- Fire Centres
- Fire Zones
- Highway

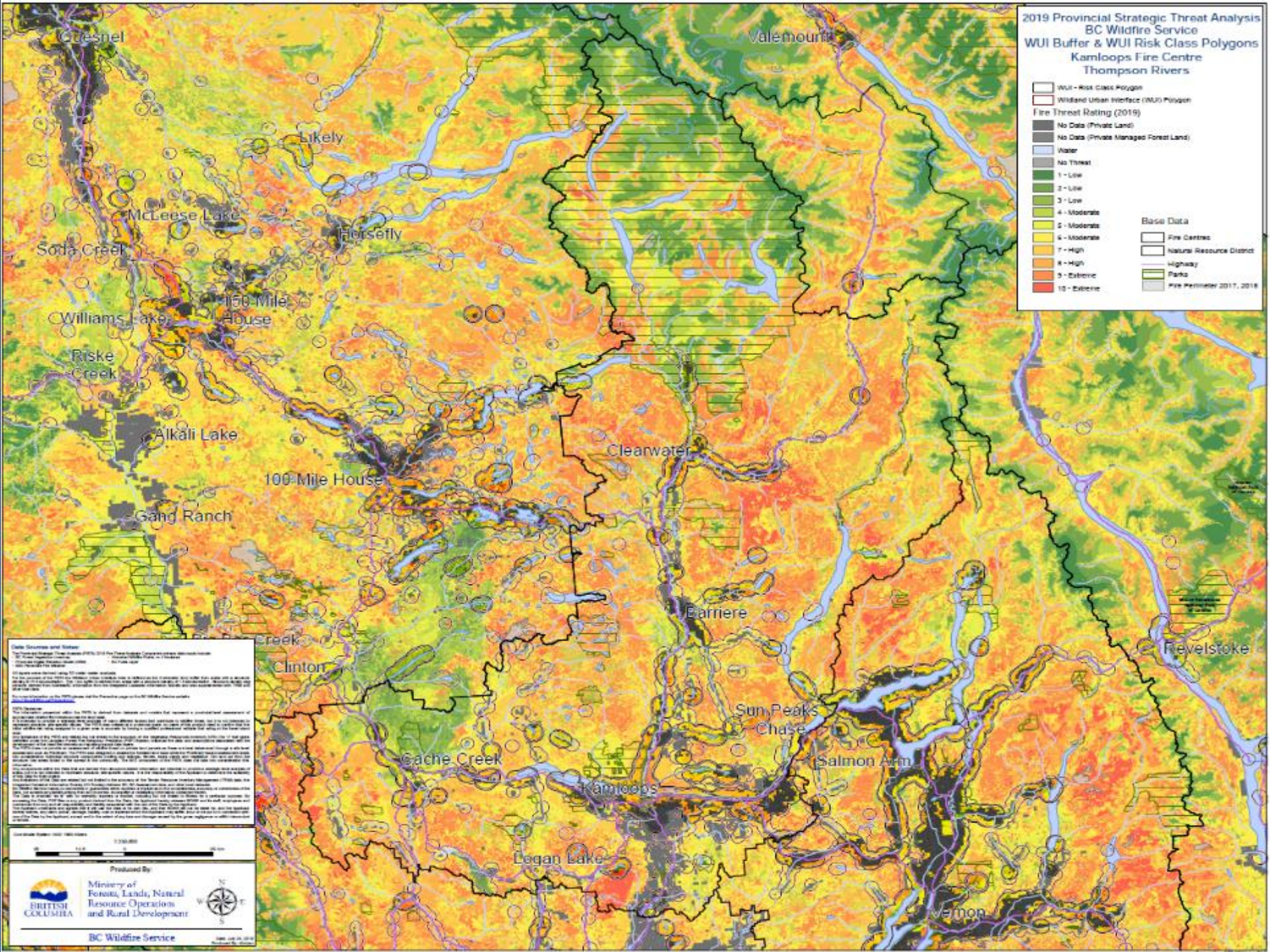
**Data Sources and Notes**

The Province of British Columbia (BC) is a large and diverse province with a wide range of land uses and land ownership. The BC Wildfire Service is responsible for the management of wildland fires and the protection of communities from wildfire risk. This map is a strategic threat analysis of wildfire risk in BC, based on a combination of factors including weather, fuel, and topography. The map is intended to provide a general overview of wildfire risk and is not intended to be used as a basis for individual property assessments. For more information on wildfire risk, please visit the BC Wildfire Service website at [www.bcwildfire.ca](http://www.bcwildfire.ca).

**Disclaimer**

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**North American North Datum**  
 The Canadian Geomatics Centre (CGC) has approved this datum for use in Canada and the United States. It is based on the North American Datum of 1983 (NAD 83) and is a geocentric datum. It is not a true datum and should not be used for precise measurements. It is only intended for use in Canada and the United States. It is not a true datum and should not be used for precise measurements. It is only intended for use in Canada and the United States.

**Scale**  
 1:50,000

**Legend**  
 WUI - Risk Class Polygon  
 Wildland Urban Interface (WUI Polygon)  
 Fire Threat Rating (2019)  
 No Data (Private Land)  
 No Data (Private Managed Forest Land)  
 Water  
 No Threat  
 1 - Low  
 2 - Low  
 3 - Low  
 4 - Moderate  
 5 - Moderate  
 6 - Moderate  
 7 - High  
 8 - High  
 9 - Extreme  
 10 - Extreme

**Base Data**  
 Fire Centres  
 Natural Resource District  
 Highway  
 Parls  
 Fire Perimeter 2017, 2018

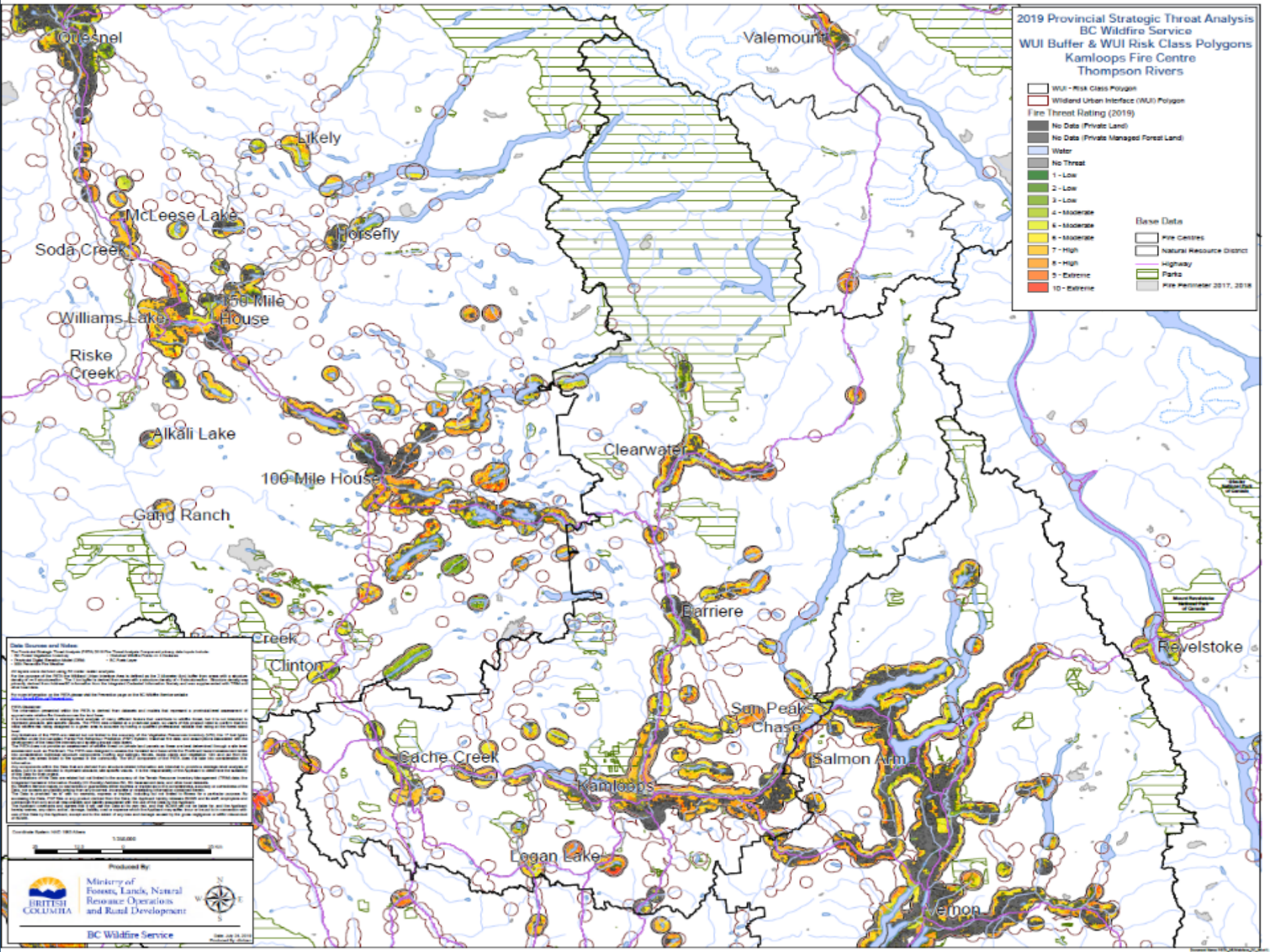
Produced By:

**BRITISH COLUMBIA** Ministry of Forests, Lands, Natural Resource Operations and Rural Development

BC Wildfire Service

June 2019





**2019 Provincial Strategic Threat Analysis  
BC Wildfire Service  
WUI Buffer & WUI Risk Class Polygons  
Kamloops Fire Centre  
Thompson Rivers**

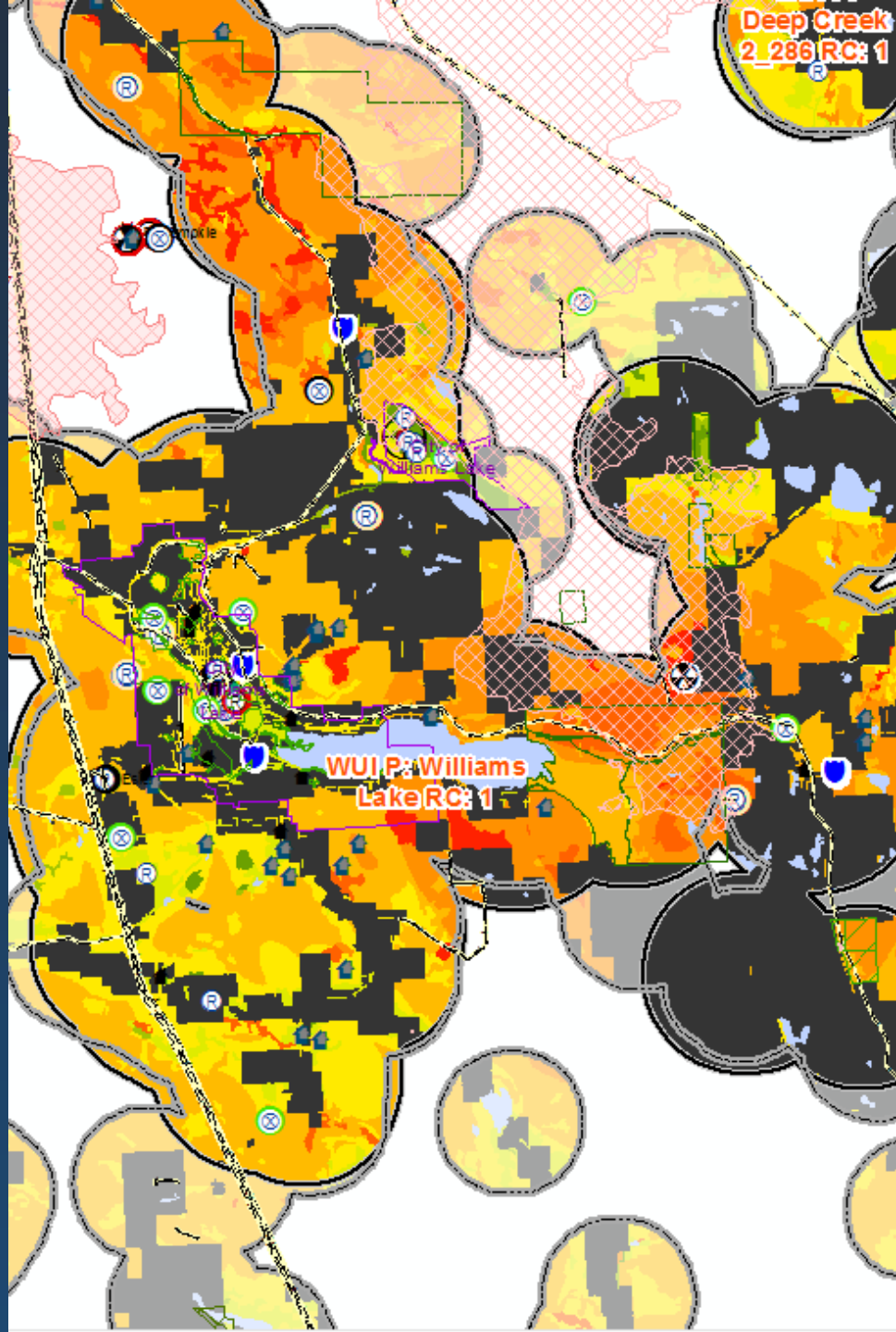
WUI - Risk Class Polygon	<b>Basin Data</b>
Wildland Urban Interface (WUI) Polygon	
<b>Fire Threat Rating (2019)</b>	Fire Centres
No Data (Private Land)	Natural Resource District
No Data (Private Managed Forest Land)	Highway
Water	Parks
No Threat	Fire Perimeter 2017, 2018
1 - Low	
2 - Low	
3 - Low	
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5 - Moderate	
6 - High	
7 - Extreme	
8 - Extreme	
9 - Extreme	
10 - Extreme	

**Data Sources and Notes:**  
 The data used in this map was derived from the following sources:  
 - Fire Threat Rating (2019): BC Wildfire Service  
 - WUI Buffers: BC Wildfire Service  
 - Fire Centres: BC Wildfire Service  
 - Natural Resource Districts: BC Wildfire Service  
 - Highways: BC Wildfire Service  
 - Parks: BC Wildfire Service  
 - Fire Perimeter 2017, 2018: BC Wildfire Service  
 - Water: BC Wildfire Service  
 - Private Land: BC Wildfire Service  
 - Private Managed Forest Land: BC Wildfire Service  
 - No Threat: BC Wildfire Service  
 - Low: BC Wildfire Service  
 - Moderate: BC Wildfire Service  
 - High: BC Wildfire Service  
 - Extreme: BC Wildfire Service



Produced By:  
 Ministry of Forests, Land, Natural Resource Operations and Rural Development  
 BC Wildfire Service  
 Date: 08/24/2019  
 Version: 1.0





## WILDLAND URBAN INTERFACE (WUI) RISK MAPS

<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/vegetation-and-fuel-management/fire-fuel-management/wui-risk-class-maps>



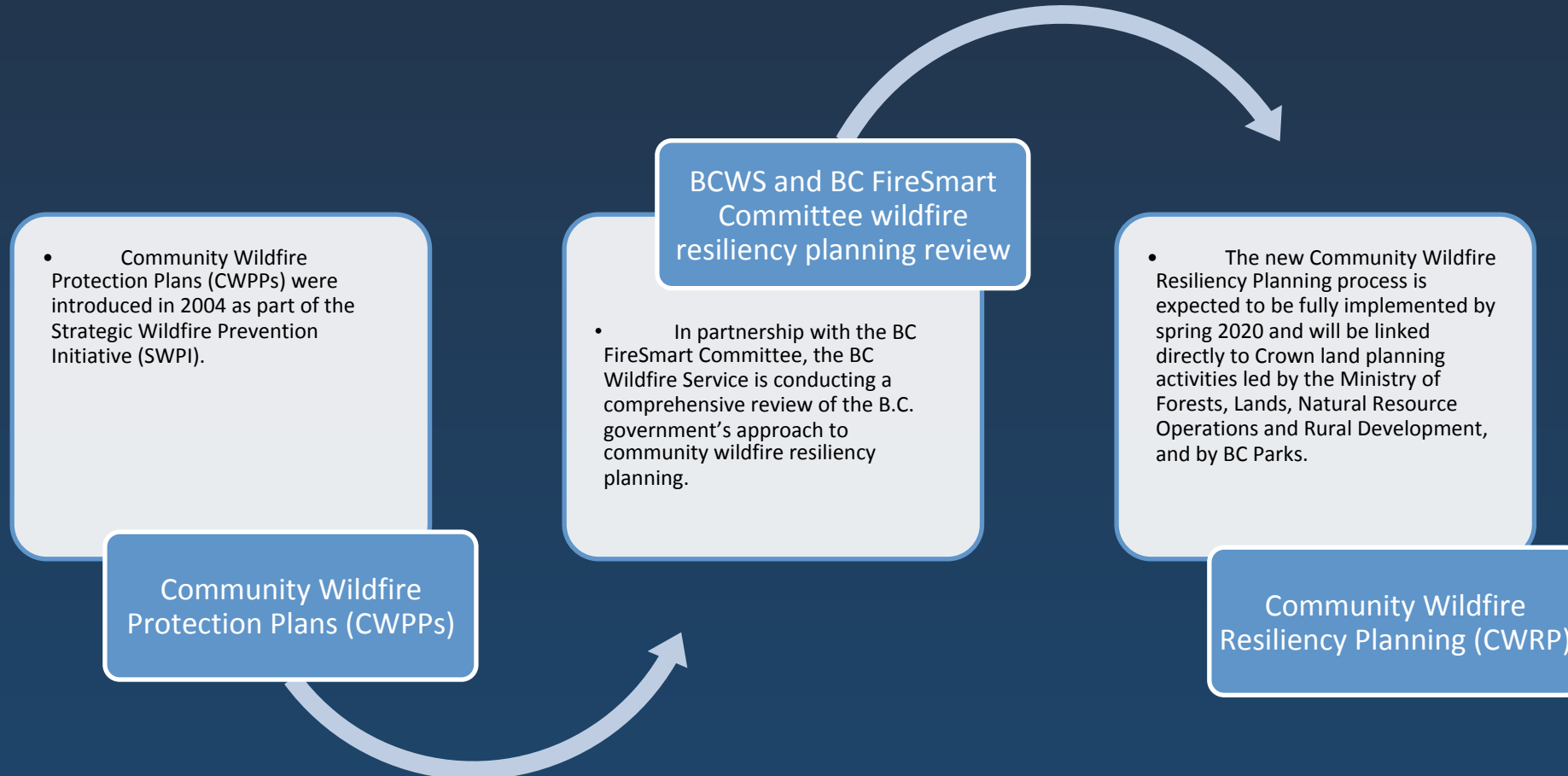
# COMMUNITY WILDFIRE RESILIENCY PLANNING PROJECT



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*Develop an improved approach to  
Community Wildfire Resiliency Planning in  
British Columbia that supports community  
capacity building and results in an increase in  
wildfire resiliency for communities in BC.*

# COMMUNITY WILDFIRE RESILIENCY PLANNING PROJECT



This approach will result in more effective wildfire risk reduction activities, incorporate all seven FireSmart disciplines, and better align with emergency planning requirements in British Columbia.



# COMMUNITY WILDFIRE RESILIENCY PLANNING PROJECT



Community Wildfire Resiliency Planning will also support the Community Resiliency Investment program's focus on:

- developing community capacity and leadership related to wildfire risk management
- FireSmart activities on private land and around critical infrastructure
- development permit area planning for wildfire risk reduction
- inter-agency collaboration through Regional FireSmart Committees  
other FireSmart activities

Key goals of the Community Wildfire Resiliency Planning process include:

- increasing communities' capacity and understanding of wildfire risk
- fostering greater collaboration across administrative boundaries
- being more responsive to the needs of different types of communities throughout B.C. (in terms of their size, their capacity and the threats they face)



## **Firefighter Safety**



# BRINGING IT ALL TOGETHER



Interagency co-operation funded under CRI intended to:

- develop and/or participate in multi-agency fire and/or fuel management roundtable discussions
- provide a link to the Community Wildfire Resiliency Planning process
- The development of a Regional FireSmart Committee would include local governments, First Nations, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, and forest license holders.

- Regional FireSmart Committees are partners in the planning and implementation of CRI activities:
  - coordinated FireSmart educational and assessment programs
  - links with ministry staff regarding fuel treatments
- Regional FireSmart Committees provide a key level of collaboration and organization:
  - scalable to local government needs as BC has variable wildfire threat, local capacity, spatial arrangement of communities
  - Eligible activity under CRI – Interagency Co-ordination



- Suggested participants
  - local government and First Nation representatives
  - BC Wildfire Service, Emergency Management BC, and natural resource district staff
  - fire departments
  - active emergency advocacy groups

# PLANNING AND PRESCRIBING FUEL MANAGEMENT TREATMENTS



Goals for managing hazardous vegetation fuels on the landscape include creating fire-resilient ecosystems and contributing to the creation of fire-adapted communities:

- From a human life and safety perspective:
  - Reduce fire behaviour so that it is **safer and easier for firefighters to suppress wildfires** and help mitigate negative impacts in the wildland urban interface (WUI).
  - Focus on creating [FireSmart](#) communities and infrastructure located in the WUI, to reduce the likelihood of structures igniting and to minimize catastrophic impacts of wildfire events.
- From a resiliency perspective:
  - Reducing fire severity so that it is more likely that areas of forest will survive, soil damage will be limited and post-fire restoration activities will be minimized.
  - Restoring the natural cycle of fire-maintained grassland and dry forest ecosystems.



# OPPORTUNITIES



- Open Burning Smoke Control Regulation (OBSCR) burning under a “*plan for Community Wildfire Risk Reduction*”
- fuel reduction treatments in more areas, through the increased use of forest licensees and mechanical treatments
- using prescribed fire to meet ecological and fire management objectives
- developing scalable plans that meet the needs of local communities and ties into Crown Land Wildfire Risk Reduction plans and implementation

**QUESTIONS?**