## District of Wells Community Wildfire Resiliency Plan 2022



Photo Credit: Louis Orieux

## Presented by: Louis Orieux (RPF)



B.A. Blackwell & Associates Ltd.



## <u>CWRP – Purpose and Goals</u>

#### Purpose:

- To identify and update the wildfire risk specific to Wells' Wildland Urban Interface (WUI),
- to describe the potential consequences of wildfire to the community, and
- to examine options and strategies to reduce the wildfire risks.

#### Goals:

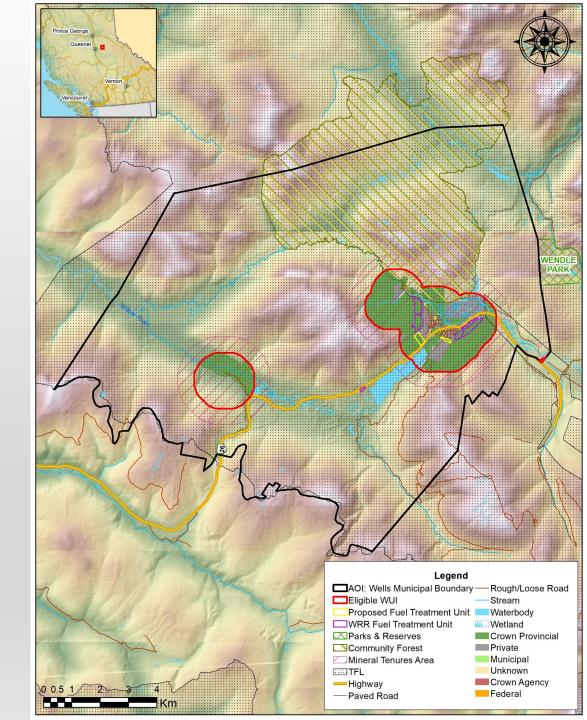
- For the District of Wells to use the CWRP as a framework to inform the implementation of specific actions and strategies (based on the 7 FireSmart principles) to:
  - 1) Increase the effectiveness of fire suppression and emergency response,
  - 2) Reduce potential impacts and losses to property and critical infrastructure from wildfire, and
  - 3) Reduce wildfire behaviour threats within the community.



## Eligible Wildland Urban Interface (WUI)

#### (Map 1 in CWRP document)

The eligible WUI represents a 1 km buffer surrounding a structure density of six or more structures per square kilometre within the area of interest. This designates the scope of the CWRP.



#### Wildfire Behavior

(Map 5 in CWRP document)

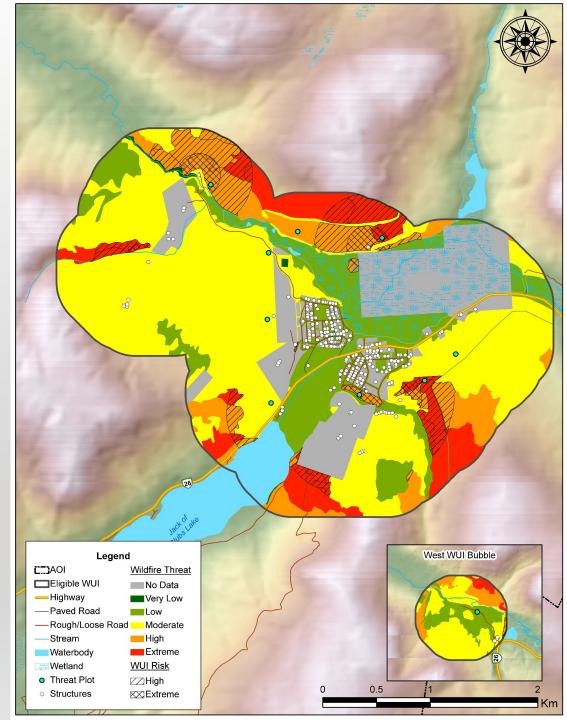
The local wildfire threat assessment process incorporates several key steps and factors in its analysis. These include:

- Updated fuel types from field assessments,
- proximity of fuels to the community,
- analysis of fire spread patterns, and
- consideration of topography

Fire behaviour threat for the assessable area of Wells' WUI is determined as being (by area):

- 21% = Low or Very Low
- 44% = Moderate
- 21% = High or Extreme

Note: CRI grant funding does not allow for assessment of private property, which constitutes 14% of the WUI's land base.



## Summary of Key Recommendations & Objectives

Wells should look to mitigate its highest risk factors (vulnerabilities) while also building upon its existing strengths (resilience) factors:

Vulnerability	Resilience
<ul> <li>Forest interface edge on leading wind edge</li> <li>Structures (older and newer) wood or vinyl siding</li> <li>Wood piles against or within 10m of home</li> </ul>	<ul> <li>- Hydrants</li> <li>- Relatively flat topography of developed area</li> <li>- Metal roofs</li> <li>- Urban vegetation largely low in fire hazard</li> <li>- Municipal properties mostly maintained</li> </ul>
<ul><li>- Small lots = structures very close together</li><li>- Isolated community</li></ul>	vegetation - Large wetlands and lakes provide natural
	fire breaks



## Summary of Key Recommendations & Objectives

#### Since:

- 1) The majority of the WUI is dominated Crown land with conifer and mixed wood forests that can carry fires, and
- 2) Structures on the edge of the small community are almost all forest interface;

And understanding the inherent limited capacity/manpower of small municipalities, such as Wells...

A focus on:	FireSmart <sup>™</sup> education	FireSmart home and infrastructure management
	Cross-Training and Emergency Planning	Implementing Fuel Treatment Units

... are the most important factors towards people, structures, and homes surviving a wildfire event in Wells.



#### **Education**

#### **Targeting Visitors/Tourists:**

 Purchase and install Fire Danger Rating signs for major highway entrances/exits to Wells (i.e., both ends of Highway 26/Barkerville Highway).

#### <u>Targeting Residents:</u>

 Launch a FireSmart social media campaign targeting platforms and online community groups used by Wells' residents.



# Legislation, Planning, and Development Considerations

#### <u>Water</u>

- Conduct a water supply analysis to determine how long 'fire flows' can be maintained on the existing system, even in 'peak drought scenarios' and high-use periods.
  - Explore opportunities to increase the Wells water reservoir capacity as required.

#### **Development**

 Conduct a full review and update of the Wells OCP to imbed FireSmart principles within the stated objectives and policies and to guide future land use and development decisions through a FireSmart lens.



#### **Interagency Cooperation**

#### **Emergency Planners and Responders**

 Continue hosting Wells Emergency Management Committee meetings, incorporating recommended FireSmart, wildfire, and land managers as recommended for Community FireSmart and Resiliency Committee (CFRC) topics, discussions, and planning.

#### **Local Stakeholders and Industry**

 Engage with forest licensees within the WUI so that both harvesting operations and the future forest stand maintain or enhance wildfire resiliency, especially at interface edges/within Wells' WUI.



## **Cross-Training**

#### First Responders

- Support WVFB in obtaining necessary wildfire equipment, and training with it.
  - Much of WVFB's current equipment was noted as being aging and unreliable.
  - Included in this is the acquisition of structural sprinkler protection units.

#### **Emergency Planners and Responders**

- Complete and participate in regular testing of, and updates to, the Wells Emergency Management Plan. Include yearly (pre-fire season is best) wildfire emergency simulation exercises.
  - Identify hazards, barriers to access (i.e., locked gates, tight or no turnarounds), and other response issues and develop measures to address them.



## **Emergency Planning**

#### Safe Access/Egress

- Mount/install acquired Emergency Evacuation signs.
- Work with the road permit holders of available resource road access/egress routes so that a minimum of one additional route is always kept in evacuationready condition during fire season.



## **Vegetation Management**

#### Residential scale FireSmart practices

Residential FireSmart Vegetation management refers to the removal, reduction, or conversion of flammable [landscaping] plants to create more fire-resistant areas surrounding homes and infrastructure.

- Complete FireSmart Home Ignition Zone (HIZ) assessments Wells received funding for.
- In conjunction with the FireSmart HIZ assessments, make residents aware of the rebate program Wells received funding for.



Graphic: FireSmart Canada (https://www.firesmartcanada.ca/mdocs-posts/firesmart-home ignition-zone-graphic/)

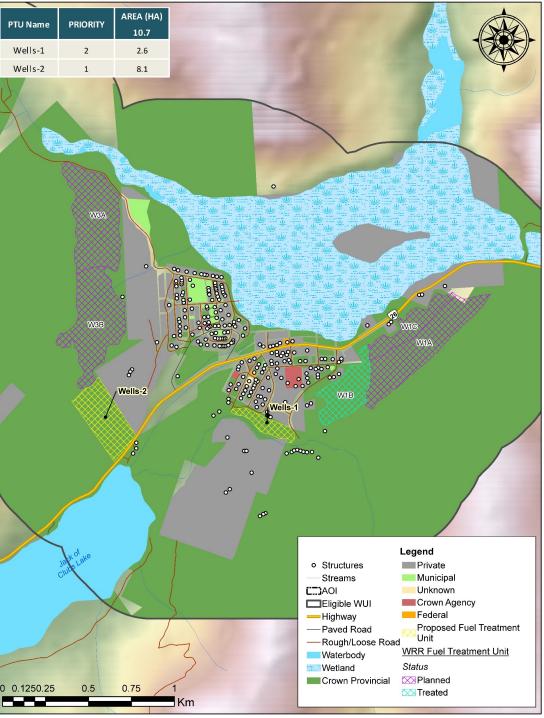


#### **Vegetation Management**

**Fuel Management Treatments** 

Proceed with detailed assessment, prescription development, and treatment of fuel treatment units identified and prioritized in this CWRP.





## **SUMMARY / CONCLUSION**

- 65% of Wells' assessable WUI has a moderate wildfire behaviour threat or higher. Despite Wells' fire season being short, the analyses presented and discussed throughout the CWRP document show that wildfire is a threat to the community
- The CWRP sets the stage for implementing important, relevant actions to increase awareness of wildfire risk and to increase Wells' wildfire preparedness and resiliency.
- Overall, a focus on
  - > FireSmart education,
  - FireSmart Home and Critical Infrastructure Ignition Zone management, and
  - Implementing planned and proposed fuel treatment units adjacent to the community

are the most important factors towards people, structures, and homes surviving a wildfire event in Wells' WUI.



## Thank you!



