Can Partnerships Help Us Address the New Normal?

- Union of BC Municipalities
- September 23, 2019
- George Abbott, PhD.

Government has been getting plenty of advice on fire, flood and climate change in recent years….

The Challenge (Auditor General 2018):

CLIMATE CHANGE IS one of the greatest challenges the world is facing. Over the past months, natural disasters have made headlines across the globe. Here in B.C., we too, are already feeling the impacts of climate change. The summer of 2017 saw wildfires burning across the province, breaking records for the greatest number of hectares burned. This past spring, heavy rains combined with the snowmelt and flooded the Okanagan.

These events highlight the environmental, economic and social threats that climate change poses to the province. From 1900 to 2013, B.C.'s average temperature has increased faster than the global average. Scientists predict that the province will face increases in extreme weather, rising sea levels, increasing risk of wildfire and flooding, as well as a change in the location of ecosystems and species that live there.

A Report for Government
and British Columbians

Addressing the New Normal: 21st Century Disaster Management in British Columbia

FIRESTORM 2003

Provincial Review

The Honourable Gary Filmon P.C., O.M.

FIRESTORM 2003

Provincial Review

- **Conclusion**
  - The Time to Prepare is Now
  - The Responsibility is Shared Between All Levels of Government as well as Private Individuals
  - An Ounce of Prevention is Worth a Pound of Cure

So what's the problem?

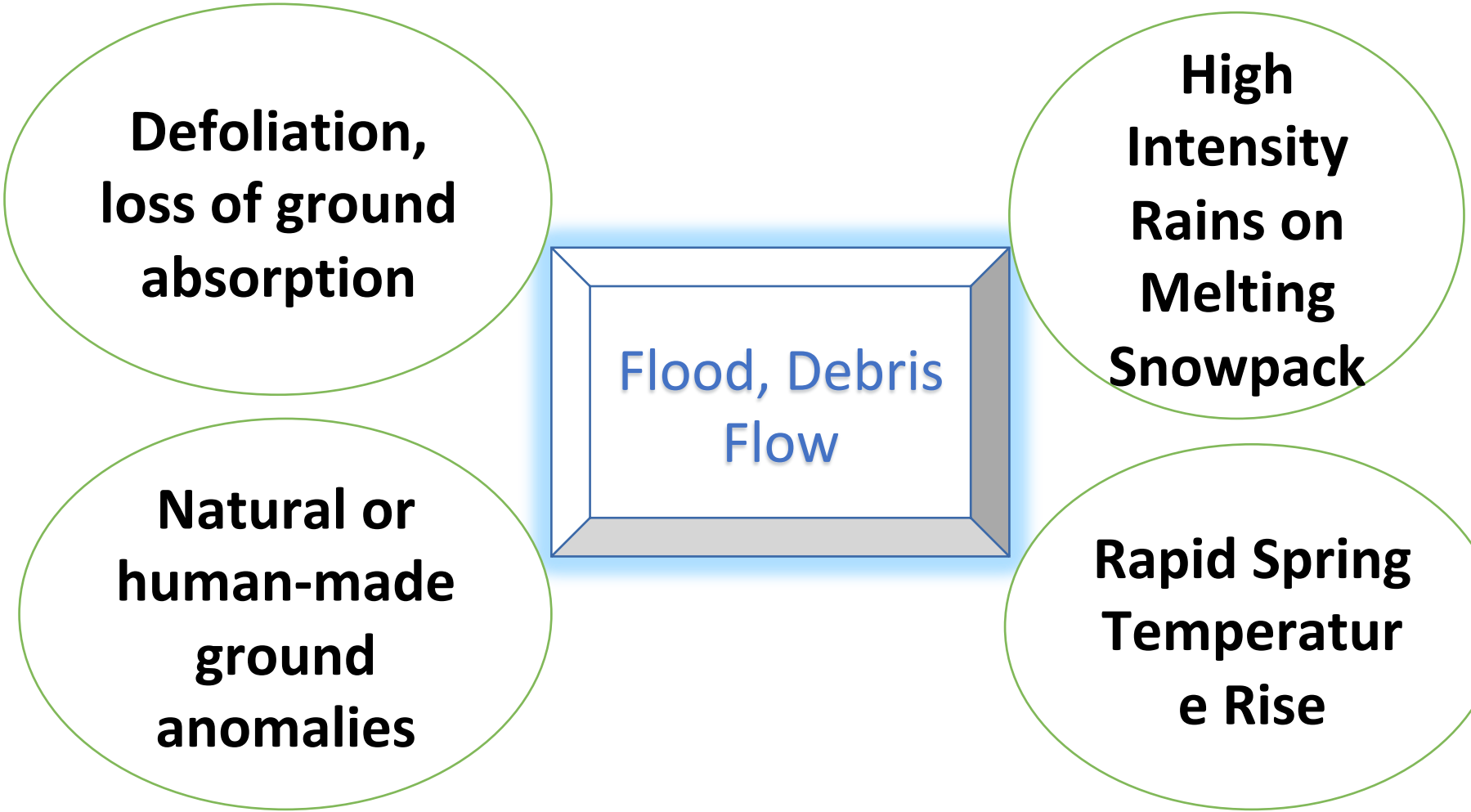
- From 1900 to 2013, BC's average temperature has increased by 1.4 degrees Celsius, faster than the global average (AG and MoE)
- Lightning storms more common with higher temperatures
- More frequent and severe summer drought

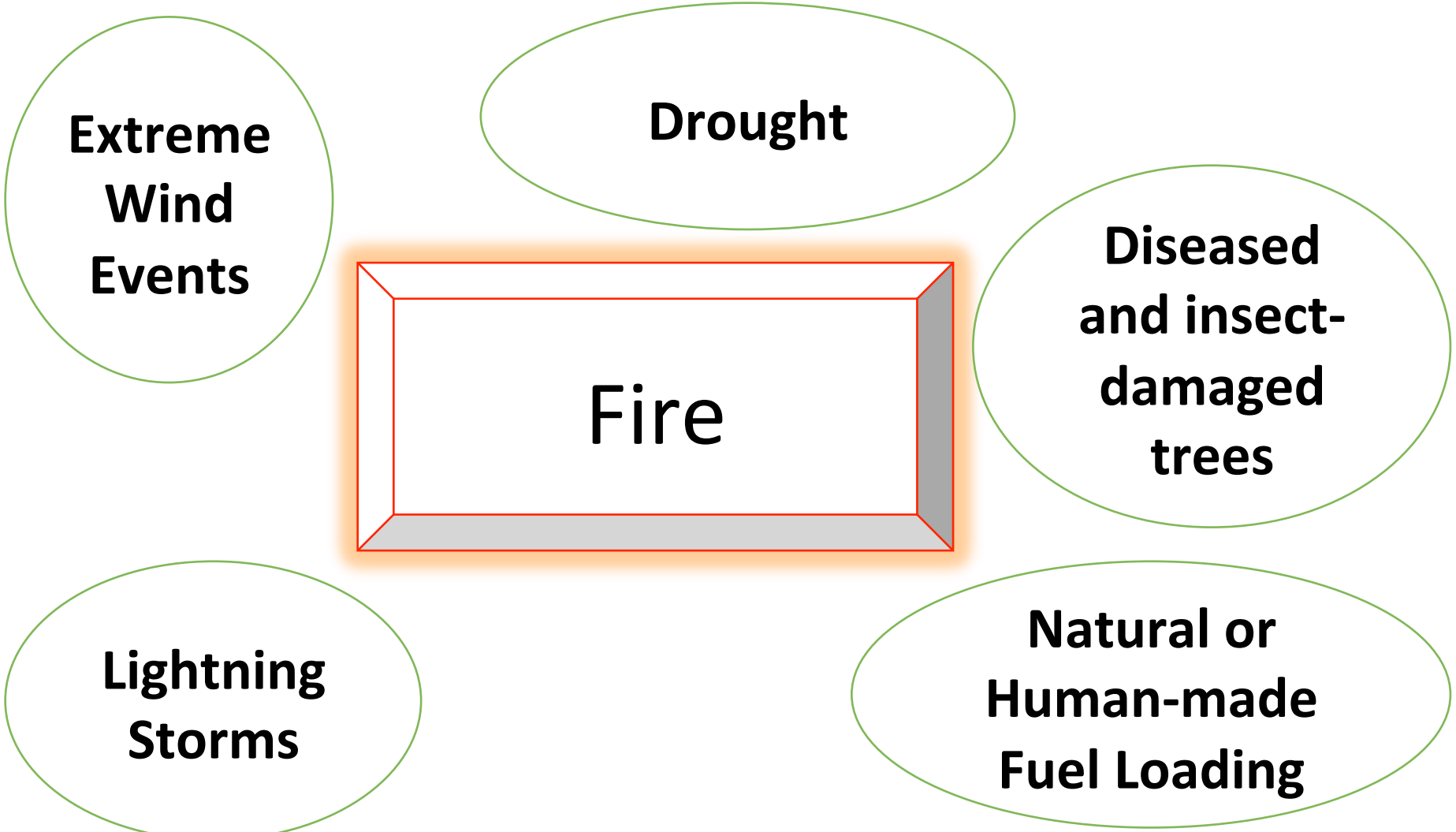
What's the problem (2)…

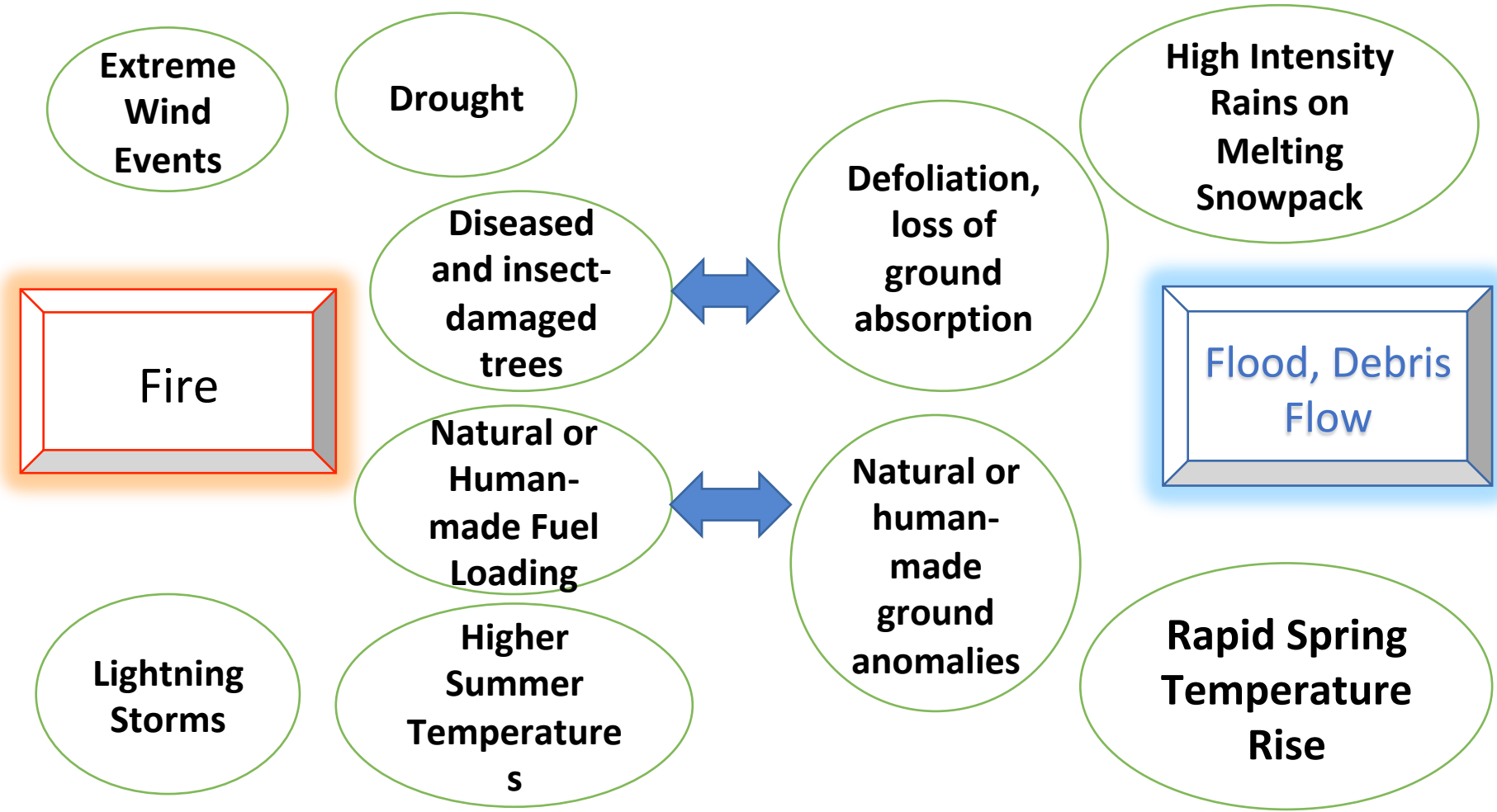
- More frequent and severe insect outbreaks/tree mortality
- Precipitation levels relatively stable on average, but more intense and concentrated exposing areas to flood and debris flow

The Heightened Challenge:

The convergence of climate-related and human-made conditions and risks.


Defoliation, loss of ground absorption
High Intensity Rains on Melting Snowpack
Flood, Debris Flow
Natural or human-made ground anomalies
Rapid Spring Temperatur e Rise


Extreme Wind Events
Drought
Diseased and insect-damaged trees
Fire
Lightning Storms
Natural or Human-made Fuel Loading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Not everyone agrees with this bleak assessment….

For example….

On climate change…

"One of the problems that a lot of people like myself – we have very high levels of intelligence, but we're not necessarily such believers…And when you are talking about an atmosphere, oceans are very small. And it blows over and it sails over."

But avoid Green's Law…

"Anything is possible if you have no idea what you are talking about"

Among the key questions…

- What has / hasn't worked?
- What is going to change?
- Are there opportunities amid wicked problems?

Filmon responds to:

- 2003 Kelowna and Barriere fires
- 265,053 ha burned; $371 m. in fire suppression
- Offers a well-warranted “wake up call”
- Strategic Wildfire Prevention Initiative created with $78 million funding

SWPI Objectives / Performance

- <78,000 ha. treated, <10 % of MHR area
- Ave. cost $5,000/ha.
- 80 Community Wildfire Protection Plans
- 50%/plans no operational treatments
- Cost of treating remaining MHR areas: $6.7 b (AG)

TABLE: WILDLAND FIRE EXPENDITURE VS. AREA BURNED/TREATED IN BC (2003–2017)

Table 2. Wildland fire expenditure and area burned/treated statistics since 2003. Data provided by the BC Wildfire Service, April 2018.[1]

Year	Suppression expenditure ($)	Area burned (hectares)	Prevention expenditure ($)[1]	Prevention area treated (hectares)
2017	568,000,000	1,216,046	3,028,290	245.2
2016	129,000,000	100,366	14,297,105	456.1
2015	277,000,000	280,605	3,570,483	406.4
2014	297,900,000	369,168	3,723,375	653.2

Year	expenditure ($)	(hectares)	expenditure ($)[1]	treated (hectares)
2012	133,600,000	102,122	4,622,321	1,125.2
2011	53,500,000	12,604	7,312,059	1,523.6
2010	212,200,000	337,149	7,698,877	1,360.7
2009	382,100,000	247,419	10,871,019	2,041.4
2008	82,100,000	13,240	5,090,966	656.9
2007	98,800,000	29,440	3,129,038	861.6
2006	160,000,000	139,265	2,142,072	867
2005	47,000,000	34,588	1,040,925	149.2
2004	165,000,000	220,518	283,361	
2003	371,000,000	265,053		
Totals	**3,099,000,000**	**3,385,881**	**73,761,344**	**11,678.5**

And the moral of the story….

- An ounce of prevention is actually worth about 42 pounds of cure
- Governments obliged to open wallets and combat threats to communities and resources

And further lessons learned….

- But prevention dollars are always the hardest to find
- Complex, multi-faceted, “wicked” problems are the toughest for governments to sustain focus on

“Why am I short of attention
Got a short little span of attention”

- Paul Simon
- “You can call me Al”

Government agendas are crowded…
Demands /needs invariably exceed resources!

Generally speaking…

Annual fire and flood issues have been resolved when Treasury Board is making its decisions in November-January…

Health and education (comprising 70% of the provincial budget) are still producing some perplexing challenges…

Curious George

Visits Treasury Board

Filmon prescription weakened by…

- Higher cost for fuel mitigation than anticipated.
- Understandable reluctance to devote local tax dollars to treatment of adjacent Crown lands given ongoing demands for improvements to water, sewer, roads, recreation, and other infrastructure.

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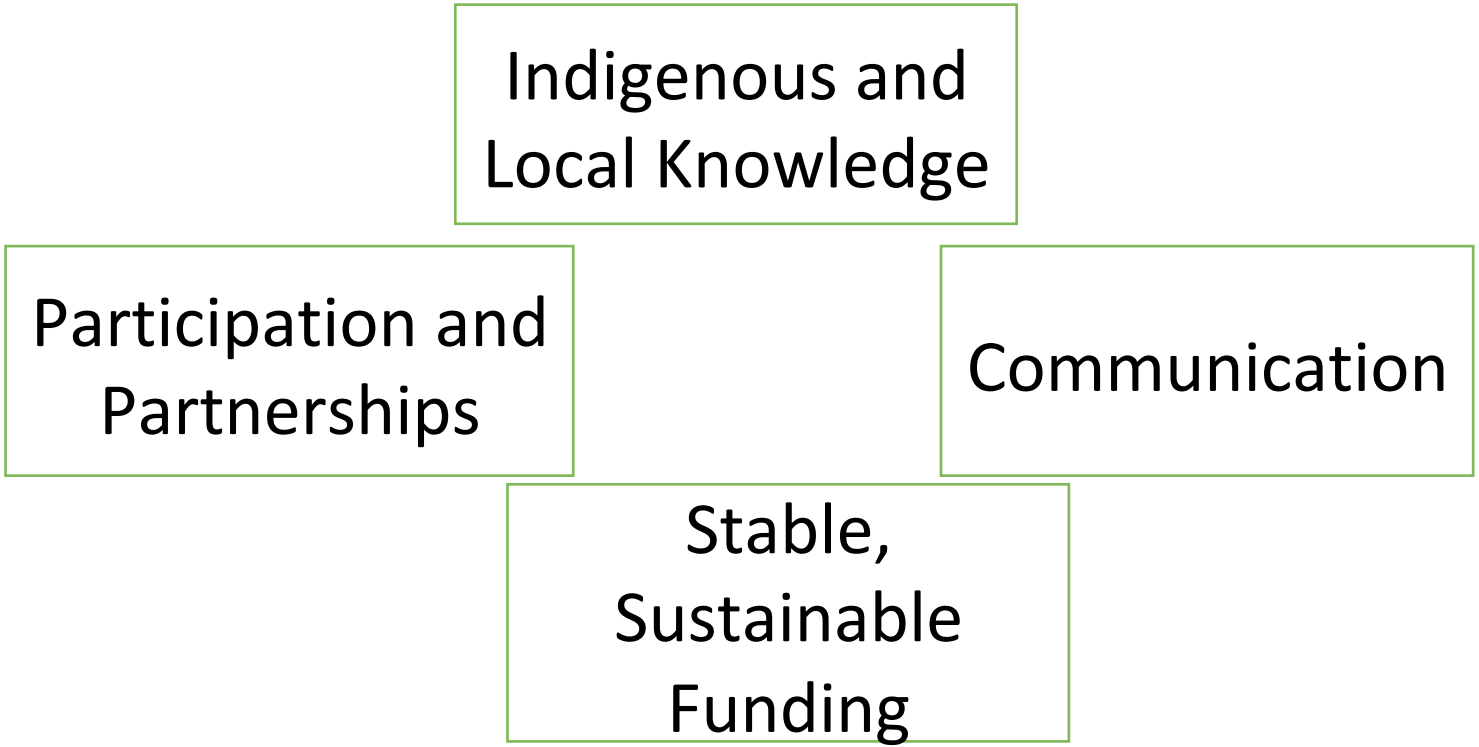
The 2017 Fire Review: Our Defining Moment…

- On July 7th, a massive lightning storm in the Williams Lake region ignites more than 160 wildfires across the tinder-dry landscape.
- Command Centre temporarily evacuated.
- Demand for suppression response quickly outstrips the capacity of BCWS. Forced to prioritize around critical infrastructure.

Defining moment…

- In the absence of BCWS, initial response is provided by First Nations, ranchers, farmers, logging contractors and others. Local response was led in many cases by people with past fire-fighting experience.
- Underlined the critical importance of on-the-ground partnerships and basic training.

The Challenge: What We Heard



The Goal that Emerged:

On-the-ground partnerships

that incorporate

Indigenous and local knowledge

empowered by

world-class technology.

Community Safety

Local gov't pivotal on almost every aspect of the safety triangle….

- Where people build from fire and flood perspectives
- How homeowners help protect themselves
- Creation of mutual aid agreements
- Other partnerships with FNs/other gov'ts

So where do we go from here?

Some great examples to build on!

- Logan Lake: community forest (CF) encompasses townsite, ongoing brushing, grazing + prescribed burn program funded by CF, major public buy-in for FireSmart
- Cranbrook, RDEK, Aq'am FN partnership: joint planning, mutual aid agreements, large and effective prescribed burns (with BCWS)
- Quesnel and others generate community, licensee and FN partnerships

And more…

- Forest Enhancement Society of BC
- Community Resilience Investment
- Partnership between BC, RDs, and the BC Cattlemen's Association
- Partnerships with First Nations and use of Indigenous knowledge

And the one I'd really like to see…

- A federal-provincial partnership providing a dedicated revenue stream for prevention (carbon/ gas tax?)inspired by UN Sendai Framework

The Tyranny of the Urgent…

Governments are confronted by continuous and urgent demands for resources….Timely and appropriate responses to the symptoms of ongoing climate change should not be contingent on annual generosity from Treasury Board (s)!

To paraphrase John Lennon,

"Treasury Board is what happens to you while you're busy completing other strategic plans!"

Despite 2019, challenges are ongoing…

- Very complex file for government; policy heft constrained
- Issue is not going away, may intensify
- Where/when is the next Kelowna fire/Grand Forks flood going to be?

Opportunities amid problems…

- Need to (quickly) get a better handle around interaction of logging and silviculture practices, prescribed burns, insects, and much more
- Approaches/solutions need to be practical, effective, cost-effective AND partnered
- Jurisdictions (federal, provincial, local and FN) need to understand and share best / wise practices

And more perplexing questions for your consideration…

- Protected areas support multiple and sometimes diverse values… how should we manage such areas when extensive tree mortality and adjacency to settlement heighten risk?

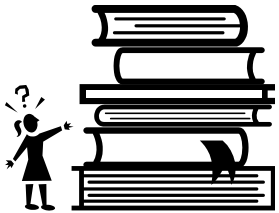
BC's 2017 wildfires emitted 190 million tonnes of carbon, 6 times the total from all other sources.

When we exempt wildfire from carbon counts, but include carbon emissions from prescribed burns, do we inadvertently undermine one of our most practical and promising preventative tools?

So what is going to change?

- Greater use of prescribed burns to achieve fuel mitigation at both interface and landscape levels, as Indigenous people have for thousands of years
- Shifting silviculture practices in interface areas: spacing, species, more deciduous
- And to a lesser extent in some landscape level areas
- More interface level partnerships: licensees, FNs, local gov’ts, supported by strategic provincial policy shifts

THANKS AGAIN!



QUESTIONS?