Theorizing Wildfire Risk Management

Research Problem

Current Wildfire Risk Management paradigm does not work for many First Nations communities (Abbott & Chapman, 2018; Arnold & Wade, 2015; Daniels et al., 2018; Galbraith, 2014; Government of Canada, 2022; McGee & Christianson, 2021).

Research Question

How can innovative opportunities improve wildfire risk management?

Methods

Pragmatic, action-oriented research utilizing mixed methodologies. This research will use a netnography approach to data collection and thematic analysis for the qualitative assessment (Creswell & Creswell, 2018; Newbold et al., 2013). Afterwards, a correlational quantitative approach will be taken using a linear regression analysis to determine local fire risk predictors (Hicks, 2020; Kozinets, 2021; Newbold et al., 2013).

Contributions

Wildfire risk Algorithms that are dedicated to supporting First Nations well-being indicators (Blackstock, 2011; Morgan, 2006; Perrakis & Eade, 2015). Build upon existing literature and a pathways for replicating similar risk frameworks for over 50 other hazard types (Aharonian et al., 2019).

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Mini Risk Assessment Point Scoring

Likert Scale Scoring

- None
- Very Low
- Low
- Moderate
- High
- Very High
- Extreme

Risk ID

Trees
- Look at the abundance of trees

Shrubs
- Look at the abundance of shrubs

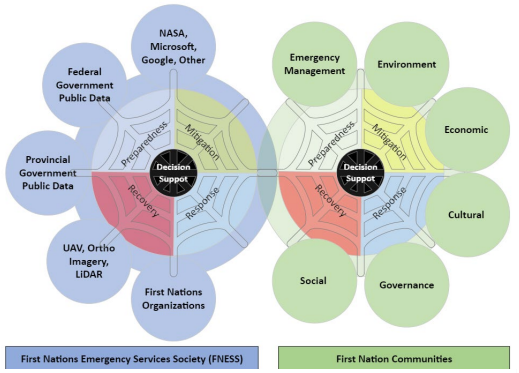
Grass
- Look the abundance of grasses

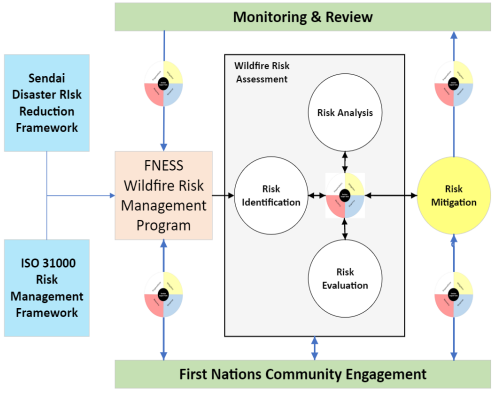
People
- Presence of people contributing to fire start likelihood

Power Lines
- Abundance of power lines
- Frequency of interaction with trees

How To Video

Risk Assessment Form





<<< Fire Risk Assessor Starter Kit

Assess these locations >>>

Risk Analysis

Spruce
- Abundance

Oak
- Abundance

Birch
- Abundance

Topography
- Flat Ground = Zero
- Mountainous = Extreme

Risk Evaluation

Nearby Critical Infrastructure
- Abundance

Nearby Water Sources
- Abundance

Risk Area - 002

Risk Area - 001

Risk Area - 003

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