



British Columbia's
Climate Change Adaption Action Plan
Wildfire Management Branch



Ministry of Forests, Lands and Natural Resource Operations



Report warns of soaring risk of 'mega-fires' in B.C.

Firefighting won't be enough to stop devastating fires; report calls for new emphasis on prevention

BY BETHANY LINDSAY AND LARRY PYNN, VANCOUVER SUN DECEMBER 4, 2014

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STORY

PHOTOS (1)



MORE ON THIS STORY

- Is there more to this story? We'd like to hear from you
- Not all fires are worth fighting



Jim McKeown · ★ Top Commenter

What a load of unquantified imaginary horseshit.

Reply · Like · 6 · Follow Post · Yesterday at 1:09am



Roger Craik · ★ Top Commenter · Maple Ridge, British Columbia

Right. The last time I checked all fires start out small. They'll just have to get to them quicker.

Reply · Like · 3 · Yesterday at 7:20am

A report warns that the province needs to emphasize clearing of brush and building of fire guards because firefighting alone cannot stop the severe fires that are becoming more common.

...threatening B.C. mills



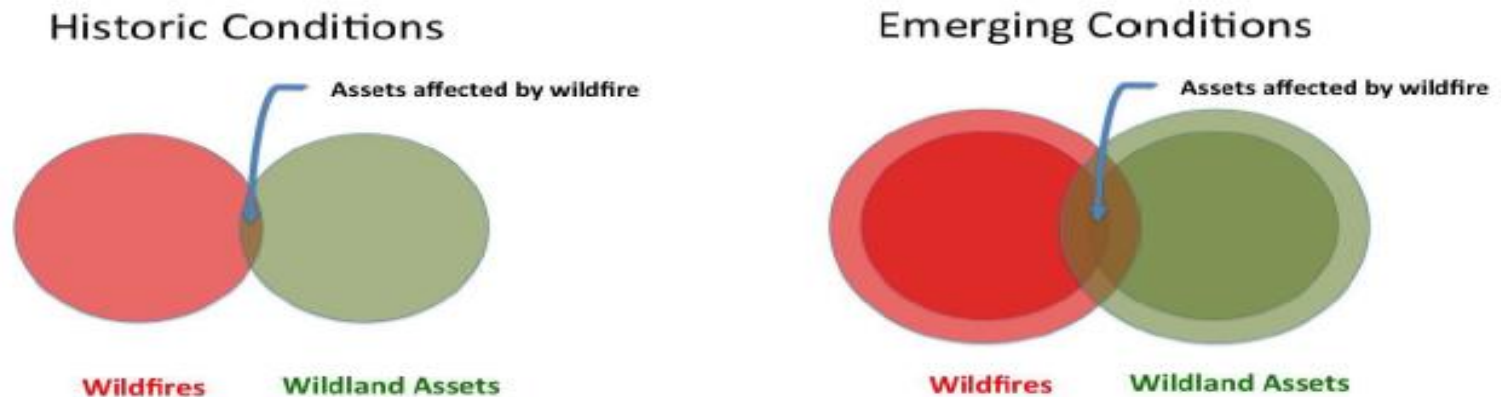
Agenda

- 1. Converging Challenges**
- 2. Climate Change Impacts**
- 3. Trends & Challenges in Wildfires**
- 4. BC's Climate Change Adaptation Action Plan for Wildfire Management**



Converging Challenges

- Longer fire season & more extreme fire days
- Wildfire incidence & severity increasing
- Increasing development in the forest- more values to protect
- Increasing forest fuel risk
- New mountain pine beetle forest fuel types showing 3x greater spread rate
- Cost of controlling wildfire and impacts increasing



Altered Fuel Type 18 million ha of Dead Pine Climate Change Forest Conversion to Grasslands

**CLIMATE
CHANGE**





Mountain Pine Beetle 3X spread rate of healthy stand





Increasing Assets With no Attention to Wildfire



BC Area Burned - Last 20 years

Av. Area Burned Projection - Next 20 Years

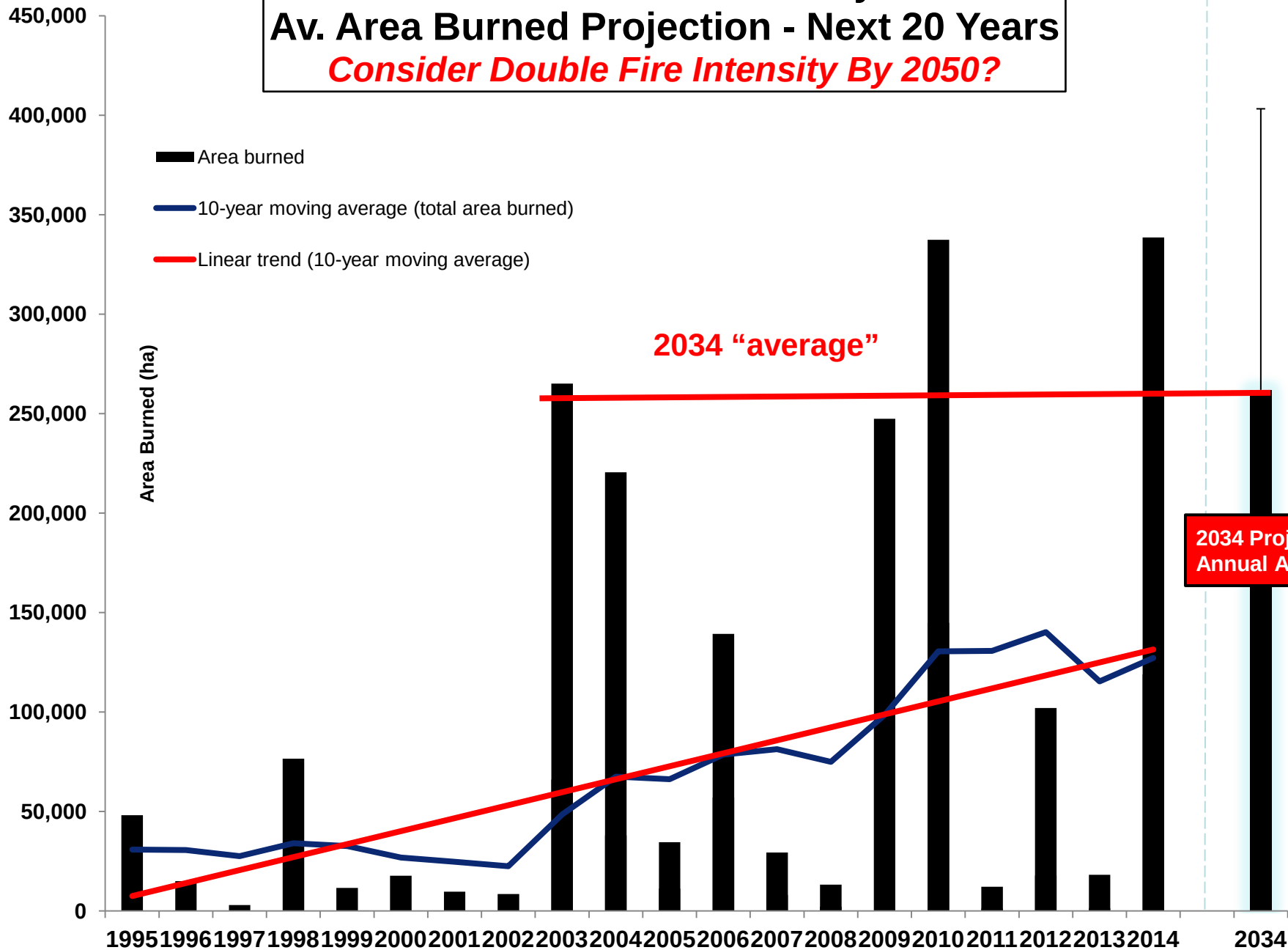
Consider Double Fire Intensity By 2050?

- Area burned
- 10-year moving average (total area burned)
- Linear trend (10-year moving average)

Area Burned (ha)

2034 "average"

2034 Projected
Annual Average





Wildfire Season 2014

- Provincially 1455 fires consumed 368 572 ha
 - 10 Year averages 1908 fires/ 141 092 ha
- Prince George Fire Center (Omineca/ NE Regions)
 - Total 557 fires/ 202 331 ha
 - Prince George Zone - 67 fires/ 162.4 ha
 - Robson Valley – 43 fires/ 86.1 ha
 - Vanderhoof – 44 fires/ 21 666.4 ha
 - Fort St James – 29 fires/ 1 823.9
 - Mackenzie – 35 fires/ 102 613.2 ha

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Climate Change Adaption Action Plan for Wildfire Management 2014 - 2024



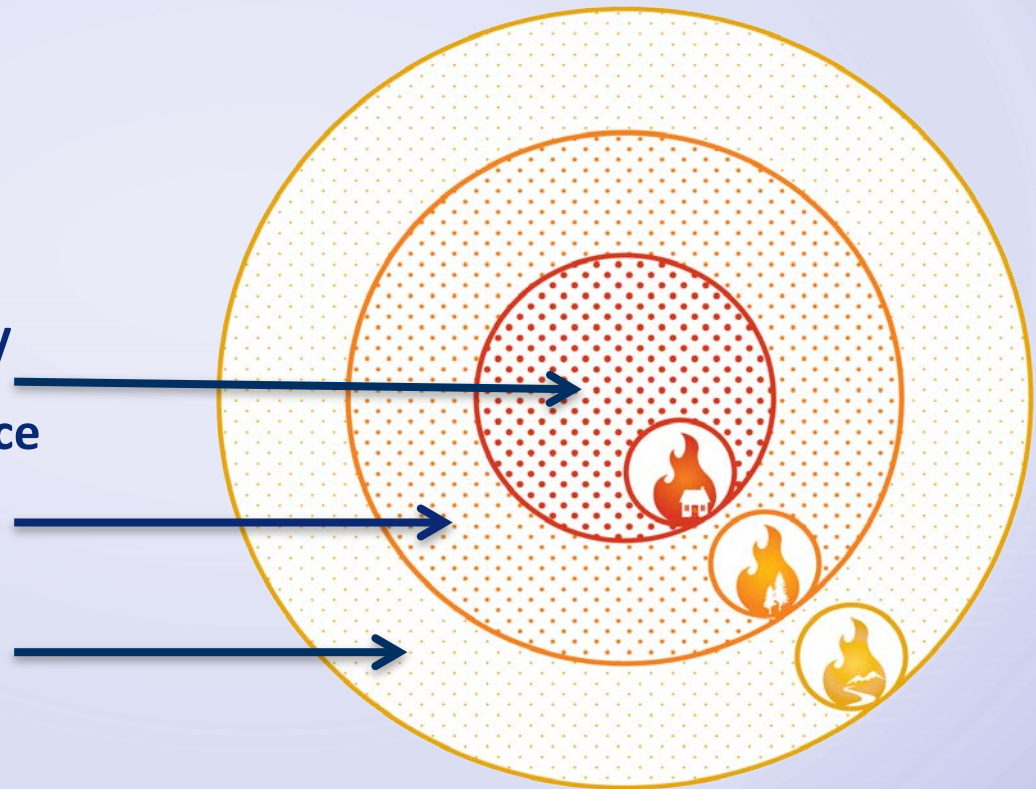
April, 2014



Key to Climate Change Adaptation Plan

Real Action Required at all Scales

- **Private Land & Property**
- **Wildland Urban Interface (WUI)**
- **Landscape Beyond the Interface**





Plans Goals and Objectives

Goal # 1: Wildfire Adapted Communities

Objective 1: Fire Planning & Management – The Private Lands Scale

Objective 2: Fire Planning & Management – The Community Scale

Goal #2: Wildfire Resilient Ecosystems

Objective 3: Fire Planning & Management – The Landscape Scale

Objective 4: Fire Management is Incorporated into all Land Management Decisions

Goal #3: World-class Wildfire Prevention, Response, and Suppression.



Goal # 1: Wildfire Adapted Communities

Objective 1: Fire Planning and Management – The Private Lands Scale

FireSmart Communities

- Reducing wildfire risk around homes & in communities
- Applying FireSmart to protect private lands & homes, critical infrastructure & communities
- Promote FireSmart Home Assessments
- Convene FireSmart workshops

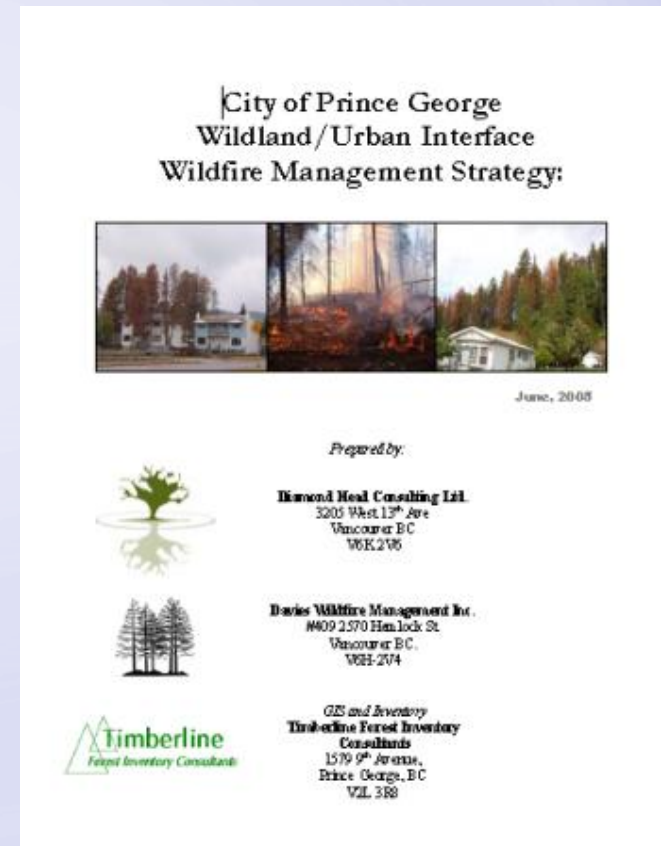




Goal # 1: Wildfire Adapted Communities

Objective 2: Fire Planning and Management – The Community Scale

- Local governments play lead role
- Identify wildfire risks & threats & proactively address issues before fires start
- Work at all levels to implement plan recommendations
- Local government planners/developers adopt FireSmart standards
- Building codes & bylaws ensure compliance
- Development approval permits reflect mandatory requirements
- Construction standards developed & enforced





Goal #2: Wildfire Resilient Ecosystems

Objective 3: Fire Planning and Management – The Landscape Scale

Objective 4: Fire Management is Incorporated into all Land Management Decisions

- Wildfire integrated into all resource management decisions
- Move to active management creating fire resilient landscapes to mitigate running crown fire
- Wildfire key driver in all land management planning, activities & authorizations
- Biggest opportunity & largest shift in business practices
- Wildfire not currently in the conversation





Goal #3: World-class Wildfire Prevention, Response, and Suppression

- **Reactive not proactive**
- **Expensive**
- **Not sustainable**





Quantifying Fire Threat on the Landscape

How do we do this at a landscape level?

- **Needs to be science based**
 - **Fuel**
 - **Weather**
 - **topography**
- **Repeatable for “what if” scenarios**
- **Makes sense!!**



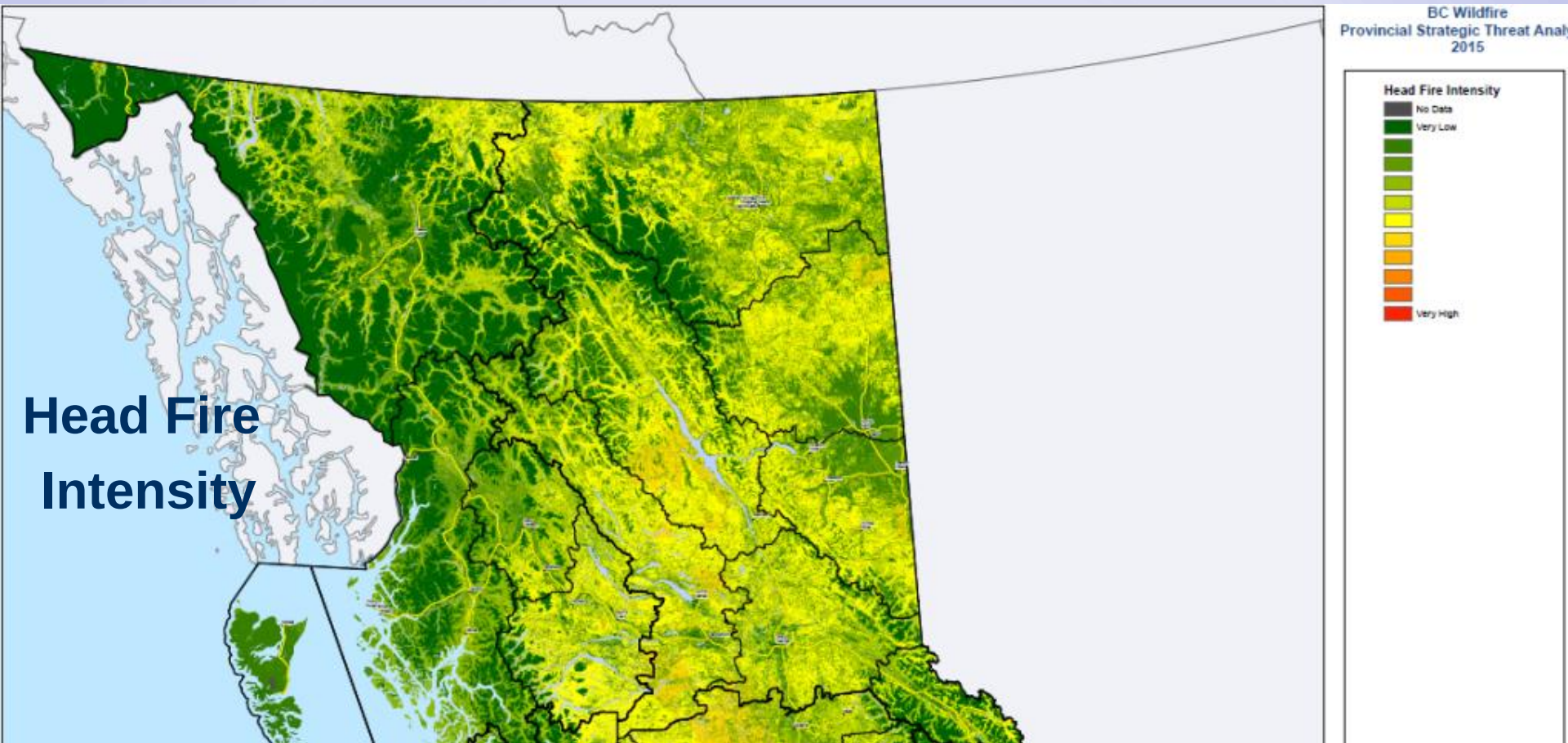
Quantifying Fire Threat on the Landscape

What can we do with this Threat mapping?

- **Once areas of threat are identified**
 - **FireSmart tenuring**
 - **Fuel Management plans**
 - **Forest investment placement**
 - **Stakeholder involvement**

“Working toward a fire resilient landscape”

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Measured in kW/m of flaming front $I = HWR$



“Potential of a 50m pixel being affected by a burning ember”

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P.S.T.A.

BC Wildfire Provincial Strategic Threat Analysis 2015

Wildfire Threat



WMB Fire Centres WMB Zone Boundary
Highway

Data Sources and Notes:

The 2015 British Columbia Wildfire Strategic Threat Analysis is comprised of the following data layers:

- Wildfire Threat
- Forest Fire History
- Climate Change
- Population Density

The primary data inputs include:

- BC Forest Inventory
- BC Forest Inventory
- BC Forest Inventory

BC Forest Inventory

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Questions & Discussion



Thank You!



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<http://bcwildfire.ca/>

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