Experiences of wildfire management and evacuations: Insights from members of Keewaytinook Okimakanak Tribal Council communities
Learning from Indigenous perspectives for wildland fire management from Treaty 5 and 9 Remote First Nations project report



Technical Report TR-77

Science and Research Branch
Ministry of Natural Resources

Ontario

Science and Research Technical Report TR-77

Experiences of wildfire management and evacuations: Insights from members of Keewaytinook Okimakanak Tribal Council communities

Learning from Indigenous perspectives for wildland fire management from Treaty 5 and 9 Remote First Nations project report

A.T. Gonzalez[1], L.P. Galway[2], J.N. Robinson[1], L.W. Robinson[1], D. Duckert[3]

[1] Ontario Ministry of Natural Resources, 421 James St. S., Thunder Bay, ON

[2] Lakehead University, 955 Oliver Road, Thunder Bay, ON

[3] Keewaytinook Okimakanak Tribal Council, 730 Syndicate Ave. South, Thunder Bay, ON.

2026

Science and Research Branch

Ministry of Natural Resources

© 2026, King's Printer for Ontario

Copies of this publication are available from executivedirector@kochiefs.ca or info.mnrscience@ontario.ca.

Cette publication hautement spécialisée, Experiences of Wildfire Management and Evacuations: Insights from Members of Keewaytinook Okimakanak Tribal Council Communities. Learning from Indigenous Perspectives for Wildland Fire Management from Treaty 5 and 9 Remote First Nations Project Report., n'est disponible qu'en anglais conformément au Règlement 671/92, selon lequel il n'est pas obligatoire de la traduire en vertu de la Loi sur les services en français. Pour obtenir des renseignements en français, veuillez communiquer avec le ministère des Richesses naturelles au info.mnrscience@ontario.ca.

Some of the information in this document may not be compatible with assistive technologies. If you need any of the information in an alternate format, please contact info.mnrscience@ontario.ca.

Cite this report as:

A.T. Gonzalez, L.P. Galway, J.N. Robinson, L.W. Robinson, D. Duckert. 2026. Experiences of wildfire management and evacuations: Insights from members of Keewaytinook Okimakanak Tribal Council communities. Learning from Indigenous perspectives for wildland fire management from Treaty 5 and 9 Remote First Nations project report. Ontario Ministry of Natural Resources, Science and Research Branch, Peterborough, ON. Science and Research Technical Report TR-77. 57 p.

Abstract

In recent years, a growing number of voices have suggested the systems in place for wildfire management in Canada often do not serve the needs and aspirations of First Nations peoples adequately. In firefighting and other aspects of fire response, fire risk mitigation, and the management of fire-related evacuations, meaningful engagement with Indigenous communities has often been lacking and the capacity, priorities, and values of First Nations have often been ignored. Remote First Nations across Treaty 5 and 9 territories have recent direct experience with most or all of these shortcomings. We conducted semi-structured interviews with 24 members of Keewaytinook Okimakanak First Nations as part of a larger collaborative research project aimed at understanding how to better support the values, needs, and resilience of remote First Nations community members in Treaty 5 and Treaty 9 territories related to wildfire management and evacuations.

Participants discussed the motivations that drive them and others in their communities to engage in wildfire management activities. They described aspects of evacuations that caused stress for individuals, their families, and their communities, highlighting the inadequacies of current support systems. Barriers and gaps that hindered individual participation in wildland firefighting and mitigation activities, and that undermined effective evacuations were richly described; so, too, were pathways to success, where these activities were carried out in ways that overcame challenges, prevented harms, and benefitted both individuals and the community.

The findings revealed a strong desire among members of all five participating communities to bolster their wildland firefighting and fire risk mitigation capacities and enhance community-led wildfire management initiatives. Fostering motivation and addressing the barriers, challenges, and gaps that preclude participation—through initiatives such as increasing community access to equipment and maintenance and creating opportunities for collaboration across organizations—can contribute to solutions that strengthen remote First Nations' capacities and self-determination related to wildfire. The data revealed how social issues intersect with fire management, stressing the importance of good organization and culturally contextualized care and wellness supports to promote resiliency, particularly during evacuations. Building on these findings, we offer key considerations, opportunities, and challenges for federal and provincial government agencies, and identify five wise practices for doing wildfire management with remote First Nations.

Résumé

Expériences en matière de gestion des incendies de végétation et d'évacuation : Points de vue des membres des collectivités du conseil tribal de Keewaytinook Okimakanak

Rapport sur le projet d'apprentissage à partir des perspectives autochtones pour la gestion des feux de broussailles par les Premières Nations éloignées des traités n^{os} 5 et 9

Ces dernières années, un nombre croissant d'intervenants ont suggéré que les systèmes en place pour la gestion des incendies de végétation au Canada ne répondent souvent pas de manière adéquate aux besoins et aux aspirations des peuples des Premières Nations. En ce qui concerne la lutte contre les incendies et d'autres aspects de l'intervention, l'atténuation des risques d'incendie et la gestion des évacuations liées aux incendies, une mobilisation importante avec les collectivités autochtones a souvent fait défaut. Par conséquent, les capacités, les priorités et les valeurs des Premières Nations ont souvent été ignorées. Les Premières Nations isolées des territoires des traités n^{os} 5 et 9 ont récemment fait l'expérience directe de la plupart, voire de toutes les lacunes mentionnées. Dans le cadre d'une vaste étude collaborative, nous avons réalisé des entrevues semi-dirigées auprès de 24 membres de la Première Nation Keewaytinook Okimakanak. Notre objectif était de mieux comprendre comment appuyer les valeurs, les exigences et la capacité de réaction des communautés éloignées des Premières Nations dont les terres sont couvertes par les traités n^{os} 5 et 9 en matière de gestion des feux de végétation et d'évacuation.

Les participants ont discuté des motivations qui les poussent, eux et d'autres membres de leur collectivité, à s'engager dans des activités de gestion des incendies de végétation. Ils ont décrit les aspects des évacuations qui ont causé du stress aux particuliers, à leurs familles et à leurs collectivités, soulignant les insuffisances des systèmes de soutien actuels. Les obstacles et les lacunes qui entravent la participation des particuliers aux activités de lutte contre les incendies de forêt et d'atténuation de leurs effets, et qui compromettent l'efficacité des évacuations, ont été abondamment décrits. De même, les possibilités de solutions ont été abordées, où ces activités ont été menées de manière à surmonter les difficultés et à prévenir les dommages, bénéficiant ainsi aux particuliers et à la collectivité.

Les résultats ont révélé que les membres des cinq collectivités participantes souhaitaient vivement renforcer leurs capacités de lutte contre les incendies de végétation et d'atténuation des risques d'incendie, ainsi qu'améliorer les initiatives de gestion des incendies de végétation

menées par les collectivités. En stimulant la motivation et en s'attaquant aux obstacles, aux difficultés et aux lacunes qui empêchent la participation, par des initiatives telles que l'amélioration de l'accès des collectivités à l'équipement et à l'entretien et la mise sur pied de projets de collaboration entre les organisations, il est possible de contribuer à des solutions qui renforcent les capacités et l'autodétermination des Premières Nations éloignées relativement aux incendies de végétation. Les données ont révélé comment les questions sociales se mêlent à la gestion des incendies, soulignant l'importance d'une bonne organisation et d'une prise en charge des soins et du bien-être adaptée au contexte culturel pour promouvoir la résilience, en particulier pendant les évacuations. Sur la base de ces résultats, nous soumettons les principales considérations, possibilités et difficultés à l'attention des organismes gouvernementaux fédéraux et provinciaux, et nous mettons en évidence cinq pratiques judicieuses pour la gestion des incendies de végétation avec les Premières Nations éloignées.

Acknowledgments

This report is the result of a collaborative research effort from the Ontario Ministry of Natural Resources, Lakehead University, and the Keewaytinook Okimakanak Tribal Council. Our immeasurable gratitude extends to the people of Deer Lake, Keewaywin, McDowell Lake, North Spirit Lake, and Poplar Hill First Nations. We thank everyone who made this research possible—through agreeing to be interviewed, sharing their time and stories about wildland firefighting, risk mitigation, and fire-related evacuations with us, and helping us connect with others who wished to do the same.

Contents

Abstract i

Résumé ii

Acknowledgments iii

Introduction 1

Methodology 3

Context 3

Data collection and analysis methods 6

Strengths and limitations of the research 8

Findings 9

Motivators for firefighting and fire risk mitigation 11

Causes of stress throughout an evacuation 17

Barriers and pathways to success 26

Discussion and conclusions 48

Overview 48

Challenges and opportunities for governments 50

Wise practices 53

References 55

Introduction

In recent years, a growing number of voices have suggested the systems in place for wildfire management in Canada often do not adequately serve the needs and aspirations of First Nations peoples. Meaningful engagement with Indigenous communities by provincial governments has often been lacking in wildfire and emergency management (Mihychuk 2018, Mihalus et al. 2024), and the capacity, priorities, and values of First Nations have often been ignored (Zahara 2020). The *From the Ashes* report of House of Commons Standing Committee on Indigenous and Northern Affairs (Mihychuk 2018), for instance, points to examples of First Nations being left out of fire response information-sharing and coordination, even when they have extensive fire management expertise. It has been argued that provincial fire agencies sometimes operate as if First Nation communities are passive recipients of assistance (Verhaegue et al. 2019)[1].

Other examples are evident in the shift in thinking on forest fires that has happened over the past three decades. The growing recognition of the essential role of fire in boreal and other forest ecosystems, while a welcome corrective to the command-and-control paradigm and what has widely been seen as excessive suppression of fire on the landscape through much of the twentieth century, still does not necessarily align with Indigenous perspectives on fire. It has been suggested, for example, that more recent approaches to wildfire management emphasize periodic, stand-replacing fires, and ignore more frequent, smaller fires, Indigenous cultural burning, and Indigenous knowledge related to fire (Christianson et al. 2022). Moreover, while this paradigm provides a valid ecological rationale for refraining from suppressing some fires, First Nations sometimes perceive a bias in how "values" are identified for protection and in which fires are left to burn (Pyne 2007, Zahara 2020). For example, Zahara (2020) describes how the Government of Saskatchewan's *Fire and Forest Insect and Disease Management Policy Framework* resulted in its wildfire agency protecting infrastructure such as cabins, but not the forest landscapes that make those cabins relevant. In "primary timber areas," however, the landscape in general is deemed a "value" that merits fire suppression.

The disconnect between contemporary wildfire management systems and Indigenous communities is also evident in the gradual loss of Indigenous firefighting crews since the 1970s. It was common for people from First Nations in northwestern Ontario to work as firefighters for the Department of Lands and Forests and later the Ministry of Natural Resources, and other

[1] See Mihalus et al. (2024), a comprehensive scoping review of the academic and grey literature conducted in the first year of this project, to learn more about how wildfire management and evacuation in North America affects Indigenous communities and ways that Indigenous communities can be more involved in decision-making in these areas.

First Nations people had experience providing support to fire crews and fighting fires informally in their homelands. Trends such as the professionalization of firefighting, increasing formalization in firefighter recruitment and employment, and standardization of training requirements and the constitution of fire crews in the mid-1970s began to change that (Sanders 2011). The alignment of Ontario's firefighting with national and international standards continued with the creation of the Canadian Interagency Forest Fire Centre (CIFFC) in 1982. In the late 1980s and 1990s, a greater emphasis on formal classroom training, use of novel equipment, a crew structure with a more systematized chain of command, and mandatory fitness and First Aid testing further contributed to a decline in the number of people from First Nations working as firefighters (Sanders 2011). In Ontario today, although some Indigenous people are still employed either as Type I firefighters (initial response) by the Aviation, Forest Fire and Emergency Services (AFFES) branch of the Ministry of Natural Resources, or as Type II firefighters (responding to less complex fires and conducting "mop up" operations) by private service providers, the system has not been conducive to employment on a more casual basis or the development of community-based firefighting crews. Only in the past few years has this trend begun to change with new initiatives led by First Nations, provincial territorial organizations, and tribal councils, and supported by government agencies such as AFFES and Indigenous Services Canada (ISC). Moreover, although examples of Indigenous-led wildfire management initiatives are emerging, much more progress is needed to revitalize Indigenous fire stewardship and support self-determination in relation to wildfire.

Evacuations are another impactful aspect of wildfire, one that disproportionately affects First Nations. Although First Nations people living on reserve make up about two per cent of the Canadian population (Foster-Sanchez and McGee 2024), it is estimated that more than 40 per cent of fire-related evacuations involve First Nation communities (Public Health Agency of Canada 2023). Preparedness for, and organization of, evacuations is often very poor in First Nations (Mihychuk 2018, Asfaw et al. 2019). For example, the Dene Tha' First Nation in Alberta created an emergency plan with provincial government support, but the plan had remained generic and was not tailored to the First Nation (Mottershead et al. 2020, McGee and Christianson 2021). The community had not assigned roles for local healthcare workers and residents, which led to delays and challenges during an evacuation (Mottershead et al. 2020). Anecdotally, we heard of similar situations in Northern Ontario, where in some cases, preparedness plans developed by consultants sat on shelves in First Nation offices not understood by the people meant to implement them.

Evacuations can also cause painful traumas to resurface, potentially exacerbating stressful situations. Some authors observed that many dimensions of evacuations—from family separations to crowded communal shelters and instructions from strange authorities—have

triggered memories of residential schools and the “Sixties Scoop” in Indigenous people across Canada, including in Northern Ontario (Mihychuk 2018, McGee et al. 2019). Reports of negative experiences and effects from displacement, and while in a host community, are common (Mihalus et al. 2024). Recovery after evacuations seldom receives much attention in First Nations (Christianson et al. 2019, Mihalus et al. 2024).

Remote First Nations across Treaty 5 and 9 territories have recent direct experience with most or all these shortcomings. To address these challenges and to ensure that responses are guided by community perspective and experiences, Lakehead University, the Ontario Ministry of Natural Resources, and the Keewaytinook Okimakanak Tribal Council collaborated to investigate how fire management decision-making can better support the values, needs, and resilience of remote First Nation community members living in Treaty 5 and 9 territories in Ontario. The aims of the project were to:

1. learn Indigenous perspectives associated with wildfire management and evacuation to include in ministry, tribal council, and First Nation planning and decision-making

2. better understand the holistic effects (social, physical, mental, spiritual, and health) of evacuations associated with wildfires on remote First Nation communities and desired community supports

3. identify community-focused criteria to include in ministry fire management decision-making and support better tribal council response to community needs

We gathered information using a variety of community-engaged methods. We report on findings derived from interviews with members of five Keewaytinook Okimakanak Tribal Council member nations, and relating primarily to the first and second of the above-mentioned aims.

Methodology

Context

Five of the six member First Nations of the Keewaytinook Okimakanak Tribal Council participated in the project: Deer Lake, Keewaywin, McDowell Lake, North Spirit Lake, and Poplar Hill First Nations. These communities are Oji-Cree (Deer Lake, Keewaywin, McDowell Lake, North Spirit Lake) or Ojibway (Poplar Hill). The identities, culture, and well-being of these communities are deeply connected to the lands, waters, and more-than-human beings in their

territories (North Spirit Lake First Nation and Ontario Ministry of Natural Resources and Forestry 2018, Deer Lake First Nation and Ontario Ministry of Natural Resources 2019). These First Nations are remote, fly-in communities, accessible by scheduled flights and winter roads, and located in the fire-prone boreal forest landscape. McDowell Lake First Nation is only accessible by float plane, snowmobile, and periodically by winter road when conditions allow.

In recent years, each of these communities have experienced wildfire. Since 2019, all five have experienced fire-related evacuations (Table 1). For example, in 2021 Deer Lake First Nation evacuated to the host communities of Thunder Bay, Cornwall, and Cochrane. Residents of Deer Lake First Nation reported experiencing poor quality meals and, more worryingly, racism while in a host community (ISN Maskwa 2021). Poplar Hill First Nation was evacuated to five different host communities that same year, with community members experiencing family separation and calling for increased culturally relevant resources and supports from the province (Fiddler 2021). Keewaytinook Okimakanak Tribal Council staff involved in supporting past community evacuations have also highlighted a range of issues, consequences, and areas for improvement (Parenteau 2022).

This project was a collaborative effort between the Keewaytinook Okimakanak Tribal Council, the Ontario Ministry of Natural Resources, and Lakehead University. The tribal council engaged its member First Nations in project plans, initially through its Chiefs and councils, and later through various engagements with community members. The ministry's Centre for Northern Forest Ecosystem Research (CNFER) supplied researchers, while AFFES provided funding and technical guidance. Lakehead University's participation was through the Department of Health Sciences. Overall decision-making for the project was highly collaborative, coordinated through a loosely defined core team of personnel from CNFER, the university, and the tribal council's Treaties, Lands, and Resources Department, which was guided by interactions with the communities and tribal council leadership.

The project ran from 2022 to 2025. In addition to regular briefings between personnel of the tribal council and Chiefs of the First Nations, members of the core team carried out relationship-building activities and sought feedback on community member priorities which included having a booth at the tribal council's general meeting in December 2023 and visiting some of the communities. We held workshops and community meetings, some in the communities, and others in Thunder Bay when many community members were there. In July 2024, we organized and held the Learning Together: Wildfire Workshop in Thunder Bay for participants from all five communities.

Table 1. Wildfire evacuations in 2019 and 2021*. Table has been adapted from Parenteau (2022).

First Nation	Year	Evacuated demographic	Host communities	On reserve population**
Deer Lake	2021	All	Thunder Bay, Cornwall, Cochrane	1087
Keewaywin	2019	All – vulnerable early	Timmins, Sioux Lookout	409
McDowell Lake	2019	All	N/A (self-evacuated from reserve)	56***
North Spirit Lake	2021	Vulnerable population only	Sault Ste. Marie	265
Poplar Hill	2021	All – Vulnerable early	Kapuskasing, Cochrane, Thunder Bay, Kenora, Lac Seul	663

* At the time of writing (July 31, 2025), three evacuations had already occurred in 2025: Deer Lake First Nation and Keewaywin First Nation in June, and North Spirit Lake First Nation in July. McDowell Lake First Nation was also encouraged to self-evacuate in July.

** Deer Lake, Keewaywin, North Spirit Lake, and Poplar Hill populations were obtained from Statistics Canada (2021).

*** McDowell Lake First Nation is a seasonal community. Community members live in McDowell Lake First Nation in the summer months, with most community members living in Red Lake or Thunder Bay during the rest of the year. Population data is from Indigenous Services Canada (2022).

Other project components included a literature review on wildfire management and evacuation in Indigenous communities in North America (Mihalus et al. 2024), and interviews with professionals involved in managing fires and fire-related evacuations (Mihalus and Robinson 2024). This report is based primarily on interviews conducted with individual community members between July and October of 2024.[2]

[2] Other publications from the *Learning from Indigenous Perspectives for Wildland Fire Management from Treaty 5 and 9 Remote First Nations* project can be found at https://kogeo.ca/catalogue/#/documents?filter%7Bcategory.identifier.in%7D=Wildfire.

Data collection and analysis methods

To recruit participants, the research team employed purposeful and snowball sampling strategies. Participants were recruited at the Learning Together: Wildfire Workshop held in July 2024, and later through emails and social media outreach. Existing relationships with members of each community facilitated the sampling process. Some participants then helped the research team identify and recruit other potential participants. People identified for interviews were:

- at least 16 years of age
- members of Poplar Hill, Deer Lake, North Spirit Lake, Keewaywin, or McDowell Lake First Nation
- people with lived experience in one or more of the following: evacuating their home community due to a wildfire, reducing risks of wildfires to their home or community, and fighting wildfires or training to fight wildfires, recently or in the past

From July to October 2024, the research team conducted 20 individual interviews and one focus group interview with four participants (Table 2). We used semi-structured interview guides to steer discussions on topics of firefighting, fire risk mitigation, and evacuations. Interviews were conversational in nature and aligned with our interest in stories and storytelling (Kovach 2010). Informed by Bearman's work (2019) on thick experiential data, these conversations encouraged rich descriptions of participants' experiences. The interview guides were pilot-tested and revised for clarity and flow. Interviews ranged from 30 to 180 minutes and were conducted in person or via Microsoft Teams video call. The interviews were then transcribed by the research team. Once the project team determined that data saturation was achieved (when no new data was arising from interviews with participants) (Fusch and Ness 2015), recruitment stopped.

As many members of Keewaytinook Okimakanak Tribal Council communities have lived experience with more than one dimension of wildfire management, some participants chose to discuss more than one topic with the research team. Of the 21 interviews, 7 addressed fire risk mitigation, 17 addressed firefighting, and 10 addressed fire-related evacuations. Although none of the participants were employed as ministry fire rangers at the time of their interviews, many had experience fighting fires around the community alongside other community members. In the interviews on risk mitigation and firefighting, we asked about community members' motivations, experiences, worries, and hopes related to participation in wildfire management activities. Participants from all five communities shared their insights on what drives community members to engage in learning, training, and work related to firefighting and

mitigation around their community. If a participant was once a firefighter or trainee or had fought wildfires around their community without participating in the AFFES fire crew system in years past, we asked what compelled them to do so. If a participant had recently completed the 40-hour ministry-approved firefighting safety and preparation SP100 firefighter training course, was intending to do so soon, or had recently fought a wildfire around the community without participating in the AFFES fire crew system, we asked what drove them to presently seek out these opportunities.

Table 2. Characteristics of participants interviewed for the research project.

Characteristic		Number of participants (of 24)	Rounded percentage (of 24)
Gender	Female	8	33
	Male	16	67
Age group	Youth	1	4
	Adult	16	67
	Elder	7	29
Community	Deer Lake First Nation	1	4
	Keewaywin First Nation	5	21
	McDowell Lake First Nation	12	50
	North Spirit Lake First Nation	5	21
	Poplar Hill First Nation	1	4
Firefighting experience	Prospective trainee	5	21
	Recent trainee	3	13
	Present firefighter	0	0
	Past firefighter	10	42
	Not applicable	6	25

We posed similar questions to anyone who had ever participated in mitigation work around the community. Lastly, we explored what may drive others in their community, particularly youth, to participate in fire management activities in the future. In the interviews on evacuations, to discern and better understand the holistic impacts of these evacuations, we asked participants about the details of their experiences. These questions focused on the emotions, worries, and

hopes felt by participants from the time shortly before an evacuation was called through to their experiences in the months after returning home.

During the interview and transcription phases of the project, researchers recorded their reflections and preliminary codes in the form of analytic memos (Saldaña 2013). Codes were progressively refined, and an a priori coding framework was developed collaboratively, drawing from the research objectives of the overall project, researcher discussion, and analytic memos.

The research team used Dedoose software to organize, code, and analyze the transcribed data. The coding framework evolved throughout the coding process, drawing from researcher memos and brainstorming as new codes arose during data analysis. The researchers used a codebook approach to thematic analysis and combined a structured approach to coding and theme development with the values of reflexive thematic analysis (Braun and Clarke 2022).

Strengths and limitations of the research

Although every First Nation is unique, we believe that residents and leadership of other remote First Nations will recognize many of the experiences and perspectives presented here, and that the findings will likely be relevant to other remote First Nations situated in boreal forests. However, all five participating First Nations are in the same region of Treaty 5 and 9 territories, and caution should be taken when extrapolating the findings to First Nations in other parts of Canada. Moreover, while we sought out a diversity of perspectives, we did not attempt to interview a statistically representative sample of community members, and the findings should not be interpreted as generalizations about the views of all community members. Our aim rather was to explore people's experiences and perspectives in depth and unpack how they think and feel about different aspects of wildfire management, and as such, we used a qualitative approach. In the findings section below, where appropriate, we refer to how common a particular opinion or experience seems to be, but do not focus on quantifying the results. It should be noted, too, that we are reporting on the views of individuals rather than the official positions of the Keewaytinook Okimakanak Tribal Council or of any of its member First Nations. In addition, although we looked for any key differences among the five communities where they emerged, we did not conduct a community-specific analysis of the interview data, and the report does not elaborate on the unique character and situation of each community.

The project included a substantial relationship-building phase and engagement among personnel from the ministry, university, tribal council, and community members. These interactions helped identify community interests and priorities and informed the planning of

subsequent activities including data collection. However, little of this involvement occurred while analyzing and interpreting the findings, which was done by the professional researchers, which may have affected the analysis. An individual from the tribal council is included as a co-author of this report, having contributed intellectually and reviewed and critiqued earlier drafts.

Several interrelated aspects to the approach were used to enhance data quality and positive experience among partners, including the partnership approach itself, which brought key actors "to the same table" in the project. Lakehead University and CNFER brought experience carrying out environmental social science. AFFES, the provincial agency responsible for managing forest fires and involved in key aspects of evacuations, provided key knowledge on existing systems. This collaboration helped the project team make connections between the experiences of individual community members, and the large "machinery" of provincial wildfire management. While the leadership of individual First Nations were not directly involved in day-to-day decisions in the project—having a heavy workload and a long list of issues to attend to—the tribal council kept them informed and ensured their input and feedback at key stages. The use of a qualitative approach, involving open-ended questions, sometimes long interviews, opportunities for informal conversation, and interactions at workshops and other events, was more culturally appropriate than a more formal and impersonal approach. Also, gathering stories and perspectives across generations both enhanced the quality of data and the cultural appropriateness of the work.

Findings

We explored 24 participants' lived experiences of wildfire management in Keewaytinook Okimakanak Tribal Council communities. Four main themes and 16 sub-themes emerged from the interviews, with many of these themes relating to one another (Figure 1). We examined each theme in detail and illustrate our findings with interview quotes.



Figure 1. Overview of experiences of wildfire management in Keewaytinook Okimakanak Tribal Council Member Communities.

Motivators for firefighting and fire risk mitigation

Inspiring the next generation

Elder: They're gonna hire me ... to work with the youth and train them and stuff. As an Elder. And the first thing I was telling the Chief, I said 'I need them from this time to that time.' And they gotta [learn], you know, that's how you do a job. You don't come in at 12:00 and then work for half a day …. You have to be up at 6:00 and go fight the fire. And I think they got to instill those things in those young people now.

Interviewer A: I just want to make sure that I'm hearing you right. Is that kind of the first step, if you want youth to be motivated to be firefighters, just motivating them in general for how to work hard, how to be go-getters?

Elder: Yeah, like, even getting up in the morning to go to work. Like if you're a firefighter, like when I was firefighting, I was [young]. I was up at 6:00, right? The fire is not waiting for you… You have to be on the ball …

Interviewer B: Yeah, to be kind of like self-motivated?

Elder: Yes, once they learn their craft, and they can self-motivate and do their job right. So that's everybody's vision I think at McDowell Lake, for young people to be able to take over at a certain point and be able to do stuff like the fire thing too, right?

Participants from all five communities shared their insights on what drives them and others in their communities to engage in learning, training, and work related to firefighting and mitigation in their community. Of the 24 participants interviewed for this study, seven touched on motivators for participation in fire risk mitigation, and 15 discussed motivations for firefighting. Participants engaged in these fire management activities to varying degrees and their experiences spanned decades. Each participant had unique reasons for seeking learning, training, and work opportunities in fire management. These opportunities were themselves wide-ranging, from signing up for SP100 firefighter training, to helping family members combat fires in the community. Individual participants often held multiple motivations for participation in wildfire management, and some reasons were more important to some than others. Three distinct themes emerged among the motivators for participation in wildfire management: culture and care for community, personal values, and professional and economic opportunities.

Culture and care for community

The interviews illustrated that, for many participants, motivation to participate was deeply rooted in cultural connections to family, community, wildfire, and the land. Seven participants across three communities expressed that their drive to learn, train, and work in wildland firefighting is fueled by a desire to protect the home and lands that they live in relationship with and hold profound connections to.

For example, this relationship to home was a key driver for a young person who hoped to be recertified in SP100. When asked what sparked an interest in wildfire management, the participant replied "I would just say that I really love my home. I really love McDowell Lake", and later specified "I would [work in wildland firefighting] only for like my First Nation, I guess. I wouldn't really want to be sent like all over Canada". Another recent SP100 trainee from a different community described the land around his community as desolate after the last wildfire passed through. He was motivated to protect what was left in part because "It's burning my hunting ground!". This desire to protect homelands was also vital to an Elder and past firefighter from a third community, who described the intersections of western wildfire management and traditional land stewardship as follows:

> "Our land was not made to have bad fire, you know, in those wildernesses … We need to keep it green. We've got to rescue the land! It feels bad when we see it like that, when it's burned down, like a tree … the Creator didn't make it like that for anything to be destroyed by fire. We have to keep the land safe. We have to keep it always safe. And always be alert to call the MNR when there's a fire or something like that."

Participants also sought out different types of knowledge, including traditional knowledge and firefighting and risk mitigation training. This desire to learn was perceived as beneficial for the community, both for individual growth and for increased community-level understanding of wildfire management. A participant who could not access wildfire training in his youth hoped for "more general knowledge of it. What to do, what to look for, what to be prepared for. I think that would help me … transfer that knowledge to the youth better." It is important to note that participants often view this kind of learning and knowledge transfer in ways that do not correspond to how federal and provincial agencies organize FireSmart and fire risk mitigation, firefighting, and evacuations, with different training curricula for each, targeting different people. Rather, they often described a need for general, crosscutting knowledge on all aspects of fire management that is connected to culture, spirituality, and being on the land, and that is practical without necessarily entailing specialized professionalization. Many also want

such learning to include inter-generational knowledge transfer. We revisit this possibility in the discussion section, below.

Participants also suggested that wildfire management training not only allows the individual to better understand what to do in a wildfire event, but to also transfer that knowledge to others in their community, particularly youth. Teaching youth was important to participants across multiple communities, and many saw fire management training and learning as a way to bridge the knowledge gap between generations. In a conversation on fire safety, one participant shared that traditional teachings around fire and fire risk mitigation are important:

> "Because like coming from our tradition, our culture, like we lived off the land. We lived off of building fires. This generation doesn't really know about that. Like, the fire used to be part of our day-to-day life, even like, smoking fish, and… smoking moose meat, we built fires… nobody does that nowadays… But maybe [they would], if they were taught in a good way."

Relatedly, some participants were motivated to learn and teach wildfire management skills because of family ties to wildland firefighting and fire risk mitigation. Family involvement in firefighting, both through ministry fire crews and less formally around the community, encouraged some participants to follow in their family's footsteps. A participant who learned how to fight wildfires from her family reminisced on how a large part of her extended family fought fires around the community she once lived in, and contended she would have become a firefighter if she had not moved away from them. Many of the interviewed Elders fought wildfires in the past alongside their brothers, sisters, and cousins. The same held true for mitigation work. When one participant, who practiced grass burning with his grandparents and described mitigation activities in his community as "just a family thing", was asked how he felt about the fire risk around his home, he responded:

> "I think that makes me like want to start doing that with my kids. Maybe something I could talk to them about and we can start doing every spring … Burn the grass together, cut the trees and clean up the yard."

Participation in wildfire management activities, particularly among youth, was also shaped by communal experiences and popular culture about wildfire. Exposure to fires, whether through firsthand shared experiences in the community or through cultural influences such as television, social media, and media campaigns, often spurred interest in wildfire management activities. In one community, a participant noticed that people started thinning trees after returning from an evacuation during which a house had burned down. In another, a participant saw that youth were more interested in getting the SP100 training than in past years because

“We had a fire again more recently. And then now we’re starting to realize that … when we’re in the community during summer, we need to be prepared for things like that.” These stories highlight how recent shared experience of wildfires and evacuations can heighten risk awareness, strengthen desire for wildfire preparedness and community resilience, and drive actions to mitigate fire risk in the community.

Social and commercial media are also powerful tools for motivating youth interest in wildfire management. A participant shared that she was proud of her daughter’s interest in wildfire and firefighting, and attributed that interest to a television drama about firefighting and emergency personnel. Another participant, who holds a leadership role in his community, said that interest in wildfire is starting to grow among youth in his community; when asked why, he responded “They see these Facebook things about Jasper burning. ‘Oh, we could have gone! Could have went there and helped them.” Media campaigns can motivate people to get involved while also imparting basic information about wildfire management. One participant laughed when he brought up that he had learned about fire risk and mitigation from Smokey Bear, a figure created to lead wildfire prevention campaigns that then became an enduring popular culture phenomenon. Acknowledging the role of Smokey Bear in his own wildfire education, he reflected that “Those kinds of stories just do stick with you, and sure enough, it does work”.

Personal values

Relational, place-based, and cultural motivators like those mentioned above were major external drivers for engaging in firefighting and fire risk mitigation, but the data also highlights internal and deeply personal dimensions of motivation. Participants frequently referred to their personal values as an important driving force behind their involvement in wildfire management. Responsibility, in the sense of a personal moral desire to build one’s own competence and accountability to fulfill a sense of duty, was identified by participants as a key motivator to learn and work in this field. Confidence and practical common sense were also identified as internal motivators for participation in wildfire management.

Responsibility and a sense of duty drove multiple community members to fight fires and seek out training. A participant who has fought fires informally around her community, describing the feeling of witnessing somebody’s home burn down, stated that she has a sense of duty to not let that happen again; on losing a home, she related “From what I hear, it’s like losing a loved one … I wouldn’t want anybody else to go through that.” Other participants took the SP100 training because nobody in the community had recently taken it and they felt the responsibility to have that knowledge. Notions of personal responsibility could also inspire youth to be trained in fire management, which was of particular importance to Elders. An Elder

and past firefighter believed fire management training could strengthen youth's "purpose in life … There's too many kids committing suicide from reserves … So keep them busy. Like you said, through firefighting stuff, doing tree thinning and all this when they're not busy firefighting, they can be doing something, right?" For him personally, firefighting had economic benefits but also became "another duty that you have to do. For yourself and for other people."

Similarly, a sense of confidence in one's ability to safeguard the community was seen as a potential motivator for youth to participate in wildfire management. An Elder stressed that youth in his community were willing and able to receive firefighting training, but that motivation would come from being called upon to work and serve the community—that the resulting pride and increase in self-esteem could motivate them and stir up interest in others to train in firefighting too.

Some participants pointed to the straightforward practicality of wildland firefighting and risk mitigation activities as their reason for engaging in these activities. One participant was taught firefighting skills by his stepfather and works in an entirely different field; when asked why he fights fires, he reasoned, "Honestly, nothing really pushes me to do it. It's just when I see a fire, I put it out… common sense." A participant from another community wanted more fire risk mitigation training to raise her community's baseline level of knowledge, as "Everybody in the community has common sense and you know, they kind of follow what each other is doing." In this way, the practical and prudent judgement of community members—informed by personal values, past firefighting training and experience, knowledge of the land, and connection to others in their community—can motivate people to reduce fire risk around their homes; even if only a few community members obtain training, others could be motivated to reduce fire risk by observing and sharing in the knowledge gained.

Professional and economic opportunities

Eight participants from three communities mentioned professional and economic opportunities from working in wildfire as strong motivators for participation. In past decades, fighting fire with the ministry was a way of making seasonal income. When asked about his experiences fighting wildfires in the 1970s, an Elder recalled:

> "It has some economic benefits … Like during the summer we'd go firefighting and then we started our commercial fishing when the weather started getting cooler. So it worked out pretty good."

Professional and economic opportunities continue to motivate younger participants today, and some see them as a motivator for youth in the near future. To access entry-level wildfire crew

opportunities with the ministry or private companies contracted by the ministry, individuals must complete the SP100. One participant, who was intent on taking the SP100 at the time of his interview, stated “When you get that, you got a pretty easy job in the MNR after that … a decent job.” Another participant, when talking about the relatively high number of youth signed up for the SP100 in his community, noted “There’s a lot more youth that want to do stuff and there’s not that much, that many opportunities up here … Yeah, most of the opportunities are out of town.” Thus, wildland firefighting can present not only a chance for youth to gain employment but can also be an opportunity to do so while remaining close to home.

While some saw wildland firefighting as a way to earn income locally, to others it also presented a much different, but still valuable opportunity – potential encouragement for youth that may be reluctant to leave home to travel with a fire crew and find professional opportunities beyond their home community. As one participant described, “Hopefully [the younger generation] get their [SP100 training] … Hoping that they stick with [firefighting]. So if they stick with it, and if they go fight fire outside, they find other opportunities elsewhere.” Another participant, who was unable to take the SP100 when it was available to him, stated, “Of course I’d want to take that … that could even open up a different avenue of employment later on down the line. Plus, it looks great on a resume to have that kind of certificate and training.” Participants thus saw participation in firefighting as both an economic opportunity close to home and a professional opportunity to explore away from the community.

Some participants noted that their motivations for participating in wildfire management were *not* career-oriented and in some cases dismissed those entirely. While the various motivations mentioned are not mutually exclusive, some participants singled out professional and economic benefits as something that specifically did *not* drive them to participate in wildfire management. Instead, they described a desire for knowing what to do if a fire ever approached their community. When discussing her motivation to take the SP100, one participant clarified “I would just like to know the basics on what to do. Not trying to make a career out of it and fight fires, but just in case there’s a fire in our area when we’re there.” Professional and economic opportunities are one of many motivators for participating in wildland firefighting discussed by participants. None of the participants interviewed for this project identified professional reasons for their participation in fire risk mitigation efforts.

Causes of stress throughout an evacuation

> *I think people think it's just pick up and go for a while. It isn't. You're moving lives. And if they can understand that—I kind of think they don't. They need to understand that more. I guess that would bring the humanist, the humanity, the humane, things like that to an evacuation.*
>
> ~ A participant formerly in a community leadership role

Ten evacuation-focused interviews explored participants' experiences, emotions, worries, and hopes from before the evacuation to months after returning home. Across the diverse experiences shared with us, stress was a connecting thread in participants' narratives. All 10 participants who shared their previous evacuation experiences recounted feeling physical, emotional, mental, social, and/or spiritual stress, and stress was felt at each phase of an evacuation: before the decision to evacuate, staying behind, leaving the community, being at the host community, returning home, and while recovering from the evacuation. Participant experiences also illustrated that causes of stress often overlapped, interacted, and exacerbated one another. Generally, we heard that stress stemmed from three main causes: gaps in communication and attention, inadequate supports, and concerns about family and the community left behind (Table 3). Importantly, the interviews also illustrated that these stressors had negative consequences on the well-being of individuals, families, and the community. It is noteworthy that we also heard examples of successful evacuation experiences (see "Barriers and pathways to success" below).

Table 3. Main causes of stress related to evacuations mentioned by interviewees.

Gaps in communication and attention	Inadequate supports	Concerns for family and home
● Inconsistent communication ● Feeling of being ignored or not listened to ● Vulnerable persons list and general community list are out-of-date or non-existent ● Unknown destination or if family would be split between different destinations ● Inadequate communication about AFFES plans and progress on fighting the fire	● Lack of equipment, e.g., air filters ● Lack of independence at host community, e.g., to cook own food and do laundry ● Lack of access to transportation at host community ● Lack of culturally appropriate mental health support ● Lack of support related to alcohol and substance use ● Lack of sense of security in host community	● Separation of families and evacuation of the vulnerable: concerns for family at host community ● Inability to check in with family ● Worries about home, dogs, and belongings (exacerbated by a lack of updates about the fire)

Gaps in communication and attention

Inadequate and unorganized communication, and feelings of being ignored or overlooked by AFFES and community leadership were identified as factors that contributed to uncertainty and worry by eight of the ten participants who shared their evacuation experiences with us. Early phases of the evacuation were made more confusing by poor or non-existent communications, especially outdated community member lists. Participants described being unaware that they were on the vulnerable persons list; dealing with outdated evacuation lists that did not include newborns and young mothers; and finding out they were listed as a support person for someone and being told to pack immediately, then staying behind when that person had chosen someone else for support. In one instance, an evacuation was announced over the radio and social media; one participant, who could not access either method of communication, related how he felt when a family member informed him the evacuation was underway:

> "We almost got left behind because we didn't know what was happening … It happened so fast that day I found out that like, oh we're, we're going, we're going!... Like they didn't even have a list of names. Like who's all here and who all left? Yeah, it was kind of confusing for some people."

Breakdowns in communication among multiple actors, including among community members and particularly at the host community, also contributed to the stress felt by community members later in the evacuation process. Of the 10 participants who spoke about evacuations, seven recalled six different evacuations where they were not provided key information by external organizations or community leadership, such as which host community they were evacuating to, or if they would ultimately stay in the same host community as their families. People often found themselves not knowing what was in store for them next; as one participant described when asked about the uncertainty of the first few days, "I think everybody was just feeling overwhelmed with everything that was happening." To some participants, the lack of organized, specific, and consistent communication they experienced was a direct cause for another stressor: alcohol and substance use among community members. As one participant recalled,

> "[The fire was] getting closer and they'll start worrying about their homes and that's when some trouble started arising because yeah, no, it's like they heard it's a big fire and then some people lost hope early. And so they started to go drink … you just give up because there's nobody telling you what's happening."

Where breakdowns in communication occurred, participants often expressed feeling forgotten or actively disregarded. Relating his community's attempts to alert the ministry about a fire that ultimately led to an evacuation, for example, one participant described being told that the rain would put it out and feeling as if ministry staff were not listening to the community. When asked what message he would like to convey to the ministry about this, he responded:

> "How come they [the ministry] didn't listen to us when we asked for them. Why did they—they ignored us. Basically, we shouldn't have been evacuated. That's what I'm saying. This could have been avoided. Why? Why did that happen? Is that acceptable? Can they watch your house burn down or would you expect people to do something? Is that acceptable behavior? I don't think so. They, I think they didn't serve their purpose. I think it was a disservice … I don't think they care, to be honest. Why would they?"

Similarly, a member of another community shared how the ministry came to fight a nearby fire, did not extinguish it completely, evacuated an Elder's tourism customers that were staying at a

nearby camp, and did not return for community members. In both cases, participants were unaware of any communications from ministry staff about these decisions; in the latter case, the ministry's actions and lack of communication conveyed a feeling that one community member described as follows: "Well, we got the white guys out and that was good enough for us. Because that's what that felt like."

Poor communication in their communities also led to participants feeling like an afterthought. The participant who related that he did not have access to a radio or social media when his community's evacuation was announced over those mediums recalled how it felt to be caught off guard by the evacuation: "I wasn't happy. I felt kind of angry. Yeah, because I had my two sons there and my wife … Like being left behind, like nobody cared about us." Stories like these highlight the profound effects of gaps in communication and attention on individuals and the community during evacuations.

Inadequate supports

The resources and services extended to community members throughout an evacuation, particularly those meant to support their physical, emotional, and mental well-being, can encourage a sense of personal agency and are crucial to preventing stress and trauma from the evacuation experience. In many stories shared by participants, these supports were inappropriate or lacking altogether, which was a broad theme among the stressors identified by community members.

"Most people that live in town, they don't know what it's like to live on the reserve"

Participant: Especially living on a reserve like most people that live in town, they don't know what it's like to live on the reserve…. It's so different from living in an urban setting like … Especially, we were close by the airport [at the host community] and that was really—like every time… when I heard a plane at night you were like, (cranes neck) 'uh oh!'. Like on the reserve that's not normal.

Like the only time we hear a plane at nighttime, like at nightfall, is if it's an emergency. If it's a medevac, so that … Then I kept thinking about, I wonder how the Elders are feeling…

Interviewer: It's not something that you ever [*hear*]? Right.

Participant: It's not normal, something's happening. Could be an emergency, and then you start to wonder who—wonder what's happening? ... Yeah. Like it was kind of like, it kind of reminds you of being at home and then you have that little bit of like that pang of (motions to heart). 'Oh, no, what's happening?'

When asked about concerns related to smoke, for example, most participants answered that they protected themselves by staying indoors with the windows closed when they could, but that they did not have access to air purifiers or other protective equipment. In some instances, participants shared that their leadership had provided air purifiers but could only do so for those vulnerable to smoke. One participant noted the need for ongoing support, as some community members had purifiers but could not access required maintenance parts such as replacement filters. Some community members lacking protective equipment resorted to whatever measures they could to protect themselves from smoke. One participant recalled employing a strategy in which "You just take a wet cloth and you have to, like, inhale through it because the air is so smoky and my lungs were just in that much pain. I just needed a humidifier, a poor man's humidifier… my asthma had never acted up like that in years. So I never even had inhalers with me." A member of another community noted that it was difficult to keep the youth indoors when the smoke was thick, due to the lack of indoor activities planned for them; they reasoned that "We needed something for them to do, like at least to hang out somewhere indoors. But I don't think anybody really trusted them to be indoors. Like to have gym access or the community hall access without anybody". Smoke exposure as a physical stressor was thus a common experience before an evacuation. When asked about supports, a participant from a third community said, "it would be nice for people to have something like that. Because that normally affects the kids too, because a lot of the kids like to play outside and everything too. Especially when it's very, very smoky like that."

Participants often linked feelings of stress, unease, and worry to a lack of control over their circumstances and an inability to act independently and autonomously. Members of all four communities who shared their evacuation experiences with us expressed the need for supports to promote personal agency and independence. A participant from one First Nation mentioned how she opted to remain home during an evacuation because it would be stressful if she could not cook the food she liked and maintain her own space at the host community; a participant from another First Nation shared that his community was hosted in an isolated space, which made it difficult for them to shop for groceries and go to town on their own; a participant from Poplar Hill First Nation told us that it was hard for community members to 'sit still' and stay in a hotel room; and a participant from Keewaywin First Nation asserted that families needed independence, but that a lack of vehicles meant they couldn't do everyday tasks or take their children out on excursions. In all four cases, supports to promote agency on both the individual and community level could help to alleviate stress.

Similarly, the lack of culturally appropriate mental health supports caused participants mental and emotional stress both at the host community and during recovery back home. Some participants shared that they were unaware of counselling or other forms of mental health

supports being offered at either phase of the evacuation. Others noted that when counselling supports were offered, people preferred relying on one another over making an appointment with a counsellor. One participant divulged that providing this support to others was difficult for him, and that sometimes he had to turn people away for his own sake. Another suggested that hesitancy to access mental health support came from a strong stigmatization of mental health language in his community:

> "I hate the words *psychologist* and *therapist*, not to me personally, but I think the connotation that exists there when you say that to someone, they think maybe you're weak or you're full of issues … something's wrong with you. And they'll make fun of that. They'll do this lateral violence … They [Keewaytinook Okimakanak Tribal Council] have the whole health section and do people use it? Not really. I think there's other ways that it can be done, and I think those areas need to be accounted for because it's not just people with addictions. It is that too. It's people with past trauma from adoption, from residential school, from just accidents at work. You get leadership and what's going on, their mental health."

In other words, simply accessing mental health support as it currently exists comes with the worry of being a potential target of lateral violence, a cycle of harm in which community members direct the internalized stress, anger, and oppression that they experience towards other members of their community (Bombay et al. 2014). This violence can take many forms, including the bullying and shaming mentioned by the participant above.

Alcohol and substance use was also associated with violence and insecurity by seven participants across the four communities that shared stories about recent evacuations; these participants saw it as a factor in heightened social tensions, conflicts, and harms, particularly at the host community. Witnessing alcohol-associated violence during an evacuation was described by one participant as traumatizing, and he wished that counselling for this trauma was available after the evacuation as, "A lot of friends who were my age at that time, we just kind of like, buried it." This lack of available support for people affected by alcohol and substance use was also alluded to by at least seven participants as a source of emotional and mental stress at the host community. People from multiple communities were impacted by alcohol and substance use, yet participants reported that little support was available to them throughout their evacuation experiences. One participant shared how his community struggled to deal with alcohol-related violence. He suggested finding places for people to "sober up" in the host community. This experience was echoed by a participant from another community, who suggested that "if something was offered, or if something was put in place for people with addictions, I think it would have helped."

Many of the stories shared with us highlighted the need for additional resources to help community members feel safe from danger, violence, and harm throughout an evacuation. When adequate supports were not available, stress and risks of harm to community members increased. One participant recounted feeling disturbed when she heard about younger people taking Elders' belongings during an evacuation where evacuees were all staying together in an arena. She asserted that what she "would have liked to see is have securities watching, looking after the Elders, especially at nighttime. Or have a different room just by themselves, not right in the open where the other people have access." Another potential source of danger arose from people aiming to abuse community members at the host community, and in one case, even after they returned home. A lack of support for community members could have dire consequences in these situations. One participant shared a story about a person at the host community who tried to gain the trust of their community leadership by warning them of human traffickers and drug dealers. Shortly thereafter, it came to light that this person had ulterior motives and had attempted on multiple occasions to sexually assault a woman from the community. As the participant related,

> "We can be vulnerable and they'll take advantage of us so … He's trying to talk to the women to meet them somewhere. Maybe he wants to take pictures of these girls… he wants to come back [to our home community] when we go back, he says he wants to make money … We gotta be careful of who we talk to and let in, and it can't just be anyone … It's funny how sometimes people will know these things, organizers and [those in leadership positions]. Sometimes people hear these things and then don't do anything."

Inaction and a lack of support for communities during evacuations can lead to community members experiencing substantial amounts of stress and harm.

Taking action to stop harms

Participant: One family came up and said this, 'Our brother's been gone for three days. No one has seen him. He's not on Facebook. He has no phone or we don't know where he is, is he in jail, is he in hospital?' So we called and checked all those things out. He's nowhere, and we checked the bar. He's not there. I don't know where he is. A couple, maybe a day or so later, because they start posting on Facebook and messaging him, like I said, he comes out from wherever he was like 'Yeah, I'm here. I'm okay, don't send a search party after me' (laughs), because we were about to.

You know, he was met up with a woman, a few of them, partying with her. The whole thing is over right, the evacuation. Goes home. A month later, I started seeing her in the community. And what I start hearing starts to trickle in. Information starts coming to me. She's dealing [illicit drugs] now. She's selling something. She's doing this. She's doing that… Making moves in the community and like, 'Why?', right?

And she's not from here. We don't know her. No one knows her. No one's friends with her. She's got no relative here.

…. [So we got her a] plane ride out of [the community]... She's not allowed back... Some people said to me like 'Finally, like someone did something' and 'About time someone kicked her out.'

After returning home from an evacuation, many participants noted that few supports were available to community members to help them process the events of the evacuation—which could have long-lasting effects on individual and social well-being. When sharing stories about their return home with us, seven participants mentioned how nothing out of the ordinary happened when they returned home, and how oftentimes community members just tried to "go back to normal". As discussed earlier in this section, at least four participants said that counselling and other mental health supports for recovery were inadequate or absent. Seven participants mentioned that they were also not aware of any community meeting or debrief held after the return home. Some thought little engagement would occur in these meetings, and perhaps people would not attend, but others were keen on ensuring a space was available for community members to share their thoughts and feelings about the evacuation. For example, one participant mentioned how people could talk about "how it was, where they slept or where they stayed. Or like, how was the food or something, what they ate over there... Or like if they got bored over there. If they needed something, stuff to do over there." A participant from another community shared how "Everybody just went back to their old, like, you would think that a few people would maybe want to talk about it. Like, I don't know if there is such a thing as being debriefed after being displaced." Not having or promoting these spaces to share stories about displacement and other evacuation experiences could have long-term effects on well-being. When asked about what could help the community after returning home,

one participant from a third community suggested, “Counselling. It impacted my older brother a lot. Yeah, because we left him behind … he was really mad. At all of us. Blamed the whole rez. He’s still mad about it, actually … [this evacuation was] ten years ago. He still brings it up.”

Concerns for family and home

The final stressor identified in these interviews—concerns about family, friends, dogs, homes, and land left behind during an evacuation—tended to be intertwined with stress caused by gaps in communication and inadequate support. In the early stages of an evacuation, a lack of communication about what to pack was emotionally stressful for one participant, who recalled:

> “It’s just, it gets overwhelming. Because you want to make sure that your child or your Elder get all their medicine, running around trying to call the clinic, make sure it’s his blister packs here, his insulin here, his meds and everything last minute. Sometimes you’re running around looking for your kid’s shoes, can’t find them. And just, it just really gets, but there’s nothing in, I haven’t seen anything in place to have all the stuff prepared prior to if we do get evacuated.”

For this participant, ensuring her family’s well-being was a primary concern; as she mentioned, the lack of communication about what to have ready for an evacuation made ensuring her family’s well-being even more taxing.

Concerns for family at the host community were frequently mentioned, especially when families were separated, a common occurrence in evacuations. Often those who are vulnerable to smoke (such as infants, chronically ill people, pregnant people, and Elders) are evacuated first, and sometimes to different cities than those who evacuate later. Not being able to communicate with or look after family in these situations was a major source of stress. One participant stayed behind to help protect his community; when asked if he was worried about people who were evacuated, he responded “Yeah. Just hearing about the incidents in regards to drugs and alcohol, those things that, that’s what worried me because I had my own children out there and I’m here all by myself.” Being unable to regularly check in with family in different cities was a common concern, and eight participants stressed the importance of keeping families together whenever possible during an evacuation.

Seven participants who were evacuated to host communities also brought up worries about their homes, family members, dogs, and belongings left ‘back home’. Recounting his experiences staying behind in the community, a participant shared the importance of “Communicating with the community members that were evacuated just to reassure them that everything is okay, that their houses are still intact, fire hasn’t reached the community … I think

that was the stressful part, knowing that the fire is coming towards the community and they think about their houses and what's going to happen. This kind of thing, I think that's what worries people most." Across communities, these concerns were only reduced with consistent and organized communication from ministry firefighters and community members who remained in the home community.

Barriers and pathways to success

The evolution of barriers in wildfire management

Elder: I think it kind of—what do you call that?—disrupted your way of thinking about firefighting. Because now you have to go by the book … when they started doing that was I guess for the safety … Like nowadays too, you need a certificate to run a chainsaw, but you know, you learned that stuff when you were young; you have those qualifications. But I guess it disrupted some of the job opportunities … whenever there was a fire, when they need people, they just would fly up there and make an announcement, 'There's a plane coming to pick up firefighters. Whoever's down by the dock can get on the airplane to go.' Firefighting provided jobs for these people. But then now with these trainings… you feel disqualified, some of the people that can't get that training.

Although some components of wildfire management have not served Keewaytinook Okimakanak Tribal Council communities well, and some barriers and obstacles persist, participants in the research also recounted positive experiences and success stories. In the interviews, participants richly described the barriers and challenges that hindered their individual and communal participation in wildfire management, and what worked well for their communities regarding wildland firefighting, fire risk mitigation, and evacuations. We also explored what kinds of actions reduced harm or contributed to the successes. Across all dimensions of wildfire and the unique experiences of community members, five distinct pathways to success emerged: good organization; relationships and supports; dignity, responsibility and agency; capacity, learning and knowledge; and socially and culturally contextualized care. These pathways all positively affected participants' experiences and could contribute to more effective and equitable wildfire management and evacuation experiences.

Good organization

Good organization—organization that was effective, thoughtful, and structured—has helped reduce harm in these communities and improve the experiences of people involved in wildfire management activities (Figure 2). Many of the organizational successes that participants mentioned were relatively simple things and practical actions that brought comfort, prevented harm, or made things easier for community members. Elders who had fought wildfires with the ministry in the past, for example, often brought up how the provision of ample high-quality food and functional gear for working in the bush was a successful part of their experience.

Recent examples of organizational successes in wildland firefighting and risk mitigation were not common, though some participants expressed excitement and hope at the recent organization of SP100 training in their communities. More often, we heard from research participants about ways in which organization could be improved. A lack of organized communication among relevant parties in the wildfire management system was a major concern, as community members were often left in the dark about wildfire management information. Participants recounted not hearing about available training and job opportunities, not hearing about the spread of a fire or other threat to the community, and not knowing what to do or who to call in case of a fire emergency. With respect to firefighting training and job opportunities, a few research participants feel that opportunities are being lost due to lack of effective communication. Improved communication among community members, community leadership, and tribal councils could help ensure that people looking for training or employment opportunities in firefighting do not fall through the cracks. When opportunities are made available, the government and tribal council must ensure that they communicate this to the community members, and with sufficient notice, so these opportunities are not missed. Good communication also means ensuring people understand what these opportunities entail; an Elder and past firefighter noted, for example, that it would help youth in his community if someone with recent experience and knowledge could discuss firefighting with them and explain what it is like today, as the Elders' experiences from 40 or more years ago are no longer as relevant.

Organization and Communication

General and crosscutting observations	Evacuations
• A common perception that poor communication hampers participation in wildfire management, including fire risk mitigation activities, firefighter training opportunities, etc. • Important to use appropriate approaches and mediums for communication • Open and proactive communication between the Ministry of Natural Resources and the community helps to build relationships and trust, which in turn facilitates collaboration	• Open communication, frequent updates, provision of information at every stage is crucial • Regular updates from home while in the host community (state of the fire, information on pets, etc.) brings comfort • Organized provision of basic needs at host community is important • Planning for social needs (meeting spaces, recreation, etc.) and providing activities and daily structure while in host community helps limit harm

Figure 2. Key insights and needs identified by the research participants—organization and communication

In evacuations, good organization can prevent harm. A lack of organization during times of crisis can lead to chaos and confusion; one participant shared how, during an evacuation, the Chief stayed behind to lead the evacuation but most of the councillors left on the first plane out of the community. This departure left an outdated evacuation list in the hands of youth with little experience, resulting in some Elders leaving on later planes and with little assistance. To the participant, “It was almost like this, we’ll go and never mind you guys…How it felt and that kind of hurt.” Examples of good organization were notably much more common in evacuations however, with nine participants reporting good experiences. In the beginning stages of an evacuation, thoughtful organization of priorities was important to community members. An Elder and past Chief noted that in his community’s last evacuation, babies and Elders “were the priorities and we just need to continue doing that if we need to evacuate people, that’s a good way.” At the host community, successes in attending to basic needs were commonly brought up, especially regarding food. One participant described pizza as a memorable treat for his community, and another remarked that providing cigarettes and takeout coffee for community members at the host community was “a taste of luxury for some … some creature comfort type of thing there.” Food that was socially and culturally appropriate was especially comforting, and will be explored later in this section. Organized mealtimes were also appreciated, as “they made sure everybody knew when supper was, lunch was, what time. And also in the evenings they had snacks available and again they posted where to pick snacks and what time it will be over. And so that was really nice.”

From what we've experienced that they do, people in the townships like Sioux Lookout and in Timmins, I hear people there try to just have activities in places where they can go and I think that's one of the things that we just need to continue to do it, doing these things! …When they take children for swimming, things like that, it was nice for them to do these things as far as I can see. And then they do their best trying to help community members in having these activities, which was nice.

~ Participant from Keewaywin First Nation

Taking care of the basics also meant organizing gathering spaces, responsibilities, activities, and mobility at the host community. Community members spoke fondly of having physical spaces available for Elders to gather and do beadwork, for community members to socialize and spend time together, and for leadership to meet and strategize. Structuring time at the host community was also important, and sometimes had compounding positive effects. For one participant, organized and structured activities at the host community gave community members a chance to "Just forget about what's happening at home for a while." During the most recent evacuation in another First Nation, community leadership hired community members in security roles to combat "the boring factor, the monotony … structure again plays an important role." As one community member described it, "Kept everyone busy. I mean do something other than drinking or something else. Yeah, it was a positive thing … once people got the jobs and got hired and got busy, it kind of calmed people down and that way like the Council could think more to do for them. Yeah. Once the ball got rolling, it kind of went smoothly after that."

Creating a community-led security group also gave the community a sense of safety—both in the direct sense and in safeguarding the community from interacting with institutions in ways that could potentially bring harm to the community. A participant involved with this security group explained how the community-led team provided an opportunity "for us to look after ourselves and to not rely too much on outside agencies … we don't always have good relationships with police, with child services, they may just wanna do what they wanna do. And then their word is the law. Their word is against ours. Their word is more trusted than us in these places, so we try to get out of those situations in the first place." Hiring community members in security roles thus not only helped to combat boredom, but provided support for those affected by alcohol use, gave leadership the ability to plan more activities for the community, and provided safety for the whole community.

Good communication was also an important dimension of evacuation organization. Inadequate and unorganized communication can lead to stress at every phase of an evacuation. One

participant suggested that updates on the fire situation should be given to communities periodically to ensure people are prepared well in advance to evacuate, rather than finding out "at the last minute". Late communication indicates a disconnect in communication somewhere; it could be the ministry not effectively communicating to community leadership, leadership not communicating effectively to the rest of the community, or the community members themselves not receiving or knowing where to find the information. Ineffective communication is also a barrier to a smooth and safe evacuation process and a potential challenge to the relationships between communities and organizations like the Ministry of Natural Resources. Clear and consistent communication not only safeguards the well-being of community members but improves and strengthens wildfire management and emergency planning relationships.

Trustworthy, effective, and structured communication was successful in preventing harm for community members and providing comfort throughout an evacuation. Local radio stations and Facebook seem to be most commonly used to spread news within communities, but it may also be useful to put up posters in common areas such as the band office or the general store, or even go door-to-door, to ensure the information gets to as many people as possible. Reliable communication can prevent confusion and misinformation in the early stages of an evacuation, as one participant related:

> "It's really helpful that our crisis coordinator goes door-to-door too, because … sometimes when people say that there's a fire somewhere they don't, they think, they kind of take it as a prank or something … but if they're actually able to hear, like from the crisis coordinator, then they know it's serious."

At the host community, effective communication between leadership and community members also helped to alleviate stress and bring reassurance to the community. In one instance, a meeting was held to listen to the concerns of the community regarding alcohol use and to receive community input on what the alcohol policy should be while staying at the host community. Recalling this meeting, a participant attributed the success of the ensuing policy to the open communication between the community and its leadership:

> "Someone yelled in the back, 'Too much drinking,' that's all they said. 'Drinking.' … Like we all know, but it's just good to have it officially set out at this gathering and the fact that someone brought that up, someone else, you know, would bring up that people are hurting each other … And you know, then another person will, you know, bring up another story. Then another person, so it sets it off and like, that's what [was needed for the] Band Council Resolution: get removed from the community if you're a troublemaker."

Good communication from ministry personnel and community members who stayed behind was also vital in dissuading despair and maintaining hope for those at a host community; this communication was mentioned as a success across the four communities who discussed their evacuation experiences with us. Updates related to the status of the fire, the protection of their homes, and the well-being of their dogs all kept community members from worrying about what was going on back home. One participant recalled "it was a good thing that they come and update us rather than not coming at all, not knowing what's happening to our community, is our community safe or did it burn down?" When asked if she had any worries about returning home when the evacuation had ended, she replied "not really, because of all the updates and that we got and also, telling us that the home is safe and it's safe to go home now … everybody was excited to go home."

Strong relationships and support

> *Being away from home, being away from family. That's a huge problem for anyone from any native community. 'Cause like, you know, you grow up in a small community… you're surrounded by literal family all the time—cousins, aunts, uncles, brothers, sisters. You know, to go to leave that kind of setting to go to a different place for training, you don't know anyone. You feel isolated. It's, the social shock is too big for most people.*
>
> ~ Participant from McDowell Lake First Nation

The importance of family in people's experiences, motivations, and ideas around wildfire management is woven throughout this research (Figure 3). One of the most common disincentives to training and working in wildfire management mentioned by the participants is isolation from community and family support networks. At least four participants noted that the limited access to SP100 and other training courses can pose a problem for individuals in remote communities. People are often required to leave their communities to take these training courses, which is not only expensive, but difficult for a person with family obligations and for youth who may experience social shock when leaving home. Parental relief was a major concern for participants too, and multiple participants mentioned that accessing training outside of the home community was even more difficult with the added stress of finding childcare for the days to weeks they would be away. As one participant pointed out, the additional fitness test that is not connected to the SP100 course but is required for employment as a Type I firefighter complicates things even further for people in remote communities.

For members of Keewaytinook Okimakanak Tribal Council communities, effective wildfire management often hinged on reducing harm and achieving success through leaning into strong relationships and support systems. When it came to wildland firefighting and risk mitigation, many participants had honed their skills not through standardized ministry training, but through participating in these activities with family members. One participant recalled how she learned through helping her aunts, uncles, and cousins fight fires in a different community, successfully put a fire out with them, and would have continued to fight fire alongside "family … because we're always together and do things". Another participant had been offered SP100 training in the past, but did not take it because he would have had to leave his community; instead, he learned how to fight fires from his stepfather and has helped to put fires out around his community since he was a teenager.

For those who were a part of ministry training and fire crews, relationships and supports were also a cornerstone of success. When asked about the best part of being a firefighter in the 1970s, one Elder recalled that "The best part of it is just you got to interact with other people, make some friends. Even like with some of the MNR personnel, I met some good people … We created some friendship, long-lasting friendship." To this day, he remains in contact with some of the people he worked with during those years. Presently, strong supports can help spur community members to obtain SP100 training; in a discussion on what could make it easier for youth to get involved in wildfire management, a participant described how in his community,

> "The youth that we have now or like that 20- to 30-year-old range. Doesn't seem like they want to leave home … I think if we do like SP100 training you know it would be nice if the MNR would come to the community and do it. And then you get more interest … They gotta have that parental support or whatever there, you know, like not parental but they gotta have somebody there to help them."

Providing pathways to wildfire management training and certification that align with the social importance of family and support networks, such as localized training opportunities that allow for parents to return home each day after training sessions, could help remove barriers and incentivize more community members to train alongside one another.

In the context of evacuations, strong relationships and supports reduced harms and improved the experiences of evacuees. Participants from all four communities that shared stories about recent evacuations mentioned how having family, close friends, and the larger community alongside them at the host community contributed positively to their evacuation experience. One participant, when asked about what helped her during a recent evacuation, shared it was "The closeness of the community members, like how there was a bunch of us in one place. Being around my parents … And that supports that were there." Another participant shared

how the evacuation gave him a chance to go shopping with his wife and running with his son, the latter of which he had not done in a while. Friendship also reduced harm and increased resilience during an evacuation. As a participant described, “Me, me and my best friend, people would always ask us questions too, because we’re one of the few that didn’t really care. And they were just wondering how we didn’t care. We had each other.”

Relationships and Support

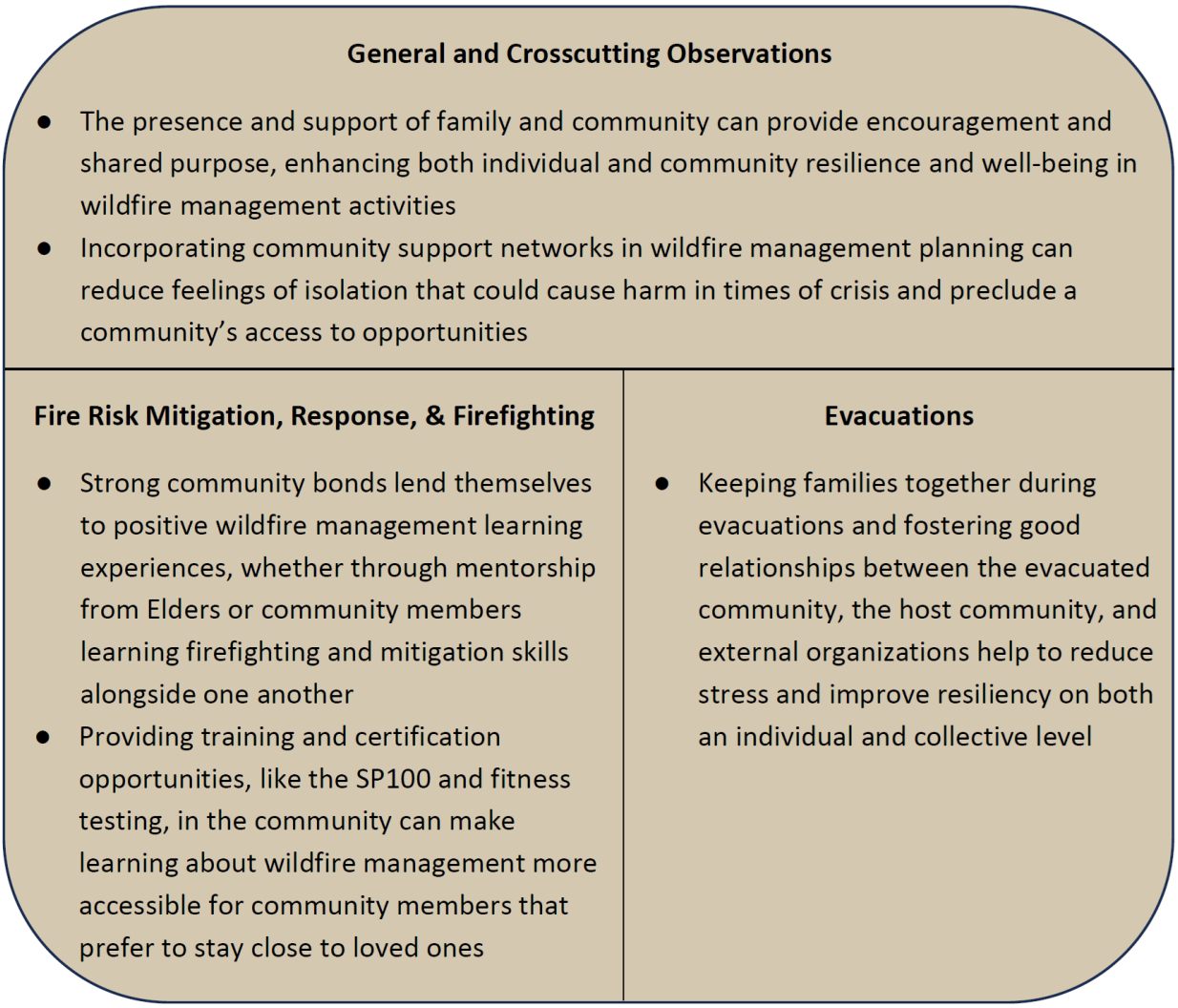


Figure 3. Key insights and needs identified by the research participants—relationships and support

Pre-existing ties like these were important, but participants also mentioned the positive effects of creating relationships at the host community. Describing an evacuation in 2014, a participant from North Spirit Lake First Nation spoke about making friendships at the host community that have lasted to this day. Relating Keewaywin First Nation’s most recent evacuation, another

participant praised representatives from a First Nation near Timmins for approaching Keewaywin's leadership to offer help, an invitation to see their land, and an opportunity to participate in their fishing derby. During a disruptive event like an evacuation, strong community bonds and a sense of being welcomed and belonging can help bolster resilience and provide a sense of security for community members.

Togetherness as a comfort for Elders during evacuations

Participant: The Elders were really nice. Like whenever we had supper, lunch or something then they would always enjoy just sitting around watching everybody. They just liked enjoying seeing everybody! (laughs) So. Mealtime was really a really good thing for them.

Interviewer: Okay. So the mealtimes, those were good times for them?

Participant: Yeah, like they don't really ask for a lot, but just like having the presence of people around them, especially the children. They really love children.

Interviewer: Is that something that they get to do a lot when they're back home?

Participant: I don't think so. Not a lot.

Dignity, responsibility, and agency

Q: What would you say is your greatest hope for the future of wildfire management in McDowell Lake?

A: I would hope that we do have an actual, like, fire crew there during the summers. That we are able to actually, like, manage it ourselves.

~ Participant from McDowell Lake First Nation

Many participants described observing a general lack of motivation, enthusiasm, or interest in wildland firefighting or risk mitigation activities and employment, particularly among youth, in their communities (Figure 4). Comments such as "they don't want to go out on their own and make it on their own", and "you have to be willing to experience what we experienced, but they don't want to experience that…It's just the way, the trend of today's world. Seems like people want it easier nowadays" reflect a concern among some community members about the demotivation felt by youth leading to changing attitudes towards work, and more specifically, wildfire management.

An Elder and past firefighter stated during his interview that most youth think there's nothing for them in their community and no available employment, even though opportunities do exist. He recalled his own experience, being hired as a firefighter for one season before the formalized training requirements were put in place. He recalled completing the training and being ready and eager to rejoin a fire crew, then explained how demotivating it was to not be hired onto a fire crew that year. For youth in his region, he noted how it is particularly demotivating to see "people coming in from other countries … how come we can't utilize our own people when we have fires in the northern areas? … Our people lose interest. They get disencouragement seeing that happening and they don't wanna pursue this kind of work because they know that they won't be called upon anyhow." Tackling the demotivation and discouragement that affects involvement in the workforce more broadly, and fire management specifically, is no simple task. Observations like those of these Elders may stem from a desire to see the younger generations embrace the same responsibilities that shaped their experiences, and at least one Elder and past firefighter noted that the lack of motivation in youth can be remedied. He expressed a desire to help them learn how to work, how to do a job, broadly, and "be a go-getter". From his perspective, this foundation of dignity, responsibility, and agency in one's own work is needed before youth can get interested in firefighting.

Successful wildfire management initiatives for Keewaytinook Okimakanak Tribal Council communities involved upholding dignity, responsibility, and agency. Participants often associated success with dignity, with success involving a fostered sense of confidence and self-respect in both individuals and the community, across all dimensions of wildfire management. When participants spoke of success in firefighting, they often spoke of the benefits to their self-esteem and confidence or to youth. One participant, who was involved in community-led firefighting and mitigation with his grandparents and continued to fight wildfires around the community later in life, shared that through these activities "You bring up yourself. Morale. How you think about yourself that you're able to step up and help the community, when they need it". An Elder and past ministry fire crew member from another community advocated throughout his interview for the ministry to not only train youth, but ensure that they are called upon to help neighbouring communities; for him, it was important "For [youth] to know that they're being called upon and to be utilized, it does something to the young person, knowing that they are doing something to help other, their fellow community members … self-esteem."

My brother and [brother-in-law] were trained firefighters and they were designated to be the crew bosses, so they had to know their stuff… I guess you have to do your job right in order to be a good firefighter, and I think, I don't want to brag, but they were pretty good at it.

~ An Elder

Dignity, Responsibility, and Agency

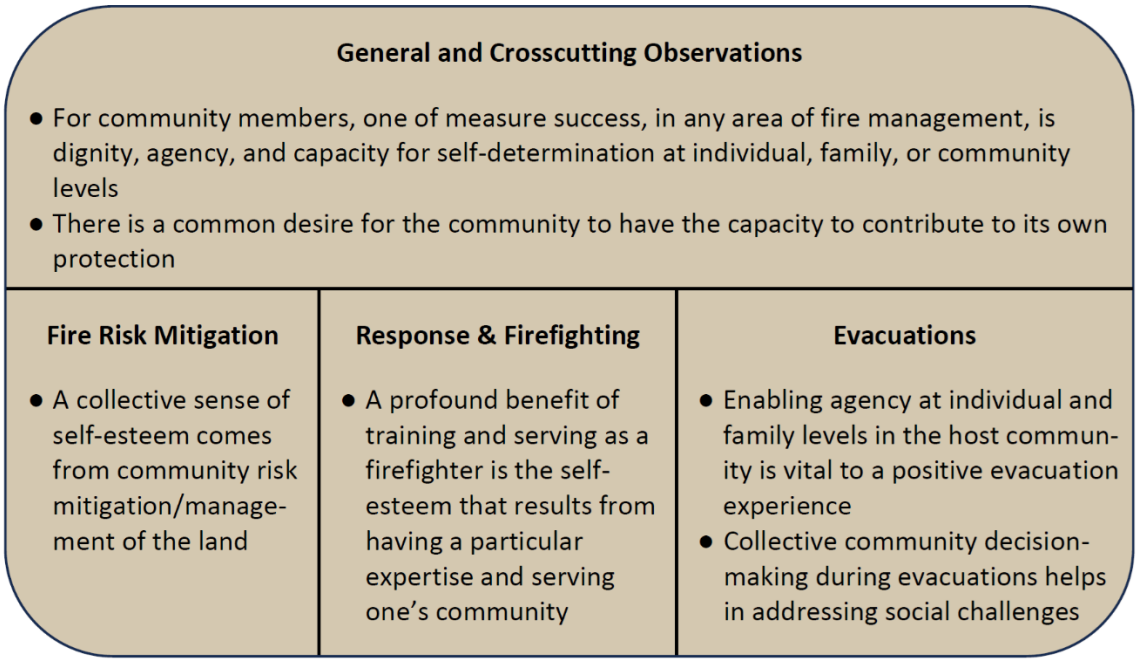


Figure 4. Key insights and needs identified by the research participants—dignity, responsibility, and agency

Notably, this confidence and self-respect was linked with satisfaction about being able to take responsibility—both individually and as a community—for various aspects of wildfire management. As illustrated in the quotes above, self-esteem was a successful outcome of firefighting, bolstered by the knowledge that one is capable of 'stepping up' to help their community. This responsibility tended to be spoken of matter-of-factly, especially in relation to fighting wildfires; for example, one Elder who worked on a ministry fire crew stated "Success was actually being able to put out fires. That was our job and most fires we went to, we successfully put them out. And that was our job. None of them got away from us, which was even better." Participants also expressed a sense of achievement and satisfaction in knowing that community members could keep wildfires from starting or spreading. In a discussion on fire risk mitigation techniques like clearing grass and fallen branches, a participant described how his community shares responsibilities about fire:

> "I would say it's just the Elders ingraining in [fire risk mitigation techniques], teaching us that. So everyone in the village does know that even like from a very young age. So yeah, like from the first moment you're able to make a fire. It's ingrained in you, not a toy. It's a tool, you know, to cook your food, it's meant to keep you warm. You know it's there to help you, not there for you to play with. Everyone just generally knows as they grow up… To my knowledge, there has never been a man-made fire, forest fire, in our community. Ever."

Promoting dignity and agency also means recognizing communal efforts and going beyond formal consultation to meaningfully engage with communities and address their desire to care for themselves, a desire expressed by multiple participants. The Elder and past firefighter who spoke about the effects of responsibility on self-esteem also expressed an opportunity for AFFES to create positive change: "They do research, they study, they ask if there's any interest and when the time [comes] to call upon people in our community to do this work, we don't hear from them … my greatest hope is for MNR to be able to utilize our community members that are willing to go out firefighting." Actively involving willing community members in firefighting and risk mitigation empowers the community to protect themselves and their homelands, and also affirms their skills and knowledge as respected partners in wildfire management.

Encouraging responsibility led to successes in the evacuation experiences of various communities. When community members described having more personal choice and freedoms, particularly at the host community, they were able to have more ownership over their actions. This personal agency was key to success at the host community for some participants, such as a former community leader who felt that "Families need some independency too, in their life. Let them do their own laundry and let them take their kids out. Let them choose, what do you want to do for the time. So, more drivers is good, options is good, for them to see the city or to do something on the beach on their own when they want to, that autonomy."

Responsibility in action

Participant in a community leadership role during the evacuation: So, movies came up and things like that I can't organize all by myself alone, because I was just too busy. And so, I gave responsibility to someone else. I said 'Here', I gave him a whole bag of tickets, it wasn't sorted out, like this is what they gave me. (laughs) 'Here's bags. Here. Here's like one bag of bus tickets and one bag of movie tickets' … And then kind of just delegated to him.

And I was like, 'Here, can you organize this?' He was like, 'OK, I'll help you out.' Like good. Thank you. I think I need that; I need someone to help me and yeah, he understood. He saw me doing my work and what I was doing, what I was saying, right? I can't. He knew. So. That's someone I never really talked to, I never asked about at the time. I just asked him and I'm glad he was there to help me with that … And the more I was working, organizing and talking with people, the more some people started to see that and wanted to help too … Some people say, 'Hey, you got something, you got a job?' Then it started happening like that, right. … Yeah, they enjoyed themselves. They had a good time.

Collective agency and responsibility can also play a positive role in decision-making during a community level evacuation. A participant involved in community leadership during an evacuation noted the importance of involving the whole community in decision-making on potentially controversial matters, such as alcohol use, at the host community. In this participant's perspective, "I will have to listen and ask questions and it can't be just from one person, but from a group and see what the collective is agreeing on … You do need that, you know, authority from them given to you to say, 'Here's the stick. Now go swing it,' you know." In this situation, encouraging the agency of community members in decision-making led to the success of the resulting alcohol use policy at the host community; as the participant described it,

> "We asked them 'Is this what you want?' and they said, 'Yeah'. Kind of hesitant, but you know, you want me to swing the stick. This is what it is (both laugh). This is what it looks like, right? This is what you're asking, you want me to do this right? Because it could, it's their family, too, that's drinking. It's their family too, that's fighting … It's a quiet yes. Cause what that could mean, right? And it was a good thing."

Fostering the values of dignity, responsibility, and agency through wildfire management activities and decision-making can, as highlighted in the examples above, contribute to successful outcomes in wildland firefighting, risk mitigation, and evacuations.

Capacity, learning, and knowledge

The ability of a community to respond effectively to wildfire threats depends heavily on capacity, learning, and knowledge, and these topics arose frequently in the interviews (Figure 5). Many of the participants mentioned capacity as a limiting factor in their ability to help protect their respective communities from wildfire and manage evacuations more effectively. Our discussions with community members identified four separate but interconnected elements that are lacking in their communities: equipment, training and education, human resources, and funding.

Six participants mentioned the importance of having fire suppression equipment such as pumps, fire hoses, sprinklers, or a fire truck, in their respective communities to be able to deal with local fire threats on their own rather than relying on the ministry. When asked who has the responsibility to protect Indigenous communities from wildfires, a participant responded:

> "I mean MNR. Cause as much as I wanna say us living on the land, growing up with the land. That's our home, I would wanna say we should be the ones protecting it. We don't have the equipment for that. We don't have water bombers. We don't have vehicles that are able to go out onto the land and, like, plop down a pump and a hose instantly and start spraying water through 200 feet of hose. We don't have that mobility. Or yeah, the equipment just to do those sort of things…You would think it would be the easiest thing for us because we're already right there…It's just not feasible for us."

Capacity encompasses not just physical resources like equipment, but also the human resources needed to apply them—people who are trained, knowledgeable, and experienced. As described by participants, this training could involve standardized training like SP100 courses, and engagement with and learning from experienced community members, such as Elders, to effectively assist their communities with firefighting, wildfire mitigation activities, or evacuations. Two Elders who had fought fires with the ministry before standardized training requirements were introduced expressed concerns about the difficulties their community faces in having its own fire crew. The limited accessibility of training affects not only employment opportunities but the community's capacity to respond to fire, as fewer community members possess firefighting knowledge and experience. A participant expressed, for example, a desire to see the ministry employ more fire personnel in the community, "not just one guy [the community fire officer]."

Similarly, ten participants expressed a need for increased knowledge around fire safety, fire risk mitigation practices, and the traditional uses of fire by Indigenous people–particularly among youth. Many shared a desire to learn how their communities could better prepare for wildfires, with considerable interest in FireSmart-type mitigation and activities like community workshops that would promote knowledge-sharing and collective preparedness. One community member mentioned the need for trained or experienced people in their community to perform wildfire mitigation activities such as cutting up and removing a large area of blown down trees which are close to the community and pose a fire risk. Seven others from three different communities spoke about the lack of trained people and training opportunities that would help protect their communities from wildfire.

During his interview, an Elder and past firefighter expressed regret that the youth from his community were not present at the Learning Together: Wildfire Workshop, another segment of this research project which brought together representatives from five Keewaytinook Okimakanak Tribal Council communities. The youth would have benefited from learning from their Elders who were sharing their knowledge with the researchers. Three others stressed the need for traditional fire knowledge – even relatively basic things such as where and when it is safe to make a fire – to be passed on from Elders to youth. An Elder who helped fight fires around her community in her youth observed that today's youth are growing up "modernly", not spending time out on the land and learning through traditional *[hands on]* methods. Another participant with traditional firefighting and mitigation experience noted that knowledge is being lost forever as Elders pass away without being able to share their knowledge and experience with younger generations.

The aforementioned lack of equipment, trained human resources, and opportunities for learning and training is compounded by the small populations of these communities. A limited pool of people with knowledge and training, or interest in being trained, to manage and maintain equipment, staff a fire crew, and perform other wildfire management activities makes it difficult for communities to build the capacity to prepare for and respond to wildfires. The final capacity element which is closely intertwined with equipment, training and learning, and human resources, is funding. Funding for activities related to wildfire management is not easily provided to First Nations from government organizations. Multiple participants spoke about the reality that financial resources are required for a community to purchase and maintain equipment, provide training and knowledge-sharing opportunities such as SP100 firefighting courses and workshops to community members, and employ people to perform wildfire mitigation activities, or even populate a fire crew and keep them busy with fire mitigation activities in the community during the off-season, when they are not fighting fires.

Capacity-building thus has the potential to be much more than the practical delivery of new knowledge and skills. Promoting learning and knowledge in a holistic sense—by ensuring the availability of equipment and funding, and encouraging engagement in knowledge-sharing activities—can bolster intergenerational knowledge transfer and community resilience. As discussed earlier, participants often alluded to the increased self-esteem and sense of accomplishment that came from developing wildland firefighting and risk mitigation knowledge, responsibilities, and experience. Some highlighted the benefits of combining Western and Indigenous knowledge. One participant described it this way: "I can take care of myself [in the bush]. And I took care of myself in the city because I went to school in college. Right? So you walk with one shoe as a runner and one shoe as a moccasin. You're between two worlds." The development of knowledge is thus not only a benefit in terms of skill development, but also in terms of emotional well-being. One Elder, looking back on what it was like to learn fire management and safety skills from Elders in her community, described the emotional and spiritual benefits of learning in this way: "I really, my spirit was just like… (pauses) I'm really eager. I was so eager to learn. I really was fed by them, as if I was fed by mouth. That's how it impacted in my heart, to learn." Another participant contended that traditional knowledge from the community should be taught alongside SP100 training, reasoning that:

> "If we had Elders there that were firefighters and shared their stories, and then showed what they had to use, versus the new equipment that they're going to be using, that would generate enough interest from youth to say like, 'Wow, I'm going to be doing exactly what my grandfather did or my uncle did, or my grandmother did. Now it can be my turn to live through this, to be ready for this.' … People think professional people [should be the ones] to pass on like this kind of knowledge of updated techniques on what to do. It's just like, well, yeah, that's cool. But I'm not going to be listening to a stranger from outside that doesn't know me or my community or who we are, tell us what to do … this is just me remembering like what I thought back in the day, and if it was my dad there teaching me, I'd be hanging on every single word he said. And if it was my grandfather telling me, I would treat it like sacred knowledge."

Another improvement participants suggested for SP100 training was an increase in hands-on learning. One participant attended SP100 training twice in his life and found that it was not only more engaging, but more practical to have more hands-on learning as opposed to classroom learning. For him, it was beneficial to learn how to use equipment like a pump outdoors as opposed to having it already set up for the training, relating the importance of practice:

> "All we had to do was prime it and start it, you know, so it was set up already. Ready to go. You know, we never had an opportunity to take it out, like carry it, put it by the water, get the pumps and stuff and prime it and start it. So … if [a wildfire] were to happen like this summer, … like, there's no way they would have been able to start that pump that they have."

Another participant learned wildfire management through both recent SP100 training and a ministry internship that she described as very hands-on, learning how to set up pumps in various terrains and protect residential buildings; in her perspective,

> "[I] found it definitely helped me like understand all of the material, way more … It helps me to just get the hands-on things because I know when you're doing the SP100, it's mostly just like classroom stuff. And then you do like hands on stuff maybe for like, the last two days … but actually going to the base and having to go to like different locations, practicing setting it up in different places was pretty fun. (laughs)"

Capacity, Learning and Knowledge

General and Crosscutting Observations

- Capacity, learning, and knowledge are deeply intertwined; a lack of equipment, education, human resources, and funding hinders communities' abilities to learn about wildfire management and mobilize that learning to protect themselves from wildfires
- Development of knowledge and skills, as well as addressing tangible needs, has benefits for emotional-wellbeing, and is an objective in its own right
- There is a strong desire for intergenerational, land-based capacity building and weaving learning and knowledge across all aspects of fire management
- It can be a challenge to interest youth in training and other learning activities
- Some people want cross-cutting learning more than deep dives into compartmentalized and professionalized skills sets

Response & Firefighting

- The professionalization of firefighting and decline in number of community members employed as firefighters, has reduced community capacity to deal with fires
- Some community members want fire training that is not necessarily geared to employment as a firefighter
- There is general preference for hands-on rather than classroom-based training

Evacuations

- Some people are hired into formal positions with little or no relevant experience or training
- There is a need and desire for continued training for evacuation teams and frontline workers
- It is important to learn from past evacuations, e.g. through community reflections after evacuations

Figure 5. Key insights and needs identified by the research participants— capacity, learning, and knowledge

Capacity shortfalls also affected the management of evacuations. The experience of evacuating a community can be so overwhelming that it impacts the ability of staff and leadership to effectively organize. In one community, for example, a participant noted how some community leadership and support staff "could have done their jobs too, but those things sometimes maybe just get lost in the evacuation, and leaving … I would like them to be there, help each other … There are limitations to what you can expect people to do and be, you know, sometimes they want to do good but just really can't." This lack of capacity is compounded by a lack of staff that are knowledgeable or trained in evacuation and emergency management; as

one participant described, sometimes community members are hired into positions without the training or knowledge specific to those positions. In this participant's perspective, "I don't really think they know the importance of planning or stuff like that … something that we lack [here] is people that have the ideas and do the work."

Several participants found success in learning from past experiences; knowledge and training in evacuation and emergency management was brought up as a potential opportunity for positive change. One participant considered his community to be more prepared for an evacuation now than before because the Chief, a councillor, and a lot of the staff during the last evacuation are currently in the same roles and now have more experience. He was confident that "they're going to know how to go about it if it happens again". Another participant stated that their First Nation is more prepared now than before because they "started doing their own rides now … starting to have, like, better rooms. Better places to sleep" – alluding to lessons learned from stressors felt by community members in the past. Lastly, a participant brought up the need for more training for emergency situations like evacuations, as in her perspective "what would have made this evacuation successful is … like for emergency frontline workers, like if we had them trained for different situations like for a pandemic or for an evacuation or for like different things."

Socially and culturally contextualized care

A common thread among the successes identified by the participants is care from external organizations that goes beyond the basics and that is consistent with the social and cultural realities of the community (Figure 6). The centrality of close family bonds in people's lives was illustrated by the importance of relationships and strong support to success. Imperative too were the values of dignity, responsibility, and agency discussed above. Prioritizing community values led to successes across all dimensions of wildfire management; whether referring to firefighting or evacuation activities, participants described benefitting from care that was empathetic, genuine, and considerate of their specific community's experiences and culture.

Socially and Culturally Contextualized Care

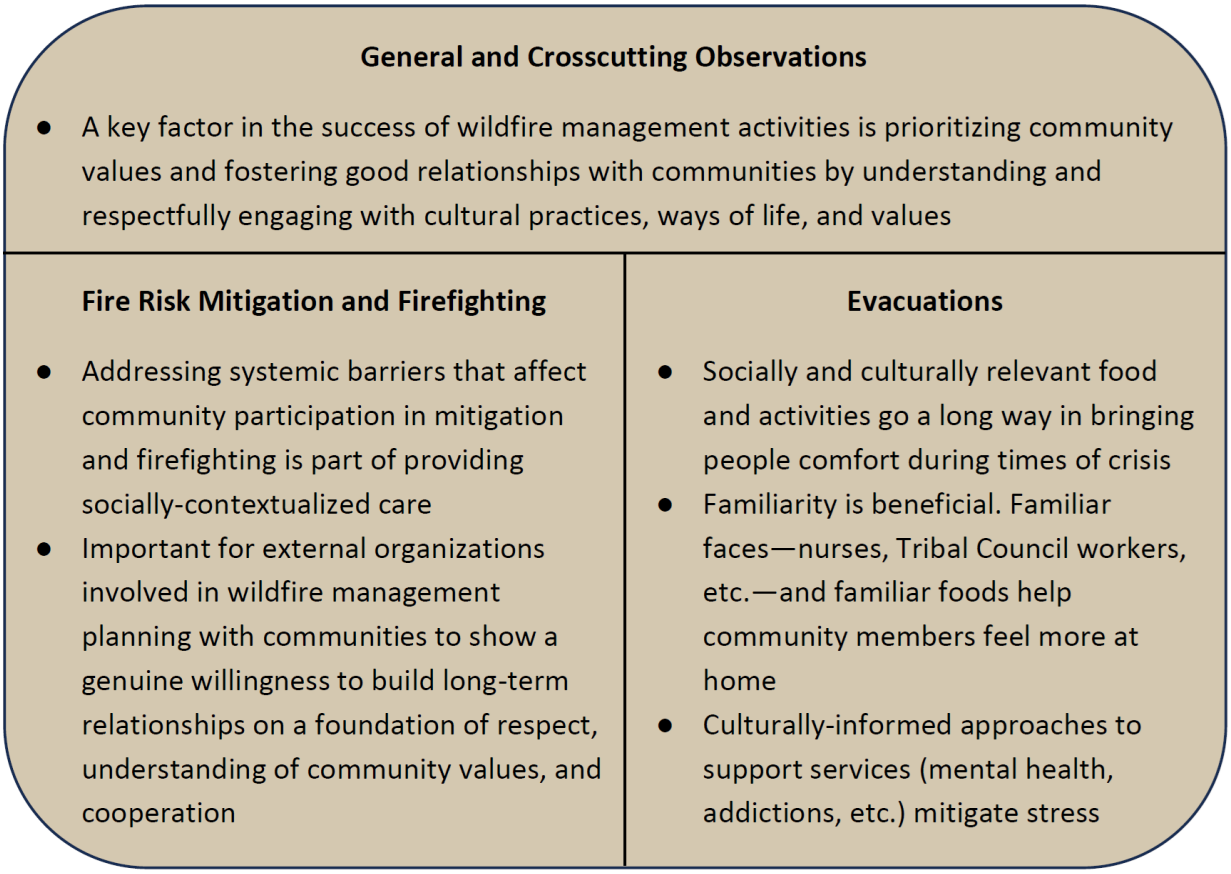


Figure 6. Key insights and needs identified by the research participants—socially and culturally contextualized care

Regarding firefighting and mitigation, providing socially and culturally contextualized care to remote First Nations communities involves not only understanding community values and culture, but also the systemic barriers which hinder participation in these wildfire management activities. Alcohol and substance use were explicitly identified by seven participants across multiple communities as major barriers to youth involvement in wildfire management. In remote communities, a lack of available opportunities and activities, combined with isolation and limited supports, can contribute to youth turning to alcohol and other substances to cope. One participant noted that in her youth, women were as eager to fight fire as men, but that had changed. When asked what had caused this switch, she replied “It’s so much drugs. Everything that these young people are doing now, it’s causing it, and there’s no recreation.” Managing addiction can understandably take priority over training and participation in wildfire management activities. This systemic barrier affects every community differently, and tailoring solutions to each community’s unique social reality is imperative. Culturally informed mental health and healing support is one such solution, as we explore further below in the context of

evacuations; creating safe and supportive environments encouraging youth to access training, mentorship, and healing activities can also lead to successful involvement in wildland firefighting and fire risk mitigation.

Socially and culturally contextualized understanding can also help create connections and foster good relationships between organizations like the Ministry of Natural Resources and communities. During a group discussion on firefighting, one participant shared an example of this approach to care from the 1970s:

> "I know there was a time there, an Elder passed away during the time they were out fighting fires and they had to replace a crew to go to where they were and bring our crew back to McDowell Lake for the passing of the Elder. So at that time they were pretty considerate if something happened in the community … I'm not sure how it is now, maybe it's just the individual gets sent back or something rather than the whole crew. But McDowell Lake is different, everyone is related."

The ministry's understanding of the socio-cultural realities of life in McDowell Lake First Nation, coupled with its willingness to make fire management decisions that honoured those realities, fostered a positive environment for firefighting in the past.

> *One of those evenings they had the ladies cooking fried bannock… They really enjoyed that. They really loved their bannock. A lot of people came out to have bannock. (laughs) …. you could tell, like after, everybody had their bannock and jam, everybody was really happy. (laughs)*
>
> ~ Participant from Poplar Hill First Nation

This approach to care by Keewaytinook Okimakanak Tribal Council, municipalities, and other organizations has also been perceived as beneficial by participants when it comes to evacuation experiences. Socially and culturally relevant activities at the host community were often mentioned as a successful part of participants' evacuation experiences. A participant recalled, for example, how Keewaytinook Okimakanak Tribal Council staff offered not only culturally relevant activities like bannock-making, but also activities relevant to her community's social realities. Staff organized bingo and church services for community members, and "workers would come and pick [the children up] and take them to the movies as a group. Parents would have time for themselves, a break … I found it helpful. I really enjoyed that." A participant from a different community echoed the importance of support for families at the host community, relating how volunteers would take children on excursions to swim and play at parks. Familiarity was also a great comfort for some participants; during Poplar Hill First Nation's most

recent evacuation, one participant described how "[Keewaytinook Okimakanak Tribal Council staff] really did a good job like coming around, and people that would come to the reserve like … the ones that come [to Poplar Hill First Nation] from KO [Keewaytinook Okimakanak Tribal Council]. When our people, especially the Elders, when they see those people out there, they feel happy. They feel at home … They're so happy to just run into somebody that they know."

Culturally and socially familiar food was also an important consideration for participants, and its availability at the host community brought comfort to many participants. When asked about positive experiences at the host town, a participant from Deer Lake First Nation mentioned how fish fries were important in bringing the community together; referring to fish, rabbit, and moose meat as "good foods", he suggested making these more available throughout evacuations. Bannock and foods like berries, fish, and moose meat were also mentioned positively by participants from other communities. A participant from Keewaywin First Nation described the value of providing familiar food as follows:

> "We had some cultural food. We had bannock and some staff would bring berries, so it was basically what we're used to, nothing new and fancy. Because I find that the new food, that some people won't even touch it, or they won't even try. But if it's something that we eat in the community then they'll take it."

A culturally informed approach to providing mental health supports and promoting well-being for community members could also be beneficial. As mentioned earlier in the findings, medical terminology can be stigmatized and accessing mental health supports may come with a risk of lateral violence for community members, increasing the risk of harm throughout the evacuation process. As one participant suggested,

> "If you develop something using our language and our beliefs to talk about healing, get away from the word psychology, psychologist, therapy, group therapy, counselling, mental health counselling. Don't use those words. Look for healing, look for strength, right. If you can use our words, find those words. Ojibwe, Oji-Cree, right? Then put it in there somehow. I think if we have that for the community, for their healings, for their benefit, which can help, I think in the times of this crisis too, right, that it can go better too and things can improve."

As participants have shared, supports tailored to the individual community and its culture can help to mitigate stress for community members and provide comfort during evacuations. Appreciating and taking account of a community's social challenges is also crucial, particularly when trying to prepare for and counter the social risks that may come from an evacuation experience. Some individuals from remote First Nations have little experience in towns and

cities, and the risks that youth face from suddenly finding themselves in a city was a topic that came up several times during the research, as did the importance of being prepared to support people struggling with alcohol use disorders while in a host community.

More broadly, fostering a wildfire management system that serves the needs of remote First Nations will require understanding of and empathy for the culture and worldview, and understanding how people view the boreal forest ecosystem and the place of fire within it. As one participant said, “If you could imagine your house burning down, that’s basically what we view as like our forests burning down.”

Discussion and conclusions

Overview

The *Learning from Indigenous Perspectives for Wildland Fire Management* research project involved various activities for dialogue and engagement among community members and researchers, and the data gathering had several components. This report focused on 20 interviews and one focus group discussion carried out with community members. In this section, we summarize and present a few reflections on what we heard. Other publications will present more comprehensive analyses of the findings from the whole project.

The collaborative research project had three major aims that informed the interview and analysis process. The first was to better understand both the holistic impacts of, and the desired supports for, fire-related evacuations of remote First Nations communities. The second and third were to learn Indigenous perspectives associated with wildfire management and evacuation, and to then identify community-focused criteria to include in ministry, tribal council, and First Nation planning and decision-making.

In these interviews with members of Keewaytinook Okimakanak Tribal Council communities, researchers heard rich and detailed stories about the physical, social, mental, emotional, and spiritual impacts of evacuations. Community members shared what supports were inadequate, what supports successfully benefited community members and prevented harms, and what supports they desired for future fire-related evacuations. Regarding wildfire management activities, they discussed their perspectives on wildland firefighting and mitigation, their motivations for participation, the barriers and gaps which hamper that participation, and opportunities for positive and meaningful change in decision-making at the ministry, tribal council, and First Nation levels. Analysis of the themes that emerged from these richly detailed stories offers a unique contribution to the body of knowledge related to the experiences, both

positive and negative, of remote First Nations community members engaged in wildfire management activities and fire-related evacuations.

Interviewed participants were clearly interested in developing capacity for firefighting and fire risk mitigation. SP100 training, with the prospect of conventional firefighter employment, can be part of meeting this need. Mostly, however, participants in the research are interested in developing in-community capacity, including having community-based crews that can fight fires in or near their own communities. This finding was also heard in workshops, community meetings, and informal conversations that occurred during this project. Interviewees from multiple communities also expressed the need to strengthen capacity for mitigating fire risk. One suggestion was for risk mitigation capacity to be developed in tandem with capacity for firefighting such that individuals might be employed as firefighters in the summer and work on risk mitigation in the off-season.

Although research participants spoke about the need for effective communication and organization, skill development, and good planning, in most of what they described of both negative and positive experiences and of their aspirations, the emphasis was not on efficient, professional delivery of services. Instead, they placed a strong emphasis on the intersection of social issues and fire management, on socially and culturally contextualized care, on values and culture, and on what might be called “a human touch”. During evacuations, attending to comforts in a way that goes beyond the physical bare minimum of providing food and shelter can go a long way to reducing stress and making evacuations bearable. The research also points to the importance of First Nations and external organizations planning for and being prepared to address mental health and addiction challenges during fire emergencies, especially while evacuated. Support for community-engaged research and community-wide dialogue could contribute to a gradual movement toward greater planning and preparedness. What is known as *rapid response research* may be an important part of this.

The stress and potential harms of evacuating are themselves a risk—one that First Nations leadership must weigh against the risks of not evacuating. Among these risks is the health effects of smoke. Ensuring that remote First Nations have sufficient shelter with up-to-date air filtration systems, could reduce the health impacts of smoke. In some cases, the availability of buildings with effective air filters may even shift the balance in how First Nations leaders calculate the evacuate/shelter-in-place trade-offs.

Challenges and opportunities for governments

Through this research, we identified three main challenges and opportunities for governments (Figure 7).

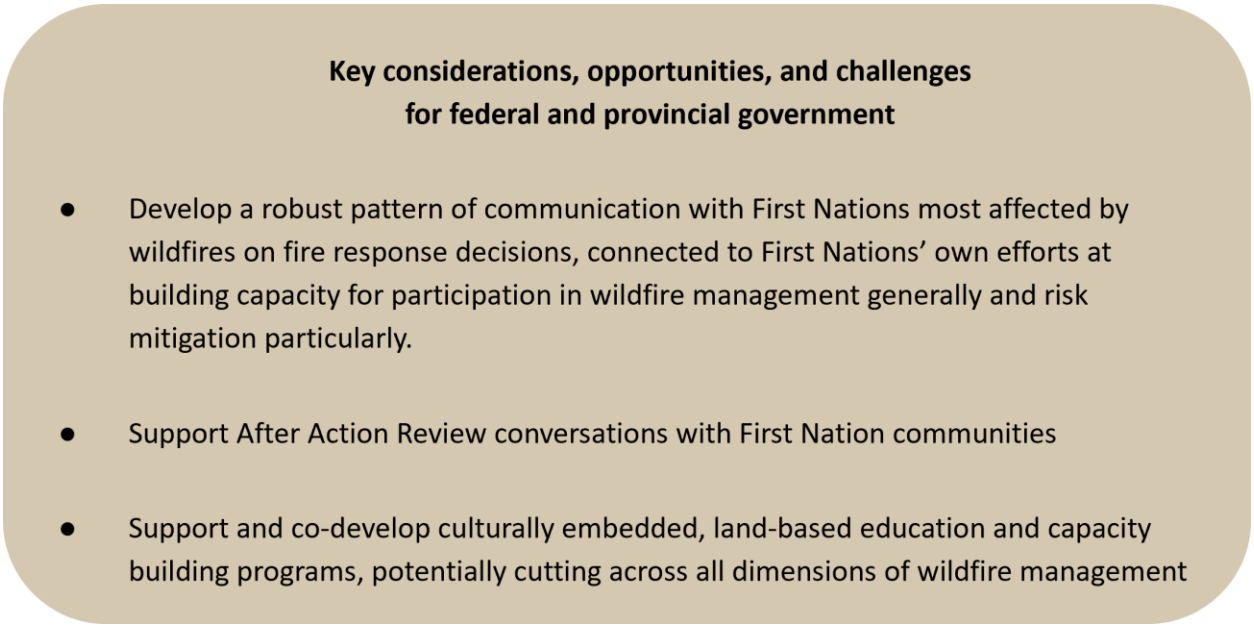


Figure 7. A list of the main considerations, opportunities, and challenges for wildfire management and evacuations for governments.

Robust communication on fire response decision-making

While the provincial government has been working to improve relations with First Nations in connection with wildland fire, the factors that undermined trust in the province's firefighting agency and its approach to wildfire management happened over decades and will take time to reverse. One such factor was the professionalization of firefighting and standardization of firefighter training, which became an obstacle for many people from remote First Nations. Communication and transparency in fire response has also been a focus of mistrust, one that continues today. The province's fire response framework directs that each fire is assessed and continually reassessed, and that not all fires will be targeted for full suppression. Misunderstandings can arise where this framework intersects with the need for rapid decision-making and with the fact that AFFES has finite resources. Several participants in this research felt ignored in their attempts to communicate the seriousness of a particular fire or the importance of protecting certain landscape values from a fire. If First Nation community members do not hear back from AFFES about such concerns, whether directly or through the

First Nation leadership, and do not understand how AFFES is responding to a fire, this gap in communication can easily be interpreted as the government not listening.

Communication with First Nations during a fire incident is, of course, important. But because time and human resources can be in short supply during an active fire, AFFES might consider finding ways to strengthen communication with First Nations not only during, but also before and after fire incidents, informed by the following considerations:

- Ensure that First Nations most susceptible to threats from fire understand the framework for fire response decision-making and the challenges AFFES faces in very active fire seasons.
- Such communication does not stand alone; for some First Nations, it could be a component of strategies for (re)building capacity for land stewardship, for participation in fire management decision-making, and for risk mitigation.
- One aspect of such information sharing and dialogue could involve AFFES and First Nations thinking together about future fire response targeting, and about how to avoid a scramble to identify "values" during an incident.

After Action Review conversations with First Nation communities

This opportunity can be understood as part of the need for robust communication referred to immediately above. However, these kinds of community conversations relate not only to fire response but also to the management of evacuations. In the interviews and other conversations that occurred throughout this project, members of several different communities observed that their community did not come together after fire-related evacuations to debrief and reflect on the experience, and some of them felt this conversation would be important. Doing so could be a helpful opportunity for communities to assess their own actions and identify areas for improvement, and for recovery. However, the actions of government agencies should also be evaluated while continually working toward better service delivery. Typically, part of a First Nation's post-evacuation conversation would happen without outsiders present, but part of that process could be a conversation with personnel from agencies such as AFFES, the Ministry of Emergency Preparedness and Response (MEPR), and any other organizations involved in fire response and in evacuation service provision.

The way that various government responsibilities are compartmentalized across different agencies, both federal and provincial, poses a challenge for organizing such conversations. However, from a community perspective, smoke and warning signs, preparation and waiting to see if an evacuation will happen, actions to fight the fire, evacuating from the community, time

in the host community, and returning home are all part of one fire experience. We suggest that, at the least, After Action Reviews conducted by external agencies should be presented to a community as a part of any such debriefing conversation. Ideally though, After Action Reviews should cut across the complexity of government agencies to consider how the system as a whole served the community. An After Action Review conversation in a community would include representatives of agencies such as AFFES, MEPR, and ISC, jointly organized perhaps by MEPR and the First Nation. Where a First Nation is proactively trying to build capacity in this area and to manage its fire risk, as referred to in the discussion on more robust communication (above), this kind of After Action Review conversation can be treated as one component of that effort. This community conversation then is not only about dissecting the incident just finished, but becomes part of a longer-term community conversation about what to do to mitigate fire risk.

Support for culturally appropriate land-based capacity development

Based on our interviews and other interactions with members of these five communities, and anecdotally on the authors' engagement with other First Nations in Ontario, we saw a widespread desire for land-based capacity development on firefighting, fire risk mitigation, and related topics, that do not necessarily conform to existing training packages for firefighting, prescribed burn training, or FireSmart. In fact, many community members are interested in training and capacity building to gain a broad, even if basic, understanding of all aspects of fire including fire behaviour, risk mitigation, firefighting, and management of evacuations. The most basic level of this kind of training could serve as a common entry-level course that allows for some exposure to these elements, thereby helping some young community members to consider if they want to go further to get the specialized firefighter training (SP100). Provincial and federal governments could provide support for this kind of broader, cross-cutting training and to work collaboratively with First Nations and Indigenous organizations to develop the content for such training.

Regarding firefighting, it will be helpful to continue with existing initiatives for training firefighters and finding ways to remove obstacles to young First Nations people receiving training and taking on jobs in firefighting. But perhaps the more interesting opportunity is to develop in-community capacity for both fire risk mitigation and fire response that is not necessarily connected to employment in the existing system as Type I firefighters with AFFES or as Type II firefighters with a private service provider. Certification through SP100 training might still be relevant for some community members as one aspect of such training or as a follow up to it, but this raises questions about how to affordably provide SP100 training and maintain

certification that would normally lapse if not followed by deployment on a fire within two years of being trained.

The kind of cross-cutting, land-based training imagined would need to be delivered through culturally-appropriate and empowering practices. As described by one participant, community members, especially youth, need to be "taught in a good way". This kind of education means not only delivering practical skills, but also social and emotional skills relevant to the kinds of challenges that youth in these communities face, and also instilling commitment to serving one's community. Such training would include intergenerational knowledge transfer and learning on the land, possibly connected to other cultural and livelihood practices that are not necessarily limited solely to wildland fire. For instance, skills development for risk mitigation could be one component of a broader, land-based program for youth. Existing *Guardians* programs may be models from which to draw lessons.

It is also important to remember that *capacity* consists of more than just training. Developing community-based firefighting capacity will require attending to organization of crews, access to and maintenance of equipment, and sustainable institutional and financial support. The interest in community-based firefighting capacity also raises questions about how community-based fire crews and trained individuals might interface with the province's formal wildfire management system. Collaboration among First Nations, tribal councils or other Indigenous organizations, and federal and provincial governments for creative experimentation rooted in a learning-by-doing approach should allow for developing solutions tailored to the needs and desires of diverse communities.

Wise practices

Despite some diversity in the outlooks of the research participants, for the most part, their perspectives were consistent and differences were mostly differences in emphasis. Implicit in their descriptions of past experiences and of their aspirations for the future is a consistent vision of how wildfire management and management of fire-related evacuations could and should be done. Drawing on the themes identified above, this implied vision can be understood as five wise practices for wildfire management with remote First Nations (Figure 8). *Wise practices* are akin to the idea of "best practices" but from an Indigenous perspective that recognizes Indigenous ways of knowing and being are diverse, informed by local history and culture (Manitowabi 2022). Other factors are certainly important to managing wildfires and fire-related evacuations in a way that attends to the needs and priorities of First Nations and ensures that their voices are heard, but these five were the ones that emerged most clearly from the interviews we did with community members.

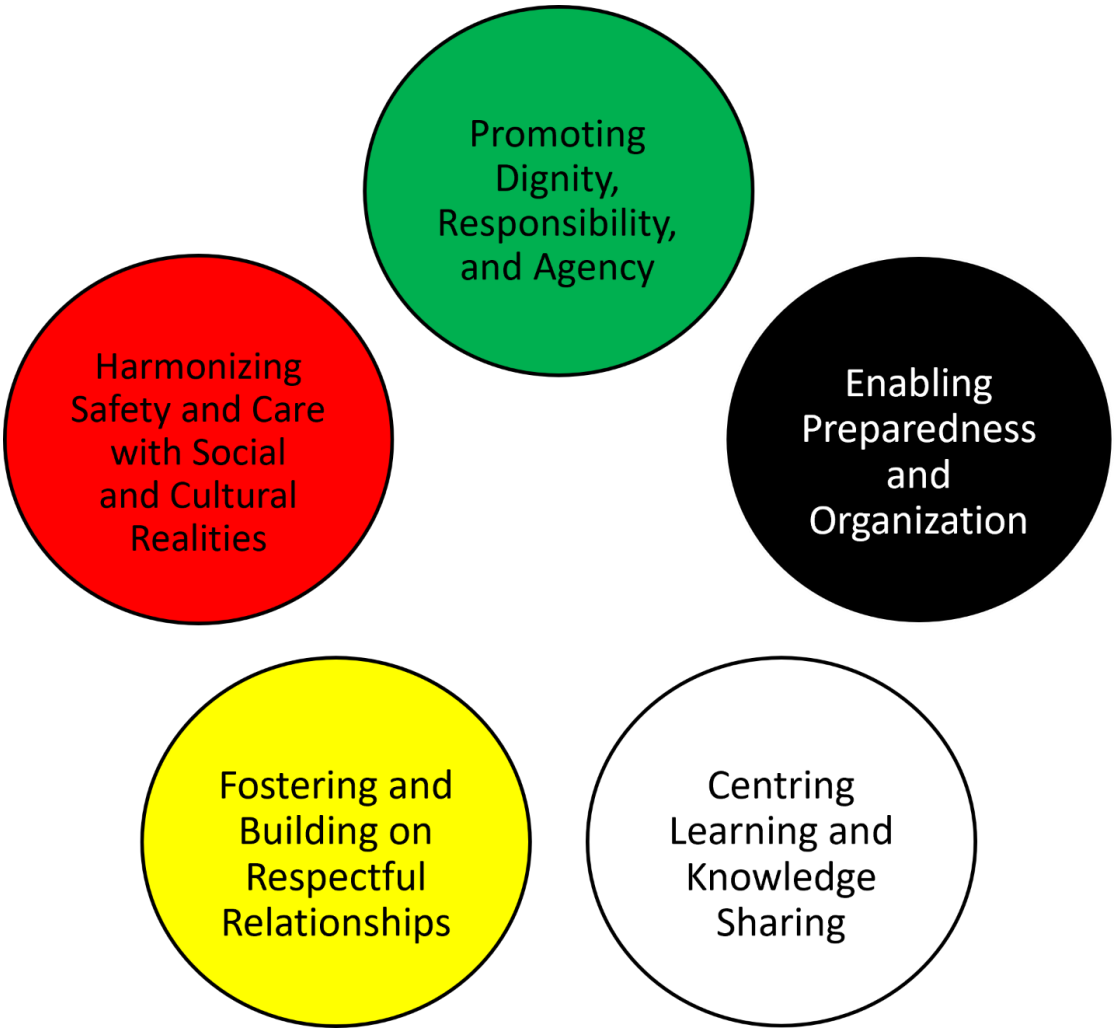


Figure 8. Wise practices for wildfire management with remote First Nations

We wish to emphasize that this list of wise practices is how we, the authors of this report, synthesized some of what we heard from the research participants. It has not been validated by the First Nations or by the individual research participants, and it does not necessarily represent the vision of the First Nations. We offer this list as a starting point for discussion and for consideration by the tribal council and its member nations[3]. Nevertheless, viewed as a set of community-focused criteria or principles to guide and assess actions, we believe these characteristics could apply both to the work of government and other external organizations, and to the work of the tribal council and First Nations themselves. We suspect they could be helpful both for reflection and self-assessment after a fire, and for planning, preparation, and capacity development.

[3] The findings of this report are based on interviews with community members. Other components of the project have suggested additional wise practices. A more complete exploration of these practices is planned for future publications from the project.

References

Asfaw, H.W., Sandy Lake First Nation, T.K. McGee and A.C. Christianson. 2019. Evacuation preparedness and the challenges of emergency evacuation in indigenous communities in Canada: The case of Sandy Lake First Nation, northern Ontario. International Journal of Disaster Risk Reduction 34: 55–63.

Bearman, M. 2019. Focus on methodology: Eliciting rich data: A practical approach to writing semi-structured interview schedules. Focus on Health Professional Education: A Multi-Professional Journal 20(3): 1–11.

Bombay, A., K. Matheson and H. Anisman. 2014. Origins of lateral violence in Aboriginal communities: A preliminary study of student-to-student abuse in residential schools. Aboriginal Healing Foundation, Ottawa, ON. 194 p.

Braun, V. and V. Clarke. 2022. Conceptual and design thinking for thematic analysis. Qualitative Psychology 9(1): 3–26.

Christianson, A.C., T.K. McGee and Whitefish Lake First Nation 459. 2019. Wildfire evacuation experiences of band members of Whitefish Lake First Nation 459, Alberta, Canada. Natural Hazards 98: 9–29.

Christianson, A.C., C.R. Sutherland, F. Moola, N. Gonzalez Bautista, D. Young and H. MacDonald. 2022. Centering Indigenous voices: The role of fire in the Boreal Forest of North America. Current Forestry Reports 8: 257–276.

Deer Lake First Nation and Ontario Ministry of Natural Resources. 2019. Deer Lake First Nation draft community based land use plan. Ontario Ministry of Natural Resources, Red Lake, ON. <http://www.ontario.ca/page/deer-lake-first-nation-draft-community-based-land-use-plan>. Accessed March 2025.

Fiddler, W. 2021. As wildfires blaze up north, Indigenous leaders call on Ontario to expand supports for evacuees. The Globe and Mail, Toronto, Ontario. <https://www.theglobeandmail.com/canada/article-as-wildfires-blaze-up-north-indigenous-leaders-call-on-province-to/>. Accessed March 2025.

Foster-Sanchez, M. and T.K. McGee. 2024. “It’s not the beds, it’s the people”: Building capacity to better host First Nation evacuations in northeast Ontario, Canada. International Journal of Disaster Risk Reduction 112: 104791.

Fusch, P.I. and L.R. Ness. 2015. Are we there yet? Data saturation in qualitative research. The Qualitative Report 20(9): 1408–1416.

Indigenous Services Canada. 2022. Registered Indian Population by Sex and Residence, 2021. Indigenous Services Canada, Ottawa, ON. <https://publications.gc.ca/site/eng/9.506255/publication.html>. Accessed March 2025.

ISN Maskwa. 2021. NAV Centre, Cornwall, Ontario After-Action Report: Monday, July 12, 2021 to Thursday, August 12, 2021. ISN Maskwa, Sault Ste. Marie, ON.

Kovach, M. 2010. Conversation method in Indigenous Research. First Peoples Child & Family Review 5(1): 40–48.

Manitowabi, D. 2022. Weweni zhichge: Wise practices in urban Indigenous education in Northern Ontario. AlterNative: An International Journal of Indigenous Peoples 18(1): 114–121.

McGee, T.K., Mishkeegogamang Ojibway Nation and A.C. Christianson. 2019. Residents' wildfire evacuation actions in Mishkeegogamang Ojibway Nation, Ontario, Canada. International Journal of Disaster Risk Reduction 33: 266–274.

McGee, T.K. and A.C. Christianson. 2021. First Nations wildfire evacuations: A guide for communities and external agencies. UBC Press, Vancouver, BC. 172 p.

Mihalus, S., L.P. Galway, L.W. Robinson, D. Duckert and D. Parenteau. 2024. Wildfire management and evacuation in Indigenous communities in Canada and the United States: A scoping review. International Journal of Disaster Risk Reduction 100: 104–170.

Mihalus, S. and L.W. Robinson. 2024. Wildland fire management in Ontario: Scan of the institutional landscape for supporting First Nation communities. Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, ON. Science and Research Information Report IR-33. 31 p. + appendix.

Mihychuk, H.M. 2018. From the ashes: Reimagining fire safety and emergency management in Indigenous Communities: Report of the Standing Committee on Indigenous and Northern Affairs. House of Commons, Ottawa, ON. 42nd Parliament, 1st session. 54 p.

Mottershead, K.D., T.K. McGee and A. Christianson. 2020. Evacuating a First Nation due to wildfire smoke: The case of Dene Tha' First Nation. International Journal of Disaster Risk Reduction 11: 274–286.

North Spirit Lake First Nation and Ontario Ministry of Natural Resources and Forestry. 2018. Terms of reference for North Spirit Lake First Nation community-based land use planning. Ontario Ministry of Natural Resources and Forestry, Thunder Bay, ON. <https://www.ontario.ca/page/north-spirit-lake-first-nation-terms-reference>. Accessed March 2025.

Parenteau, D. 2022. Moving toward self-care and self-determination: Improving the role and organization of tribal councils in remote First Nations wildfire evacuations. Lakehead University, Faculty of Natural Resources Management, Thunder Bay, ON. M.Sc. thesis. 83 p. + appendices.

Public Health Agency of Canada. 2023. Public health risk profile: Wildfires in Canada, 2023. Public Health Agency of Canada, Ottawa, ON. <https://www.canada.ca/content/dam/phac-aspc/documents/services/emergency-preparedness-response/rapid-risk-assessments-public-health-professionals/risk-profile-wildfires-2023/wildfire-risk-profile.pdf>. Accessed March 2025.

Pyne, S.J. 2007. Awful splendour: A fire history of Canada. UBC Press, Vancouver, BC. 584 p.

Saldaña, J. 2013. The Coding Manual for Qualitative Researchers (2nd ed.). Sage, London, UK. 328 p.

Sanders, M.R. 2011. Voices from the fire line: Pikangikum Anishinaabeg experiences as provincial forest firefighters in northwestern Ontario. University of Manitoba, Faculty of Environment, Earth, and Resources, Winnipeg, MB. M.N.R.M. thesis. 222 p. + appendix.

Statistics Canada. 2022. Census of population: Find 2021 census data. Statistics Canada, Ottawa, ON. <https://www12.statcan.gc.ca/census-recensement/index-eng.cfm>. Accessed March 2025.

Verhaegue, C., E. Feltes and J. Stacey. 2019. Nagwedîẑk'an Gwaneŝ Gangu Ch'inidẑed Ganexwilagh: The fires awakened us. Tsilhqot'in National Government, William Lake, BC. Tsilhqot'in Report—2017 Wildfires. 90 p. + appendices.

Zahara, A. 2020. Breathing fire into landscapes that burn: Wildfire management in a time of alterlife. Engaging Science, Technology, and Society 6: 555–585.

(0k P.R. 26 01 30)
ISBN 978-1-4868-9589-2 (pdf)