

# Island Lake Wildfire Mitigation

B.R. Hay

### Introduction

For remote First Nations, wildfires can result in damaged or destroyed homes, outages to critical infrastructure such as power or telecommunications, and require evacuations which have their own negative consequences such as trauma, being the target of racism, domestic violence, or even suicide (Asfaw et al., 2019; McGee, 2021; Office of the Auditor General of Canada [OAG], 2022; Public Health Agency of Canada [PHAC], 2024). With this in mind, the following research is a review of mitigation methods, and associated challenges, that when put in place would increase wildfire resilience for the First Nations in the ILR. Mitigation methods and options were evaluated in their current form with current constraints to recommend a course of action that the ILR First Nations, and applicable parties, must take to implement mitigation options and achieve wildfire resilience.

### Background

The worldwide trend for wildfires is that they are getting bigger, occurring

### Discussion

Wildfire resilience for the Island Lake First Nations is important. People's lives and livelihoods depend on it. By increasing their resilience, there is less likelihood that the Nations would be impacted by wildfires in the area. This means reduced need for evacuation, reduced potential damage to the Nations from wildfires, and reduced chances that citizens of the region would suffer the potentially traumatic effects of evacuation. Wildfire mitigation is the pathway to wildfire resilience for the ILR First Nations. Because mitigation extends to housing by way of maintenance and upgrades, a cross-over benefit is realized to general housing on First Nations too, thereby helping to alleviate a broader housing concern that is currently plaguing those Nations (OAG, 2020; OAG, 2024).

# **Conclusions or Recommendations**

#### **Conclusions and Recommendations**

This research found that the following was required to attain wildfire resilience in the region that:

more often, and causing larger impacts than ever before. Recently, wildfires in Manitoba have burned close to and threatened remote First Nations such as those in the Island Lake Region (ILR), requiring evacuations, threatening supply of power, damaging homes, destroying the environment around them, and threatening people's lives (Hobson, 2021; Kemp, 2022; Sinclair, 2024; Ringos, 2024). This research answers the question: For the First Nations in the Island Lake Region, what mitigation opportunities can interested parties and the Nations themselves take to increase resilience of *Nations against wildfires while balancing traditional wildfire mitigation* techniques with post-colonial wildfire mitigation techniques in order to become more resilient to wildfires and what challenges might they face when doing so?

# Methods

This research used a chain-referral strategy which resulted in a critical appraisal of secondary data to explore what mitigation measures were available to remote First Nations and challenges they may encounter when implementing these measures. It then used the same strategy to source reference material to better advise on how to implement those measures and avoid associated challenges. In total, sources came from multiple sources such as industry or agency grey literature (31%), peer-reviewed academic articles (29%), context specific information for the Island Lake First Nations (27%) and the remainder (13%) which was from other sources such as general or media information.

# **Results/Findings**

The research found that to increase wildfire resilience for the ILFNs, multiple wildfire mitigation measures were arrayed in a layered, overlapping, arrangement. Effective mitigation required an exertion of control over both the built and natural worlds. The built world included structures such as homes, businesses, and critical infrastructure. The natural world includes items as plants, trees, and forests the surround the First Nations. The research also uncovered awareness that with respect to wildfire mitigation, the ILFNs are operating under a set of incredibly rigid constraints. Those constraints include a short window of practical physical access for the winter roads that provide access to the communities and is used to import wildfire mitigation materials. They also include a bureaucratic framework that makes mitigation project execution difficult, especially with tight physical access window. The journey to wildfire resilience requires a large-group of interested parties such as the citizens, First Nations' leadership and involvement by all levels of government working together closely to make it so.

- The built world, primarily housing, in the First Nations requires a large initial effort in fireproofing and improving general maintenance of structures to lower the risk that wildfires pose to those structures and attain wildfire resilience. These initial efforts will reduce the likelihood that structures could be ignited by ember transmission from wildfires in the area;
- The natural world, such as forests, trees, and grasses in and around the Nations requires a large initial vegetation management effort remove and control vegetation in the region. This initial effort will reduce fuel for potential wildfires and lower associated wildfire risk for the Nations;
- Both the built and natural worlds will require ongoing maintenance to keep wildfire risk low and maintain the resilience earned by initial built and natural world mitigation efforts;
- A myriad of constraints exists for the Island Lakes First Nations in attaining wildfire resilience. They include bureaucracy issues, lack of autonomy issues, and logistical challenges stemming from the Nations being in a remote location. Combined, the constraints are nearly insurmountable.
- A task force approach is required because of the sheer number of different interested parties and jurisdictions involved in and around the region.
- The Nations themselves must reestablish the practice of IFS and execute it for their areas. Given their remote location and difficulty this brings to conventional large-scale vegetation management practices and transporting heavy equipment required to do so, IFS is the only practical large-scale means to manage vegetation in the region. It can achieve what other methods are unable to given the remoteness of the ILR; and
- Establish strong relationships between the Nations and with interested parties such as the Manitoba wildfire service. This is required because executing the practice of IFS must be done with a high degree of coordination involving multiple jurisdictions present ILR.

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