Wildfire Mitigation Strategies, Challenges & Successes

29th Annual PNWER Summit Saskatoon, Saskatchewan July 22, 2019



Presentation Overview

- Mitigation strategies in Saskatchewan
- Challenges faced
- Success stories
- Opportunities
- Questions



Mitigation Strategies

- Education is always the key
 - Presentations
 - Risk assessments and recommendations
 - Training workshops
- Raise awareness and build support



Mitigation Strategies

Once buy-in is achieved:

- Work with stakeholders to develop a mitigation plan
- Complete mitigation project work
 - Forest thinning by hand crews
 - Fire guard construction
 - Strategic forest harvest
 - Prescribed burns



Fuel Management Projects

 Hand crews with chainsaws or mechanical thinning or clearing



Saskatchewan //













Saskatchewan 🙎

Challenges

- Fire seasons getting worse?
- Reduced forest health
- Expanding wildland-urban interface
- Wildfire disaster "cycle"

Severe Fire Conditions

Fuel, Weather, and Topography

Wildland Fire

Rapid fire spread and/or High intensity

Urban Fire

Multiple, simultaneous ignitions

Overwhelmed Fire Suppression

Too much fire and too few resources

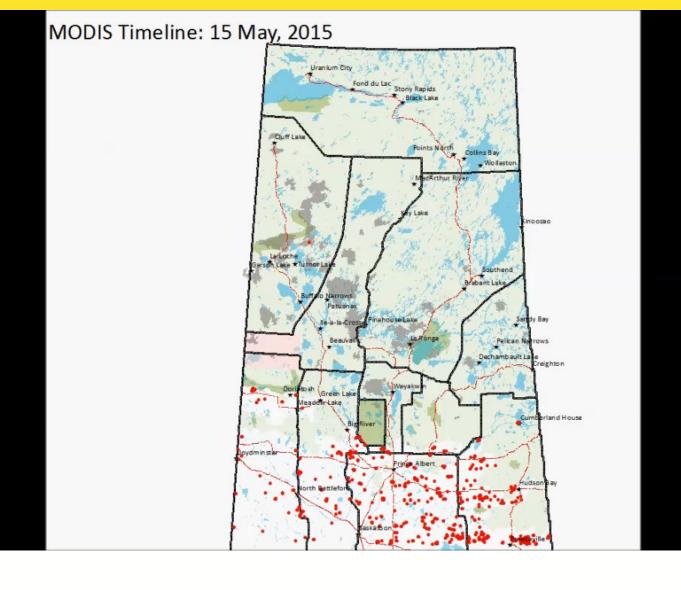
Reduced Fire Protection

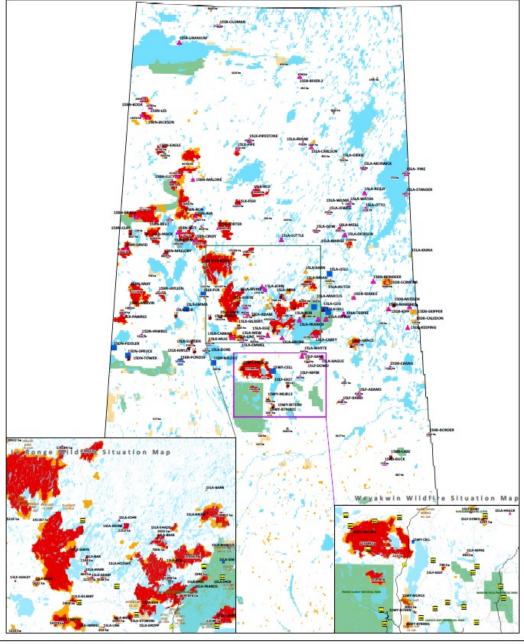
Lack of resources leads to reduced effectiveness

DISASTER!

Many homes totally destroyed











Key Challenges

- 1. Mitigation work is expensive.
- 2. How do you prove mitigation funding saves money?
 - Overall suppression costs
 - Social costs
 - Economic impacts
 - Insurance costs
- 3. How do you compete with suppression costs?



Success Stories

- Support for mitigation work
 - ISC since 2015
 - Federal Disaster Mitigation Adaptation Fund
 - Provincial and municipal matching funding
 - Total in excess of \$35.8 M over 9-year period
- Stakeholder interest
- Relationship building



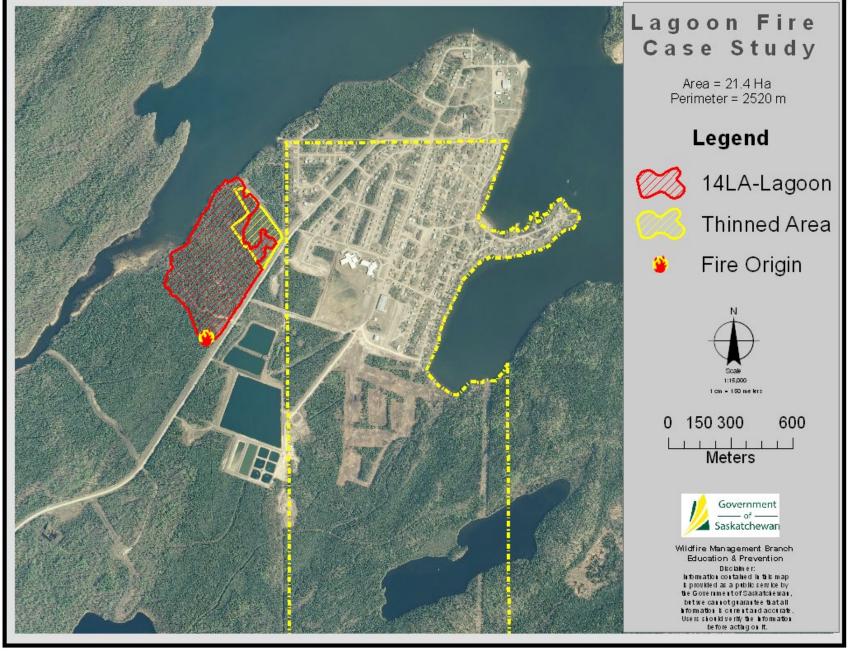
Relationship Building

- ISC, WFM, PAGC & all provincial First Nation communities
- Project Partnership Project Success
 - Capacity building
 - Mitigation work
 - Community involvement
 - WIN / WIN



Success Stories at Community Level

- Local employment opportunities
 - Capacity building (training and work experience)
- Community support and pride
- Making a difference
 - Case studies completed & shared





















Measuring Success

Quote from Chief Air Attack Officer when asked if the fuel break contributed to suppression effectiveness:

"From initial observations, I would comment on the success of the fuel break at the SE corner of Jeanette. The community was challenged in a big way, and it was almost inconceivable that residential values were not lost."



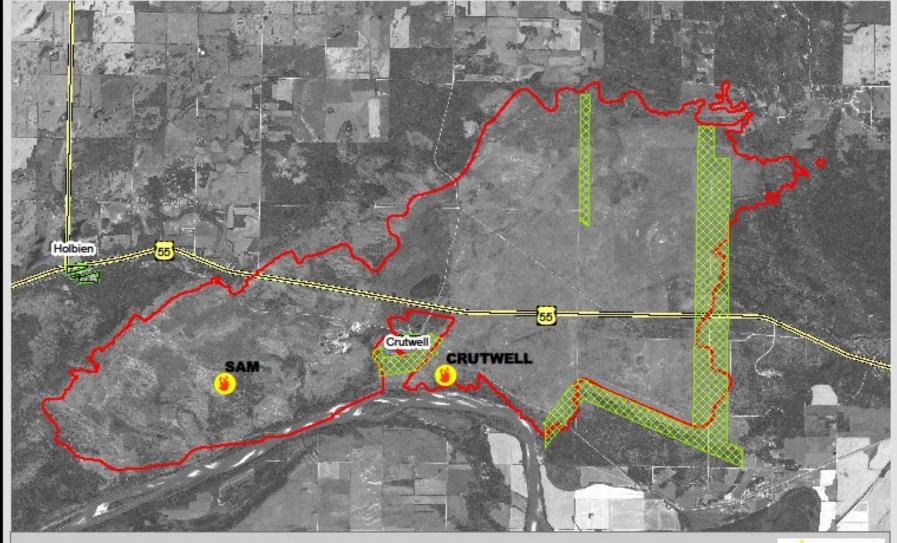
Sometimes, it is easy











Legend



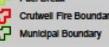
Fire Origin



Fuel Break



Crutwell Fire Boundary





Crutwell Fire June 28th 2002





Wildfire Management Branch Education & Prevention

Education & Prevention
Disclaimer:
Information contained in this map
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Opportunities

- 1. Expand mitigation to landscape level
 - Working with forest industry
- 2. Incorporate FireSmart / Firewise principles in new development planning
 - Wildland-Urban Interface Code
- 3. FireSmart / Firewise Programs
 - Residents owning the mitigation process
 - Create fire resilient communities





NEW PERSPECTIVE: BREAK THE WUI DISASTER CYCLE

Severe Fire Conditions

Fuel, Weather, and Topography

Wildland Fire

Rapid fire spread and/or
High intensity



Stopping the transition of fire from "wildland" fuels to "built" fuels significantly reduces the likelihood of a disaster.

Opportunities

4. Incentives

- Insurance industry
- FireSmart Canada / Firewise recognized communities





Questions? Saskatchewan.ca/fire

saskatchewan.ca