Village of Belcarra Community Wildfire Resiliency Plan

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Wildfires in British Columbia

Wildfire seasons in BC over the past two decades have increased in numbers of ignitions and burned area. This is the result of two significant factors:

- Increases in fuel loads associated with long-term fire suppression, insects and disease; and
- A period of increasing drought during the fire season.

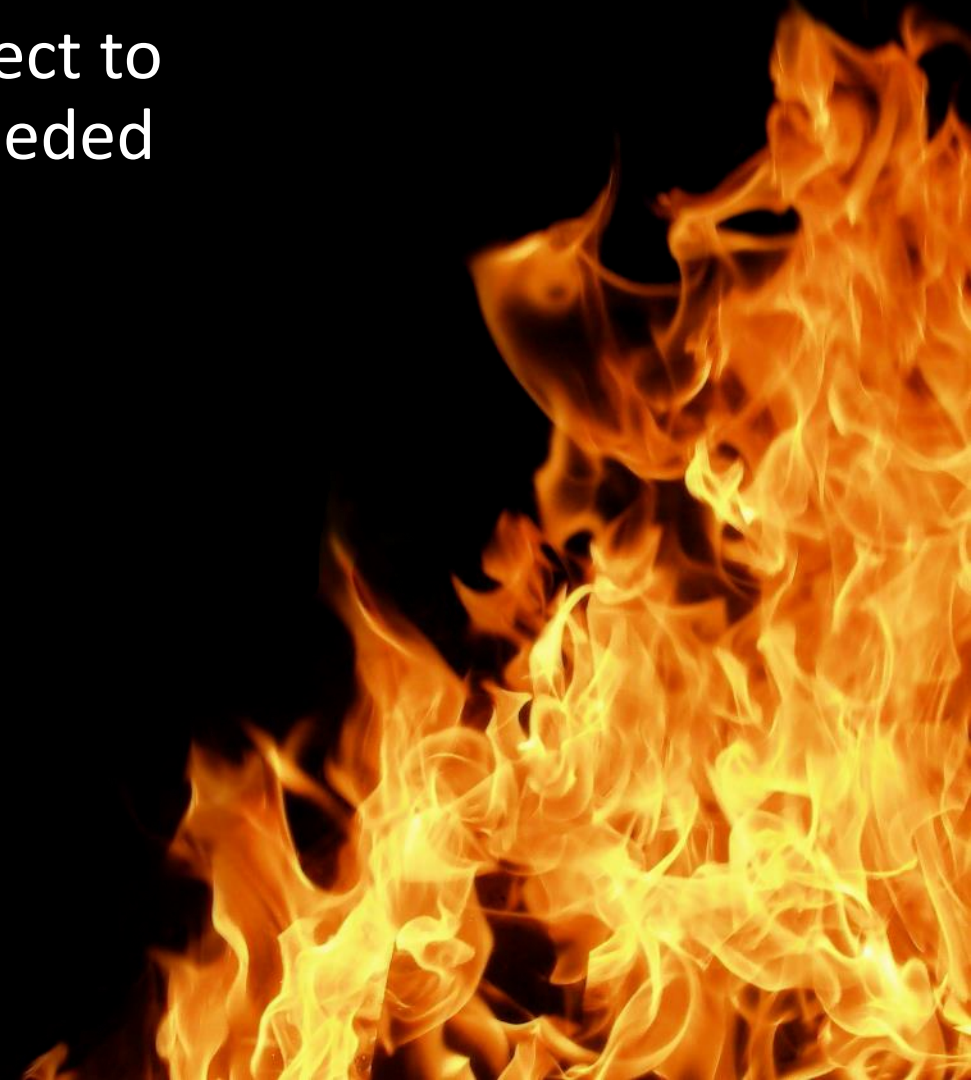Coastal communities are among those facing **increasing risk from wildfire.**

Belcarra Community Wildfire Resiliency Planning

- B.A. Blackwell & Associates Ltd. has been retained to develop a Community Wildfire Resiliency Plan (CWRP) for the Village of Belcarra

- The first CWPP for Belcarra was developed in 2008 and required an update

- As of 2020, CWPPs will transition to 'CWRPs'- Community Wildfire Resilience Plans. CWPPs/CWRPs remain valid for 5 years

- The goal of a CWRP is to:
  - **Identify the risk of wildfire to a community;**
  - **Aid communities in developing plans to improve safety; and**
  - **Reduce the risk of damage to property.**

- CWRPs are provincially funded (through UBCM CRI Programs) and are approved by the local government council
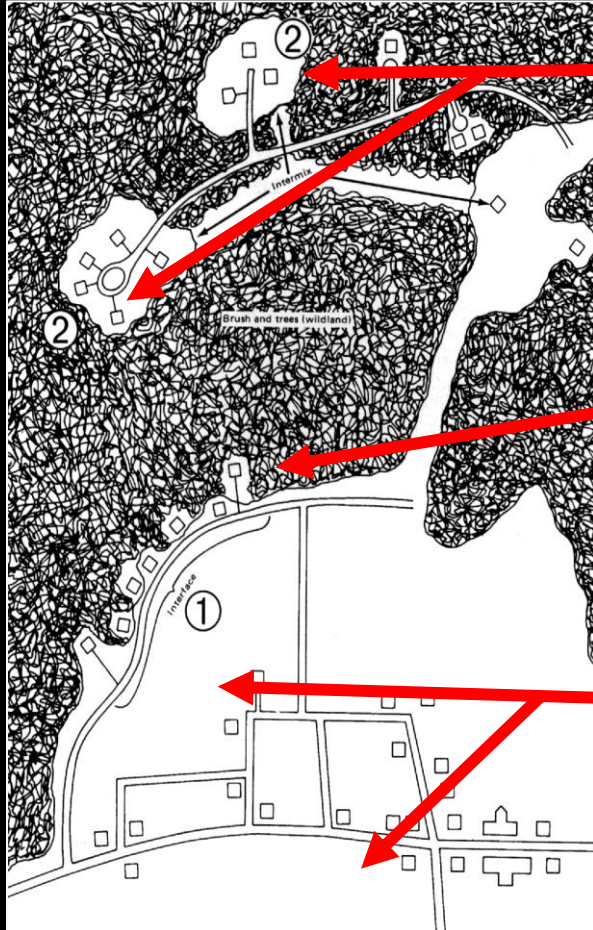
B.A. Blackwell & Associates

The Risk from Wildfire

- Greater consideration and due diligence with respect to fire risk in the wildland urban interface (WUI) is needed

  - How does fire threaten the WUI?

Wildland

Fire Threat…   ↓ ↑

Community

Background

Intermix
Isolated developments embedded within the forest

Interface
Where the "forest meets the community"
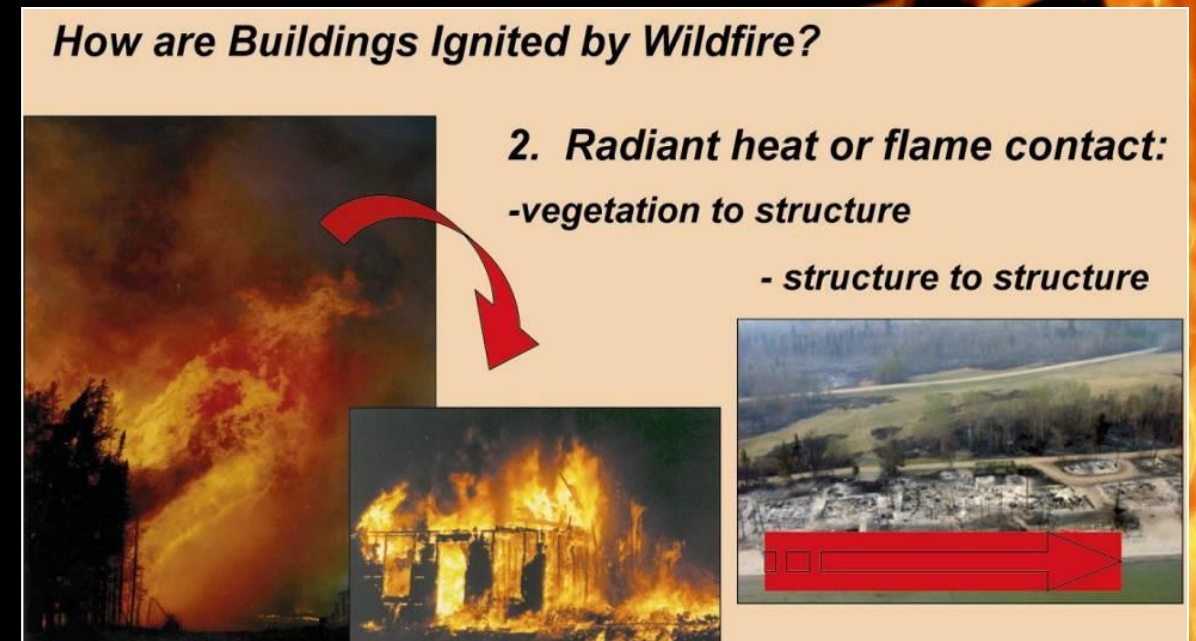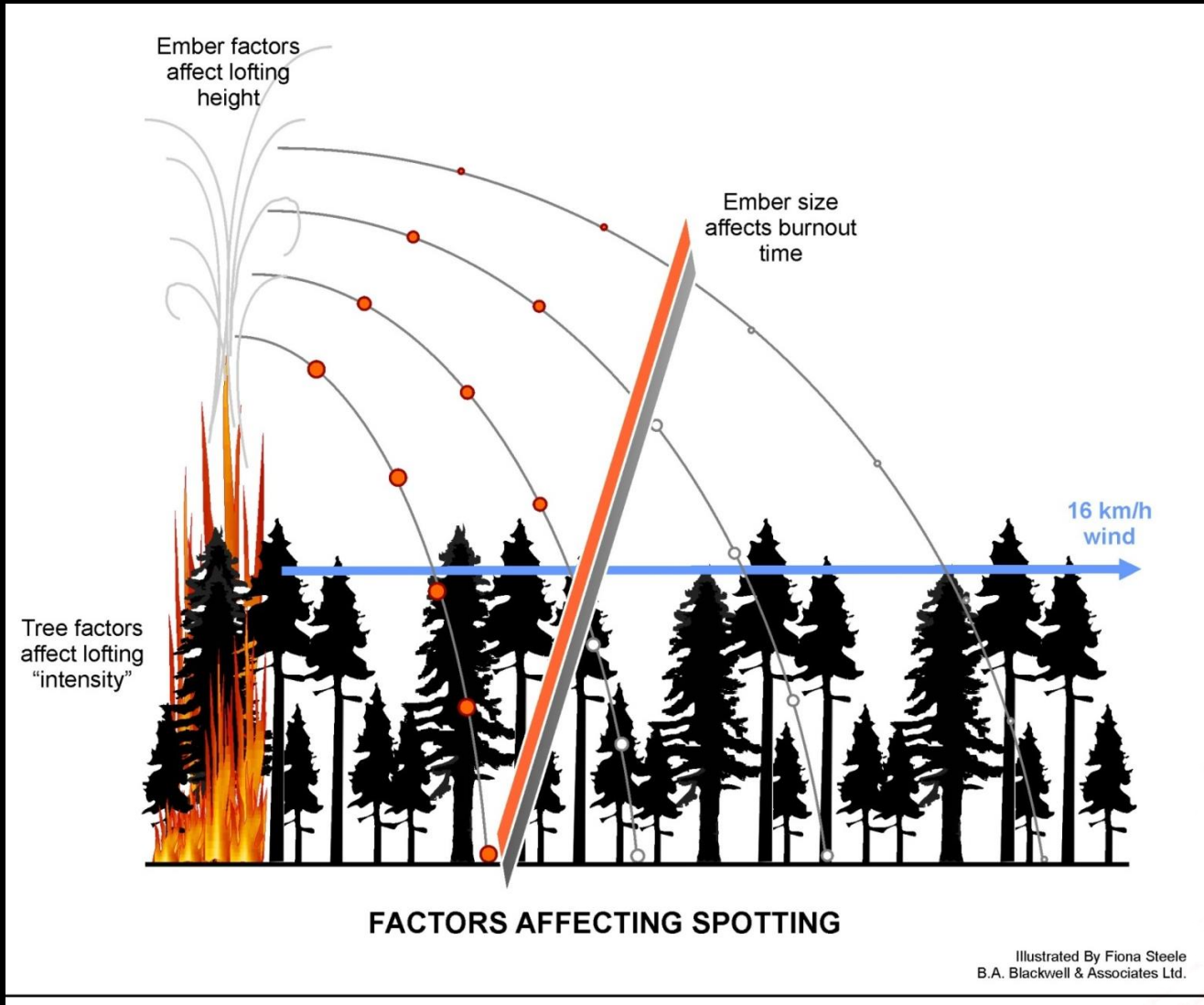
Spot Fire Risk

Background

Firebrand caused ignitions

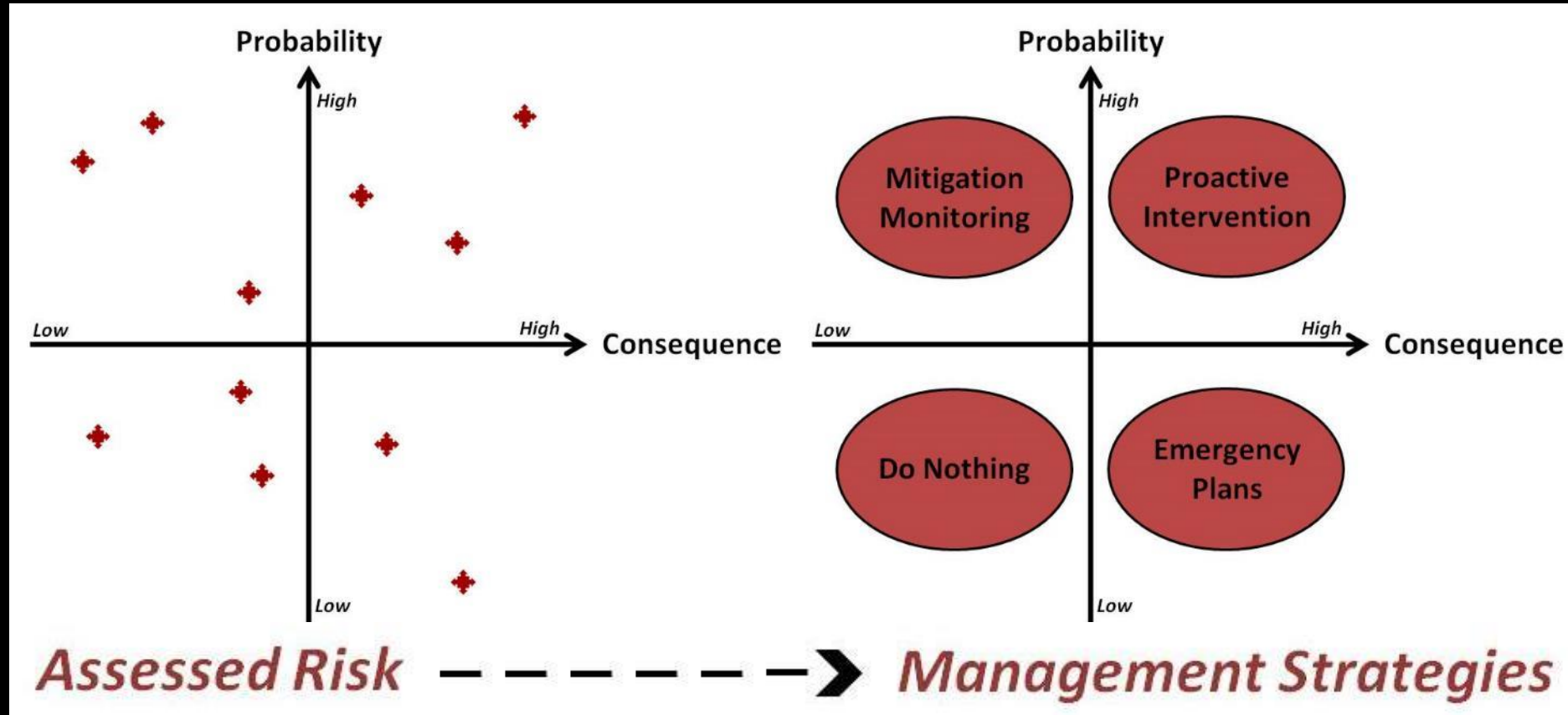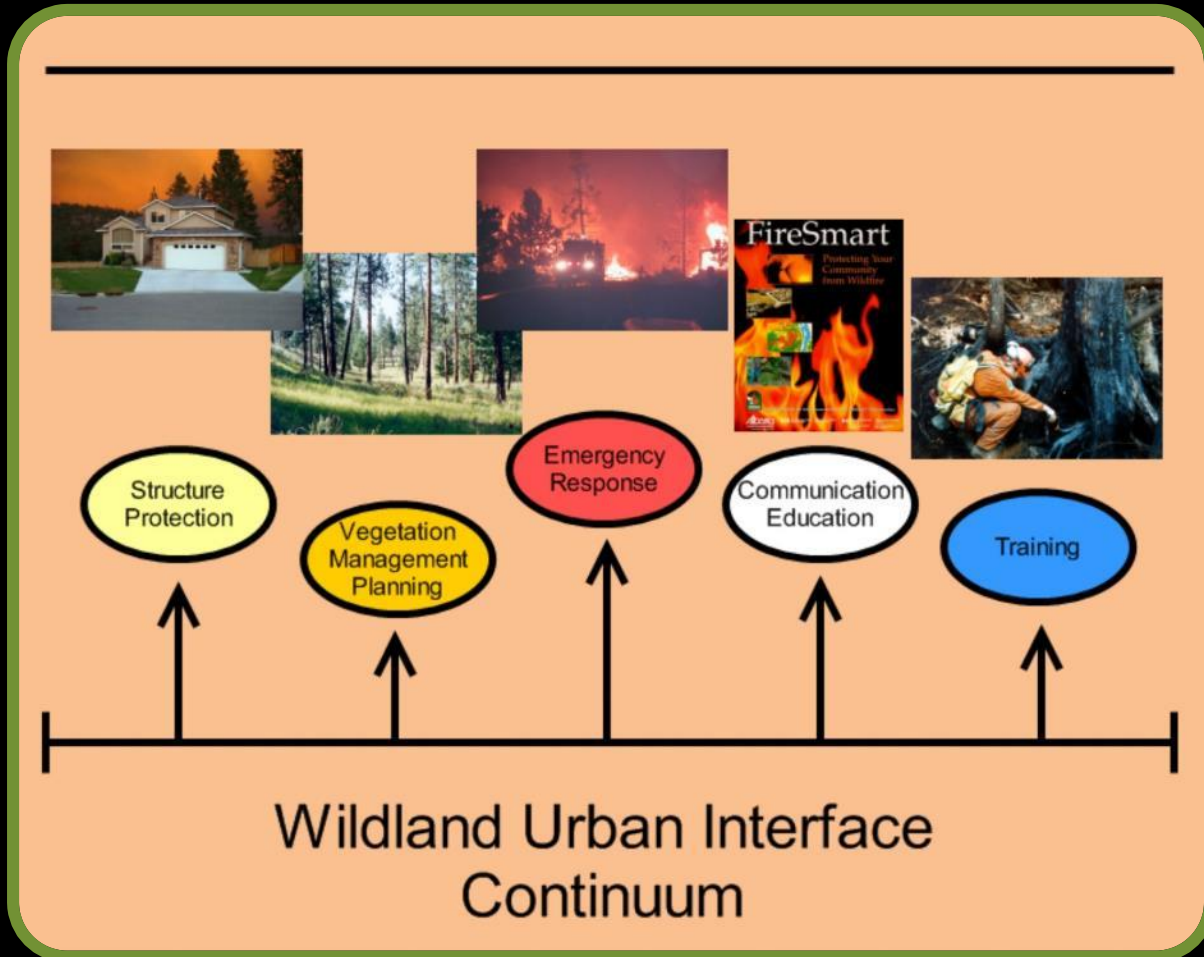Radiant heat/flame contact

Background - Fire Behaviour

Analyzing Risk

RISK

=

PROBABILITY x CONSEQUENCES

Planning to Manage Wildfire Risk
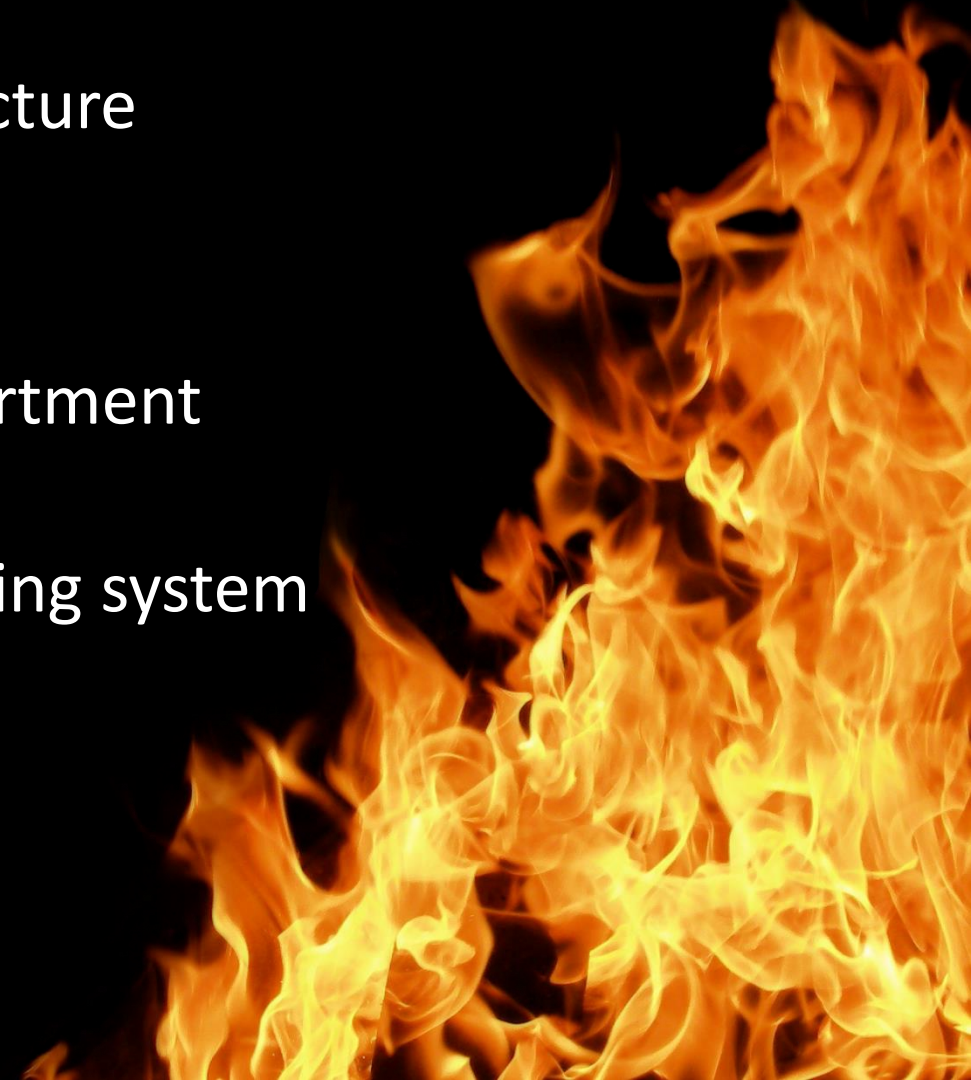
CWRP Plan Elements

- Structure Protection

- Fuel Management

- Emergency Response

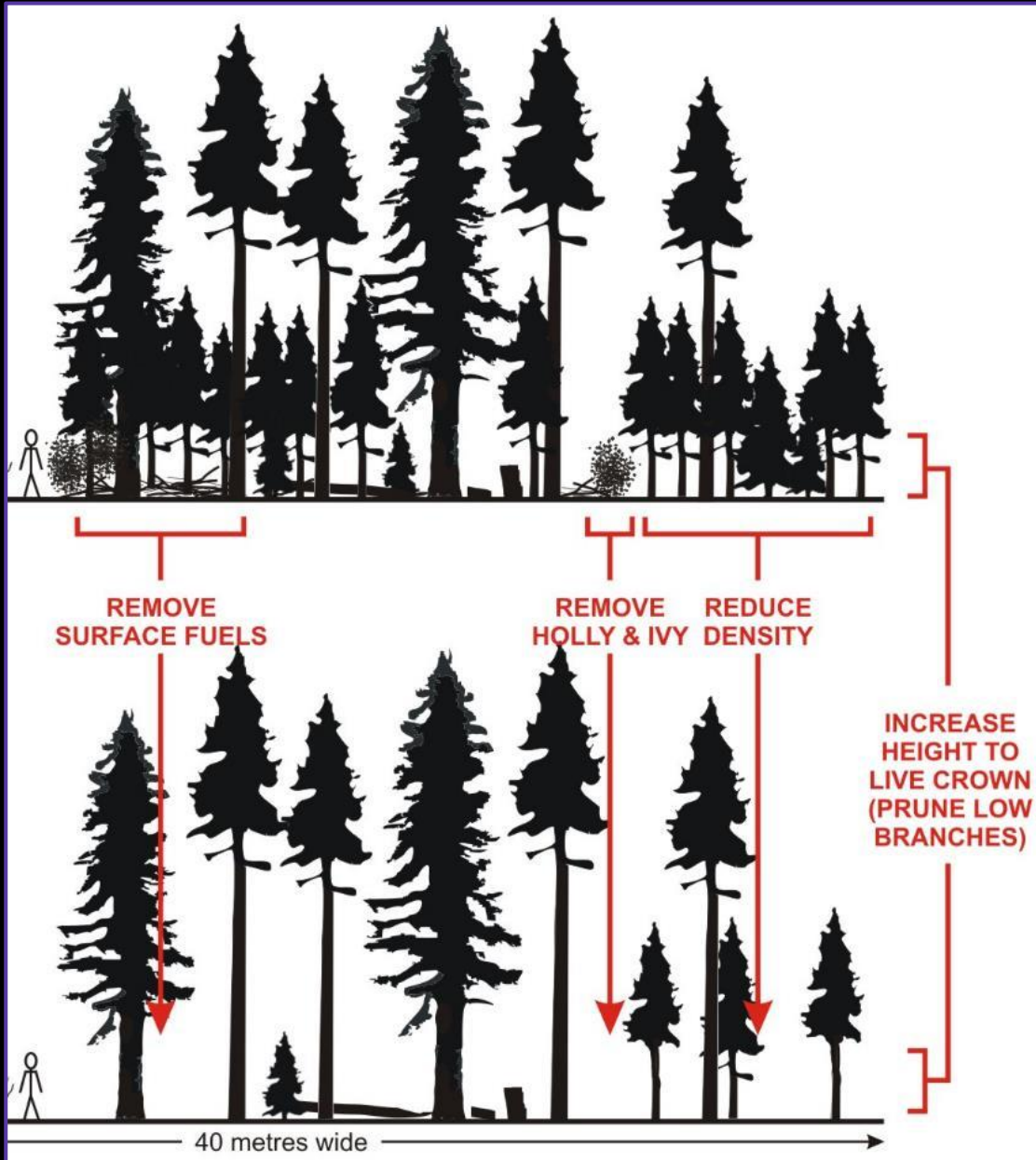- Communication / Education

- Training

2021 CWRP Focus

- Identification and Protection of Critical Infrastructure
- Identification of Key Evacuation Routes and Fuel Modification to improve public safety
- Comprehensive review of the Belcarra Fire Department Interface fire capability
- Review of water availability and flow of the existing system

2021 CWRP Focus

- Examination of 2008 implementation effectiveness

- Integrate community changes since 2008, such as:
  - New development
  - Changes in hazardous fuels on the landscape

- Identification of high hazard areas to prioritize for treatment

- Review of policies and bylaws affecting wildfire risk

Vegetation Management

Before Treatment

After Treatment

REMOVE
SURFACE FUELS

REMOVE
HOLLY & IVY

REDUCE
DENSITY

INCREASE
HEIGHT TO
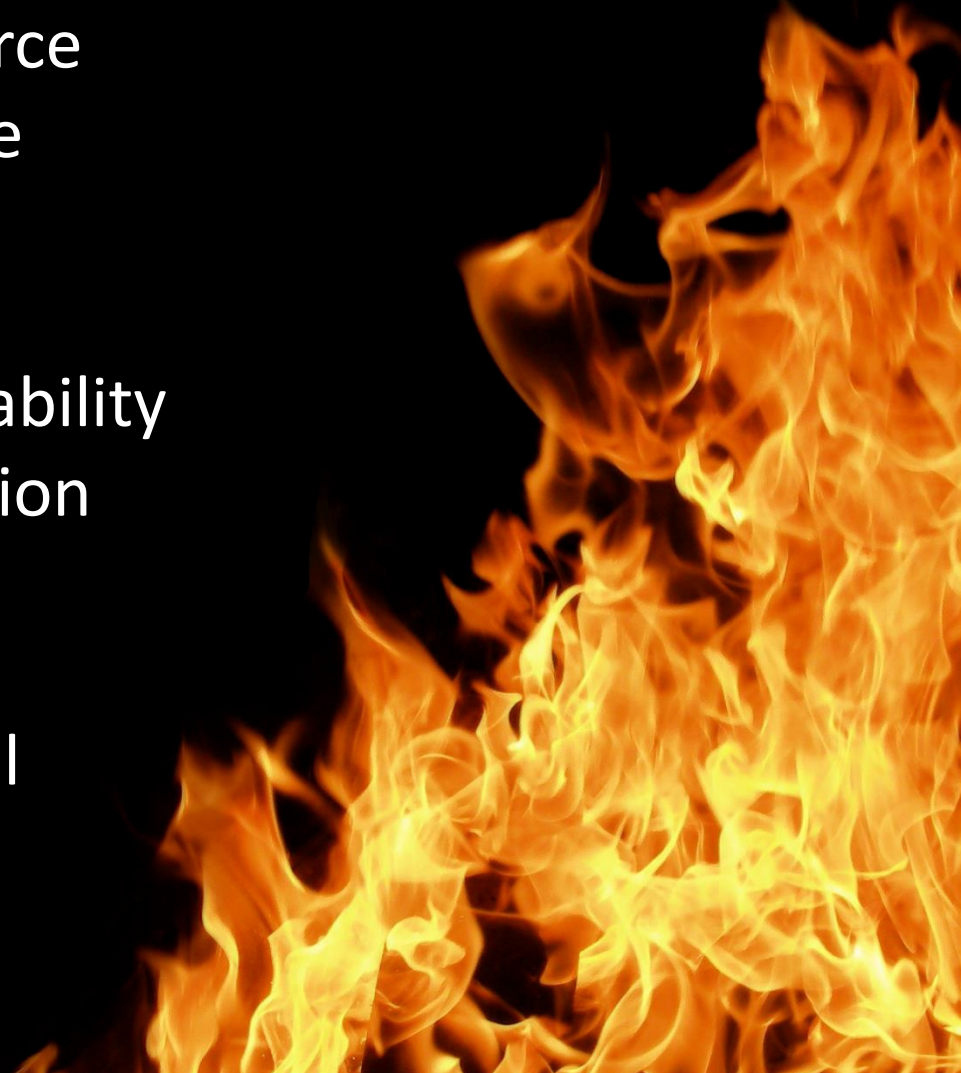LIVE CROWN
(PRUNE LOW
BRANCHES)

40 metres wide

Emergency Response

BC Wildfire Service resource availability may be scarce during emergency situations when multiple fires are burning in different areas of the Province

Local government preparedness and resource availability are critical components of efficient wildfire prevention and planning

Wildfire specific training opportunities for structural firefighters builds capacity for suppression and emergency management at the local level
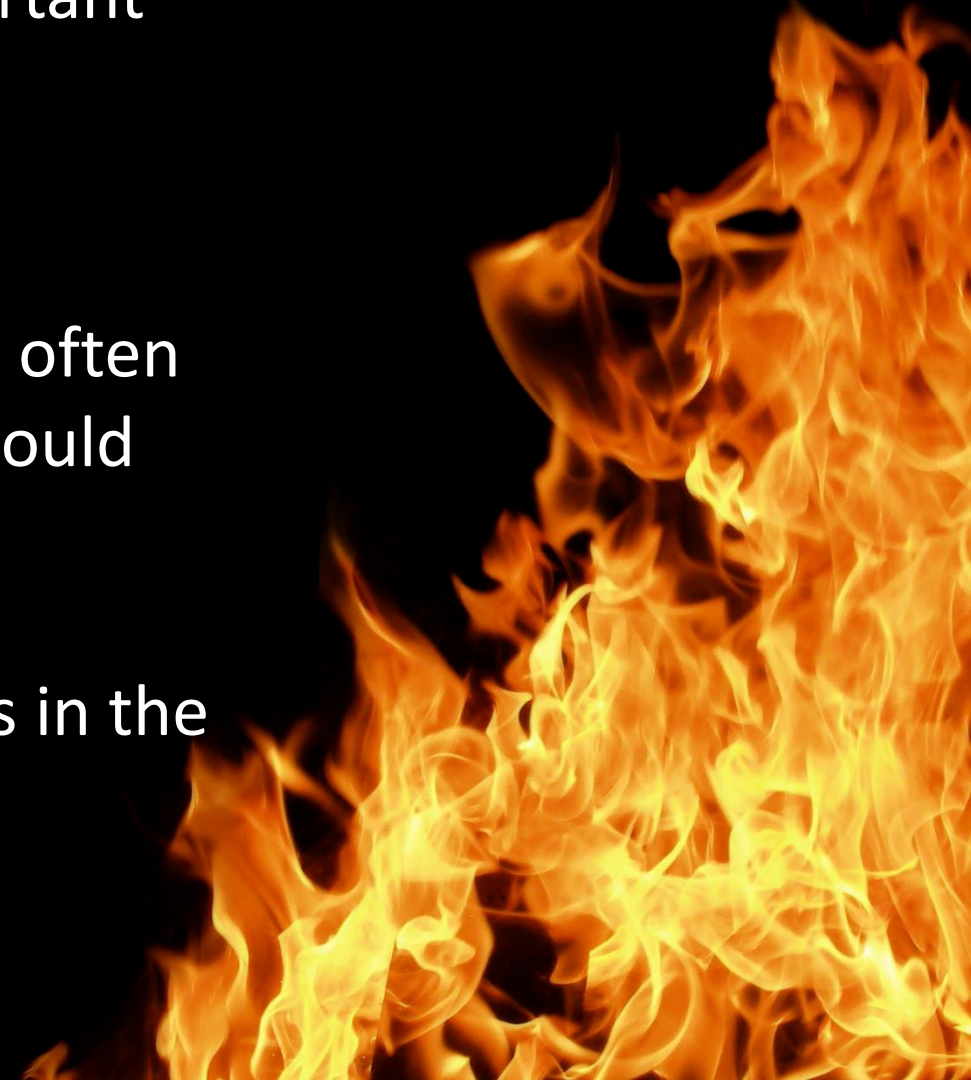
Access and Evacuation

Emergency access and evacuation planning is important in the event of a wildfire event or other large-scale emergency

Access and evacuation during a wildfire emergency often must happen simultaneously and road networks should have the capacity to handle both

Evacuation plans should outline basic contingencies in the event of a wildland/interface fire including

FireSmart

A set of principles, practices and programs for reducing losses from wildfire

- Two main avenues to FireSmart a structure:

    1. Change the vegetation type, density and setback from the building (vegetation management/landscaping); and
    2. Change the structure to reduce vulnerability of fire and the potential for fire to spread to or from a building.

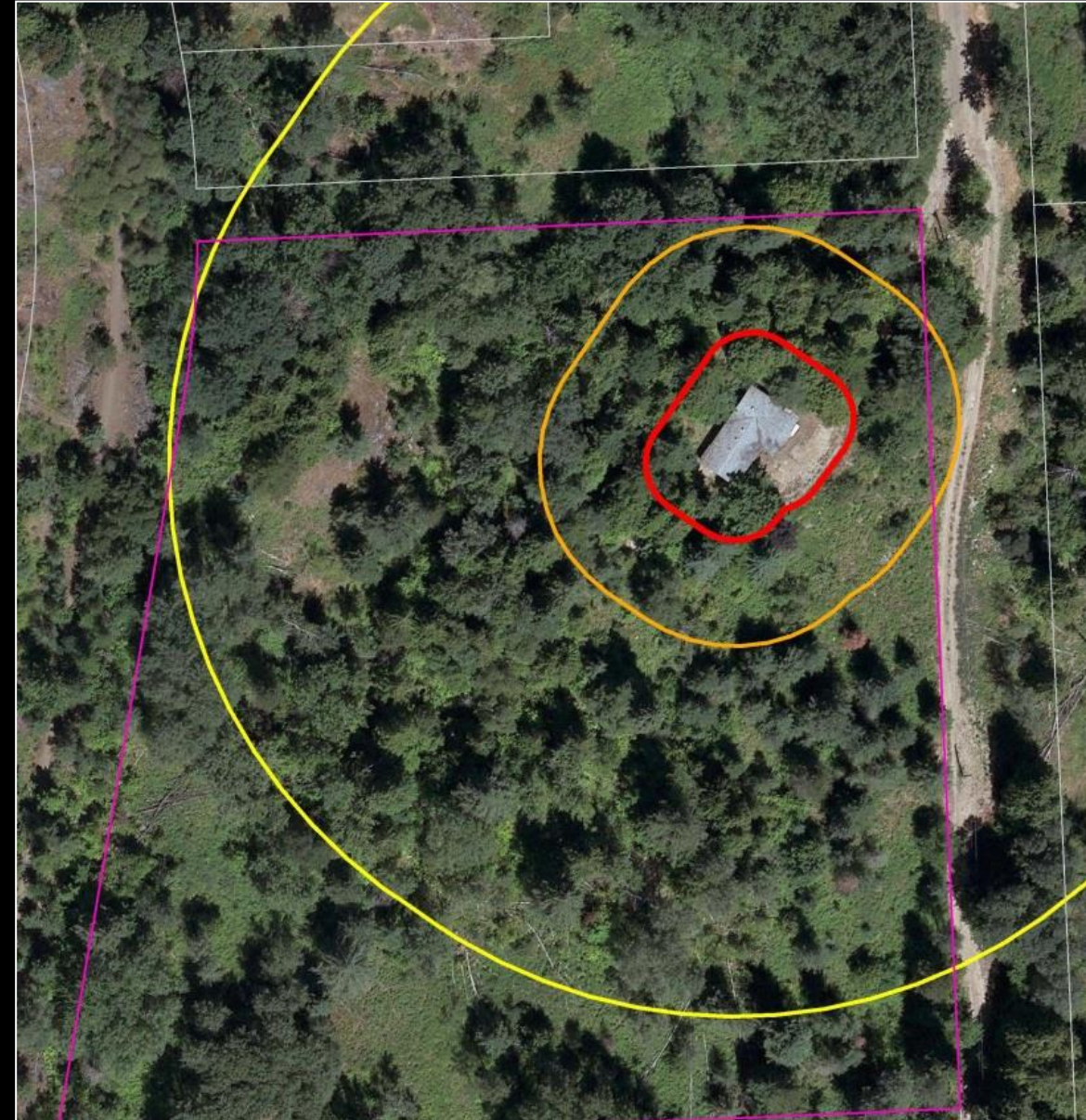# Structure Protection

Fire Priority Zone 1 (red)
- 10 m radius
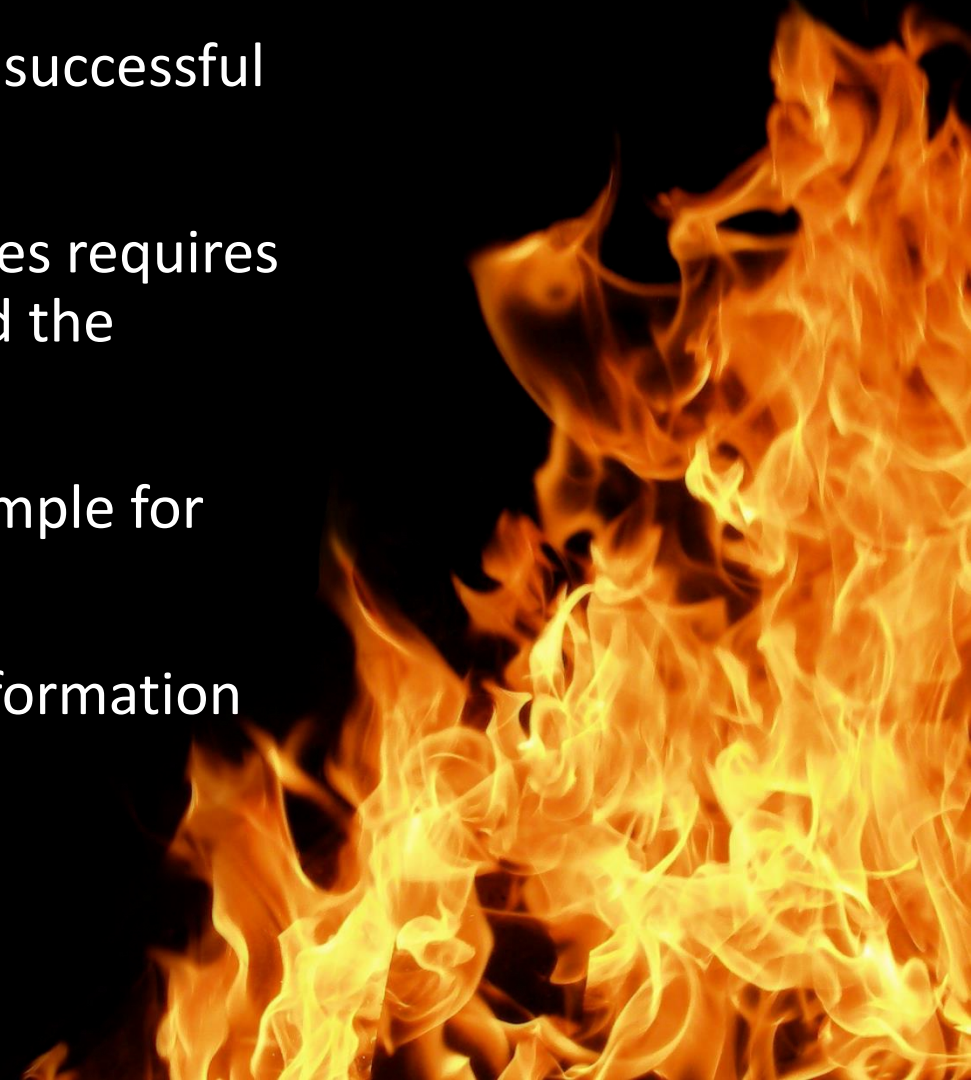
Fire Priority Zone 2 (orange)
- 30 m radius

Fire Priority Zone 3 (yellow)
- 100 m radius

Communication & Education

- Community education and engagement is a key aspect if successful wildfire risk mitigation

- Moving from the CWRP to the implementation of activities requires a community that is well informed of the reasons for, and the benefits of specific mitigation activities

- FireSmart educational material is readily available and simple for governments to disseminate

- Information needs to be supported by locally relevant information that illustrates the vulnerability of homes to wildfire

Thank you!
Questions?