## Saskatchewan Flood & Natural Hazard Risk Assessment:

#### Introduction to Stakeholder Workshops

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Saskatchewan Flood and Natural Hazard Risk Assessment -

**Stakeholder Workshop** 

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## Saskatchewan Flood & Natural Hazard Risk Assessment

- A social and natural science project funded by:
  - Saskatchewan Ministry of Government Relations
  - Government of Canada: National Disaster Mitigation Program
- To better understand Saskatchewan's:
  - Exposure to Natural Hazards (e.g. Fires, Floods, Drought, Other)
    - Range of severity and variability (Intensity, Frequency, Duration)
    - Geographic distribution
  - Natural Hazard Impacts to People, Places, Economic activities, Industry, Environment
  - Current mitigation measures and practices
  - Risk and changing risk factors (historic and future)
  - Concepts for improved mitigation to:
    - reduce risk & vulnerability for current and future exposure
    - improve disaster preparedness & response
    - strengthen capacity & increase resilience
  - Outcome: Classify/Rate Saskatchewan's natural hazard risks









#### Floods

"1.8-million Canadian households are in flood-prone areas, and most of them do not know it."

L. Perreaux, May12,2017 Globe & Mail

#### **Provincial Disaster Assistance Program (Sask)**

- \$335 million expended from 2009-2014
- 136 local states of emergencies declared
- Source: Prov. Auditor, Saskatchewan, 2015 Report Vol.1, Table 5
- https://auditor.sk.ca/pub/publications/public\_reports/2015/Volume\_1/12\_Govt%20Relations-Emergency%20Preparedness.pdf





R.Halliday WSA, 2014; Yorkton Cr

Wheaton Consulting



## Wildfires – Forests / grass fires

#### La Ronge Forest Fires June 2015

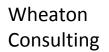
- >10,000 people evacuated
- ~1.7 million hectares of forest burned



Gov of Sask, 2015









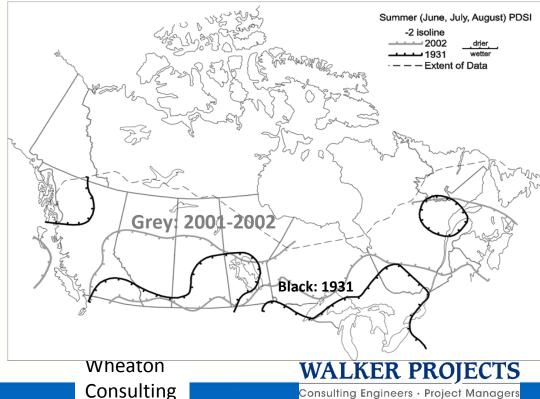
### Drought

Dust Storm Lomond; PFRA



- 1920s-30s drought impacted people and environment
- 2001-02 Drought was more extensive across Canada
  - \$5.8 B drop in Can. GDP
  - \$3.6 B drop Can. ag prod.
  - 1.6 B drop Sask ag prod.
  - 41,000 Can. jobs lost
  - SRC/PFRA: Lessons Learned from Cdn Drought 2001-02
- Drought, inc. multi-year
  - Natural characteristic
  - 800 years historic record





#### Other Hazards

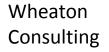
- Hail
- Slumping/landslide
- Tornado/ wind
- Ice/snow
- Insects
- Disease
- Earthquake
- Other



Kawacatoose First Nation Tornado, Mar 7, 2011 Gov. of Saskatchewan









#### Stakeholder Workshops

- Your Knowledge is key
- Natural hazard risks to you/ your area of interest
- Current Mitigation Practices
- Stakeholder insights for
  - Concepts for future risk from natural disasters
  - Improving capacity and resilience to natural disasters







## Stakeholder Insights (Natural Hazards)

- an example of breakout activities
- Impacts
- Risks
- Identify geographic areas
- For HISTORIC IMPACTS
- For CURRENT MITIGATION
- For FUTURE SCENARIOS
- For FUTURE MITIGATION
- STAKEHOLDER KNOWLEDGE

Impact identified by Stakeholders	Severity of Impact		
	Low	Medium	High
Human Health			
Economic			
Infrastructure			
Homes			
Recreation			
Community			
Industry			
Institutional			









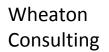
# Today's Session is to gather Stakeholder Expertise

- Historic Hazards
  - Fires
  - Floods/Excessive Wet Conditions
  - Drought/Excessive Water Scarcity
- Stakeholder discussions
  - Breakout Groups
  - Plenary
- Future Scenarios
  - Changing Risk
  - Breakout Groups
  - Plenary
- Stakeholder Data Summary
- Adjournment











### Why are we doing this?

- Hazard Risk Assessments help us understand and manage risk
- Stakeholder knowledge is critical
- Your contributions will help shape future mitigation/adaptation planning





Consulting



Wheaton

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