

British Columbia's Strategic Wildfire Prevention Initiative Program, Costs and Variables

Wildland Fire Canada 2012 – Kananaskis, Alberta

Presented by: Lyle Gawalko
Manager - Fire Management
BC Wildfire Management Branch



Ministry of
Forests, Lands and
Natural Resource Operations

Presentation Overview

- 1. Introduction to the BC Strategic Wildfire Prevention Initiative**
 - Key program elements and how it works from the Strategic to the Operational level
- 2. Discuss the initiative costs and how they are apportioned**
- 3. Discuss the initiative successes and challenges**

BC Strategic Wildfire Prevention Initiative –Key Elements

- Province and Partners lead Strategic Program Implementation (Union of BC Municipalities, First Nations Emergency Services Society, BC Wildfire Management Branch);
- Initiative is cost shared with Provincial/Federal governments, local governments and First Nations based upon defined cost share ratio's;
- Local government/First Nation community responsible to develop community wildfire prevention plans and prescriptions and implement treatments;
- Initiative to address high and extreme risk areas as a priority;
- Initiative to build community participation/engagement and ownership at a local level.

BC Strategic Wildfire Prevention Initiative

Canadian Wildland Fire Management Strategy

(National)

British Columbia Wildland Fire Management Strategy

(Provincial)

Provincial Fuel Management Working Group

- Union of BC Municipalities - Administration
- Wildfire Management Branch - Technical Review
- First Nations Emergency Services Society - Technical Review/Admin support

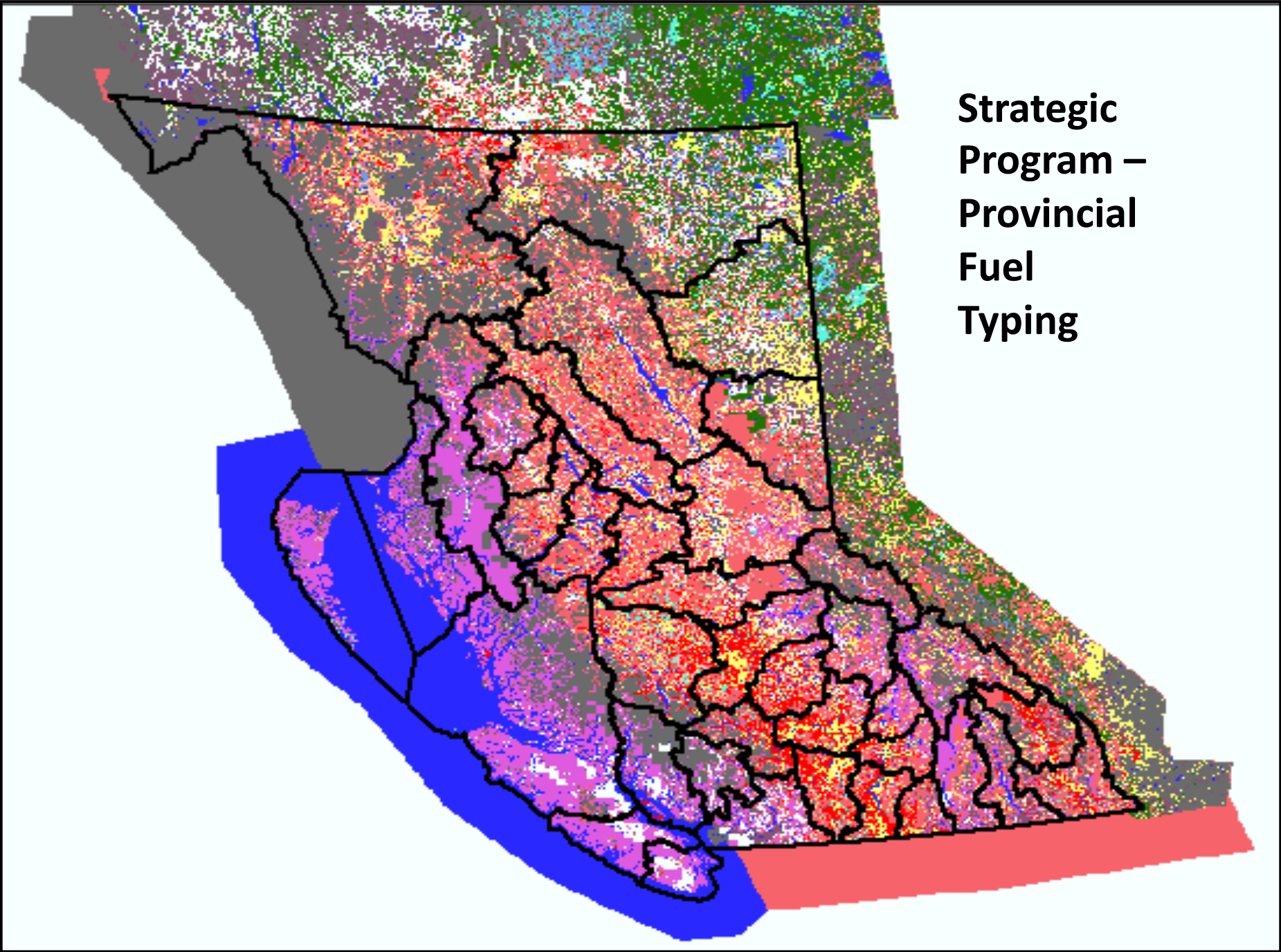
First Nations Communities

Incorporated Municipalities and
Local Communities

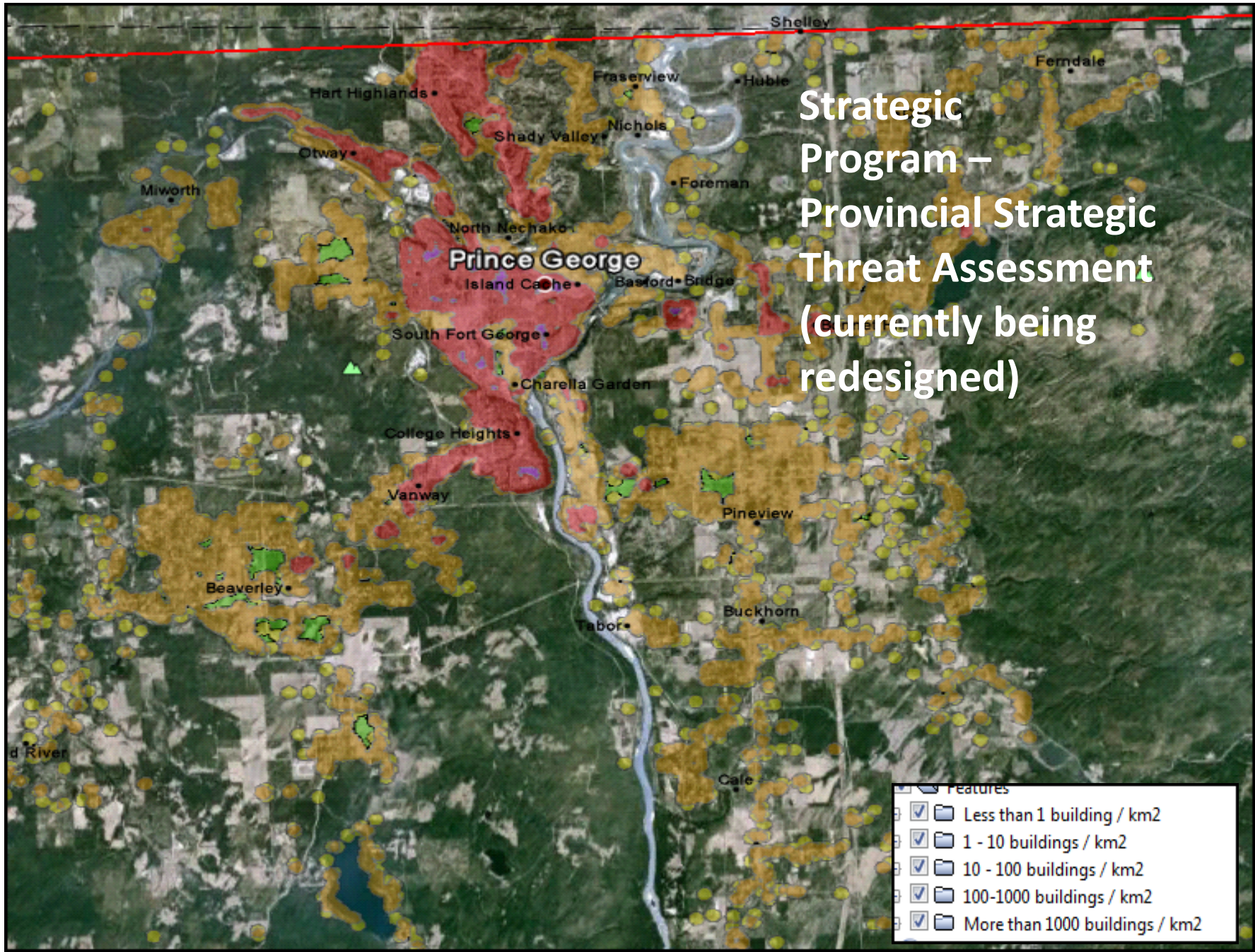
Regional Districts

Forest Management Contractors (Forest Professionals)

**Strategic
Program –
Provincial
Fuel
Typing**



**Strategic
Program –
Provincial Strategic
Threat Assessment
(currently being
redesigned)**



Strategic Program – Interface Threat Assessment

Rating Interface Wildfire Threats in British Columbia



SUBMITTED TO:

Mike Dittaro
Ministry of Forests and Range
Protection Branch

April 22, 2008
updated April 6, 2010



DEVELOPED BY:

Bruce Morrow, RPF
Bruce Morrow Forest Consulting Ltd.



Kelly Johnston, WFBS, FIT
Wildland Solutions



John Davies, RPF
Davies Wildfire Management Inc.



**Local
Government -
Community
Wildfire
Protection Plan**

**Thompson-Nicola Regional District
Community Wildfire Protection Plan**



Submitted to:

Terry Kress
Development Services – TNRD
FINAL - March 22, 2008



Submitted by:

John Davies, RPF
Davies Wildfire Management Inc
Mike Coulthard, RPF, RPBio
Diamond Head Consulting Ltd
Nick Zukanovic
Timberline Natural Resource Group Ltd
Bruce Morrow, RPF
Bruce Morrow Forest Consulting Ltd



Treatment Options

- Harvesting & commercial thinning,
- Thinning and pruning,
- Under-burning,
- Shaded fuel break,
- Mulching and chipping,
- Large scale fuel breaks,
- Energy/bio-fuel use



Examples: Treatment



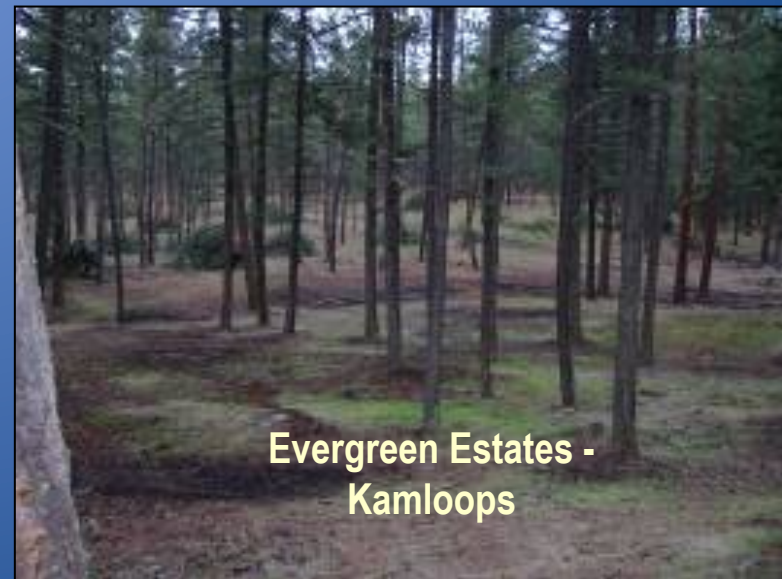
Moore's Meadow Park – Prince George



Rainbow Park – Prince George



Mt Robson Provincial Park



Evergreen Estates - Kamloops

Cost Share Ratios

- **Community Wildfire Protection Plans:** 50% SWPI and 50% Community Contribution
- **Prescriptions:** 75% SWPI and 25% Community Contribution
- **Demonstration Projects:** 75% SWPI and 25% Community Contribution
- **Operational Projects:** 90% SWPI and 10% Community Contribution for the first \$100,000; and, 75% SWPI and 25% Community Contribution for the remaining up to a maximum of \$400,000 annually per local government



COSTS INCREASE

What Does it Cost ?

Community Wildfire Prevention Plans (\$5 – \$15 K) : Average \$8K

- Size of plan – from small Municipality to a Regional District

Prescriptions (\$246 - \$703/ha) : Average \$400/ha

- Size and complexity of prescription area
- Requirement for local stand information/inventory
- Public consultation

Treatments (\$2797 – \$15,599/ha) : Average \$9640/ha

- Size and complexity of treatment area – terrain, stand type
- Treatment method – hand vs mechanical
- Ability to offset costs with merchantable timber
- Volume of debris and disposal method (air quality issues)

Average Treatment cost as \$9640/ha – community contribution (10%) = \$8676/ha

Prescription: \$400/ha – community contribution (25%) = \$300/ha

Total: \$8976/ha

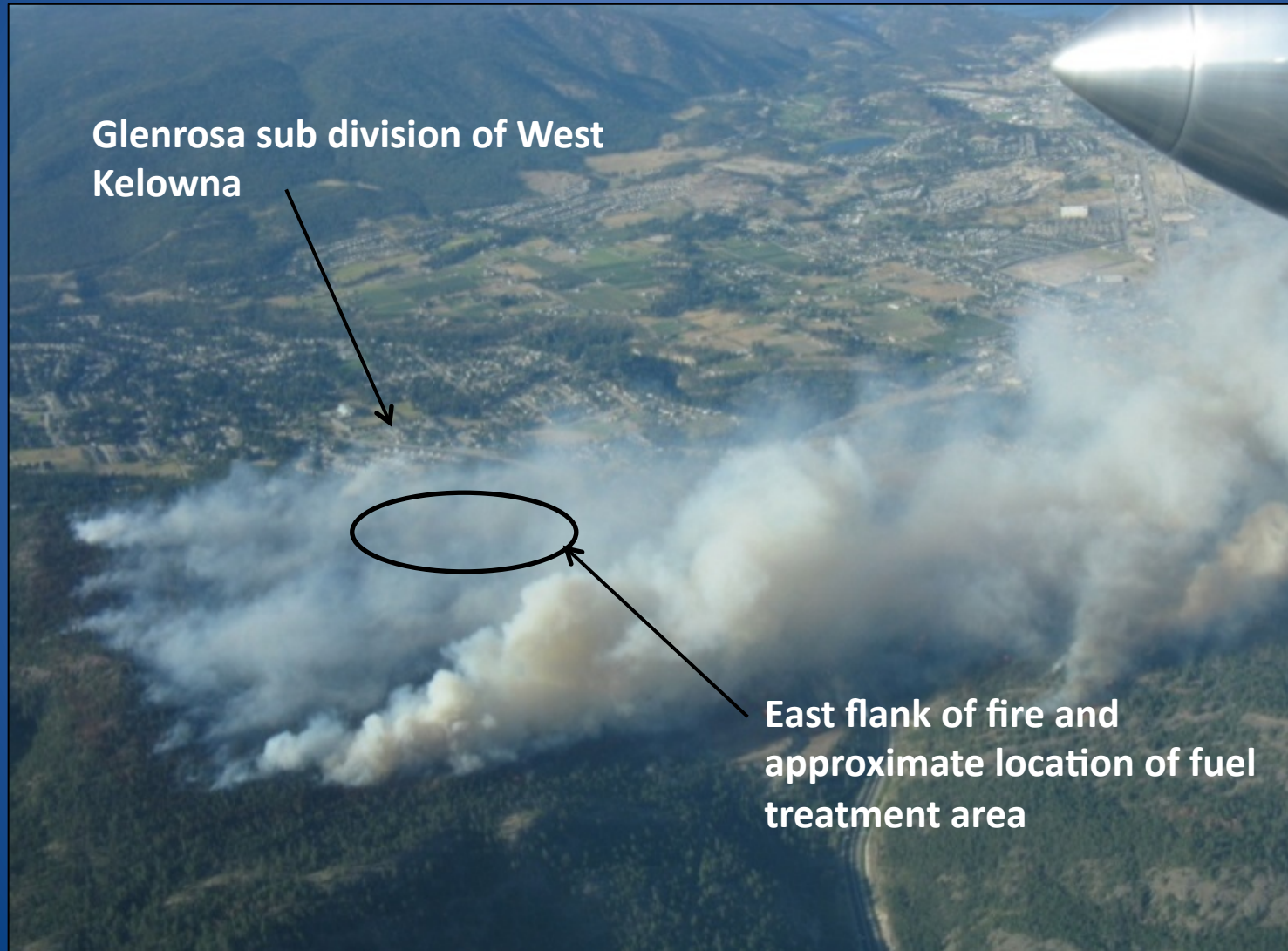
Does it Work?

- 2005 West Kelowna estates
- 2009 Alexis Creek
- 2009 Glenrosa
- 2010 Barnhartvale



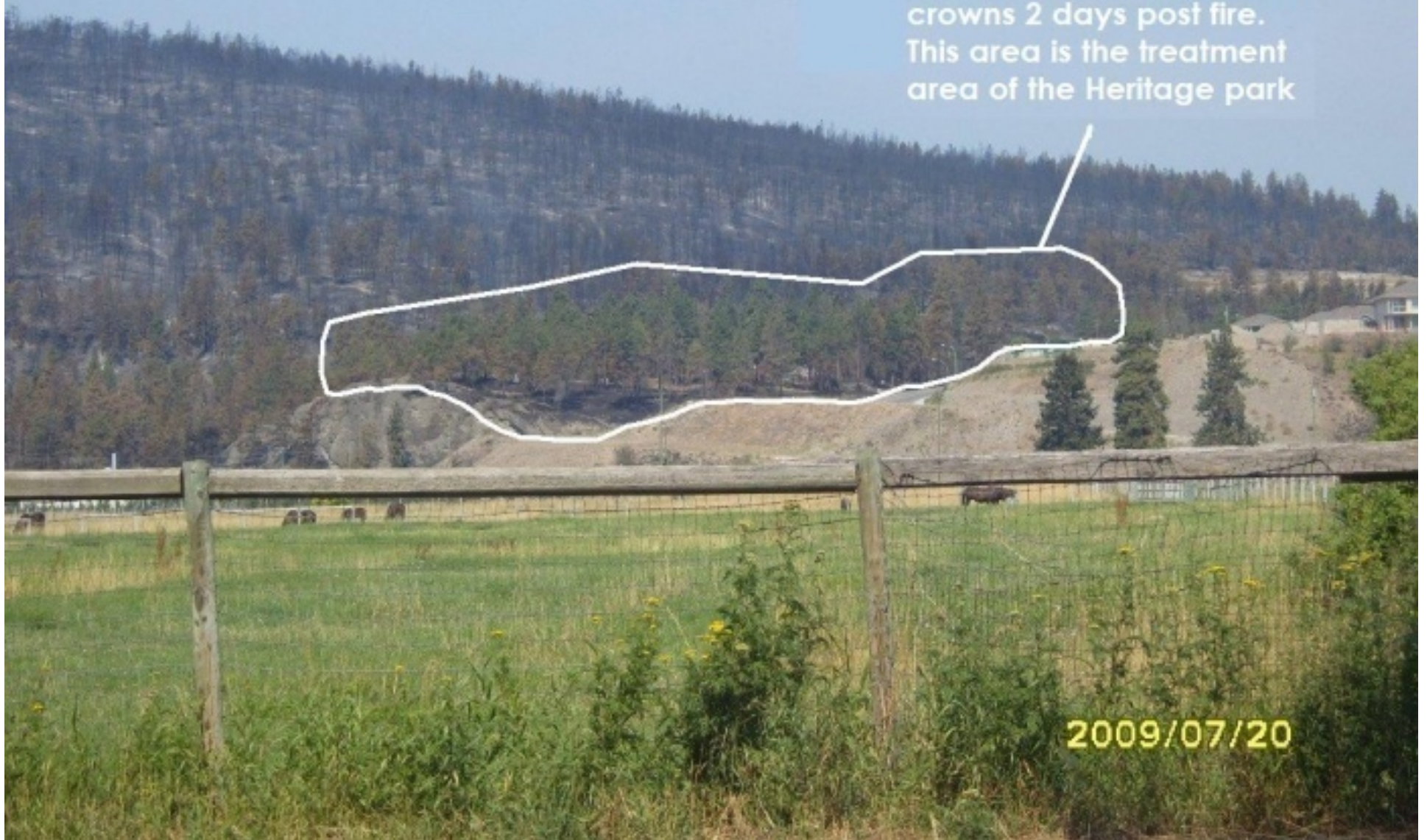
Treatment Successes Case Study

Glenrosa - West Kelowna Fire K50739 2009



Post Wildfire Fuel Treatment Result

Band of trees with green
crowns 2 days post fire.
This area is the treatment
area of the Heritage park



2009/07/20

Treatment Successes

- **SAFETY:** Safer crew access
- **REDUCED LOSSES:** More time to evacuate/set up structural protection units
- **REDUCED COSTS AND FASTER CONTROL:** Reduced fire behaviour and Little to no aerial support required

“The fuel management work that was done was a huge contributing factor to the success of the fire not making it across the guard, and threatening values.”



Program Successes

Community Wildfire Protection Plans

- Currently 302 completed or in-progress in BC (227 completed CWPP, 75 in-progress)
- Includes 189 CWPP from local government, 113 from First Nation communities

Prescriptions

- Currently 412 completed, or in-progress in BC
- Includes 307 prescriptions from local governments, 105 from First Nation communities

Fuel Treatments

- Currently 234 fuel treatments (Demonstration plus operational treatments)
- Includes 161 treatments from local governments, 46 from First Nation communities

Total combined ha treated Provincially June 30th, 2012 is : 46,467 ha (2004-2012)

Note: total includes Wildfire Management Branch crew treatment work (can be up to one third of annual treatment depending on fire season)

Provincial Strategic Wildfire Prevention Initiative (SWPI) (Crown Lands)



Program Challenges

- Securing long term funding Provincial and/or Federal Contributions;
- Securing community participation and having community ownership of the program;
- Funding Ratio's and community contribution amounts;
- Community expertise to engage in treatments and reliance upon contractors;
- Sheer size of the treatment area (+ 600,000 high risk, currently being reassessed)

Strategic Successes

(other than just the fuel treatments themselves):

- Building community awareness - communities become active participants in community protection from wildfires
- Shared funding requirement ensures communities are responsible for costs and incents communities to reduce costs through municipal bylaws to support wildfire risk reduction
- Creates strong government/community partnerships as a basis for a wide variety of similar initiatives
- Direct delivery by First Nations Emergency Services Society supports cross government integration of the program
- An established program supports other funding initiatives – community development funding, job opportunities funding etc.
- Job creation and training opportunities

Questions?