



Alberta's Hazardous Fuels Management – Program, Costs and Variables

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FireSmart
Safer communities Healthier forests

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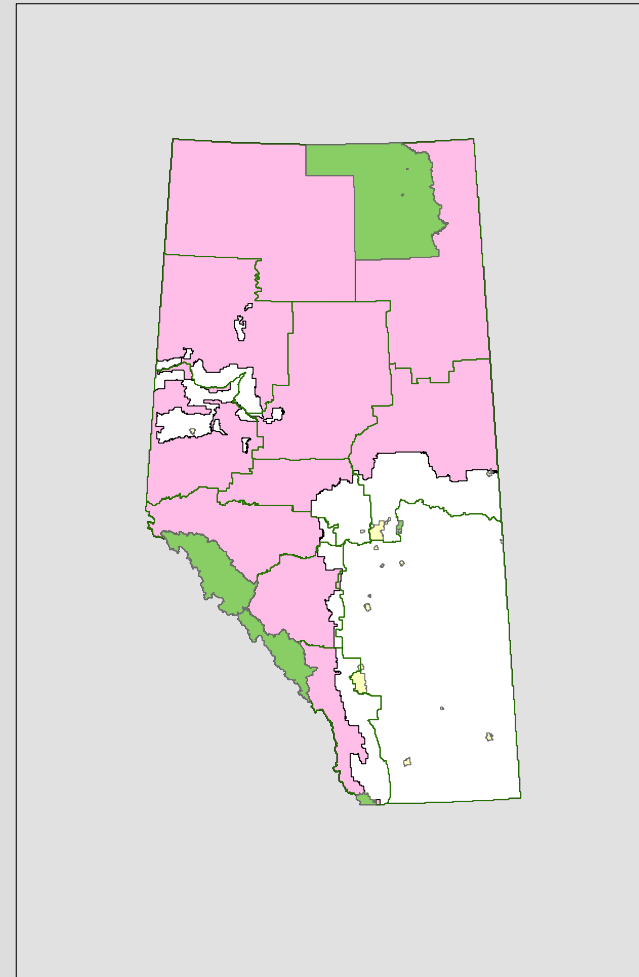
Alberta Environment and Sustainable Resource Development

Presentation Outline

- Introduction/Overview
- Alberta's Fuels Management Programs
- Fuel Management Methods
- Funding and Treatment Costs
- Variables
 - Operational
 - Environmental
 - Social

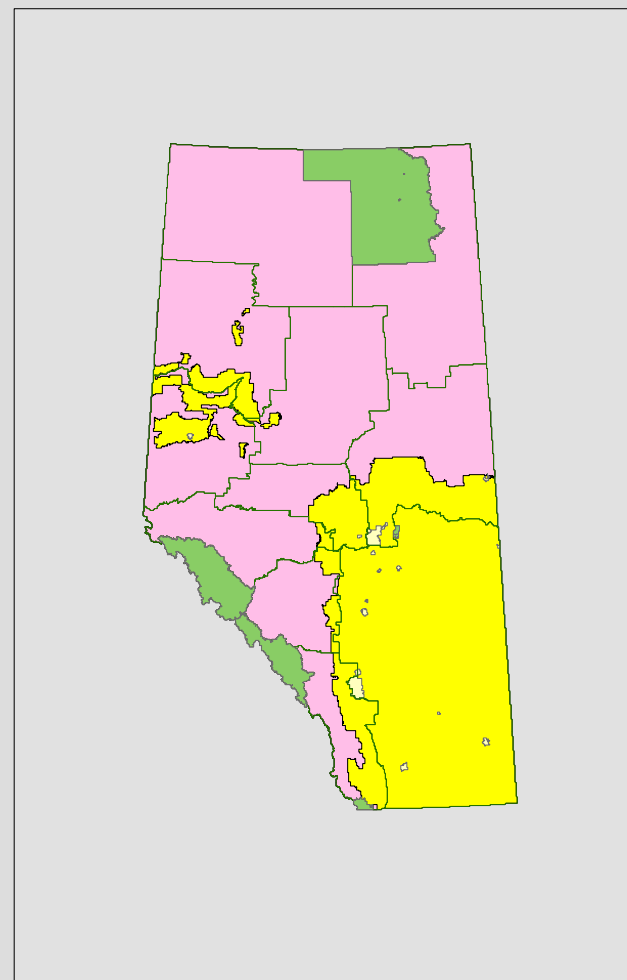
Hazardous Fuels Management

- Alberta's Forest Protection Area (FPA) = 38 million hectares
- Presently 10 ESRD Area offices are involved in wildfire management



Hazardous Fuels Management

- Majority of hazardous fuels management occurs in the FPA
- Initiatives are underway to increase hazardous fuels management outside of the FPA



Hazardous Fuels Management

- Hazardous fuels management programs are centred around human life, community protection and other critical values
- Hazardous fuels management adjacent to communities – priority recommendation 2012 Flat Top Complex Final Report



FireSmart Zones – Hazardous Fuels Management

- Wildland Urban Interface
- Community Zone
- Landscape Zone

**THREE ZONES.....
ONE CONCEPT.....**

FIRESMART

Wildland Urban Interface Zone

The area where various structures and other human developments meet or are intermingled with the forest and other vegetative fuel types.



Community Zone

A standard 10 kilometre radius around the community extending from the Wildland Urban Interface Zone. A unique data set is gathered for this zone, for community protection planning to provide a link between community zone and landscape zone.



Landscape Zone

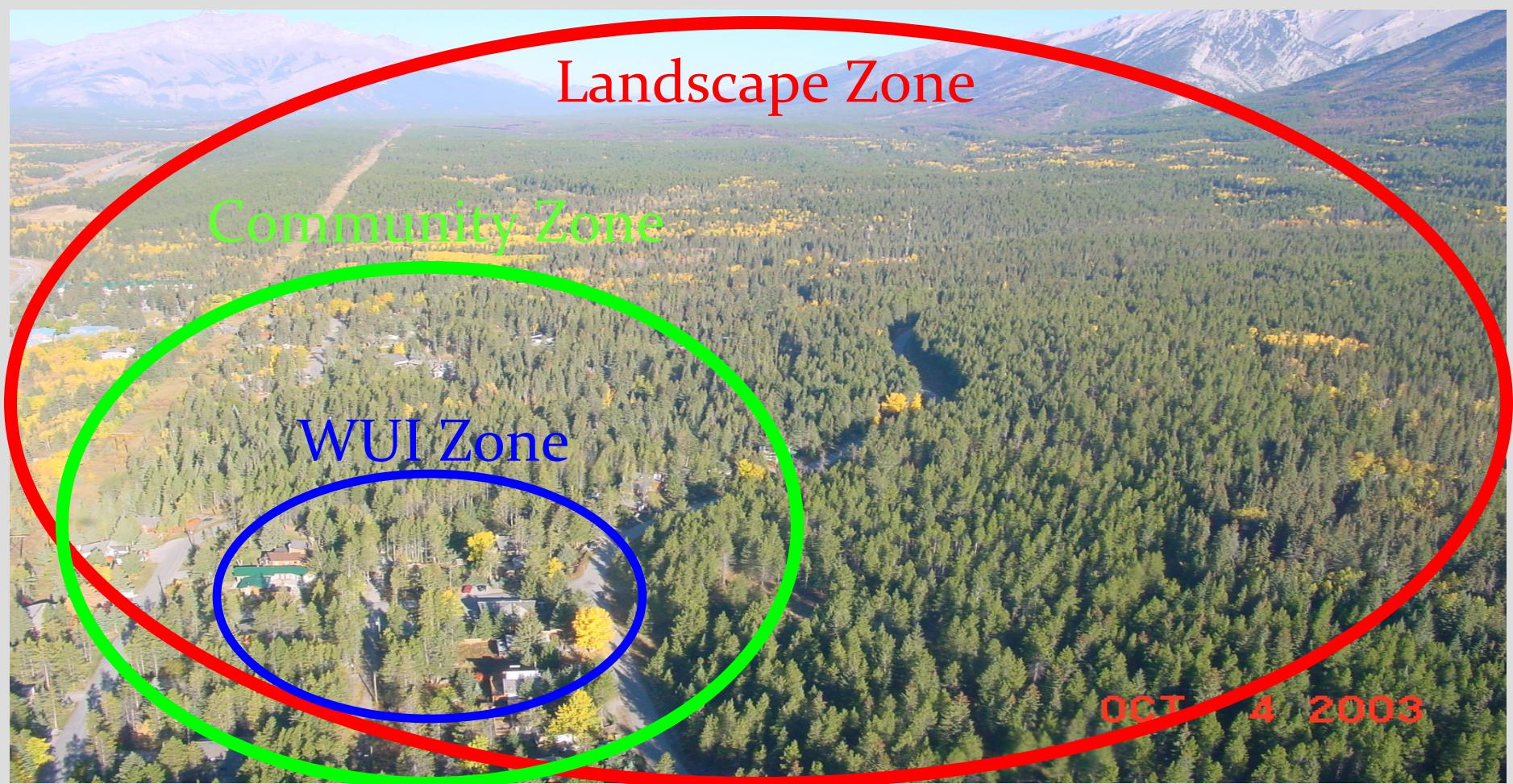
The zone that extends beyond the Community Zone overlapping multiple jurisdictions at a broad landscape level. This zone focuses on mitigating the likelihood of large, high intensity, high severity fires. Fire, forest and land management planning are integrated and designed to reduce the negative ecological, economic, and social impacts of wildfire while maximizing the positive attributes of wildfire.



SMOKE OR FIRE IN THE FOREST? 310-FIRE

Alberta
Forest Protection

FireSmart Zones



Alberta's Fuels Management Programs

- FireSmart Community Grant Program
- Community Wildfire Protection Program
- Prescribed Fire Program
- Landscape Level Program – Industrial Partnerships
- FRIAA Fire Hazard Reduction and Forest Health Program (One-Time Funding)
- Municipal District of Lesser Slave River FireSmart Regional Action Team (FRAT) Program

FireSmart Community Grant Program

- Introduced in 2005
- Wildland-Urban Interface focused
- Maximum \$50,000/year per grant recipient
- Approximately \$500,000 awarded each year
- Given to municipalities with expressed need in areas of planning, education, and fuels management
- Built on partnerships

ESRD FireSmart Community Protection Program

- Provincial Wildfire Prevention budget transfers to the ESRD Areas
- Focus on fuels management priorities identified by the local ESRD Areas



Prescribed Fire Program

- Fire is an important tool in hazardous fuels management
- Type I, II and hazard reduction burns depending on complexity
- Hazard reduction burns are extensively used in the spring and fall to reduce grass fuel hazards in and around communities



Prescribed Fire Program

- Reduces fire hazard around communities
- Increases potential for successful suppression in high risk areas
- Potential to limit spread of out of control wildfires
- Supports wildfire operations
- Facilitate a healthy environment

Landscape Level Programs

- Partnerships with industry (forest companies, oil and gas, utility companies, etc.) and other agencies / government departments
- FireSmart considerations are a requirement in the Forest Management Planning (FMP) process

FRIAA Fire Hazard Reduction and Forest Health Program

- One time shared funding program – \$15 million from the Federal Government and \$15 million from the Government of Alberta
- Administered by the Forest Resource Improvement Association of Alberta (FRIAA)
- Took place between fall of 2008 and spring 2010
- Numerous large projects inside and outside of the FPA

MD of Lesser Slave River FRAT Program

- Focus specific to the MD of Lesser Slave River and associated communities
- Response to the 2011 wildfires which impacted the area
- Numerous partners involved
- This important initiative will be detailed in other presentations during this conference

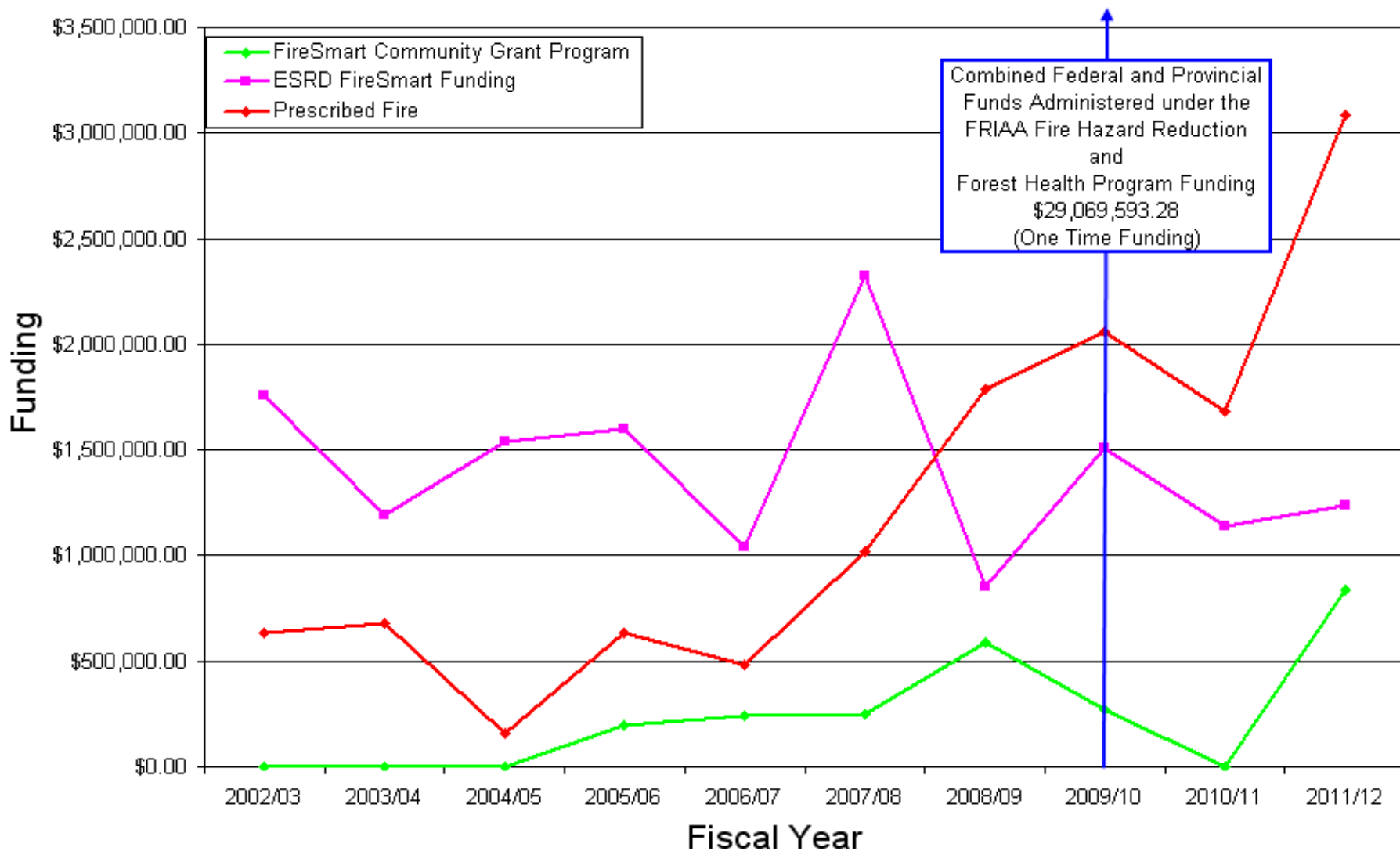
Hazardous Fuels Management Methods



And Finally the Financial Portion

Program and Treatment Costs

Alberta FireSmart Funding 2002 to 2012



Fuels Management Costs – Prescribed Fire

- 2002-2012 (10 year average) = \$343.40/hectare
- 2007-2012 (five year average) = \$437.86/hectare
- Above costs reported include all burn types.
- Hazard reduction burns - \$60.00 to \$200.00/hectare

Fuels Management Costs – Mechanical / Manual

- Mulching (Small Mulchers)= \$1500 to \$2500/hectare
- Large Mulchers = \$3500 to \$6000/hectare
- Hand Crews (Thin/Prune/Pile/Burn) = \$5000 to \$9000/hectare
- Industrial Harvest = varies

Operational Variables Influencing Costs

- Project Type
- Project Area (Hectares)
- Equipment Necessary
- Contractor – Supply and Demand
- Debris Disposal
- Merchantable Timber
- Future Maintenance Requirements
- Budget Surprises

Environmental Variables Influencing Costs

- Slope
- Hydrologic Factors
- Blowdown Potential
- New Science
- Remote Locations (Prescribed Fire)
- Wildlife
- Ecological – Rare, Threatened and Endangered Species
- Viewshed and Smoke Management

Social Variables Influencing Costs

- “Not In My Backyard!” Factor
- Public Support Is Essential
- Consultation and Education

Success

- Successful Fuels Management Requires
 - Understanding
 - Partnerships
 - Prescriptions
 - Timing
 - Tools

Potential Cost Reducing Solutions?

- For Discussion
- Contracts – Longer Term
- Incentives – Industry, Homeowners, Municipalities
- Other Ideas?

For More Information

Thank You!

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