

WILDLAND FIRE MANAGEMENT IN ALBERTA

Natural Disturbance Workshop December 10, 2009
Kevin Quintilio ASRD

Wildland Fire Management



- Drivers of change
- Where we have come from
- Healthy Landscape Approach

Drivers of change

Old forests, bugs & climate change?

Law of diminishing returns

Stakeholder expectations

Budget cuts

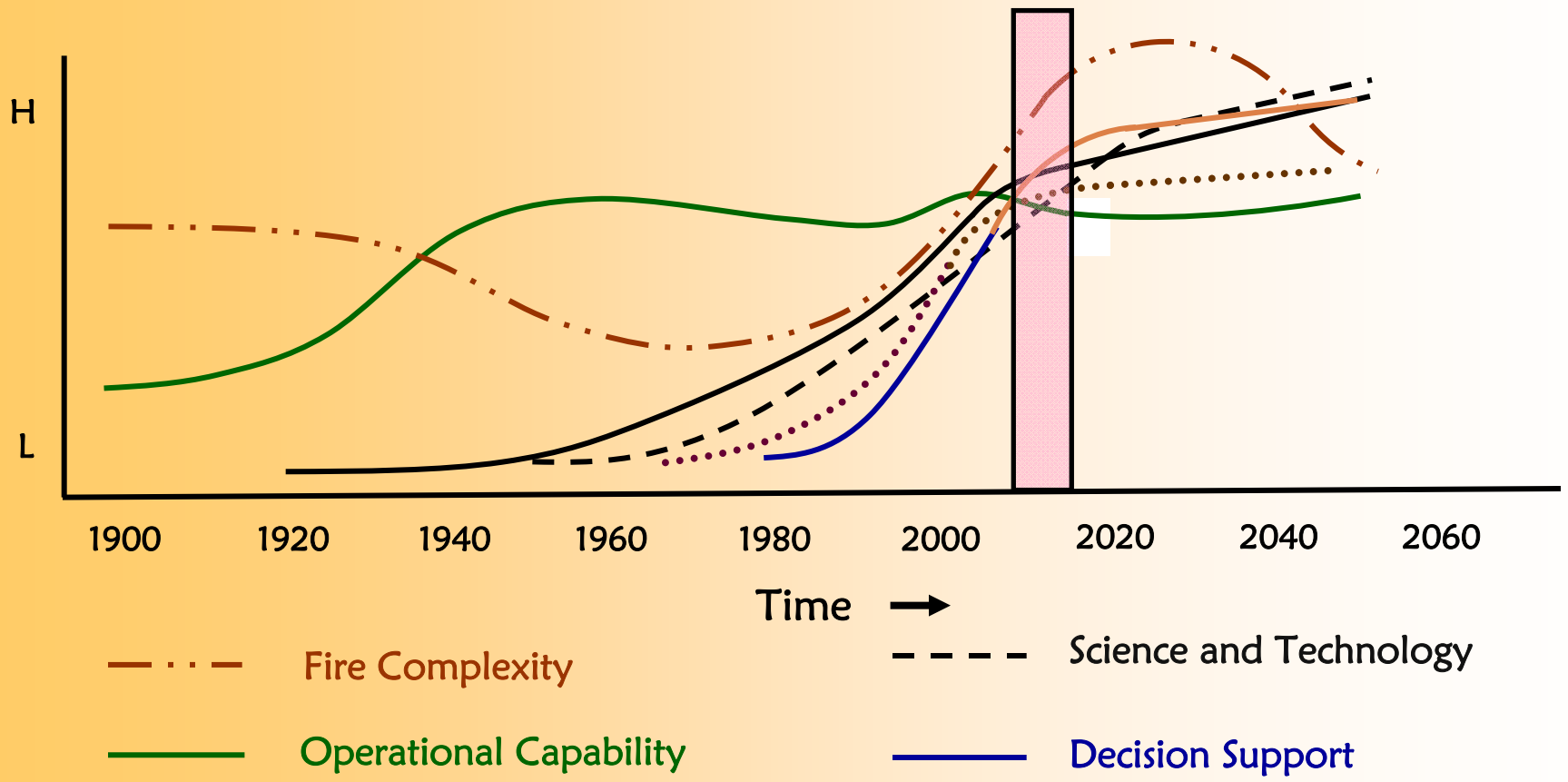
Bridgeland Photo 1912



Repeat Photo 2007

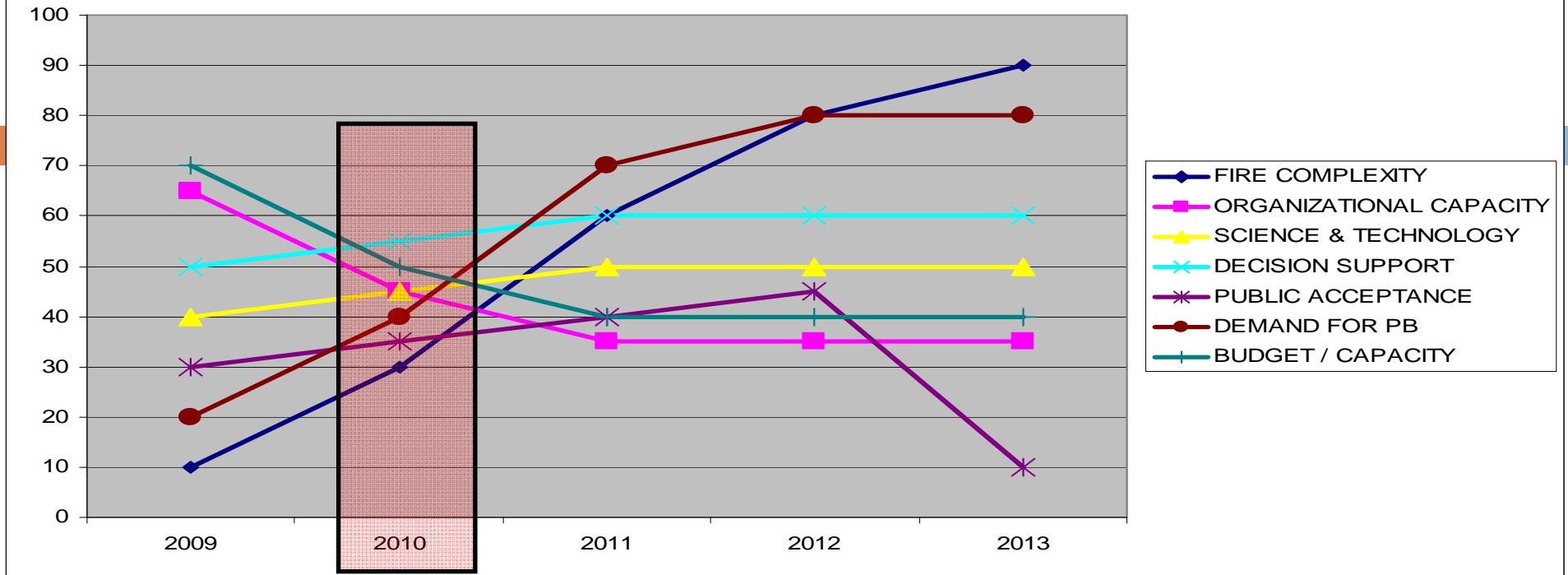


Wildland Fire Complexity and Capability



Presented at "The '88 Fires: Yellowstone and Beyond. Jackson Hole, Wyoming. September 22-27, 2008".

FUTURE OF WILDLAND FIRE MANAGEMENT



When will demand for Wildland fire Management exceed our organizational capacity?

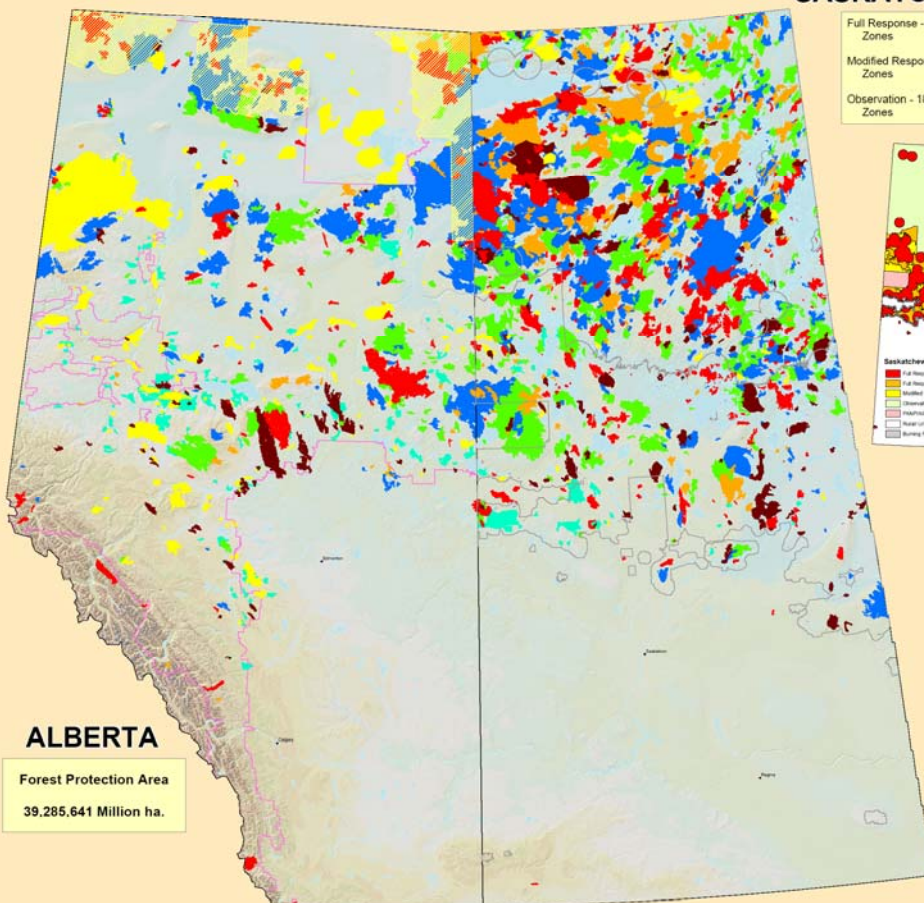
What effect will \$\$\$ cuts have on the program?

What if science & technology does not keep pace with complexity and demand?

What will impact public acceptance and stakeholder support?

Wildfire - "managed uncertainty"

SASKATCHEWAN



Full Response - 11.6 million ha. Zones
 Modified Response - 2.4 million ha. Zones
 Observation - 18.6 million ha. Zones



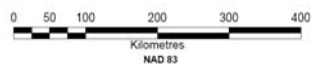
ALBERTA

Forest Protection Area
 39,285,641 Million ha.

Fires by Decade 1945 - 2007

- 1945 - 1949
- 1950 - 1959
- 1960 - 1969
- 1970 - 1979
- 1980 - 1989
- 1990 - 1999
- 2000 - 2007
- Forest Protection Area
- Ecological Wildfire Management Zone
- Saskatchewan Response Zones

Note: Fires greater than 1000 Ha depicted



Produced By: Steve Storer
 Date: July 01, 2008
 Project: U:\gta_research\GIS\Projects\fire\alberta_sask_haz_r1_20080728.mxd



Future Forests, Future Fires, Future Risk

- Age class correction in the forest of East slopes
- Area burned increase at the high elevation
- Fire severity increase
- Mega fire events more frequent
- Suppression resource levels will be insufficient during multiple mega fire events

Healthy Landscape Approach

1. Integration of wildland fire response with landscape objectives
2. Science and research needs
3. Risk management framework
4. Wildfire priority setting protocols
5. Appropriate response policy shift
6. Economic decision making approach

Future Forests, Future Fires, Future Risk



Future Forests, Future Fires, Future Risk

