



Disaster Proofing Canada: Preparedness for Parliamentarians

February 2, 2017



Disaster Proofing Canada

- A Primer -

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Fort McMurray 2016

Oldest, largest, university-based disaster research institute in Canada

Established by the insurance industry 20 years ago, in 1997, at Western University

ICSU International Centre of Excellence for Integrated Research on Disaster Research

Mission - Reduce the risk of loss of life and property damage from floods, storms & earthquakes

Catastrophe – damage exceeds 2% of GDP (none yet)

Disaster – damage 0.2% - 2% of GDP (15 - 25 each year)

Hazard – damage less than 0.2% of GDP (1,000s each year)

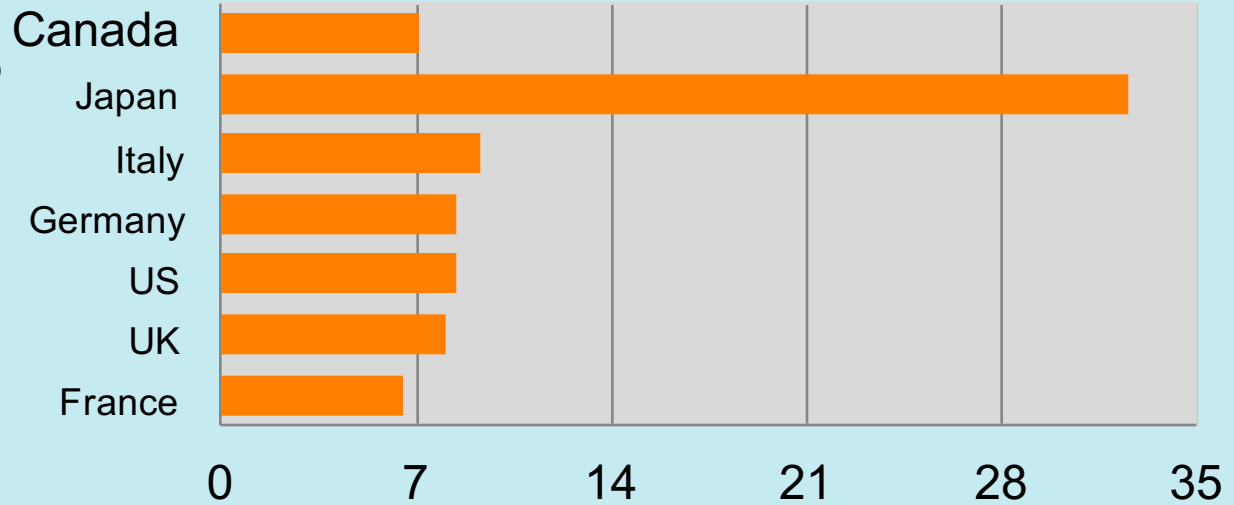
Fort McMurray 2016



Canada does less to reduce the risk of disaster damage than our peers

Source: United Nations Risk Index

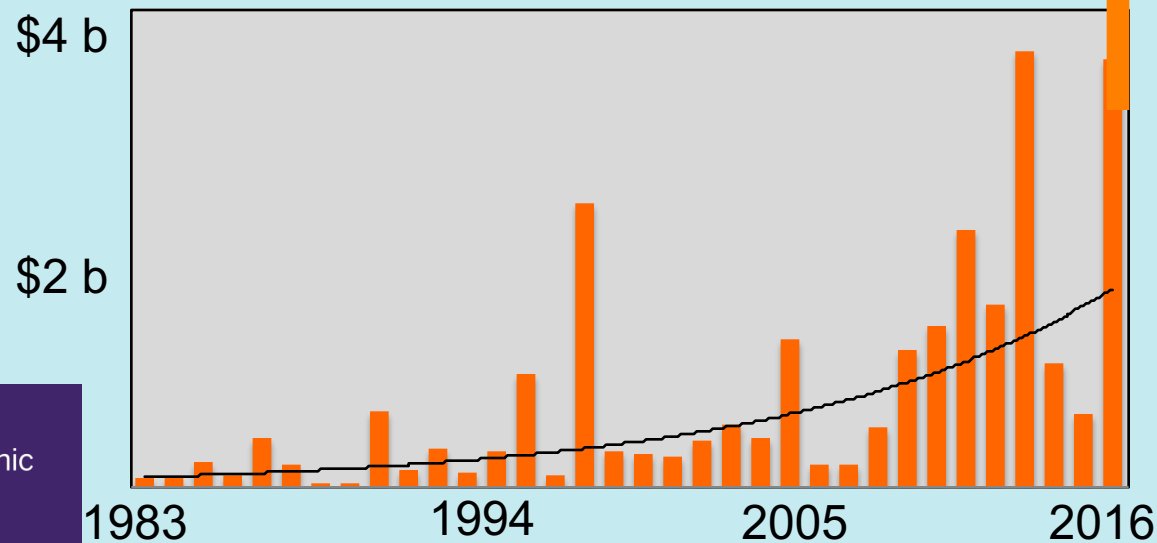
Disaster risk reduction effort, 2015



Disaster damage is rising in Canada and elsewhere

Source: Insurance Bureau of Canada

Disaster claims paid by Canadian insurers



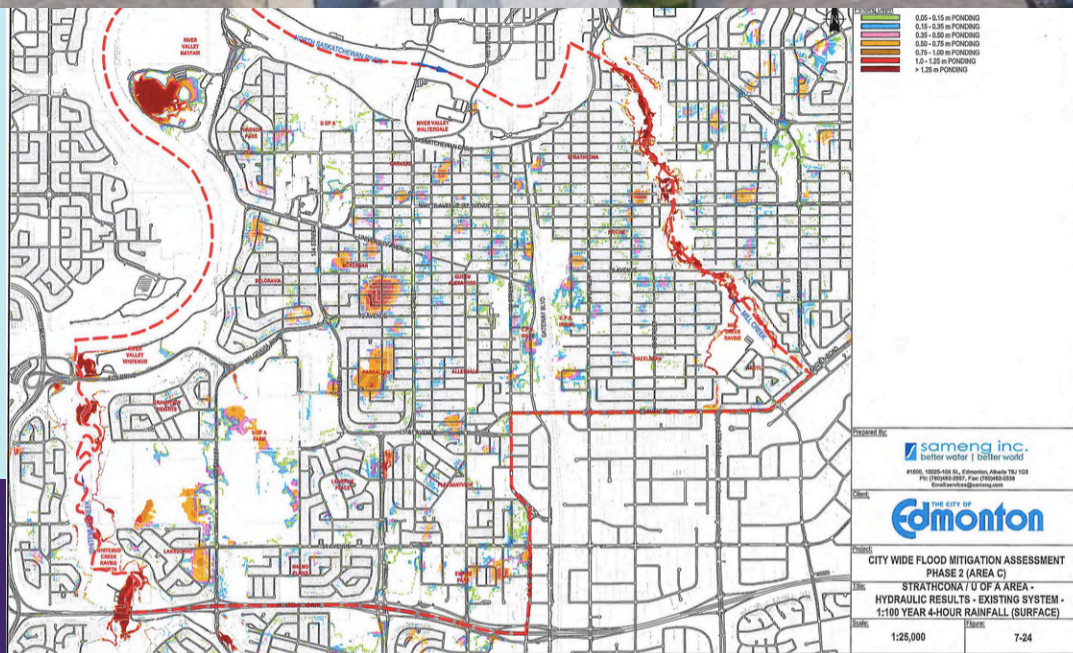
Why were some homes in Fort McMurray destroyed and others not?

Source: ICLR



Why are most homes at risk of flood not near rivers?

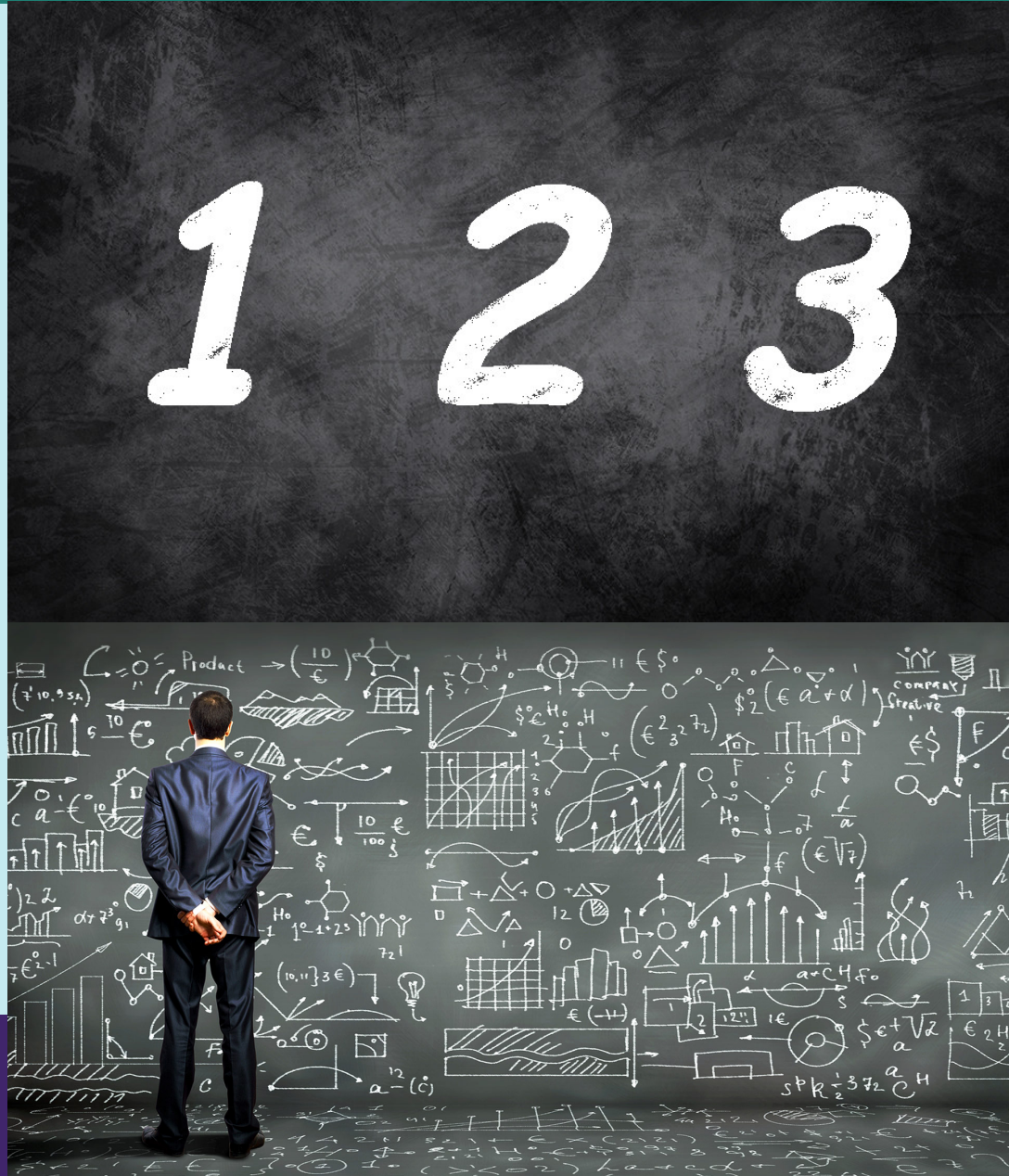
Source: City of Edmonton



Disaster response -
clear local, provincial,
federal chain of action



Risk reduction -
ambiguous rules, little
action, poor outcomes



The Red River floodway prevented \$ billions of damage

But there are too few other Canadian examples

Red River floodway



Public funds for infrastructure, uninsured homes

- Since 2008, DFAA permits 15 percent funding

Insurers Rebuild Stronger Homes program

- ICLR science
- Water, wind, fire, hail
- 4 pilot studies, 20+ showcase homes

How effective is disaster response in Canada?

Why are most federal funds for cyber threats spent on prevention, while most funds for flood and severe weather is spent on repairing damage, not prevention?

What can Canada learn from disaster management leaders like Japan and New Zealand?

Disasters are the new normal, are we prepared for the next one?

What should Canada do to prepare for the risk of a large disaster, a catastrophic earthquake in Vancouver or Montreal?



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