



parks canada.gc.ca

LESSONS IN GAINING PUBLIC ACCEPTANCE OF WILDFIRE MITIGATIONS: **A FIELD PERSPECTIVE**

Alan Westhaver
Vegetation/Fire Specialist
Jasper National Park
alan.westhaver@pc.gc.ca

**Don Campbell, Jasper Resident and
J.I.S.T. Member**

**Mike Wasuita, Jasper businessman
and J.I.S.T. Member**

**Kim Weir, Parks Canada Fire
Communications Officer**



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

WILDLAND/URBAN INTERFACE

A Canada-wide Issue:

- 900+ WUI fires with structure loss since 1980
- 700,000 Canadians threatened, 250 communities evacuated since 1995
- 2003 British Columbia: 100 W/I fires, 334 homes burned, 50,000 evacuated
- Extraordinary risks, losses, costs
- The trend is... up
- Canadian Wildland Fire Strategy



Parks
Canada

Parcs
Canada

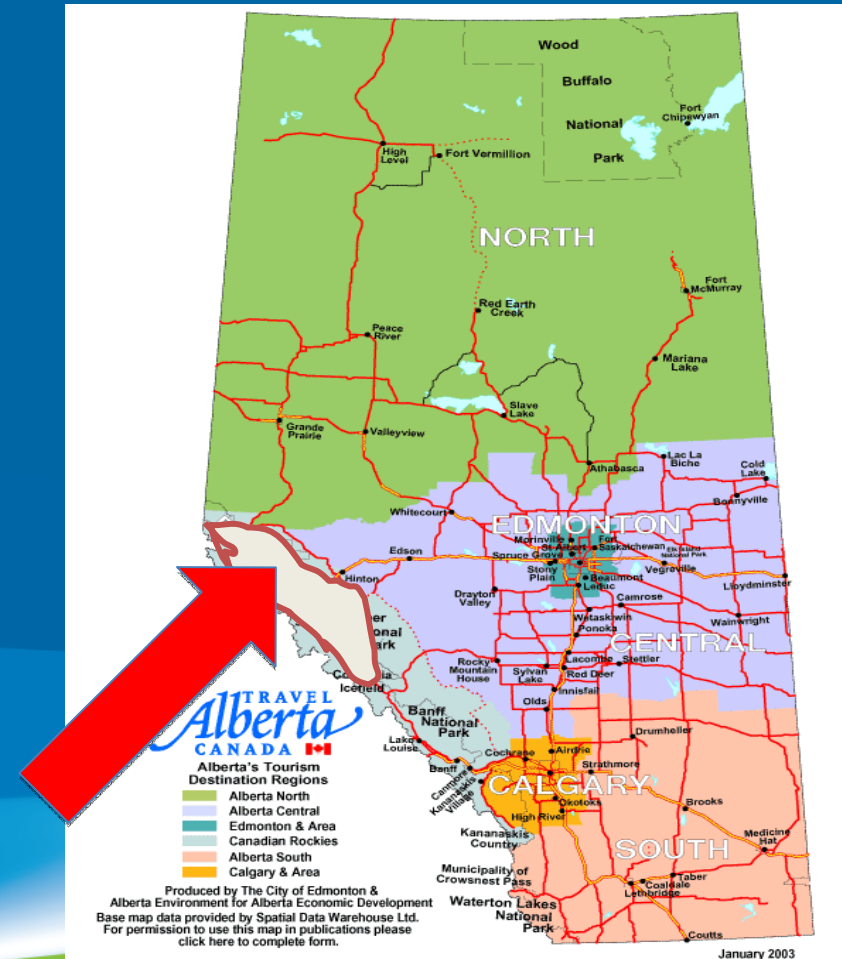
Canada



parkscanada.gc.ca

JASPER SITUATION REPORT:

- **Jasper National Park:**
 - 11,000 km²
 - Northern Rocky Mountains
 - Dense coniferous forest
 - 15 – 20 wildfires/year
 - Active history of stand-replacing and surface fires
 - ~10 – 120 year fire cycles in Athabasca Valley surrounding the town of Jasper



Parks Canada
Parcs Canada

Canada



parks canada.gc.ca

JASPER NATIONAL PARK

- 1 OF 42 National Parks in a national network of protected areas
- Preserves an example of the Rocky Mountains natural region
- Conservation/ Education/ visitor experience are vital objectives
- Part of a World Heritage Site
 - 7 contiguous National + Provincial Parks





parks canada.gc.ca

TOWN OF JASPER, ALBERTA

Town of Jasper

- 5,000 full time residents
- 500 businesses
- 2 million tourists/year
- National highway/ rail corridors
- 20,000 hotel rooms + campsites
- Significant wildfire risk to the town site and nearby residential and commercial developments



Parks
Canada

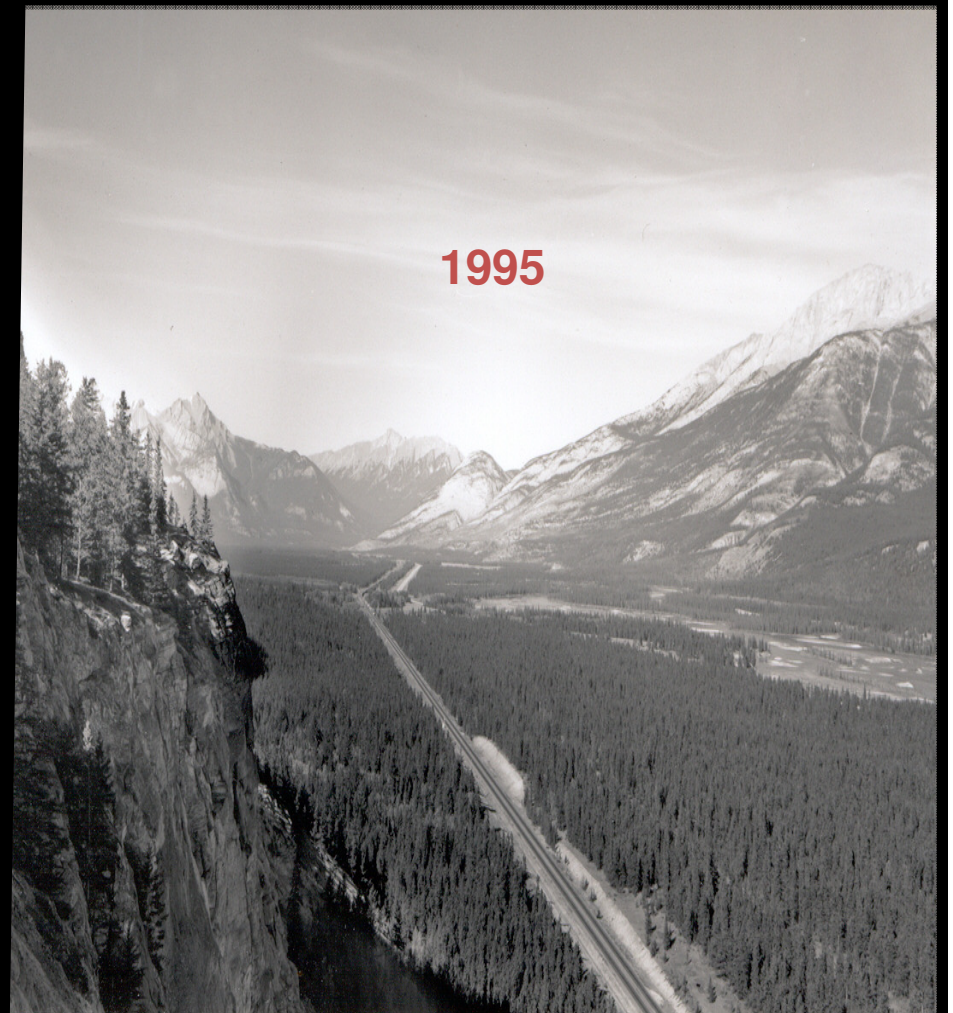
Parcs
Canada

Canada



parks canada.gc.ca

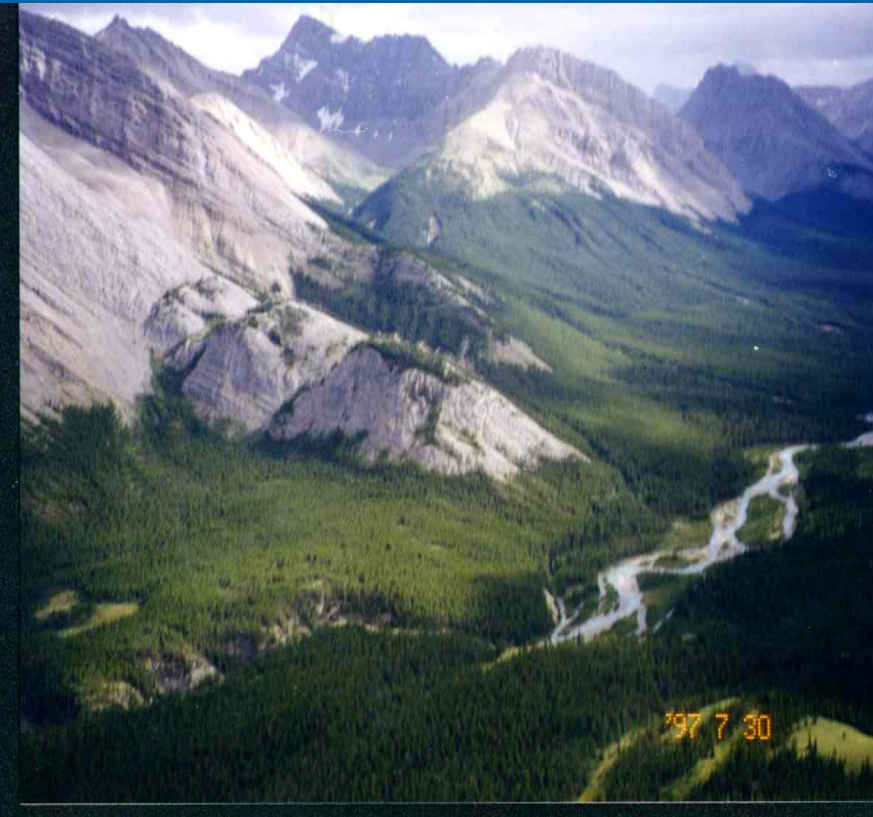
DECADES OF FIRE SUPPRESSION HAVE ALTERED FOREST CONDITIONS.....





parkscanada.gc.ca

JASPER SITUATION REPORT



Jasper Forests:

- 50% forested
- Montane + sub-alpine forests
- Dominated by lodgepole pine, spruce, sub-alpine fir
- Aspen, Douglas-fir, grasslands at lower elevations
- Long-term (500 yr) average annual area burned = 42KM²
- ~2 KM² 1940 - 1995



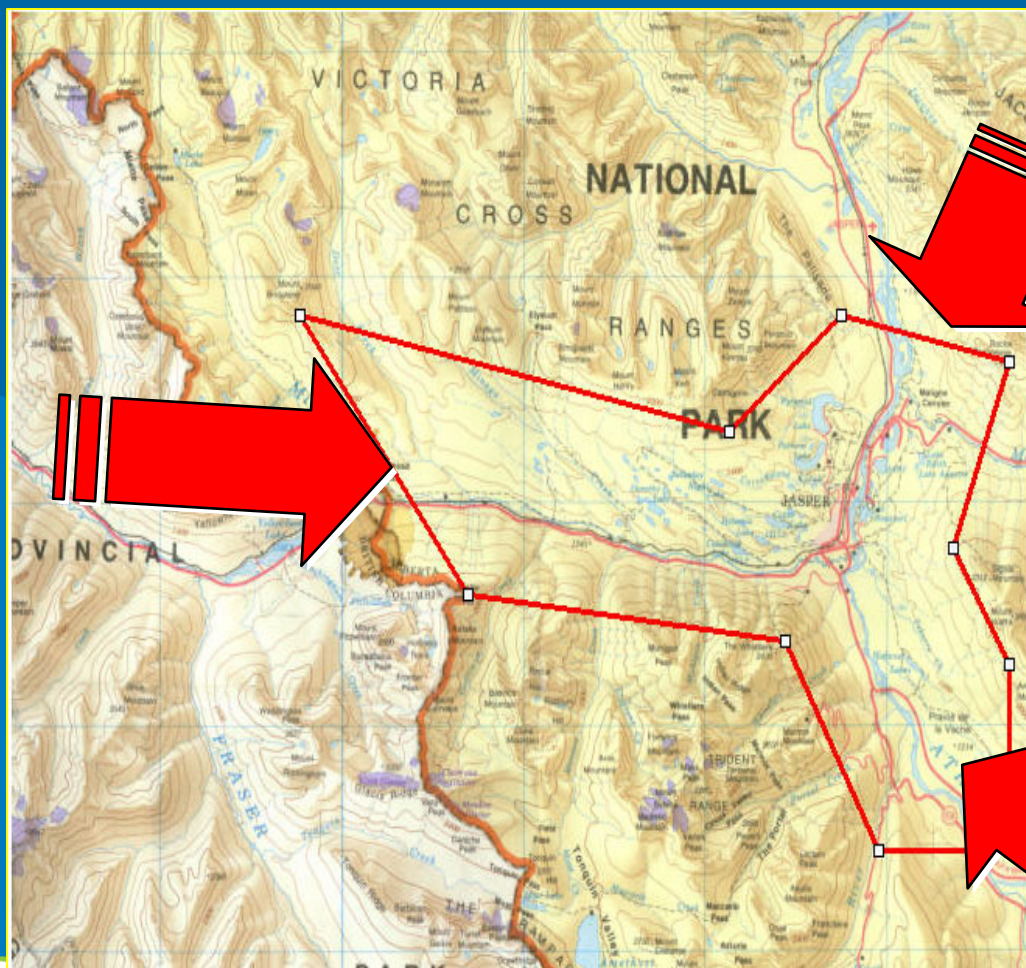
Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

JASPER WILDFIRE SCENARIOS



*Weather and wind
pattern analysis*

*Most probable fire
scenarios*



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

FIRE MANAGEMENT CHALLENGES

- Three Problems:
 1. Community Wildfire Protection
 2. Restoring Forest Structure
 3. Restoring Landscape Fire
- Four Solution Circles:
 1. Backyards
 2. Wildland/Urban Interface
 3. Meso-scale
 4. (Community)Landscape



"START IN THE MIDDLE"



Parks
Canada

Parcs
Canada

Canada



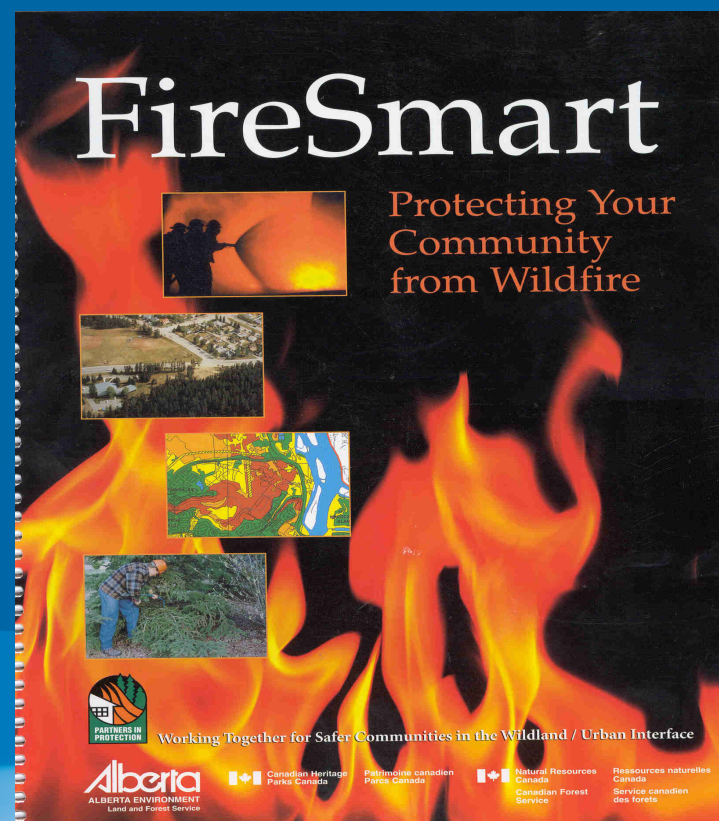
parkscanada.gc.ca

WUI SOLUTIONS AT HAND

7 STRATEGIES TO REDUCE WILDFIRE RISK

Partners in Protection/ NFPA1144

- Hazard Assessment
- Emergency Measures & Land Use Planning
- Fire Training
- Communication/Education
- Structural Options
- Infrastructure Options
- **Fuel Management**



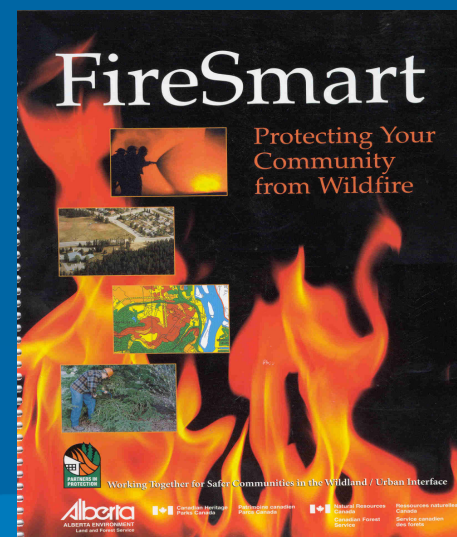
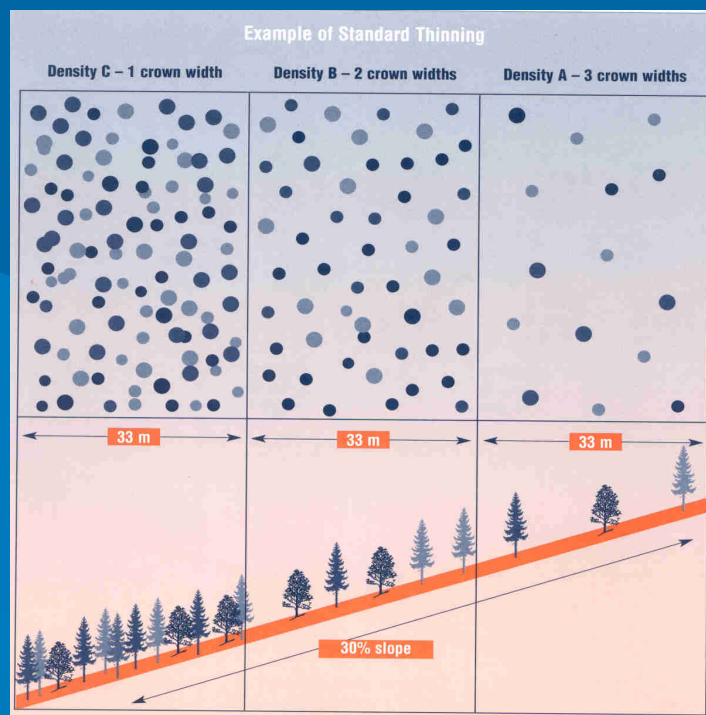


parkscanada.gc.ca

CURRENT FUEL MGMT STANDARDS

To create less flammable conditions:

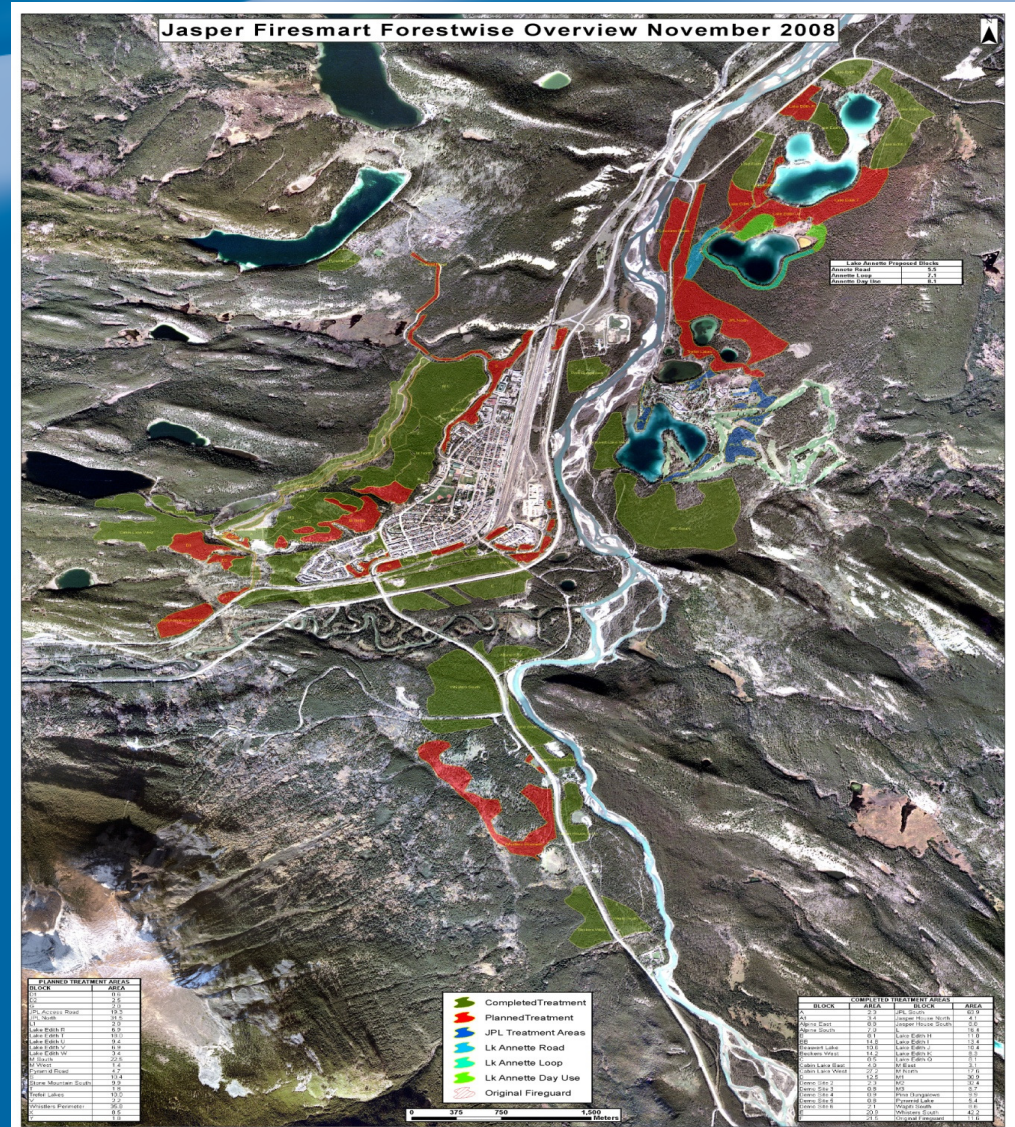
- Remove it
- Reduce it
- Convert it
- Isolate it



OUR PLAN: THIN + RESTORE

1000 hectares of intensive forest fuel management on public lands....

Off we go.... right?
It's a good plan.. right?



parkscanada.gc.ca

Bringing you Canada's natural and historic treasures



NOTICE OF TENDER

Forest Thinning, Wildfire Protection Contract Jasper National Park, Alberta

The work consists of selective thinning of up to 125 hectares of forest surrounding the Town of Jasper and Lake Edith cottage subdivision within Jasper National Park, Alberta. The contractor shall provide all materials, equipment and labour required to perform the work. The work shall commence on October 27th, 2003 and be completed on or before March 31st, 2004.

A site meeting is scheduled for 1300 hours (MDT), Thursday, September 25th, 2003. Bidders are to meet at the Parks Canada Administration Office, (in the Train Station), 607 Connaught Avenue, Jasper, Alberta. It is highly recommended all bidders attend this site meeting. The time and date set for receipt of tenders is 1400 hours (MDT), Tuesday, October 7th, 2003.

The tender documents are available by sending a written request to:
Parks Canada, Contracts & Materiel Management,
Room 1550, 635 - 8th Avenue S.W., Calgary, Alberta, T2G 4X3,
Fax: (403) 292-4475 or e-mail: diane.watson@pc.gc.ca.

The Crown retains the right to negotiate with suppliers on any procurement. Documents may be submitted in either official language of Canada.

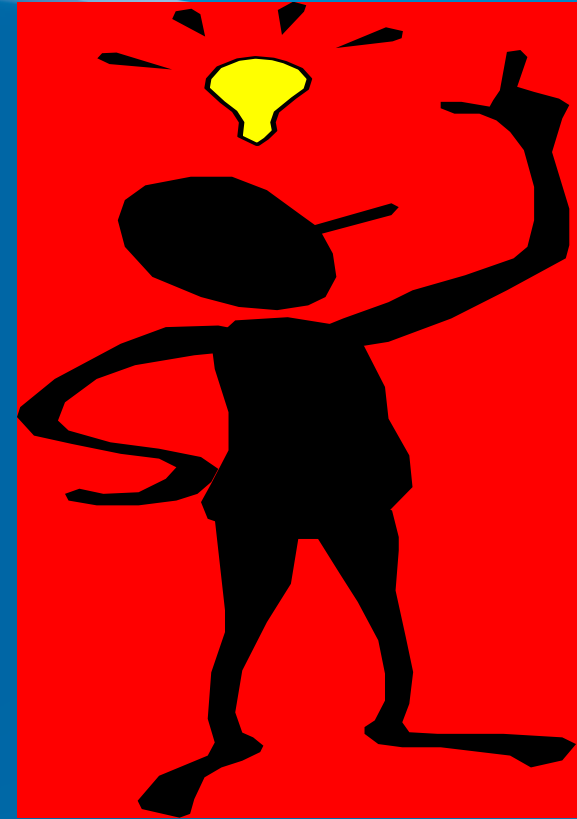


Canada



BUT.....

- It's NOT that simple!



Good planning is NOT enough....



parkscanada.gc.ca

Bringing you Canada's natural and historic treasures



parkscanada.gc.ca

WE ALSO KNEW THAT.....



- Fuel Reduction Programs in Other Locations:
 - Were largely a mystery to residents,
 - Were plagued by controversy or,
 - Were poorly supported by residents,
 - Were openly resisted or ridiculed, or
 - Had been stopped all together!



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

6 DEADLY REASONS...

For NOT Implementing FireSmart...

1. PEOPLE Lack Knowledge to Reduce Risk*
2. PEOPLE Perceive Wildfire Risk to be Low*
3. PEOPLE have Limited Ability to Reduce Risk*
4. PEOPLE are Skeptical about Effectiveness*
5. PEOPLE Lack Trust in Agencies*
6. **FUEL MANAGEMENT CONFLICTS WITH PEOPLES VALUES and QUALITY OF LIFE***

* see articles by Mc Caffrey, Winter, Vogt, Mc Gee + Mc Farlane



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

WE ALSO NEEDED TO.....

- Motivate People to Act in Their Own Backyards.....
or agency measures would not be effective.
- Go BEYOND informing, educating, motivating >> to ENGAGING the public to get the Level of acceptance that we required,



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

AND, I WAS ALSO “REMINDED



“If the Public **DOES NOT** support this program, it will not proceed !”

Ron Hooper
Park Superintendent
The “Boss”



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

THE PROBLEM CHANGED...

To as much of a Social Issue.....
as a Fire Management Issue.



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

NON-TRADITIONAL TOOLS TO ENGAGE YOUR PUBLIC



FireSmart
Neighbourhood
Work Bee

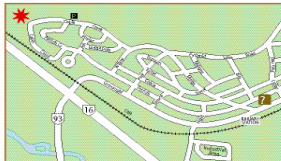


TODAY!

**Cabin Creek West
Stone Mountain Village**

Walk in beside 1201 Cabin Creek Drive, or behind Stone Mountain units #29 and 30
(limited parking so bike or walk and follow the directional signs)

Refreshments
and lunch
barbecue
provided!



*Come for
an hour
or come
for the day!*



ENGAGEMENT is the
level of public
acceptance we were
seeking....

A.K.A.

Canada

ALSO KNOWN AS...



What does Rum Punch have to do with FireSmart?



parkscanada.gc.ca

Bringing you Canada's natural and historic treasures

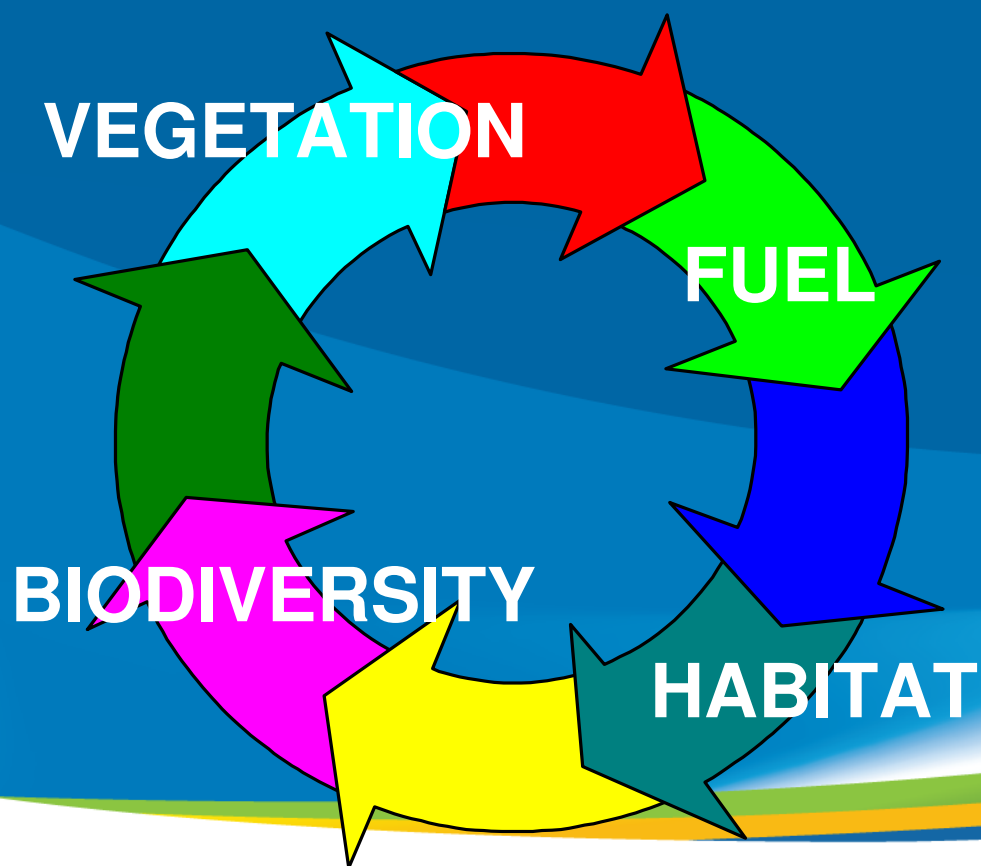


parkscanada.gc.ca

1. RESOLVE DEFICIENCIES IN CURRENT FUEL STANDARDS

Modify treatments to accommodate:

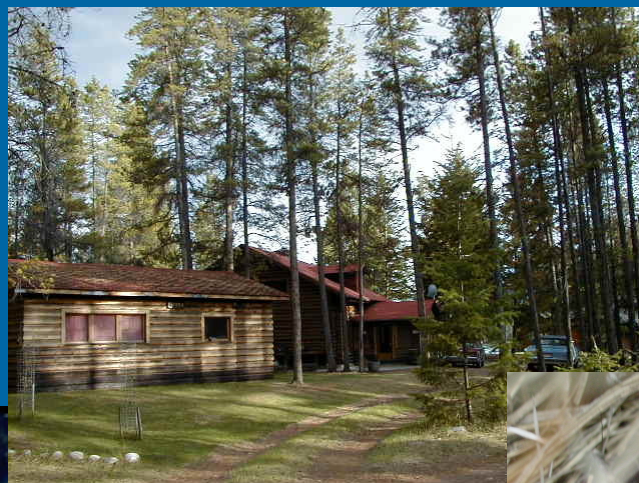
- Wildlife
- Habitat qualities
- Biodiversity
- Aesthetics
- Visual quality





parks canada.gc.ca

VEGETATION IS MORE THAN FUEL.... NEW PERSPECTIVE



Parks
Canada

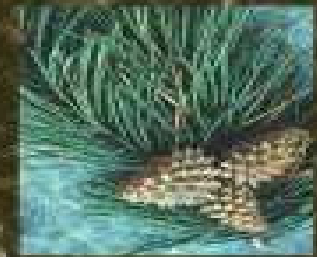
Parcs
Canada

Canada

FireSmart



ForestWise



Parks
Canada

Parcs
Canada



PURPOSE: to develop, implement and assess innovative methods for managing forest fuels in ways that reduce wildfire risks but also restore or optimize ecological conditions, wildlife habitat values and aesthetic qualities in wildland/urban interface areas AND are supported by the public.

*** Westhaver, 2006. FireSmart – ForestWise: Managing wildlife and wildfire risk in the wildland/urban interface. University of Calgary, M. Sc. thesis**



parkscanada.gc.ca

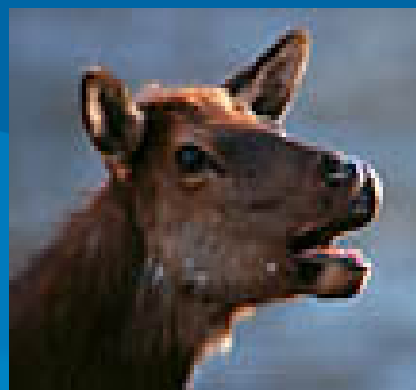
Bringing you Canada's natural and historic treasures



parkscanada.gc.ca

SPECIES –SPECIFIC MITIGATIONS

- Synthesis of wildlife needs & fuel standards
- 41 species evaluated
- minimize wildlife impacts or obtain benefits.



Parks Canada
Parks Canada



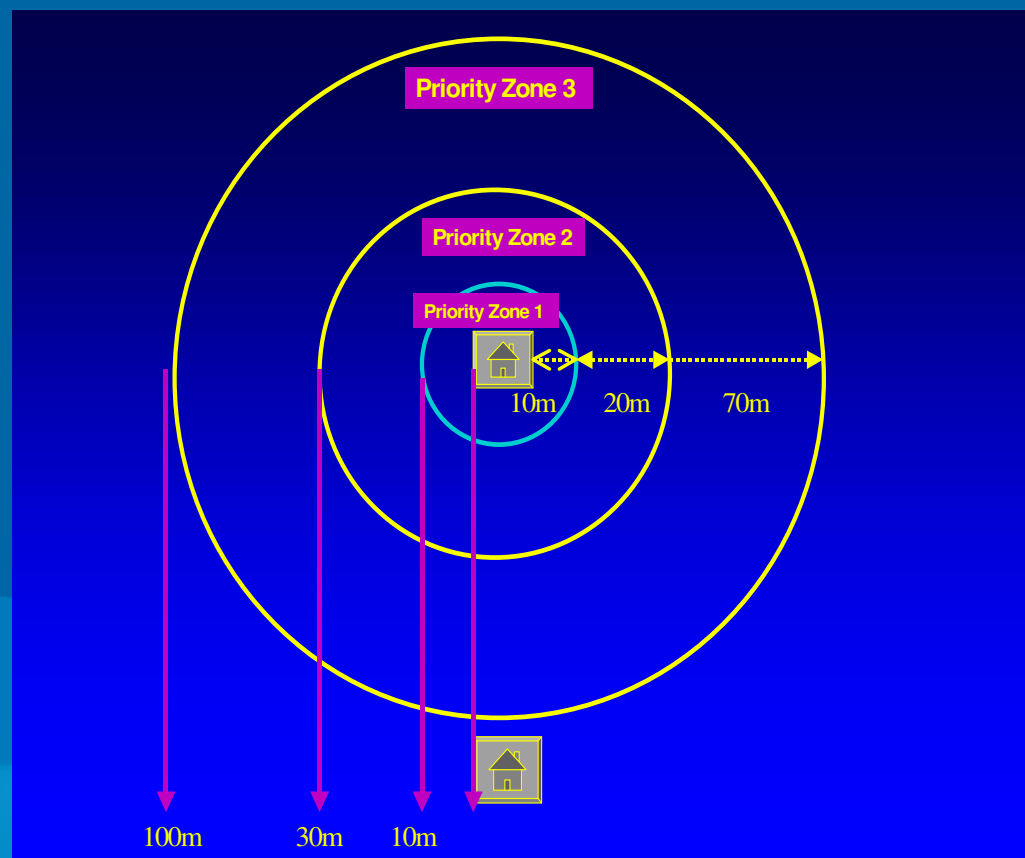
Canada



parkscanada.gc.ca

PRIORITY ZONE GUIDELINES

- Organized by interface Priority Zones (3)
- By forest/fuel strata
- Minimize adverse effects
- Achieve benefits where possible





parkscanada.gc.ca

GENERAL “BEST PRACTICES”

Guidelines for modified fuel management practices:

1. Retention of coarse woody debris
2. Protection of key habitats (e.g. forest edge, wildlife corridors)
3. Reducing wind throw
4. Preserving habitat trees



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

GENERAL “BEST PRACTICES”

Guidelines for modified fuel management practices:

5. Debris disposal
6. Seasonal and hours of operation
7. Stand-specific prescriptions
8. Prescriptions by fire regime



Photo by A. Wilson



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

2. INTERFACE STEERING TEAM



- Coalition of Key Stakeholders
 - Decision and opinion makers
- Problem Solving Group
 - Active in all 7 strategy areas
- Formal Communication and Spokesperson Roles
- Foster Community Advocates
- Provide Feedback Loop



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

2a. Neighbourhood Fire Protection Committees

- Effective for outlying residential subdivisions, recreational developments, cottage associations
- Seek out receptive or influential individuals
- Attend scheduled annual general meeting or other mtg.





parkscanada.gc.ca

3. HAZARD ASSESSMENTS

Crucial way of making personal contacts; one at a time..

- Identify sources of risk
- Review risk factors
- Discuss “comfort” zones
- Develop rapport and trust



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

3. HAZARD ASSESSMENTS



- Focus on receptive individuals
- Invest 60 minutes of time
- Requires a credible assessor
- Explain fire behavior and how homes ignite
- Hi-lite simple measures – Walk around with owner – Prioritize!
- Offer follow-up



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

3. HAZARD ASSESSMENTS



Benefits:

- Assessment piques curiosity of neighbors
- Peer pressure evolves among neighbors
- Engaged residents become local advocates
- Contacts multiply effortlessly



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

4. NEIGHBORHOOD WORK BEES: DEMONSTRATION PROJECTS

- Choose high profile locations IN neighborhoods
- Small areas, do-able in 1 day
- Pre-fall trees; pile/burn/chip
- Advertise, knock on doors
- Invite media - visible results
- Feed people – social time
- Sponsors + celebrity chefs





parkscanada.gc.ca

4. NEIGHBORHOOD WORK BEES: DEMONSTRATION PROJECTS



Highly Effective Way to ENGAGE Groups

- Residents Take Ownership
- Educational Opportunity
- Leaves Positive Example
- Leads to Trust, Acceptance, Support



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

4. NEIGHBORHOOD WORK BEES: DEMONSTRATION PROJECTS



Warning: Can be Addictive

- Potential to become annual events
- Buzz spreads through community...
- Builds social capacity
- Sense of stewardship develops



Parks
Canada

Parcs
Canada

Canada



parkscanada.gc.ca

5. ENVIRONMENTAL ASSESSMENT PROCESS



- Not just a bureaucratic necessity
- Opportunity for proactive contact with potentially affected parties
- Identify & solve potential conflicts
- Invite involvement before controversy
- Locals are vital knowledge source
- **Invite peer review, expert third party critique**



Parks
Canada

Parcs
Canada

Canada

6. DELIVER YOUR MESSAGE WHERE THEY LEAST EXPECT IT



FIRESMART's

"Smart Ash Chuck Wagon Chili"

The Best Darn Chili in the Ecosystem!



We've done it! We've taken the "best of" the championship chili-maker secrets and combined them with the original (and authentic) ingredients dished out by chuck wagon cooks in the mid-1800's. The result? The best darn chili in the ecosystem. We're sharing MOST of our secrets on this recipe sheet. Stay tuned to future public info for the deepest and darkest FireSmart chili secrets.

Ingredients

1 lb round steak
 3/4 pkg beef fajita mix
 2 tbsp sweet rice vinegar
 *
 1 lb Italian or chorizo sausage
 1 lb lean ground beef
 1/2 onion diced
 *pumpkin mash
 2 tsp spanish paprika
 *oregano "tea"
 *
 1/2 cup diced sweet onion
 5 cloves chopped garlic
 1 sm can crushed tomato
 a little beer
 1 tsp maple syrup
 1/2 cup Jalapeno broth
 1/2 square of semi-sweet baking chocolate
 1 tsp corn flourmeal

Method

Tenderize 1 lb room temperature round steak with mallet. Cube the meat and place in zip lock bag with Fajita mix and rice vinegar. Shake and set aside for 15 minutes.

In the BIG pot, saute sausage with a little oil. Once browned, add ground beef and onion. Cook over medium-high heat until grey in colour. Now add 2 heaping Tbsp pumpkin mash (* see mini recipe below), spanish paprika (don't use Hungarian it's toooo hot) and 1 cup Oregano Tea (see mini recipe below) Stir and set aside.

In another pot, saute onion and garlic lightly in a little oil on med heat. Add small can crushed tomato, rinsing out the can with a little dark beer. Stir to combine flavours. Add maple syrup and Jalapeno broth. Simmer gently for about 10 minutes. Add chocolate and melt into sauce. Add this tomato mixture to BIG pot and stir.

Add 1 tsp corn flour or corn meal to marinated cubed steak mix. Shake. Heat oil in separate fry pan and saute cubes until they lose their pink. 2-3 minutes. Add to BIG pot and set aside. Purée the reserved jalapenos according to your taste for heat (1, 2 or 3 pods). Add to BIG pot. Add more Oregano tea or Jalapeno Broth to achieve your favourite consistency and...ENJOY!





parks canada.gc.ca

BE OPEN TO NEW IDEAS !



Parks
Canada

Parcs
Canada

Canada



parks canada.gc.ca

WE DID TRADITIONAL COMMUNICATIONS TOO !

- Schools, service clubs, town council meetings
- Posters, mail box drops, hand-bills, bill boards
- Road signs, trail signs
- Newspaper ads, articles, editorials
- Television media day
- Special events, Canada Day, Parades, farmers market
- Fax for Staff, weekly e-mail to stakeholders



Parks Canada
Parcs Canada

Canada



parkscanada.gc.ca

LESSONS LEARNED:



“You know, we’re just not reaching that guy.”

Go TO them, don't try to get them to come to you... or worse, another meeting!



Parks Canada
Parcs Canada

Canada

LESSONS LEARNED: AS WE SEE IT

1. “It wasn’t just residents and businesses that needed to change their mind-set; Parks Canada shifted policies too – moved from an adversarial relationship to close co-operation”.
2. Combined communications resulted in a deep understanding of the fire problems AND the reasoning behind risk mitigations.
3. The FireSmart program became a source of deep community pride, “You can’t put a price on the sense of satisfaction FireSmart created in our community.”



parkscanada.gc.ca

Bringing you Canada's natural and historic treasures

LESSONS LEARNED: AS WE SEE IT

4. The collaborative approach, and dual benefits of environmental stewardship and risk reduction, made it easy to gain public support and engage residents in FireSmart activities.
5. Working this way is fun, fulfilling, and effective.
6. Creating local “demonstration sites” was an educational event for all ages; they also allowed residents to see immediate benefits and changes. “Doctors and ditch-diggers, we are all equal - and in this together.”



parkscanada.gc.ca

Bringing you Canada's natural and historic treasures

LESSONS LEARNED: AS WE SEE IT

7. Formation of J.I.S.T. broke down social barriers and created an honest opportunity to express views, explore solutions and work together in common a interest.
8. Conflicts with other values + controversy can be avoided. “We’ve done some good things for the areas ecology, and understand why some compromises had to be made for our own safety.” Wildlife conflicts were reduced by increasing lines of sight, creating food opportunities away from homes.



parkscanada.gc.ca

Bringing you Canada's natural and historic treasures

LESSONS LEARNED: AS WE SEE IT

- 9) The Park's openness to discussion and willingness to seek third party opinions (expert review) built trust and credibility; "It all seemed right, but that's when I bought in".
- 10) "We gained an appreciation of how fire risk is shared; how one home influences another".
- 11) FireSmart appealed to the community "elders"; it made sense based on long-term memories of how the forest looked (decades) ago.
- 12) "Personal connections to fire professionals, access to sound advice, and knowing they were going the extra mile towards a mutual goal made a big difference."





parkscanada.gc.ca

Questions & Discussion



Alan Westhaver
Vegetation/Fire Specialist
Parks Canada, Jasper National Park
(780) 852-6169
alan.westhaver@pc.gc.ca



Parks
Canada

Parcs
Canada

Canada