

Rekindling Indigenous-Led Wildfire Readiness and Resilience in Canada

Policy Brief for the Canadian Red Cross

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Photo credit: Jesse Winter

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Land Acknowledgement

This brief was prepared by Master of Public Policy students at McGill University's Max Bell School of Public Policy, situated in Tiohtià:ke (Montréal) on the traditional territory of the Kanien'kehà:ka, which has long served as a site of meeting and exchange amongst many nations, including the Haudenosaunee and Anishinaabeg. We acknowledge and thank the diverse Indigenous peoples whose histories and presence continue to shape this territory.

We extend our respect and recognition to the diverse First Nations, Inuit, and Métis Peoples of Alberta and the Northwest Territories. We are grateful for their knowledge, practices, and stewardship of these traditional lands and waters since time immemorial.

Positionality of the Authors

As non-Indigenous students, we recognize that we are writing from outside the histories, cultures, and lived experiences of Indigenous Peoples. We acknowledge the historical and ongoing impacts of colonial policies on Indigenous Peoples in what is now called Canada. We have approached this work with humility, recognizing the limitations of our perspectives and privilege, acknowledging our responsibility to meaningfully engage with Indigenous voices, and recognizing that further consultation and collaboration would be needed to move forward with our policy recommendations.

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Disclaimer

Please note that the views expressed in this brief are those of the authors and do not represent the position of the Max Bell School of Public Policy, McGill University, the Canadian Red Cross, or the interest holders we met with.

Acronyms

AEMA	Alberta Emergency Management Agency
AI	Artificial Intelligence
AAR	After-Action Review
BRIF	Brazil's Indigenous Federal Fire Brigades Program [English translation]
CAF	Canadian Armed Forces
CIFFC	Canadian Interagency Forest Fire Centre
CRC	Canadian Red Cross
CWPP	Community Wildfire Protection Plans
ECCC	Environment and Climate Change Canada
EMA	Emergency Management Act
EMAP	Emergency Management Assistance Program
FPA	Forest Protection Area
GEMR	Government Emergency Management Regulation
GNWT	Government of the Northwest Territories
HIRA	Hazard Identification and Risk Assessment
ICS	Incident Command System
ILI	Indigenous Leadership Initiative
ISC	Indigenous Services Canada
LEMR	Local Authority Emergency Management Regulation
MACA	Municipal and Community Affairs
NRCAN	Natural Resources Canada
NWT	Northwest Territories
OCAP	Ownership, Control, Access and Possession
RFA	Requests for Assistance
TRC	Truth and Reconciliation Commission of Canada
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNDRIPA	United Nations Declaration on the Rights of Indigenous Peoples Act
WRCC	Wildfire Resilience Consortium Canada
WUI	Wildland-Urban Interface

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Executive Summary

The 2023 wildfire season was the most destructive in Canadian history.¹

Over 6,000 fires burned more than 15 million hectares — twice the size of England — from the Maritimes, to the Rockies, and the North.² This is double the previous record and nearly seven times the historical average.³ 232,000 people in Canada were evacuated from their homes.⁴ Smoke blanketed much of Canada and spread as far as the United States and Europe.⁵ In 2024, the Jasper wildfire alone caused an estimated \$1.23 billion in insured damages.⁶ The Canadian Red Cross (CRC) declared its 2025 wildfire response the largest domestic operation in recent history, surpassing its COVID-19 pandemic efforts.⁷

As Canada warms at twice the global average rate, climate change is creating longer, hotter, and drier conditions that contribute to more frequent, faster-spreading, and intense wildfires.⁸ Modelling suggests that wildfire occurrence in Canada could increase by up to 75% by the end of the century.⁹

The risks and impacts of wildfires fall disproportionately on Indigenous Peoples. Although they represent only 5% of Canada's population, roughly 80% of Indigenous communities are located in forested, fire-prone areas.¹⁰ Indigenous Peoples also account for nearly 42% of wildfire evacuations;¹¹ many communities experience repeated displacement, with some evacuated five or more times over recent decades.¹²

This brief responds to the following urgent and timely challenge question posed by the CRC:

How effective are current wildfire preparedness policies in Canada at mitigating risks to communities experiencing vulnerability, and what policy innovations could enhance resilience in the face of increasing wildfire threats?

15M

Hectares burned in 2023

\$1.2B

2024 Jasper wildfire cost

42%

Indigenous evacuees

We narrowed our scope to Indigenous Peoples in northern and remote areas of Alberta and the Northwest Territories (NWT), focusing on readiness and resilience. Through a literature review, case studies, and interviews with interest holders, we identified four interconnected and cyclical policy gaps across emergency management legislation, governance, approach, and evaluation that undermine community readiness and resilience:

1. Indigenous Peoples are not included as rights holders in **legislation**;
2. Fragmented **governance** leaves Indigenous communities without services they need;
3. A reactive **approach** focused on response and recovery rather than proactive prevention, mitigation, and preparedness ignores Indigenous cultural fire knowledge and practices;
4. **Evaluation** does not measure socio-economic risks and impacts of wildfires on Indigenous communities and does not integrate lessons learned.

In response, this brief proposes three Indigenous-led policy recommendations to the CRC, as a partner, funder, and convener, to be developed together with communities, organizations, and governments:

Indigenous Wildfire Readiness and Resilience Hubs: Physical and digital spaces where communities gather, share, and mobilize cultural fire knowledges and practices, support training, and strengthen evaluation capacity.

Indigenous Wildfire Readiness and Resilience Stewards: Trained community members who monitor lands, develop readiness plans, and conduct cultural burns, while contributing operational knowledge back to the Hubs.

Indigenous Wildfire Readiness and Resilience Fund: A financing mechanism that provides long-term support for the Hubs and Stewards, beginning with grant funding and transitioning toward a flexible and sustainable resilience outcomes fund.

Designed to work together and address all four policy gaps, these recommendations reduce wildfire risks and impacts on Indigenous Peoples and build capacity, ultimately enhancing community readiness and resilience in the face of increasing wildfire threats.

Methodology

This policy brief was developed through an iterative, mixed-methods exploratory approach conducted between January and May 2026, combining desk research, literature reviews, and interest holder interviews. The term "interest holders" is used throughout instead of "stakeholder", recognizing that the latter carries harmful connotations for some Indigenous communities.

Narrowing the Scope

Early rounds of research progressively narrowed the scope through analysis of the social, economic, and environmental dimensions of wildfire impacts. Evidence from wildfire occurrence and evacuations revealed disproportionate risks and impacts of wildfires among Indigenous communities in northern and remote regions across Western Canada and the Territories. Based on these findings, Alberta and the NWT were selected as the jurisdictions of focus (see Policy Context for full scope justification). Case studies from Australia and Brazil were analyzed to situate Canadian findings within a broader comparative international wildfire policy context.

Literature Review

A targeted literature review examined Canada's emergency management system across federal, provincial, territorial, and Indigenous community levels. The review focused on legislative frameworks, governance structures, operational approaches, and evaluation systems. Main sources of information included academic articles, government documents, grey literature, and news articles. Academic articles were identified through online journals, such as *Environmental Hazards*, *International Journal of Wildland Fire*, and *International Journal of Disaster Risk Reduction*, as well as the Policy Commons and Canada Commons databases. Sources were screened for relevance, coded thematically and by jurisdiction, and stored in a shared research repository.

Interest Holder Interviews

22 semi-structured interviews were conducted with representatives from federal, provincial, territorial, municipal, and Indigenous governments, as well as non-governmental organizations. Participants were identified through direct outreach, the Max Bell School of Public Policy network, the CRC Ready Conference (January 2026), and snowball sampling. Interviews were conducted virtually, ranged from 30 to 60 minutes, and anonymized. See Annex A for a complete list of interest holder interviews.

Use of Artificial Intelligence

Artificial intelligence (AI) tools, including Grammarly, ChatGPT, and Claude, were used as supports for scope refinement, research synthesis, editing, and citations. All AI-suggested sources were independently located, reviewed, and verified before inclusion. AI was not used to generate analysis or policy recommendations. These reflect the team's independent ideas and judgment.

Limitations

Limited direct engagement with affected communities

Because formal ethics approval was outside the Policy Lab's scope and timeline, we did not directly engage with Indigenous communities affected by wildfires. Instead, our findings and recommendations are informed by interviews with interest holders working closely with affected communities and by local sources, such as After-Action Reviews (AARs) and reports on wildfire planning, evacuation, and recovery experiences.

Geographic scope

While wildfires are a growing concern across Canada, our findings focus on the federal level, Alberta, and the NWT. Insights may be relevant to other provinces, territories, and communities, but their applicability is limited by differences in legislative frameworks, governance structures, hazard profiles, capacity, and Indigenous cultural knowledges and practices.

Interest holders

Engagement with some interest holders was limited by capacity challenges during an active wildfire season; others declined to participate, did not respond, or were unavailable. Given our narrowed scope and short project timeline, we could not speak with every relevant group or capture all perspectives — including academics and the private sector — resulting in a targeted rather than exhaustive engagement process.



Policy Context

Photo credit: Jesse Winter

Source: <https://thenarwhal.ca/topics/alberta-wildfires/>

Policy Context

Wildfires in Canada

The 2023 wildfire season was the most destructive in Canadian history.¹³ More than 6,000 fires burned over 15 million hectares of land across the country,¹⁴ double the previous record and nearly seven times the historical average,¹⁵ forcing 232,000 people to evacuate their homes.¹⁶ Smoke blanketed much of Canada and spread to the United States and Europe.¹⁷ As Canada warms at twice the global average rate, climate change is creating longer, hotter, and drier conditions that contribute to more frequent, faster-spreading, and intense wildfires.¹⁸ Modelling suggests that wildfire occurrence in Canada could increase by up to 75% by 2100.¹⁹

Impacts of Wildfires in Canada

Fires are a natural and necessary part of Canada's ecosystem.²⁰ However, wildfires — whether naturally occurring or human-caused — are increasing in frequency, scale, and severity, creating significant ecological, financial, and socioeconomic impacts.

Ecologically, wildfires disrupt forest ecosystems, alter forest composition, degrade biodiversity, and damage air, water, and soil quality.²¹ Canada is home to over a quarter of the world's boreal forests,²² which store approximately 12% of the world's land-based carbon, meaning wildfires can release substantial carbon emissions and accelerate climate change.²³

Financially, wildfire costs have risen by \$150 million per decade since the 1970s, exceeding \$1 billion in six of the last ten years.²⁴ The 2024 Jasper wildfire in Alberta alone caused an estimated \$1.23 billion in insured damages, making it one of the most expensive natural disasters in Canadian history.²⁵

Wildfires also release dangerous levels of particulate matter, spreading thousands of kilometres and affecting millions of people in Canada, increasing the risk of respiratory and cardiovascular disease and certain cancers.²⁶ Wildfires and evacuations are linked to adverse mental health outcomes such as stress, anxiety, depression, and post-traumatic stress disorder.²⁷

These impacts are uneven: people living in rural and remote areas, racialized communities, lower-income individuals, seniors, children, people with disabilities, people experiencing homelessness, and outdoor workers face greater risk due to intersecting social, economic, geographic, and systemic factors.²⁸

Disproportionate Impacts of Wildfires in Canada on Indigenous Peoples

Indigenous Peoples are disproportionately at risk of and affected by wildfires in Canada. Although they represent only **5%** of Canada's population, roughly **80%** of Indigenous communities are located in forested, fire-prone areas.²⁹ Indigenous Peoples also account for nearly **42%** of wildfire evacuations;³⁰ many communities experience repeated displacement, with some evacuated **five or more times** over recent decades.³¹

Existing inequities rooted in the legacy of colonialism increase Indigenous Peoples' vulnerability to the physical, mental, cultural, and social impacts of wildfires. For example, the dispossession of Indigenous lands and geographic isolation of many communities limit access to goods, services, and resources needed to mitigate wildfire risk, build capacity, and strengthen readiness and resilience. Indigenous Peoples experience disproportionately higher rates of respiratory, cardiovascular, and autoimmune diseases, which are worsened by exposure to wildfire smoke, particularly for children and Elders. Chronic underinvestment — leading to a \$349 billion infrastructure gap estimated by the Assembly of First Nations — has left many Indigenous homes overcrowded, in need of major repairs, or without proper ventilation and air filtration to keep toxic smoke out.³²

Wildfires also disrupt Indigenous ways of life and relationships with the land. Cultural activities, including hunting, fishing, harvesting, gathering, and the collection and use of traditional medicines, are threatened by wildfires and disrupted by evacuations. For some, displacement triggers trauma associated with the Sixties Scoop and residential schools. Those who return home after wildfires often face ongoing financial, social, and physical and mental health challenges; many come back to a devastated landscape, which can cause solastalgia — a form of distress caused by environmental change.³³

Wildfire Management in Canada: A Shared Responsibility

Wildfire management in Canada is a shared responsibility between federal, provincial, territorial, and local governments.³⁴ Emergencies are managed first at the local level, then escalated to provinces and territories, and finally to the federal government if capacity or resources are exceeded.³⁵ Several federal departments are involved, including Public Safety Canada,³⁶ Natural Resources Canada (NRCAN),³⁷ Environment and Climate Change Canada (ECCC), Parks Canada,³⁸ and Indigenous Services Canada (ISC),³⁹ alongside inter-governmental bodies such as the Canadian Interagency Forest Fire Centre (CIFFC)⁴⁰ and non-governmental organizations, including the CRC. See Annex D for a full overview.

SPOTLIGHT

THE CANADIAN RED CROSS

Founded in 1896, the CRC is Canada's largest humanitarian organization, with over 13,000 active volunteers. It provides services and programs that help communities prepare for, respond to, and recover from emergencies and disasters across Canada and around the world, including wildfires, floods, and earthquakes.⁴¹



As the complexity of wildfires outpaces current solutions, people are looking for innovative ways to solve this policy problem. Different actors, including Indigenous communities, academia, insurance, and non-profits, are increasingly looking beyond governments alone toward a whole-of-society approach to wildfire management. With its large humanitarian workforce, decades of experience, disaster expertise, and well-established partnerships across governments and communities, the CRC is uniquely positioned to support this shift. It is in this context that the CRC asked for evidence-based policy recommendations to expand its role into prevention, mitigation, and preparedness earlier in the wildfire cycle — alongside its continued work in response and recovery — so it can keep helping people in their time of need and strengthen their resilience in a way that matches this new reality.

Canada's emergency management system is organized around four interconnected pillars: prevention and mitigation, preparedness, response, and recovery. It is also guided by ten principles: responsibility, comprehensiveness, partnerships, coherence of action, risk-based, all-hazards, resilience, clear communication, continuous improvement, and ethics. See Annexes B and C for definitions and additional information.

Note on Terminology

This brief uses the term **wildfire management** to refer to the planning, coordination, and operational activities related to wildfires within the broader emergency management system in Canada.

The term **readiness** refers to the broader legislative, institutional, governance, infrastructure, social, and cultural conditions that enable communities to prepare for and respond to wildfires.

Resilience refers to communities' capacity to withstand, adapt to, recover from, and learn from wildfires.

Scope Justification

This brief focuses on Indigenous Peoples because they experience disproportionate risks and impacts of wildfires in Canada, while also being central to building wildfire readiness and resilience in their communities as holders of traditional knowledges and practices.⁴²

Northern and remote areas were selected due to rising temperatures — caused by the Arctic warming at four times the global average rate — increased lightning strikes, vast unmanaged boreal fuel loads, and geographic isolation that limits emergency response capacity, infrastructure, and access to services.⁴³

Within this scope, the brief examines three jurisdictions: the federal level, Alberta, and the NWT. The federal jurisdiction is included because its emergency management legislation and funding shape wildfire management across Canada. Alberta and the NWT were selected to provide a comparison between one province and one territory that share significant wildfire risk and large Indigenous populations but differ in legislative frameworks, governance structures, and emergency management capacity.

Alberta

Alberta has among the highest wildfire risk and hazard levels in Canada,⁴⁴ due to its vast boreal forest zones and wildland-urban interface (WUI) areas where communities and infrastructure intersect with fire-prone landscapes.⁴⁵

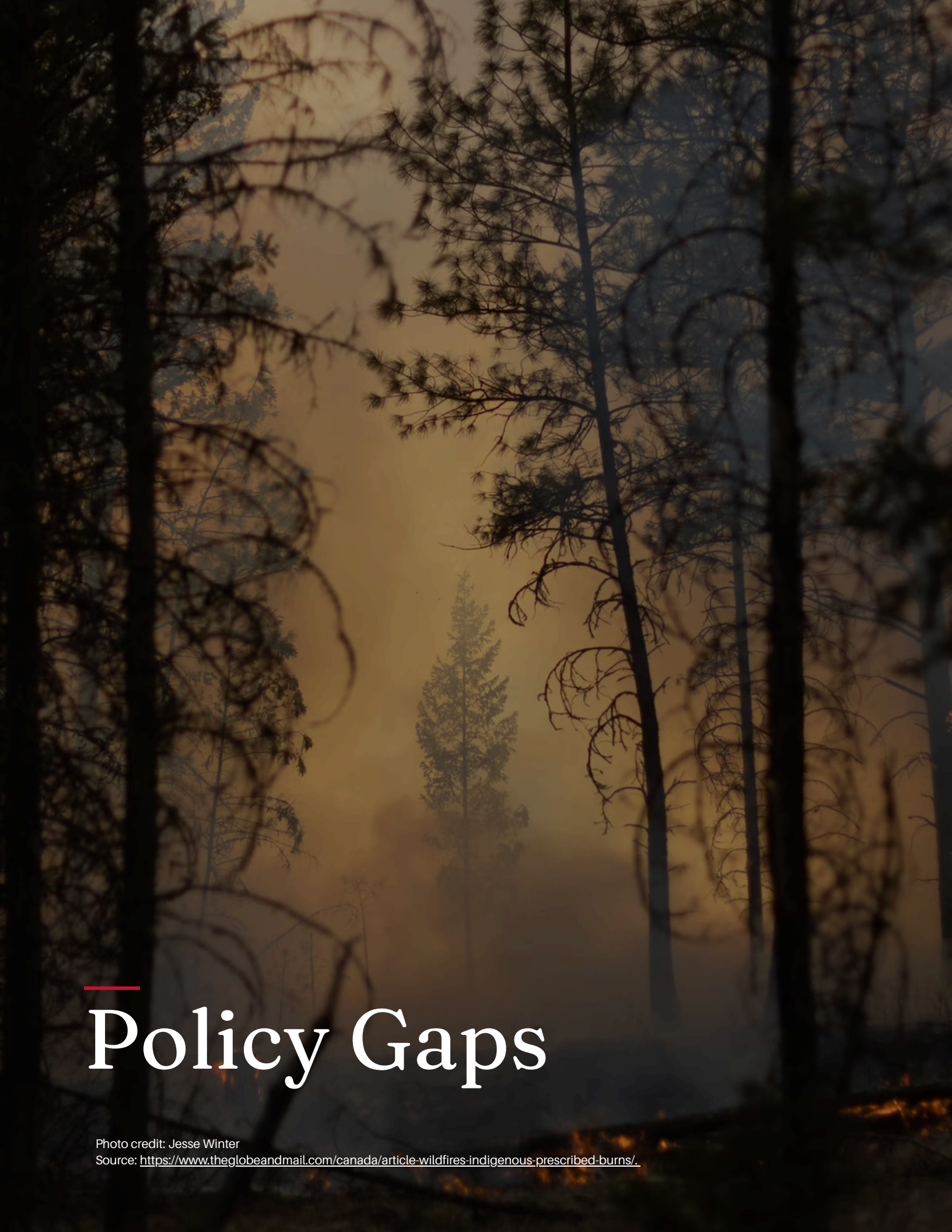
Between 1980 and 2021, Alberta experienced the second-highest number of wildfire evacuations in Canada, after British Columbia.⁴⁶ The province has also experienced some of Canada's costliest and most destructive wildfires.⁴⁷ The 2016 Fort McMurray wildfire alone caused an estimated \$9 billion in damages and displaced approximately 85,000 people — one of the largest evacuations in Canadian history.⁴⁸

Alberta is home to approximately 284,465 Indigenous Peoples, representing 6.8% of the province's population. These include First Nations and Métis, two distinct groups with different legal statuses, treaty relationships, and governance structures, which adds complexity to wildfire coordination and capacity across the province.⁴⁹

The Northwest Territories

The NWT also faces some of the highest wildfire risk and hazard levels in Canada, driven by hotter, drier weather from rapid Arctic warming and its vast, remote boreal forest. Limited road access increases danger to communities by trapping residents, hindering wildfire operations, and complicating evacuations. The NWT experienced its worst wildfire season on record in 2023: wildfires burned over 4 million hectares and displaced about 70% of its population, making this another one of the largest evacuation efforts in Canadian history.⁵⁰

Nearly 50% of residents in the NWT are Indigenous, represented by diverse and geographically dispersed governments and nations, including the Akaitcho Territory, Dehcho First Nations, Gwich'in Tribal Community, Inuvialuit Region, Métis Nations, Sahtu communities, and the Tłıchǫ Government.^{51 52} This scale and dispersion of Indigenous Peoples make wildfire management especially complex in the territory.



Policy Gaps

Photo credit: Jesse Winter

Source: <https://www.theglobeandmail.com/canada/article-wildfires-indigenous-prescribed-burns/>.

Policy Gaps

"The pace of the problem is not matching the pace of the solution." - Canadian Interagency Forest Fire Centre⁵³

We identified four policy gaps between the principles that guide Canada's emergency management system on paper and how it functions in practice, across legislation, governance, approach, and evaluation.

01 Legislation

Emergency management legislation does not include Indigenous Peoples as rights holders.

02 Governance

Fragmented emergency management governance structures leave Indigenous communities without the services they need.

03 Approach

Emergency management is reactively focused on response and recovery rather than prevention, mitigation, and preparedness, ignoring Indigenous cultural fire knowledges and practices.

04 Evaluation

Emergency management evaluation does not measure socio-economic risks and impacts of wildfires on Indigenous communities and has no formalized mechanisms to integrate lessons learned.

These gaps are interconnected and cyclical:

Without rights-holder status in emergency management **legislation**, governments have no legal obligation to include Indigenous Peoples in emergency management decisions.

As a result, Indigenous communities must navigate a fragmented **governance** system across federal, provincial, territorial, and local governments. Access to culturally responsive services is inadequate, and integrating Indigenous knowledges and practices is discretionary rather than mandatory.

The emergency management **approach** remains reactive by design, prioritizing response and recovery over prevention, mitigation, and preparedness. This ignores proactive Indigenous fire stewardship, which is proven to reduce wildfire risk, and deepens the disproportionate impacts on Indigenous Peoples.

Without **evaluation** of these risks and impacts through an intersectional, socio-economic lens, or the integration of lessons learned through formalized accountability mechanisms, there is no feedback loop to challenge the legislative exclusion that started the cycle.

The subsections below examine each gap at the federal level, in Alberta, and in the NWT, with best practices from British Columbia, Brazil, and Australia.



Figure 1: Four interconnected, cyclical wildfire policy gaps: legislation; governance; approach; evaluation

Gap 1: Emergency management legislation does not include Indigenous Peoples as rights holders



Federal

Federal emergency management laws and policies are outdated, complex, and do not include Indigenous Peoples as rights holders. Federal emergency management is governed by five key instruments: the Emergency Management Act (2007),⁵⁵ the Federal Policy for Emergency Management (2009),⁵⁶ the Federal Emergency Response Plan (2011),⁵⁷ the Emergency Management Framework for Canada (2017),⁵⁸ and the Emergency Management Strategy for Canada: Toward a Resilient 2030 (2019).⁵⁹ See Annex D for more information.

The Act and Policy have not been updated since 2007 and 2009, respectively, while other instruments have not been updated despite commitments to periodic review. Together, these overlapping and outdated documents create a complex legislative and policy foundation that is difficult to follow and implement consistently.

Indigenous Peoples are absent from this foundation entirely, appearing for the first time as partners — not rights holders — in the 2017 Framework.⁶⁰ Despite the passage of the United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIP Act),⁶¹ which commits the federal government to harmonizing federal laws with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP),⁶² these obligations are not reflected within emergency management frameworks, creating a gap between Canada's commitments to Indigenous self-determination and emergency management practices at the provincial and territorial levels.

Alberta

The Government of Alberta has signed bilateral agreements with First Nations affirming UNDRIP principles, but these commitments are not built into emergency management frameworks.^{63 64 65} Only one agreement — the 2022 Confederacy of Treaty Six First Nations Relationship Agreement — explicitly addresses emergency management on paper, while in practice, First Nations remain service recipients rather than decision-making partners.⁶⁶ Under the Emergency Management Act (EMA) (2025), First Nations band councils are recognized as local authorities only if a bilateral service agreement exists between the Alberta Emergency Management Agency (AEMA) and ISC.⁶⁷ AEMA provides wildfire preparedness and response support, while ISC is responsible for prevention, mitigation, and recovery through its Emergency Management Assistance Program (EMAP).⁶⁸ According to the Public Safety and Emergency Services Annual Report, AEMA First Nations Field Officers reviewed emergency plans for just 13 of 46 First Nations communities in 2024-2025.⁶⁹

Interest holders reported that emergency management responsibilities are often absorbed into other administrative roles in First Nations governments, limiting the capacity to engage in preparedness activities or access provincial supports. Provincial readiness metrics measure whether support is available under an agreement, but not whether a community can actually access, implement, or sustain it.^{70 71}

Interest holders also noted that discussions are underway to shift from bilateral service agreements to trilateral arrangements that would include First Nations governments in Alberta as formal partners. However, uncertainty remains regarding the timeline, governance structure, and the degree of First Nations' decision-making authority.^{72 73}

The Northwest Territories

The NWT Emergency Management Act (EMA) (2018) establishes the legal basis for emergency management but does not include the necessary regulatory and policy instruments to guarantee proper implementation, oversight, and accountability. Although local governments are responsible for frontline emergency management, few mechanisms exist to enforce preparedness obligations or monitor compliance.⁷⁴ Communities are expected to create and maintain emergency plans and Community Wildfire Protection Plans (CWPPs). However, due to limited resources and infrastructure, only a few, including Yellowknife, have publicly available plans that are up-to-date.^{75 76}

77

Emergency management in the NWT is guided by the seven FireSmart disciplines: vegetation management, public and community education, emergency planning, legislation and policy, development and infrastructure, interagency cooperation, and cross-training.^{78 79}

CWPPs are organized around these disciplines and aim to identify community vulnerabilities while offering recommendations to improve wildfire resilience and preparedness.⁸⁰ However, these plans are non-binding, and no formal mechanisms exist to ensure that recommendations are implemented, monitored, or regularly updated.⁸¹ As a result, many communities do not revise their CWPPs or publicly report on implementation progress.

The NWT EMA does not officially recognize Indigenous governments as authoritative governing bodies within the emergency management system, and does not mandate Indigenous representation in key planning and decision-making processes. Instead, the EMA assigns community-level emergency management responsibility to local authorities and emergency coordinators, but these do not necessarily include Indigenous governments.⁸²

Impacts on Readiness and Resilience

Due to their absence in legislation, Indigenous communities are often left out of prevention, mitigation, and preparedness planning and decision-making.⁸³ This directly weakens wildfire readiness, as Indigenous Peoples are traditional stewards of their lands who know their communities and their needs best.⁸⁴

Legislative exclusion also renders policy commitments to include Indigenous Peoples as partners in emergency management unenforceable. The federal, provincial and territorial governments are not required to recognize Indigenous Peoples as rights holders in emergency management or to support their self-determination and control over wildfire management on their territories. As a result, Indigenous communities continue to face disproportionate wildfire risks and impacts without the legislative recognition that would allow them to use their knowledge, skills, and experience to reduce those risks and impacts and build capacity.⁸⁵

As these gaps persist from one wildfire season to the next, risks and impacts on Indigenous Peoples become more uneven, undermining communities' long-term resilience. A 2022 Auditor General report of ISC's EMAP found that many of the gaps it identified in its first audit of First Nations emergency management in 2013 had not improved, and, according to an interest holder from ISC, they persist today.⁸⁶

CASE STUDY

BRITISH COLUMBIA: INDIGENOUS PEOPLES AS RIGHTS HOLDERS IN EMERGENCY AND DISASTER MANAGEMENT ACT

In 2023, British Columbia's *Emergency and Disaster Management Act*⁸⁷ became the first emergency management legislation in Canada designed to align with UNDRIP.⁸⁸ Developed in consultation and co-operation with First Nations using a distinctions-based approach, it formally recognizes First Nations as partners and their inherent right of self-government in emergency management. The Act provides a legal framework to establish formal agreements between Indigenous governing bodies and provincial authorities to advance joint decision-making and coordination during emergencies. Local authorities, critical infrastructure owners, and the province are required by law to consult and cooperate with Indigenous governing bodies across all four phases of emergency management: prevention and mitigation, preparedness, response, and recovery. Emergency plans and risk assessments must now actively incorporate Indigenous knowledge and prioritize cultural safety.⁸⁹

Gap 2: Fragmented emergency management governance leaves Indigenous communities without the services they need



Federal

Emergency management governance is fragmented across federal, provincial, territorial, and local governments, with a structural disconnect between who funds and who operates, which leaves Indigenous communities without adequate access to the emergency services they need. At the federal level, ISC administers the EMAP, providing funding to First Nations on reserve to support emergency management services across mitigation, preparedness, response, and recovery.⁹⁰ However, ISC does not physically manage wildfires on the ground. Provincial and territorial governments have operational authority over wildfire management. Band councils are responsible for their community's immediate safety, but lack the authority to mobilize resources without provincial consent. Off-reserve First Nations and Métis fall outside EMAP and are under provincial and territorial jurisdiction.⁹¹

Communities access emergency management services through bilateral service agreements negotiated between ISC and provincial and territorial governments, without First Nations as full and equal partners.⁹² The 2022 Auditor General report on EMAP identified a patchwork system in which not all provinces and territories have agreements, and not all communities within a province are covered by agreements. Where agreements exist, many are outdated, with some not updated in 30 years. ISC has acknowledged that more needs to be done to include First Nations as full and equal partners, improve emergency management services, and transfer control of emergency management programs to First Nations, and is currently engaging with First Nations, provincial and territorial governments, and other service delivery partners to develop multilateral service agreements.⁹³

Alberta

Although Métis Settlements are recognized as local authorities under the Métis Settlements Act, Alberta's emergency management framework does not adequately address the dispersed Métis population, with nearly 96% residing outside formal Settlements.^{94 95}

Through its self-government agreement with the federal government, the Otipemisiwak Métis Government has a mandate to advance the social, economic, and cultural well-being of the Métis Nation in Alberta, including the provision of emergency management supports.^{96 97} Interest holders describe how the organization aims to fulfill its service mandate during wildfire emergencies but faces jurisdictional barriers when coordinating with municipal emergency management systems.⁹⁸

A 2025 survey of over 3,500 Métis citizens in Alberta found that 95% had been affected by wildfires. Many identified a systemic failure of federal, provincial, and municipal emergency plans to account for Métis Elders, community networks and culturally significant sites. Respondents also highlighted limited opportunities for Métis community participation in emergency planning processes.⁹⁹

The Otipemisiwak Métis Government is not formally integrated into municipal emergency management systems. As a result, emergency planning, communication, and service delivery fail to reflect Métis governance structures and community realities.¹⁰⁰ These gaps increase community vulnerability to wildfires, with significant costs: climate-related losses linked to premature mortality and declining well-being among Métis citizens in Alberta are projected to reach an estimated \$551 million annually by 2085.^{101 102}

The Northwest Territories

Emergency coordination in the NWT is led by the Department of Municipal and Community Affairs (MACA), supported by the Department of Environment and Climate Change (ECC).¹⁰³

Indigenous regional governments play an intermediary role between communities and MACA, but governance structures vary across regions due to different land claim and self-government agreements.¹⁰⁴ This creates a complex wildfire management system in which the roles and responsibilities of territorial, municipal, and Indigenous governments are not always clearly defined. A 2023 wildfire AAR highlighted the consequences of this ambiguity, finding that unclear emergency authorities and communication created significant confusion and stress for residents seeking evacuation information, support, and services.^{105 106 107}

DID YOU KNOW?

LAND AGREEMENTS AND NEGOTIATIONS IN THE NWT

Understanding the context of land agreements in the NWT is essential for identifying governance gaps and coordination challenges in wildfire management. There are several types of agreements. Land and Resource Agreements (commonly referred to as land claims) define Aboriginal and treaty rights related to land and resource use. Self-Government Agreements recognize the inherent right to self-government and establish Indigenous governance structures, powers, and responsibilities. Combined Land, Resource, and Self-Government Agreements integrate these rights into a single framework, clarifying jurisdictions, authorities, and responsibilities. Finally, Transboundary Agreements involve the GNWT, Canada, and Indigenous groups from neighbouring provinces or territories whose traditional territories extend into the NWT, primarily addressing harvesting rights.²⁴⁹ The Tłıchǵ are the only Indigenous government with a combined Land, Resource, and Self-Government Agreement. The Gwich'in, Inuvialuit, and Sahtu have Land Claim Agreements; the Salt River First Nation has a Treaty Settlement Agreement; and Délı̨nę has a Self-Government Agreement. Several other Indigenous governments are negotiating new agreements or expanded authorities.^{250 251 252} The resulting patchwork of governance arrangements can create jurisdictional uncertainty, hinder intergovernmental coordination, and complicate wildfire management in small and remote communities.

Impacts on Readiness and Resilience

Because wildfires do not respect jurisdictional boundaries, fragmented governance creates coordination gaps and service delays. The 2022 Auditor General report on ISC's EMAP found that the patchwork system of service agreements increases the risk that some First Nations communities will not receive emergency services when they are most needed, and creates ambiguity and confusion about roles and responsibilities, leading to delays in First Nations receiving services during an emergency.¹⁰⁸ As the number of service agreements has declined while wildfires have risen, this readiness gap is widening.¹⁰⁹

Beyond readiness, communities receive emergency management services and supports based on whether they have a service agreement, not on their wildfire risk — meaning the communities most at risk of wildfires who do not have a service agreement are not building capacity between each wildfire season. Even among communities with agreements, capacity varies depending on how comprehensive and up-to-date those agreements are.

EMAP's proposal-based funding compounds this, placing a burden on smaller, northern, and remote communities with limited administrative capacity and creating a systemic bias toward communities with more resources to navigate proposal processes.¹¹⁰ As a result, many Indigenous Peoples cannot build long-term resilience in the face of increasing wildfire threats.

CASE STUDY

AUSTRALIA: FIRESTICKS ALLIANCE

In Australia, the Firesticks Alliance is a national, Indigenous-led network that bridges cultural fire knowledge and modern wildfire management, supporting Indigenous communities in revitalizing and practicing cultural burning on their lands. It positions Indigenous Peoples as the authorities on cultural burning, with fire agencies playing a supporting rather than gatekeeping role.¹¹¹

Additionally, the Government of New South Wales developed a formal Cultural Fire Strategy, which institutionalizes Indigenous cultural burning within the government wildfire management framework, recognizing cultural fire as distinct from prescribed burning and supporting Aboriginal communities to burn on Country according to their own knowledge and governance structures.¹¹²

Gap 3: Emergency management is reactively focused on response and recovery rather than proactive prevention, mitigation, and preparedness, and ignores Indigenous-led cultural fire knowledges and practices



Federal

Canada's federal emergency management approach is reactive, with a disproportionate focus on response and recovery rather than proactive investment in prevention, mitigation, and preparedness. The 2022 Auditor General report found that ISC's EMAP spent 3.5 times more on response and recovery (\$646 million) than on prevention and mitigation (\$182 million) for First Nations communities between 2018-19 and 2021-22.¹¹³ The Government of Canada has recently attempted to shift this imbalance, including through a \$2 billion commitment to the Disaster Mitigation and Adaptation Fund in 2024,¹¹⁴ and the modernization of the Disaster Financial Assistance Arrangements program, which provides financial assistance to provinces and territories for response and recovery costs, to include structural mitigation.¹¹⁵

**Prevention, mitigation,
and preparedness**
\$181,737,904
22%



Response and recovery
\$646,305,156
78%

Figure 2: Indigenous Services Canada's Emergency Management Assistance Program Spending on Prevention, Mitigation, Preparedness, Response, and Recovery (2018-2022)

Source: Office of the Auditor General of Canada, *Report 8—Emergency Management in First Nations Communities—Indigenous Services Canada, 2022*.

Despite this, Canada's reactive approach to emergency management was not designed to accommodate Indigenous fire stewardship — inherently proactive practices through which Indigenous Peoples assert their sovereignty and rights, including cultural burns and landscape planning, grounded in a year-round, ongoing relationship between people, fire, and the land.¹¹⁶ Wildfire agencies in Canada devolved from colonial government systems and continue to control wildfire management decision-making, treating Indigenous knowledge as consultative rather than authoritative.¹¹⁷

While there is federal interest in supporting cultural burns — including through NRCAN and Parks Canada programming such as the REDfire Lab¹¹⁸ — permitting and regulatory frameworks were designed around Western science criteria and do not recognize Indigenous fire knowledge as a legitimate basis for burning decisions.¹¹⁹ First Nations retain the right to conduct cultural burning on reserve lands, but significant oversight by wildfire agencies is often required. Indigenous Nations who wish to burn on Crown land must submit classical burn plans and permit applications requiring Western science criteria and technical expertise that take weeks to months to approve. Shared governance and the right to burn in areas covered by historical and modern Treaties have not been fully realized, and cultural burning has been largely omitted from strategic land-use plans, wildfire mitigation strategies, and community risk assessments.¹²⁰

DID YOU KNOW?

PRESCRIBED VS. CULTURAL BURNING

While some of the objectives may be the same, there are many differences between the prescribed burning and cultural burning. Prescribed fire is driven by emergency management/wildfire agencies, has hazard reduction and ecological objectives, is driven by Western science knowledge on when to burn and how to burn, uses different fire intensities depending on objectives, follows the Incident Command System structure, and uses accelerants and specialized tools. Cultural burning is Indigenous-led, community-centred, and involves elders and knowledge keepers. Practiced for millennia, it is guided by Indigenous knowledge of when and how to burn and uses slow, cool burns with traditional fire ignition methods. Its objectives are primarily cultural, tied to safety goals such as risk reduction, and to ecological objectives, including habitat and wildlife enhancement and food and medicine revitalization.¹²¹

Alberta

The Government of Alberta has increased spending across all four pillars of emergency management, but most funding is dedicated to response and recovery. Wildfire response and recovery costs reached approximately \$899 million in 2024 and \$801 million in 2025, up from \$294 million in 2017–2018.^{122 123} The 2026 Budget includes \$169 million for wildfire mitigation, although spending on response and recovery is expected to exceed this amount as the wildfire season progresses.¹²⁴

Planned investments in readiness and resilience activities are relatively modest. In Alberta’s 2025 and 2026 Fiscal Plans, the Ministry of Public Safety and Emergency Services allocated only \$2 million annually to proactive initiatives.^{125 126} In 2024–25, the Ministry of Forestry and Parks provided over \$1.4 million through its agreement with ISC to complete 12 wildfire prevention and mitigation projects on reserve lands. An additional \$300,000 was provided to the Ministry of Indigenous Relations to expand emergency management capacity for Métis Settlements.¹²⁷ Over the next three years, the Ministry plans to invest \$8.4 million in readiness and resilience programming, along with \$10.8 million for the Wildfire Enhancement Program and \$19.2 million for facility upgrades aimed at strengthening operational capacity.¹²⁸

The Northwest Territories

Under the NWT’s EMA, operational powers are only activated once an emergency has occurred.¹²⁹ While the Act recognizes all emergency management pillars of prevention and mitigation, preparedness, response, and recovery, it focuses more on what to do during emergencies than on how to prevent or prepare for them. The legislation does not require mitigation measures once risks are identified, mandate fuel management practices, establish resilience benchmarks, or dedicate resources to long-term risk reduction. As a result, prevention, mitigation, and preparedness efforts remain largely discretionary, limiting accountability for reducing disaster risk before emergencies occur.¹³⁰

The NWT allocates a large share of its resources to recovery efforts following major emergencies. The territory experienced multiple floods and wildfires in recent years, with total recovery costs reaching \$354 million between 2021 and 2025.^{131 132 133} Proactive investments are limited in comparison: the City of Yellowknife’s 2023 budget allocates only \$1.6 million for emergency preparedness.¹³⁴

Impacts on Readiness and Resilience

Spending more on response and recovery directly takes resources away from prevention, mitigation, and preparedness — the pillars that Indigenous communities need most, given their lower capacity and infrastructure in northern and remote areas. Every \$1 invested in pre-disaster mitigation saves between \$7 and \$15 in post-disaster assistance.¹³⁵ Cultural burning significantly reduces wildfire risk by lessening fuel loads, enhancing pyrodiversity (the frequency, timing, and severity of fire), and supporting ecosystem management.¹³⁶ As a result, the exclusion of Indigenous fire stewardship from wildfire management directly undermines the capacity of Indigenous communities to prepare for and reduce the risks of wildfires on their lands.

This creates a cycle in which events that could have been prevented or managed become disasters or crises that Indigenous communities must repeatedly recover from, relying on response and recovery rather than building long-term resilience. The escalating deployment of the Canadian Armed Forces (CAF) illustrates this: the CAF responded to eight provincial and territorial requests for assistance (RFA) in 2023, compared to an average of four per year between 2017 and 2021, and twice between 2010 and 2016 – doubling every five years since 2010.¹³⁷ Between 2023 and 2025, 18 RFAs were related to wildfires, and at least six of those were in Indigenous communities.¹³⁸

Repeated displacement also produces compounding health, social, economic, and cultural impacts that further reduce resilience over time.¹³⁹ The exclusion of cultural burning worsens this by removing practices that strengthen intergenerational teachings, social networks, cultural continuity, and community agency, all of which support holistic healing after disasters.¹⁴⁰

CASE STUDY

BRAZIL: INDIGENOUS FIRE BRIGADES

Brazil's Fire Brigades Program (BRIF) manages wildfires on Indigenous lands across the Amazon and Cerrado through community-based prevention, monitoring, and cultural burning, with formal recognition of traditional fire stewardship knowledges and practices. BRIFs reduced active fires on Indigenous territories by 22.7%, compared to a 12.3% increase in areas without programming, lowered fire severity, and improved landscape resilience at a relatively low operational cost of \$1.02 USD per hectare.¹⁴¹



Gap 4: Emergency management evaluation does not measure the socio-economic risks and impacts of wildfires on Indigenous communities and lacks formalized mechanisms for integrating lessons learned

Federal

Canada demonstrates strong capacity in wildfire risk detection, monitoring, and the measurement of physical impacts through federal research activities and tools such as the Canadian Wildland Fire Information System¹⁴² and the forthcoming WildFireSat.¹⁴³ However, there is no national framework for measuring social risks and impacts of wildfires or community-level wildfire readiness and resilience — what Signal49 research calls “Canada’s wildfire blindspot.”¹⁴⁴ Current approaches rely primarily on hazard-based and technical indicators, such as drought, temperature, wind patterns (in the National Risk Profile),¹⁴⁵ and the number of hectares burned, buildings lost, and the type and volume of resources deployed to manage fires and support recovery (for impacts).¹⁴⁶ They overlook broader social, economic, and demographic determinants and long-term outcomes such as mental health, community cohesion, and traditional ways of life.¹⁴⁷ There are also no formal mechanisms to ensure that lessons learned from wildfires are integrated into federal policy and practice. AARs are often conducted only after major events, and the integration of lessons learned depends on individual leadership rather than on institutional mechanisms.¹⁴⁸

Alberta

Alberta’s Emergency Management Act (EMA) (2025) and its supporting regulations do not require local authorities to conduct AARs, measure preparedness outcomes, or assess community resilience following wildfire events.^{149 150} Evaluation is largely discretionary, often dependent on capacity, political will, or external pressure to initiate review processes.

Although emergency management plans are mandated under the EMA and Local Authority Emergency Management Regulation (2025), there is no framework to evaluate their effectiveness or broader socio-economic impacts on community readiness and resilience following wildfire events.¹⁵¹

¹⁵² One of the province's main preparedness metrics — the percentage of local authorities receiving an emergency management plan review from an AEMA field officer — measures whether a review occurred, rather than whether it improved readiness and resilience outcomes.¹⁵³ Interest holders from Rural Municipalities of Alberta and Alberta Municipalities acknowledged this evaluation gap, but cautioned against introducing mandated reporting requirements without additional support, given disparities in funding, staffing, and technical capacity across municipalities.^{154 155 156} An interest holder from the Confederacy of Treaty Six First Nations added that evaluation capacity is further constrained by the cumulative effects of repeated emergencies; recovery from one emergency is often interrupted by the next before evaluations can be completed.¹⁵⁷

The Northwest Territories

The NWT's EMA provides limited guidance on evaluation, accountability, and organizational learning following emergencies. While it requires emergency management programs to be based on risk assessments, it does not mandate regular AARs or systematic evaluations of wildfire prevention, mitigation, preparedness, response, and recovery efforts.¹⁵⁸

There is no legally binding framework to implement or track recommendations from AARs. Although the NWT has conducted or commissioned several AARs in recent years, including for floods (2021, 2022, and 2023) and wildfires (2014, 2023), there is no requirement to ensure consistent follow-up or integration of lessons learned into policy and practice.^{159 160}

Evaluations tend to focus on operational and technical issues, with limited holistic analysis of broader socio-economic, cultural and health impacts.^{161 162 163} As noted by an NWT engagement practitioner working with communities, these processes often do not fully reflect Indigenous voices.^{164 165} For example, FireSmart programs measure whether activities are completed, but not their effectiveness in reducing wildfire risks and impacts or building community capacity.¹⁶⁶

Impacts on Readiness and Resilience

Wildfire risk and impact assessments are limited by a lack of socio-economic data and insufficient integration of local Indigenous knowledges. This makes it difficult to identify and prioritize community readiness and resilience needs. For example, ISC's EMAP allocates funding based on proposals rather than risk,¹⁶⁷ making it neither inclusive of nor responsive to the unique and intersecting contexts of northern and remote Indigenous communities. As a result, investments in prevention, mitigation, and preparedness fail to reach the communities that need them most.¹⁶⁸

What is not measured cannot be improved: without a national framework that captures the socio-economic dimensions of wildfire risks and impacts on Indigenous communities, Canada's emergency management system cannot identify gaps. Without a strong feedback loop through formalized mechanisms to integrate lessons learned and hold governments to account, the same issues repeat across wildfire seasons, weakening resilience and preventing the system from learning and improving.¹⁶⁹

CASE STUDY

AUSTRALIA: INSPECTOR-GENERAL FOR EMERGENCY MANAGEMENT

Following the 2009 Black Saturday bushfires, the state of Victoria, Australia, passed the Emergency Management Act, which created the Inspector-General for Emergency Management, an independent entity whose mandate is to ensure the government formally accepts, tracks, and implements lessons learned from disasters, providing an institutionalized mechanism for translating wildfire reviews and AARs into future policy decisions.^{170 171}

Together, these gaps reveal a larger, systemic divide between the principles that guide Canada's emergency management framework on paper — responsibility, comprehensiveness, partnerships, coherence of action, risk-based, all-hazards, resilience, clear communications, and continuous improvement — and what is practiced on the ground for Indigenous communities in northern and remote areas of Alberta and the NWT. The following three recommendations are proposed to the CRC as an operational partner, funder, and convener to help close these gaps and reduce disproportionate wildfire risks and impacts, build community capacity, and ultimately enhance Indigenous-led wildfire readiness and resilience.



Policy Recommendations

Photo credit: Jesse Winter

Source: <https://www.theglobeandmail.com/canada/article-wildfires-indigenous-prescribed-burns/>.

Policy Recommendations

Legislation is the structural root of this policy problem. Beyond the scope of this project, governments must formulate recommendations for legislative reform as the long-term foundation for closing the policy gaps in wildfire readiness and resilience among Indigenous Peoples. As a humanitarian organization, the CRC cannot change legislation — but it can advocate for reform alongside communities and other interest holders. Because legislative change is a long and complex process, the three recommendations that follow are practical and achievable in the meantime.

We propose three Indigenous-led recommendations to the CRC as a partner, funder, and convener, to be developed together with communities, organizations, and governments:



Recommendation 01: Hubs

Physical and digital spaces where communities gather, share, and mobilize cultural fire knowledges and practices, deliver training, and strengthen evaluation capacity.



Recommendation 02: Stewards

Trained community members who monitor lands, develop readiness and resilience plans, and conduct cultural burns and other fire stewardship activities.



Recommendation 03: Fund

A financing mechanism that provides long-term support for the Hubs and Stewards, beginning with grant funding and transitioning toward a flexible and sustainable resilience outcomes fund.

The recommendations are designed to **work together**:

The Hubs gather and share Indigenous fire knowledges and practices, and train the Stewards to apply them. As the operational arm of the Hubs, the Stewards mobilize that knowledge to conduct cultural burns and other fire stewardship activities. They contribute their own knowledges and practices back to the Hubs and train future Stewards through a train-the-trainer model. The Fund initially finances the Hubs and Stewards through short-term grants, then uses social risk and impact data from the Hubs and operational outcomes data from the Stewards to inform long-term investment through social resilience outcomes funding.

The three recommendations target each of the four policy gaps:

On the **legislative gap**, the Hubs, Stewards, and Fund cannot grant rights-holder status to Indigenous Peoples in emergency management laws — only legislative reform can — but together they are a short-term solution to self-determination in practice: they give communities control over fire knowledge, operations, and funding to lead wildfire readiness and resilience on their own terms.

On the **governance gap**, the Stewards deliver wildfire management services by and for Indigenous communities, tailored to their contexts and needs, rather than a top-down, one-size-fits all model imposed from outside.

On the **approach gap**, the Stewards and the Fund both shift wildfire management from reactive to proactive: the Stewards prevent, mitigate, and prepare for fires through Indigenous fire stewardship rather than only responding to them, while the fund moves financing from one-off, project-based grants to long-term, flexible, and sustainable outcomes-based investment.

On the **evaluation gap**, the Hubs gather socio-economic risk and impact data, conduct evaluations, and build evaluation capacity, while the Fund integrates those lessons learned to determine financing for wildfire readiness and resilience initiatives.

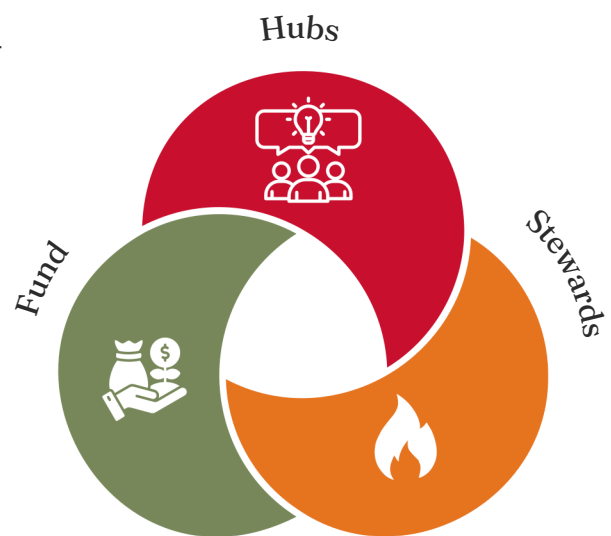


Figure 3: The Hubs, Stewards, and Fund work together and address the legislative, governance, approach, and evaluation gaps

In the short term, the recommendations are expected to improve knowledge gathering and sharing within and between Indigenous communities, train more Indigenous fire stewards and support cultural burns, and increase funding for Indigenous-led prevention, mitigation, and preparedness. In the medium term, this will reduce wildfire risks and impacts and build community capacity, ultimately enhancing wildfire readiness and resilience in northern and remote regions of Alberta and the NWT, and all of Canada in the long-term.

Role of the Canadian Red Cross

The CRC works as an ally organization in support of Indigenous community leadership, all levels of government, and other partners, before, during and after emergencies. This includes supporting operational responses through capacity and expertise when requested, as well as partnering in risk reduction and recovery programming and activities before and after events. The CRC also supports research and policy work alongside Indigenous groups such as the Assembly of First Nations. In the context of the Stewards, the CRC would thus act as an operational partner, contributing funding, capacity, and expertise that support, rather than direct, Indigenous fire stewardship. Any potential recommendations for the CRC would be considered and evaluated with reference to the CRC's frameworks for Indigenous partnerships and consultation and in close collaboration with Indigenous leadership. Any recommendations for Indigenous leadership would need to be reviewed and validated by Indigenous leadership directly and be Indigenous-led.

Guiding Principles

The Hubs, Stewards, and Fund recommendations are guided by seven principles: self-determination and ownership; meaningful engagement; distinctions-based; strengths-based; data sovereignty; equitable and sustainable funding; and culturally responsive Indigenous evaluation. These are rooted in UNDRIP and Canada's obligations under UNDRIPA, the Truth and Reconciliation Commission's (TRC) Calls to Action, the Indigenous Protected and Conserved Areas' Knowledge Basket, *Beyond Conservation: A Toolkit for Respectful Collaboration with Indigenous Peoples*, and Indigenous theory and practice of evaluation. See Annex E for more information on each guiding principle.¹⁷²



The Hubs

Description

The Hubs are physical and digital spaces where Indigenous communities gather, share, and mobilize cultural fire knowledge and practices. Created in partnership between the CRC and the Wildfire Resilience Consortium of Canada (WRCC), the Hubs will operate through the WRCC's existing place-based knowledge networks: the Taiga Network in the NWT and the Boreal West Network in Alberta.¹⁷³

Two regional Hubs — one in Alberta and one in the NWT — will support Stewards programs in four pilot communities — two in Alberta and two in the NWT. Hub Coordinators will connect each Hub to its Stewards and to the other Hub.

Objective

The Hubs aim to build Indigenous community-owned knowledge infrastructure that reduces wildfire risks, builds capacity, and enhances readiness and resilience. They do this through four functions:

- Knowledge gathering and sharing: collecting, organizing, and sharing cultural fire knowledge and practices, traditional teachings, community fire stewardship plans, and relevant Western science.
- Public awareness and education: community wildfire workshops, trainings, and resource translation.
- Knowledge mobilization: training Stewards and translating knowledge into on-the-ground fire stewardship activities.
- Evaluation capacity building: helping communities define their own readiness and resilience indicators, collect evidence, evaluate, and apply it to decision-making, rather than relying on external evaluators or imposed metrics.

Rationale

Indigenous communities have been leading wildfire prevention, mitigation, and preparedness in Canada since time immemorial, relying on local Indigenous knowledge systems. Yet a 2018 House of Commons report on emergency management in Indigenous communities found that this expertise is frequently excluded from wildfire management.¹⁷⁴ Public Safety Canada has also identified the limited inclusion of Indigenous knowledge in wildfire management as a key gap and has noted the importance of building collaborative mechanisms for Western science and Indigenous knowledge and integrating diverse, traditional ways of knowing, doing, and being to transform wildfire management in Canada.¹⁷⁵ FireSmart Canada's *Blazing the Trail: Celebrating Indigenous Fire Stewardship* is a collection of stories showing how this knowledge has helped communities reduce the risks and impacts of wildfire.¹⁷⁶ Indigenous Peoples already have the knowledge; what they need is the Hubs' community-led infrastructure to apply it in practice.

Historically, colonial institutions have extracted data from Indigenous communities to make policy decisions about them. Guided by First Nations OCAP principles of Ownership, Control, Access, and Possession¹⁷⁷ the Hubs give communities control over what and how knowledge is collected, protected, shared, and accessed — returning wildfire management decisions to communities themselves.¹⁷⁸

The Hubs also build on existing infrastructure. The WRCC operates Regional Knowledge Networks connecting communities, researchers, and emergency responders across Canada through place-based coordination and knowledge mobilization.¹⁷⁹ Building the Hubs on this foundation would empower communities to strengthen wildfire readiness and resilience through their own knowledge systems.



The Stewards

Description

The Stewards is an Indigenous-led, community-owned, holistic and proactive wildfire stewardship program created in partnership between the CRC and the Indigenous Leadership Initiative (ILI).

As the operational arm of the Hubs, the Stewards are trained community members who mobilize cultural fire knowledges and practices gathered and shared in the Hubs, integrated with Western science and fire management through a Two-Eyed Seeing approach, to monitor their lands, conduct cultural burns, co-create community readiness plans, and respond to wildfires on traditional territories.

Stewards also contribute their operational knowledge and practices back to the Hubs, where they are both trained and train new Stewards through a train-the-trainer model.

Each community will have an average of five Stewards and one Coordinator, depending on its size.

Objective

The objective of the Stewards is to operationalize Indigenous fire stewardship by establishing a dedicated, year-round group of trained community members whose on-the-ground activities reduce wildfire risks and impacts, build community capacity, and ultimately strengthen Indigenous-led community readiness and resilience in northern and remote areas of Alberta and the NWT. The CRC acts as an operational partner, contributing capacity, expertise, and funding to help ILI scale up its Indigenous fire stewardship research and initiatives, and its existing Guardians program,¹⁸⁰ with a dedicated Indigenous fire stewardship stream. See Annex F for more information on ILI, their Guardians program, and Indigenous fire stewardship.

Rationale

Operating across Canada since 2016, growing from 30 initiatives to over 200 by 2024. The evidence of their effectiveness is well established. A 2016 analysis of a Guardians program in the NWT found that every dollar invested in Guardians generates between \$2.50 and \$3.70 in social, economic, cultural, and environmental returns.¹⁸¹

Indigenous fire stewardship has existed for millennia and has proven benefits in reducing wildfire risks and impacts for Indigenous communities. For example, cultural burning reduces fuel loads, shortens the return interval for wildfire activity, lowers long-term suppression costs, and supports food, medicine, and community protection.¹⁸² This is supported by international case studies: a study of Brazil's comparable Fire Brigades Program reported a 22.7% reduction in active fires at a cost of \$1.02 USD per hectare.¹⁸³

While the Guardians program exists and works, it lacks funding at scale. ILI has been working to get more funding to ensure all communities that want Guardians have the capacity, training, and resources to do so.¹⁸⁴ To advance this goal, in 2022, ILI released *The Role of First Nations Guardians in Wildfire Response and Management: A Proposed National Strategy*,¹⁸⁵ a collaborative framework exploring the active involvement of Indigenous Guardians in fire management planning and response, the restoration of cultural burning and traditional fire stewardship, and mechanisms for coordinated wildfire response across Guardian programs.¹⁸⁶ That same year, the First Nations Guardians Network was created to help administer federal funding for Guardians programs, but it is currently facing legal issues over misuse of funds.¹⁸⁷

This underfunding is part of the larger systemic problem. As mentioned previously in this brief, ISC spends 3.5 times more on response and recovery than on prevention, mitigation, and preparedness,¹⁸⁸ while every dollar invested in prevention, mitigation, and preparedness saves between \$7 and \$15 in response and recovery.¹⁸⁹ Additionally, communities at high risk of wildfires may either not have service agreements or have service agreements that are outdated and incomplete, and may be unable to access proposal-based funding from ISC due to low administrative capacity.¹⁹⁰ Indigenous communities are the first line of defence for wildfires, yet most operate without adequate capacity, training, and resources.¹⁹¹



The Fund

Description

The Fund is a two-fold financing mechanism: short-term grant funding, followed by long-term resilience outcomes financing modelled on Raven Outcomes Fund, Canada's first Indigenous-led outcomes fund. In the initial years, grant funding supports the Hubs' knowledge-sharing activities and the Stewards' on-the-ground operations, generating the social and ecological risk and impact data needed to design the outcomes model. Once that evidence base is established, financing shifts to the resilience outcomes fund, where outcome payers — governments, insurers, and infrastructure owners — repay investors as community-defined wildfire risk reduction, capacity building, and enhanced readiness and resilience outcomes are achieved and verified.

Objective

The Fund aims to provide long-term, flexible financing for the Hubs and Stewards, moving away from short-term, project-based grants toward a sustainable funding model. The purpose of the Fund is to empower communities to define what successful risk reduction, capacity building, and wildfire readiness and resilience means for them, and to decide how funding is spent to meet their own communities' wildfire needs and priorities.

Rationale

Interest holder interviews highlighted the limitations of project-based funding, competing administrative priorities and the capacity constraints Indigenous communities face in advancing wildfire preparedness and resilience.¹⁹³ They described a need for flexible, long-term investments that allow communities to identify their own needs, draw on community risk assessments and traditional knowledge, and design solutions that build enduring capacity.^{194 195 196}

Canada already has a working model for this approach. Established in 2023, the Raven Outcomes Fund is the country's first Indigenous-led outcomes fund. Through its \$32.2 million Fund, the organization uses Community-Driven Outcomes Contracts (CDOCs), whereby Indigenous communities define the problems they seek to address, design interventions, identify outcome measures and lead funding decisions, while governments and other funders pay based on independently verified results. Its current portfolio spans clean energy and housing retrofits, diabetes prevention, employment and training, and climate resilience and adaptation.¹⁹⁷

A wildfire-specific precedent is also emerging in the Canadian context. Nature Focus is currently developing a Canadian Fire Resilience Bond in partnership with First Nations, insurers, and infrastructure investment partners.¹⁹⁸

This presents a timely opportunity for the CRC to partner with these key organizations in supporting an Indigenous-led wildfire resilience outcomes program. Internationally, resilience bonds, green bonds, and related outcomes-based financing mechanisms have become established tools for supporting environmental and climate resilience initiatives, reflecting growing recognition that investments in preparedness and risk reduction can reduce both human and financial costs associated with the increasing severity of disasters.^{199 200 201}

Grant Funding

Capital for the Fund's initial granting stream would need to be secured through a targeted advocacy and government engagement strategy. As one of Canada's largest humanitarian organizations and a longstanding non-governmental partner in wildfire response and recovery, the CRC is well-positioned to advocate for greater investment in readiness and resilience. Its national presence, established relationships across federal, provincial and territorial governments, demonstrated ability to convene diverse partners, and experience coordinating complex, multi-jurisdictional initiatives provide a credible foundation for the organization to serve as a trusted intermediary. A coordinated engagement strategy with federal, provincial, and territorial governments could seek multi-year commitments to capitalize the Fund during the pilot phase while positioning the CRC as a long-term partner in advancing wildfire readiness and resilience. See Annex H for potential government and institutional partners.

Resilience Outcomes Fund

The outcomes funding mechanism is structured around community-defined wildfire risk reduction outcomes. Each risk-reduction outcome, for example, completing a set number of cultural burns or fuel-reduction projects, is assigned a cost based on what it will take to deliver the project within the community. The combined cost of all community-identified risk reduction outcomes determines the total size of the project fund. Because the Hubs operate regionally, aggregating these costed outcomes across all participating communities within each hub's region could help determine the size of a jurisdiction-specific project targeting key outcome payers.

Outcome payers, including governments, insurers, and infrastructure owners who stand to benefit from reduced wildfire risk, commit to making payments as outcomes are achieved and verified. Impact investors (individuals, institutions, etc.) then provide initial capital to fund the preparedness work in the communities. As wildfire risk is reduced and outcomes are verified, those outcome partners repay investors over an agreed period.

The evaluation, risk, and impact-mapping infrastructure that the Hubs co-develop with regional communities is essential to this process. These processes, including HIRA assessments, AARs, community evaluation frameworks, and monitoring data, provide a credible, community-governed evidence base for verifying outcomes.

The CRC would partner with Raven Outcomes Fund to anchor and host the Fund, while working with WRCC and ILI to develop the evaluation and verification mechanism. Together with communities through the Hubs and Stewards, these partners would co-design outcomes-based projects and build the evaluation infrastructure needed to support the resilience outcomes fund.

Implementation

Implementation follows a phased approach: 1–2 years of pre-pilot advocacy and fundraising, a seven-year grant-funded pilot phase, and long-term expansion and outcomes funding thereafter.

Pre-Pilot Advocacy and Fundraising (1-2 years)

CRC connects with ILI, WRCC, and Raven Outcomes Fund to explore a partnership in advancing Indigenous-led wildfire readiness and resilience. Together, they form a coalition and launch a government engagement strategy targeting federal, provincial, territorial, and municipal partners to build support and secure funding commitments for the pilot.

CRC also works with Raven Outcomes Fund on co-developing a wildfire resilience outcomes fund, identifying the technical requirements, governance arrangements, and partnership structures needed to support outcomes-based financing beyond the pilot.

Community pilot project selection (months 4-6)

ILI and WRCC lead outreach and select four pilot communities for two Hubs (one in Alberta, one in the NWT) and four Stewards programs (two in Alberta and two in the NWT). Selection is based on existing relationships with communities, expressed interest, low or no existing Indigenous fire stewardship capacity, high wildfire risk, absent or outdated service agreements with ISC, and a history of repeated displacement. Communities confirm participation by signing a partnership agreement with the CRC, ILI, and WRCC.

Engagement, co-design, and development (month 7 - year 2)

CRC dedicates time and resources to trust- and relationship-building with communities as rights-holders and partners, meaningfully engaging Elders, Knowledge Keepers, youth, and other community members early and throughout pilot co-design and development. CRC staff complete cultural safety training before engagement begins.

Pilot delivery (years 3-5)

The Hubs

Hubs collect, consolidate, and share Indigenous fire stewardship knowledges and practices through a digital platform, such as a website or community portal, built and maintained with community members. Hubs also operate as physical spaces within existing community infrastructure, hosting workshops, training, apprenticeships, intergenerational knowledge transfer, and regular gatherings. Both bring together Elders, Knowledge Keepers, youth, community members, Stewards, researchers, practitioners, and other partners.

The Stewards

Stewards are recruited with priority given to existing Guardians and community members, or to those from neighbouring areas with knowledge of and connections to that land and community. Following training through the Hubs, Stewards monitor their lands, conduct cultural burns, and develop and implement community readiness plans year-round, respecting Indigenous seasonal cycles and calendars. Stewards contribute knowledge and practices gathered on the land back to the Hubs, and train new Stewards through the train-the-trainer model.

The Fund

In parallel, Ravens Outcomes Fund, WRCC, ILI, participating communities, and prospective outcome payers co-design the resilience outcomes fund structure, identifying, costing, and codifying community-defined indicators for risk and impact reduction, capacity building, and Indigenous-led wildfire readiness and resilience.

Evaluation (year 6)

Evaluation of the Hubs and Stewards is grounded in culturally responsive, Indigenous evaluation theory and practice. It is co-designed with communities, using community-defined questions and indicators, and treats Indigenous knowledges as legitimate evidence. Evaluation can be conducted through internal Indigenous evaluation capacity at CRC, ILI, or WRCC, or by hiring an external Indigenous evaluation firm. In both cases, evaluation is conducted through the Hubs, building long-term evaluation capacity within communities. Findings are returned to communities, and OCAP principles guide data sovereignty.²⁰²

Evaluation findings on risk and impact reduction, capacity building, and readiness and resilience provide the evidence base for long-term, sustained funding and expansion through the transition to resilience-outcomes funding. While formal evaluation occurs in this phase, engagement and feedback loops are early and ongoing throughout implementation, with potential interruptions from wildfires and evacuations.

Expansion (year 7+)

Evaluation findings from the pilot inform the case for sustained funding, with CRC leveraging its government relationships to advocate for expansion. CRC shifts from grant funder to convener, grounding the resilience outcomes fund in partnership with Raven Outcomes Fund, ILI and WRCC to move financing from short-term grants to long-term, flexible outcomes-based funding for expansion. Impact investors provide upfront capital to fund knowledge-based and operational wildfire prevention, mitigation, and preparedness activities through the Hubs and Stewards. Once pre-identified outcomes are achieved, outcome payments begin flowing to investors. See Annex H for a sample list of outcome payers and investors.

ILI leads the expansion from the four pilot projects to provincial and territorial programs, then at the regional level, and eventually nationally, with Indigenous ownership and leadership maintained throughout. WRCC leads the expansion from the two regional Hubs under the Taiga Network and Boreal West Network to integrate them under their regional networks across Canada: the Cordillera Pacific Network, Prairie Network, Boreal East Network, and Atlantic Maritime Network. Expansion is decentralized and non-standardized, with Indigenous ownership, leadership, and decision-making authority over the Hubs, Stewards, and Funds, maintained throughout.

Costing



The Hubs

Item	Cost per Hub per year	Cost for two Hubs per year	Six-year pilot total
Digital platform	~\$155,000	~\$310,000	~\$1.86 M
Hub operations	~\$310,000	~\$620,000	~\$3.72 M
Evaluation capacity building	~\$200,000	~\$400,000	~\$2.4 M
Hub coordinator	~\$100,000	~\$200,000	~\$1.2 M
Indigenous community champions (2)	~\$168,000	~\$336,000	~\$2.01 M
Indigenous evaluator	~\$90,000	~\$180,000	~\$1.08 M
Training and apprenticeship	~\$85,000	~\$170,000	~\$1.02 M
Education and public awareness	~\$20,000	~\$40,000	~\$240,000
Estimated pilot total	~\$1.13 M	~\$2.26 M	~\$13.56 M
Estimated national expansion total (7 hubs) per year			~\$7.91 M per year

Table 1: Hubs Costing

The Hubs

Each Hub costs an estimated \$1.13M annually — \$2.26M per year for both Hubs, and \$13.56M over the six-year pilot. Costing estimates are based on comparable Indigenous knowledge-sharing and stewardship initiatives, including the Canadian Mountain Network,²⁰³ the Indigenous Guardians Toolkit,²⁰⁴ and standard Indigenous Guardians training.²⁰⁵ Costs have been adjusted to reflect the realities of delivering programming in northern and remote communities in Alberta and the NWT. These include travel between communities, translation and interpretation services, Indigenous knowledge protocols and honoraria, higher northern salary premiums, and the specialized training and equipment required for Indigenous fire stewardship.

Cost categories include:

- Digital platform: Web development and maintenance, cybersecurity, software licenses, cloud services, and technical support.
- Hub operations: Day-to-day operating costs for physical Hub space in existing community infrastructure.
- Evaluation capacity building: Community evaluation activities and meta-evaluation.
- Lead Indigenous evaluator: Oversees evaluation design, implementation, and reporting.
- Indigenous community champions: Lead community outreach, facilitate engagement, gather feedback, and align Hub activities with local contexts, needs, and priorities.
- Hub coordinator: Oversees coordination among Hubs and between Hubs and Stewards, administration, and partnerships with governments and Indigenous organizations.
- Training and apprenticeship: Elder-youth intergenerational knowledge transfer and train-the-trainer Stewards programs.
- Public awareness and education: Work with organizations like FireSmart to deliver accessible, culturally and linguistically appropriate community awareness and education initiatives on wildfire prevention, mitigation, and preparedness.

Scaling the Hubs to 7 across Canada, within WRCC's six regional networks (approximately one Hub per region), would serve 200 communities and their respective Stewards programs. See the Stewards costing for more information. At \$1.13M per hub, this expansion costs approximately \$7.91M annually.



The Stewards

Item	Cost per community per year	Cost for four communities per year	Six-year pilot total
Fire-specific equipment, cultural burn operations, landscape planning (Blood Tribe benchmark)	~\$166,000	~\$664,000	~\$3.98 M
5 Stewards x \$70,000	~\$350,000	~\$1.4 M	~\$8.4 M
1 Coordinator x \$90,000	~\$90,000	~\$360,000	~\$2.16 M
Cultural burns (~\$1,500-\$8,000 per hectare)	TBD	TBD	TBD
Estimated pilot total (excluding cultural burns)	~\$606,000	~\$2.42 M	~\$14.54 M
Estimated national expansion total (200 communities) per year			~\$121.2 M per year

Table 2: Stewards Costing

The Stewards

As the Indigenous Guardians Toolkit notes, no two Guardian program budgets are the same. However, many Guardians programs have core one-time and annual costs, including staff and wages, training and certification, equipment and supplies, travel and transportation, community engagement, administrative overhead, and evaluation. Additional costs may arise when launching a program, every few years when reinvestment is needed, such as for equipment, or when a program is expanding, requiring contingencies to be considered as well. Some costs are project-specific and vary year-to-year depending on community priorities and funding.²⁰⁶

ECCC's 2024-25 baseline Guardians funding of approximately \$350,000 annually per community covers standard Guardian program costs and a range of community and project-specific costs, but does not include fire-specific training, equipment, or cultural burns.²⁰⁷ Using the Blood Tribe (Kainai First Nation) Fire Guardianship Program — the first Indigenous fire guardianship program in Canada — as a benchmark, an additional \$166,000 per year is required for a dedicated fire stewardship stream.²⁰⁸ Combined with personnel costs of approximately \$440,000 annually for an average of five Stewards and one Coordinator per community based on current Guardians personnel²⁰⁹ and wages,²¹⁰ the Stewards are estimated at approximately \$606,000 annually per community, or a minimum total of \$14.5 million over the six-year pilot phase, excluding cultural burns, which are a variable cost ranging from \$1,500 to \$8,000 per hectare.²¹¹ Should the Stewards expand nationally, based on ILI's 2021 estimate of 400 communities for a fully scaled national Guardians network,²¹² which we halved given the context of smaller, northern and remote communities, costs would reach a minimum of \$121.2 million annually. See Annex G for a detailed breakdown of base Guardians program costs, additional costs for a dedicated fire stewardship stream, and wage methodology.



The Fund

Grant Funding

Item	Annual cost	Duration	Total
Hubs (2 regional at ~\$1.13M/hub/year)	~\$2.26 M	6 years	~\$13.56 M
Stewards (4 pilot communities, at ~\$606k/community/year)	~\$2.4 M	6 years	~\$14.54 M
Cultural burns (variable, ~\$1,500-\$8,000/ha)	TBD with communities	6 years	TBD
CRC administration: convening and government relations*	~\$120,000	7 years	~\$840,000
Estimated grant fund total			~\$28.94 M
Estimated national expansion total (7 hubs, 200 communities) per year			~\$168.5 M

Table 3: Fund Costing

*The CRC administration line represents CRC's cost of acting as convener, mobilizer, and advocacy partner. This includes potentially a dedicated fund coordinator role (\$100,000–\$120,000/year) to support ongoing government and donor relations.

The Fund

Resilience Outcomes Fund

The resilience outcomes fund covers the Hub and Stewards activities from Year 7 onward, supporting their continuation and the eventual onboarding of additional communities as the initial grant stream transitions to community outcomes-based financing. Based on the combined annual operating cost of the four pilot communities and two regional Hubs (approximately \$4.68 million per year), and including the benchmarked anticipated hosting and management fees associated with Raven Outcomes Fund's transactions (estimated at upwards of \$400,000 per year) per comparable programs, a pilot fund size of approximately \$5.4 million CAD per year is proposed for the continuation of the two regional Hubs, contingent on community interest in participating in the outcomes fund process.^{213 214}

This range reflects upfront capital sufficient to cover operations across both recommendations, including community- and regional-specific preparedness activities and Raven's transaction costs, with targeted investor returns in the 4-7% range, benchmarked against Raven Outcomes Fund's own published target.²¹⁵ The Fund is ultimately designed as a scalable mechanism; the success of the initial pilot could lead to the addition of more communities, the structuring of additional hubs, and the aggregation of project outcome funds.

Estimated scaling costs for the outcomes fund, based on the proposed Hubs and Stewards models, are projected to be at least \$168.5 million per year. This estimate assumes expansion to 200 communities, each with its own Stewards program, supported by seven regional Hubs. Actual scaling costs are difficult to estimate precisely, as they depend on factors such as community-specific implementation needs across regions and the final fee structure of the Raven Outcome Fund during the expansion process.

Key Assumption

Detailed information on the Raven Outcomes Fund's internal mechanisms and end-to-end fund management process is not fully publicly accessible. The structure and costing assumptions presented for the outcomes fund draw on Raven's publicly available fact sheets and community reports, alongside benchmarks from comparable outcomes-based financing models, including social impact bonds and development impact bonds, where Raven-specific figures were not available. These estimates should be treated as planning assumptions rather than confirmed costs, and would benefit from direct verification with the Raven Outcomes Fund before finalization.

Limitations and Mitigation Strategies

Time

Wildfires are worsening, increasing the need for urgent action, but trust and relationships cannot be rushed. Building partnerships and engaging Indigenous governments and organizations takes time and must align with Indigenous cultural calendars and community priorities. Short-term evaluation of prevention and preparedness efforts is challenging, creating pressure to show results before communities can build capacity. Implementation may also be disrupted by fire bans, wildfires, or evacuations.

Mitigation: Allocate time and resources for relationship-building from the start and throughout all phases. Compensate Indigenous expertise, train staff in cultural safety, and design timelines that respect Indigenous cultural calendars and adapt to wildfire events or evacuations.

Funding Sustainability

All recommendations require sustained, multi-year funding. Loss of funding could disrupt community knowledge sharing and fire stewardship, which are critical for building Indigenous-led wildfire readiness and resilience, undermining trust and relationships. Funding may fluctuate with political and economic factors and with demands from other natural disasters. For the Resilience Outcomes Fund, partners must commit resources to long-term outcomes, which may be challenging given the newness of outcomes-based wildfire financing.

Mitigation: Secure multi-year funding agreements and present resilience investments as long-term cost savings. Stagger grant contributions across government partners according to mandates and fiscal capacity. Negotiate funding terms with Indigenous communities to respect their needs, protocols, and calendars.

During the pilot, engage governments to build support for the long-term outcomes financing model: Raven Outcomes Fund's successful example shows this approach works in Canada; Involving Raven early provides a proven framework and aids regulatory and governance design for readiness and resilience outcomes financing.

Community Ownership

Maintaining Indigenous ownership throughout requires careful attention to power dynamics. While recommendations are designed to be community-led, with the CRC as an ally and working with other Indigenous partners, funding relationships must not compromise Indigenous authority, governance, or knowledge systems.

Mitigation: Indigenous communities lead every phase, determining their own governance structures and decision-making processes. The CRC's role is support, as requested by communities, not direction. Beyond formalizing community authority in partnership agreements, build in early and ongoing feedback loops to ensure communities retain ownership by having the power to adjust project activities as their needs and priorities evolve.

Data Sovereignty

Failure to uphold Indigenous data sovereignty could erode community trust, risk misuse of sensitive information, and result in decisions that do not reflect community contexts, needs, and priorities.

Mitigation: Communities create data governance protocols guided by OCAP principles to determine how data is collected, stored, protected, accessed, and shared.

Community Capacity

Community engagement is essential, but many northern and remote communities face barriers, including infrastructure gaps, limited administrative capacity, staff turnover, and wildfire disruptions. Over the multi-year implementation, shifting priorities, leadership changes, and significant events — such as the passing of Elders or Knowledge Keepers — may also affect communities' ability to participate.

Mitigation: Program coordinators provide ongoing support to reduce capacity barriers. Indigenous community champions build local leadership and continuity. Intergenerational knowledge transfer and a train-the-trainer model helps retain knowledge in community, and implementation remains flexible to adapt to changing priorities or events.

Outcome Measurement Complexity

The resilience outcomes fund depends on clear, verifiable outcomes, but standard measurement frameworks may not capture Indigenous understandings of wildfire risk and impact, capacity, and readiness and resilience.

Mitigation: Co-develop flexible measurement frameworks and outcome indicators using Two-Eyed Seeing principles that weave together Indigenous and Western knowledge and practices to reflect diverse community perspectives on readiness and resilience.

Selection Criteria and Options

The three recommendations were assessed against five criteria:

1. Feasibility: The recommendations are low-cost relative to wildfire response and recovery costs, achievable within a realistic timeframe, and backed by both organizational will — the CRC is shifting toward a more proactive approach to helping those most in need — and political will, as wildfires are a policy problem that every level of government in Canada has acknowledged and wants to address.

2. Effectiveness: The recommendations are grounded in evidence of real-world impact from Indigenous-led wildfire readiness and resilience in international case studies and existing best practices in Canada.

3. Alignment with self-determination: The recommendations centre Indigenous ownership, leadership, and decision-making.

4. Fit within the existing landscape: The recommendations build on what Indigenous communities and organizations are already doing, rather than duplicating or displacing their efforts.

5. Scalability: The recommendations can scale results beyond pilot communities to the provincial, territorial, regional, and national levels, addressing a policy problem that is increasingly affecting all of Canada.

Each recommendation meets all five criteria. Since they are designed to work together and are most effective as a system, the preferred option is for the CRC to implement **the Hubs, Stewards, and Fund**.

Where this is not possible, **the Fund paired with either the Hubs or the Stewards** is the second option.

If only one is possible, **the Fund** — beginning with the pilots — is the minimum option, providing flexible, long-term financing for communities to build wildfire readiness and resilience according to their own priorities and needs.

	Feasibility	Effectiveness	Self-determination	Fit	Scalability
Hubs	Relatively low-cost compared to financial cost of responding to and recovering from wildfires, which exceeded \$1 billion in 2024; full implementation of pilot projects achievable within seven years; aligns with CRC's strategic direction toward proactive, Indigenous-led wildfire prevention, mitigation, and preparedness; political will to address wildfires	Supported by evidence from WRCC and other knowledge-sharing networks	Communities own, control, and determine knowledge collection and use	Builds on WRCC place-based regional knowledge networks	CRC and WRCC-led expansion through regional networks
Stewards		Supported by evidence from Indigenous Guardians Programs and Indigenous-led fire stewardship in Brazil and Australia	Indigenous-led, community-defined recruitment, roles, and operations	Builds on ILI Guardians program and fire stewardship research and initiatives	CRC and ILI-led expansion from pilot communities to provincial/territorial and national scale
Fund		Supported by evidence from outcomes-based financing in social impact bond models	Long-term, flexible financing informed by community priorities and needs	Builds on Raven Outcomes Indigenous-led investment for supporting community-driven projects	Resilience outcomes fund structure designed for regional and national expansion

Table 4: Selection Criteria Assessment for Hubs, Stewards, and Fund

Conclusion

Canada's emergency management system identifies priorities for wildfire policy on paper, including comprehensiveness, partnerships, risk-based approaches, resilience, and continuous improvement — but does not implement them in practice. As wildfires worsen across Canada, the ecological, financial, and social costs of maintaining an exclusionary and reactive system will only grow, and Indigenous Peoples will continue to be disproportionately affected. As one interest holder noted, the pace of the problem is not matching the pace of the solutions.

The Indigenous Wildfire Readiness and Resilience Hubs, Stewards, and Fund are designed to address the four policy gaps identified across emergency management legislation, governance, approach, and evaluation while reinforcing one another: the Hubs gather and share cultural fire knowledges and practices, which are mobilized through the Stewards as their operational arm, while the Fund finances both. By improving community knowledge gathering and sharing, supporting Indigenous fire stewards and cultural burns, and providing long-term flexible funding, these recommendations shift Canada's wildfire policy from reactive and exclusionary to proactive and Indigenous-led — reducing wildfire risks and impacts in Indigenous communities and building capacity, ultimately enhancing readiness and resilience in the face of increasing wildfire threats.

The CRC's next step is to establish partnership agreements with Indigenous leadership, governments, and organizations already doing this work to begin meaningful engagement and co-design for each recommendation. Beyond the scope of this brief, the CRC is also well-positioned to advocate to federal, provincial and territorial, and local governments for legislative reform that formally recognizes Indigenous Peoples as rights holders in emergency management.

The cultural fire knowledges and practices needed to address this urgent policy challenge already exist within Indigenous communities. What is missing is the resources and support for Indigenous fire stewardship, and the political will to act. At the time of writing, out-of-control wildfires are burning across Canada, especially in northern Alberta and the NWT. Since governments react more to crises, a large coalition of actors coming together during major wildfire events to demand not only immediate relief, but the pre-emptive recommendations proposed in this brief, can make the case for why this, why now — getting governments to listen and make the changes needed to build Indigenous-led wildfire readiness and resilience.

Annexes

ANNEX A	Interest Holder Interviews
ANNEX B	Four Pillars of Emergency Management in Canada
ANNEX C	Ten Guiding Principles for Emergency Management in Canada
ANNEX D	Legislative Overview of Emergency Management in Canada, Alberta, and the Northwest Territories
ANNEX E	Guiding Principles
ANNEX F	Indigenous Leadership Initiative (ILI), Guardians Program, and Indigenous Fire Stewardship
ANNEX G	Detailed Costing Breakdown for Stewards Recommendation
ANNEX H	Potential Fund partners, Outcome Payers, and Investors

Annex A

Interest Holder Interviews

- International Wildfire Alliance
- Natural Resources Canada
- Métis National Council
- Emergency Management Ontario, Ministry of Emergency Preparedness and Response
- Nature Focus
- Alberta Emergency Management Agency, Public Safety and Emergency Services Ministry
- Alberta Municipalities
- Alberta Forestry and Parks
- Public Safety Canada
- Indigenous Services Canada
- Rural Municipalities of Alberta
- Otipemisiwak Métis Government
- Northwest Territories Medical Association
- Government of Northwest Territories
- Canadian Climate Institute
- Wildfire Resiliency Consortium of Canada
- Confederacy of Treaty Six
- Nahanni Butte Dene Band and Group

A total of 22 interest holder interviews were conducted with representatives from federal, provincial, territorial, municipal, and Indigenous governments, as well as non-governmental organizations involved in emergency management policy and readiness and resilience-building activities. Interviews were semi-structured and conducted either one-on-one or in small group settings. Discussions were designed to surface implementation gaps, jurisdictional tensions, governance challenges, Indigenous participation and operational realities not fully captured within formal policy and legislative documents. Interviews were conducted virtually via Microsoft Teams and ranged from approximately 30 minutes to 1 hour.

When permission was granted, interviews were recorded and supplemented with detailed notes. Recordings and summaries were stored on a secure shared drive accessible and deleted upon completion of this policy brief in accordance with the project protocols. Interview data were analyzed thematically to identify recurring patterns, areas of governance fragmentation and jurisdictional friction, and points of convergence or divergence between interview findings and broader literature review. These insights were used to validate and refine the project's key findings and recommendations.

Annex B

Four Pillars of Emergency Management in Canada

Canada's emergency management system is organized around four interconnected pillars: prevention and mitigation, preparedness, response, and recovery.²¹⁶

1. **Prevention and Mitigation:** Actions taken to eliminate or reduce disaster risks to protect lives, property, the environment, and reduce economic disruption. This includes structural measures such as floodways and dykes, as well as non-structural measures such as building codes, land-use planning, and insurance incentives.
2. **Preparedness:** Actions taken before a disaster occurs to strengthen the ability to respond and manage consequences, including emergency response plans, mutual assistance agreements, training, public awareness activities, equipment, and exercises.
3. **Response:** Actions taken immediately before, during, or after a disaster to manage consequences and minimize suffering and losses, including emergency communications, evacuations, search and rescue, and emergency medical assistance.
4. **Recovery:** Actions taken after a disaster to restore conditions to an acceptable level, including reconstruction, financial assistance, trauma counselling, and the return of evacuees.

Annex C

Ten Guiding Principles for Emergency Management in Canada

The Emergency Management Framework for Canada sets out ten guiding principles that shape emergency management policies, programs, and services in Canada, including wildfire management.²¹⁷

1. **Responsibility:** Emergency management responsibilities are shared across federal, provincial, territorial, municipal, Indigenous, community, and individual actors, with disasters managed first at the local level before escalating to higher levels of government.
2. **Comprehensive:** Canada's emergency management approach integrates risk-based measures, all hazards, all sectors of society, and all four pillars of emergency management.
3. **Partnerships:** Emergency management relies on a whole-of-society approach based on collaboration, coordination, and communication among governments, Indigenous Peoples, communities, first responders, the private sector, non-governmental organizations, and international partners.
4. **Coherency of Action:** Emergency management systems aim to ensure coordinated and complementary action through clearly defined roles, responsibilities, and communication among partners.
5. **Risk-Based:** Emergency management uses risk and vulnerability assessments, including climate change projections, to guide decision-making and prioritize risk reduction measures.
6. **All-Hazards:** Canada adopts an all-hazards approach that addresses vulnerabilities associated with natural, human-induced, technological, and biological hazards.
7. **Resilience:** Emergency management seeks to strengthen the capacity of individuals, communities, and systems to adapt to, withstand, recover from, and learn from disasters.
8. **Clear Communications:** Open, timely, and effective communication before, during, and after emergencies supports public awareness, preparedness, response, and recovery.
9. **Continuous Improvement:** Emergency management systems are continuously improved through lessons learned, knowledge sharing, and evaluation following disasters.
10. **Ethical:** Emergency management decisions are guided by ethics and values that prioritize human life, dignity, safety, and security.

Annex D

Legislative Overview of Emergency Management in Canada, Alberta, and the Northwest Territories

Canada

In Canada, wildfire management is a shared responsibility between federal, provincial, territorial, and local governments.²¹⁸ The Emergency Management Act states that the Minister of Public Safety and Emergency Preparedness is responsible for exercising leadership relating to emergency management in Canada by coordinating emergency management activities among government institutions and in cooperation with provinces, territories, and other entities.²¹⁹

Emergencies are managed first at the local level. If an emergency exceeds local capacity or resources, provinces or territories may provide assistance. If provincial or territorial capacity is exceeded, the province or territory may submit a request for federal assistance to the department of Public Safety Canada.²²⁰ The Government Operations Centre monitors events and coordinates responses with other federal departments and agencies.²²¹ Natural Resources Canada (NRCAN) conducts research, provides fire intelligence and predictive services, and wildfire programming, working closely with Environment and Climate Change Canada (ECCC) to track and model the accelerating impact of climate change on wildfires,²²² and Parks Canada manages fires in national parks.²²³

For First Nations living on reserve, communities are expected to use all available local resources to respond to emergencies.²²⁴ If an emergency exceeds community capacity, ISC may coordinate support, including through service agreements with provinces and territories that provide emergency management services to First Nations on reserve.²²⁵

Inter-governmental organizations also play a critical role in wildfire management, including the CIFFC, which supports resource and information sharing across jurisdictions and with international partners.²²⁶

Non-governmental organizations also play an important role in emergency response and recovery, including the CRC.

Federal Emergency Management Instruments

Emergency Management Act (2007): Outlines the federal Minister of Public Safety's responsibilities for coordinating emergency management activities across federal government departments, provinces, territories, and other entities.

Federal Policy for Emergency Management (2009): Sets out emergency management requirements for federal government departments under the Act.

Federal Emergency Response Plan (2011): Provides an overview of the coordination of federal emergency management efforts led by Public Safety Canada.

Emergency Management Framework for Canada (2017): Outlines the ten principles guiding emergency management in Canada.

Emergency Management Strategy for Canada: Toward a Resilient 2030 (2019): Identifies emergency management priorities and objectives.

Alberta

Alberta's emergency management system operates through a layered legislative and regulatory architecture that has undergone significant modernization in recent years, most notably through Bill 49, the Public Safety and Emergency Services Statutes Amendment Act, 2025.^{227 228} Most recent policy developments, such as the Alberta Wildfire Mitigation Strategy (2026), signal an incremental policy shift to a whole-of-society, all-hazards approach to emergency management, emphasizing shared responsibility among governments, Indigenous communities, civil society organizations, the private sector, and individual citizens across the prevention, mitigation, preparedness, response, and recovery continuum.²²⁹ Similarly, readiness and resilience have been consistently identified as core outcomes within the Ministry of Public Safety and Emergency Services' Business Plans since 2023, which states that ensuring Albertans are prepared for and resilient to disasters is a key objective.²³⁰

Emergency Management in Alberta

The primary statute governing emergency management in the province is the Emergency Management Act (EMA), which establishes the foundational authorities, responsibilities, and obligations of the provincial government, local authorities, and related bodies in preparing for, responding to, and recovering from emergencies.²³¹

The EMA is supported by two key regulations: the Government Emergency Management Regulation (GEMR), which governs the roles and responsibilities of provincial government departments and the Alberta Emergency Management Agency (AEMA), and the Local Authority Emergency Management Regulation (LEMR), which establishes commitments for local authorities, including municipalities and Métis Settlements.^{232 233} First Nations are incorporated under the “local authority” designation, contingent upon a parallel service agreement framework between the Government of Alberta and ISC.

The Forest Protection Area and Non-Forest Protection Areas

Alberta's wildfire management system divides the province into two operational zones: the Forest Protection Area (FPA), established by regulation under the Forest and Prairie Protection Act for protection of Alberta's forestry resources and areas outside the FPA.²³⁴ Encompassing the vast majority of Alberta's forested northern and boreal regions, the FPA places wildfire detection, management, and suppression under the primary responsibility of Alberta Wildfire, a program administered by the Ministry of Forestry and Parks. Rural municipalities and Métis Settlements located adjacent to these areas retain responsibility for protecting local infrastructure and populations within boundaries not subject to FPA. For boundaries traversing FPAs, wildfire suppression activities are coordinated through the Alberta provincial command structure, requiring local authorities to work within the provincial operational frameworks before deploying resources or undertaking response activities.

Local Authorities as First Line of Defence

Under the Alberta Municipal Government Act and the LEMR, local authorities in non-FPAs serve as the first line of response for emergencies within their jurisdictions. They are responsible for implementing local emergency management plans and managing emergency responses before escalating to provincial support.

In practice, however, local authorities possess markedly different capacities to fulfill these responsibilities. The Rural Municipalities of Alberta has identified significant disparities in municipal staffing levels, technical expertise, emergency management capacity, fire service models (volunteer-based vs. full-time staff), and critical infrastructure across jurisdictions.²³⁷ Similar capacity challenges exist among First Nations and Métis communities, where longstanding infrastructure deficits, limited administrative capacity, workforce limitations, and over-reliance on short-term or project-based funding often constrain emergency management efforts.

The scale of those challenges is reflected in estimates from the Assembly of First Nations, which place the infrastructure deficit on reserve in Alberta at approximately \$40.9 billion.²³⁸ By comparison, the RMA estimated a \$17.25 billion infrastructure deficit across its 69 member counties and municipal districts in 2023.²³⁹ Collectively, these disparities shape communities' ability to invest in preparedness, sustain emergency management capacity, and build resilience over time.

Alberta Emergency Management Plan

The mechanisms through which Alberta's emergency management legislative instruments are operationalized are set out in the AEMP (2022), which establishes the provincial framework for emergency preparedness, response, and recovery, and defines the coordination responsibilities of provincial ministries, the AEMA, and local authorities.²⁴⁰ Recovery specifically is guided by the *Alberta Provincial Recovery Framework*, which provides strategic direction for how the provincial government organizes and coordinates resources following disasters.²⁴¹

Alberta Emergency Management Agency

The AEMA is the central coordinating body of the provincial emergency management system. Established under the GEMR, AEMA is mandated to develop, implement, manage, and maintain the Alberta emergency management system as described in the Alberta Emergency Plan.^{242 243} AEMA coordinates two distinct operational centres that serve consecutive phases of emergency events. The Provincial Emergency Coordination Centre (PECC) leads active emergency response, operating on a 24/7 basis during declared emergencies. The Provincial Recovery Coordination Centre (PRCC), activated when a disaster meets certain criteria, manages long-term recovery and community restoration, serving as the central hub for information sharing and funding coordination.

AEMA is also responsible for reviewing and approving municipal hazard assessments and emergency management plans, and is currently introducing the Hazard Identification and Risk Assessment (HIRA) tool, a new approach designed to support local authorities in identifying localized risks, mapping vulnerable populations, and providing more consistent data to inform emergency management decisions at both local and provincial levels.²⁴⁴ While the GEMR mandates that the AEMA develop and manage the provincial emergency management system, the AEMP defines the Agency's role more narrowly as coordination and oversight. This divergence creates ambiguity about the Agency's mandate and has become a recurring point of tension among interest holders.²⁴⁵

The Northwest Territories

At the federal level, the NWT elects one member to represent them in the House of Commons. At the territorial level, the “Legislative Assembly of the Northwest Territories” is made up of 19 electoral districts; seven are in Yellowknife, and the remaining 12 serve regional and remote communities across the territory. The NWT governs itself through a unique system called “Consensus Government”, which operates without political parties. The NWT relies on indigenous governments’ partnership, mostly established at the regional level: Akaitcho Territory Government, Dehcho First Nations, Gwich’in Tribal Council, Inuvialuit Regional Corporation, Northwest Territories Métis Nation, Sahtu Secretariat Incorporated, and Tłı̨chǫ Government.

Legislation and Policy Instruments

The forest ecosystem in the NWT is governed under the Protected Areas Act and the Forest Act. The Protected Areas Act, passed in 2019, is a legislative framework that enables the GNWT to collaboratively manage protected areas with Indigenous governments.²⁴⁶ This Act aims to prioritize the biodiversity, ecological integrity and the cultural continuity of Aboriginal and treaty rights. Meanwhile, the Forest Act is an amendment of the Forest Management Act, still under development. Under Bill 44, the act has been enacted into law yet needs regulations to be in force.²⁴⁷ One important modification is the redefinition of values-at-risk and the forest system management to embrace a more ecological approach and respect for obligations under the land claims and self-government agreements. In terms of wildfire emergency management, the NWT uses its EMA to set out roles and responsibilities of jurisdictions at each level of government: territorial, regional, local and community. In terms of operational tools, the NWT uses the Fire Smart program, the CWPP, Emergency Management Plans, the Incident Command System and Fire Reports, Detection and Assessments.²⁴⁸

Annex E

Guiding Principles

Self-Determination and Ownership

Consistent with Article 32 of UNDRIP and Canada's obligations under UNDRIPA, the recommendations position Indigenous communities as rights holders and leaders with authority over decisions that affect their lands and peoples. Community ownership of policy and program design, governance structures, and long-term direction is imperative.

Meaningful Engagement

Grounded in UNDRIP's principle of free, prior, and informed consent, the recommended policies and programs must be developed with Indigenous communities, not for them. This means engaging early, continuously, and on communities' own terms, with dedicated time and resources for relationship- and trust-building, and fair compensation for Elders and Knowledge Keepers across all program and policy stages.

Distinctions-based

First Nations, Métis, and Inuit Peoples have distinct identities, cultures, traditions, and histories, and relationships with the Crown. Recommended policies and programs are responsive to the specific contexts and needs of different Indigenous groups rather than a pan-Indigenous approach.

Strengths-based

Indigenous Peoples hold traditional stewardship knowledges and practices since time immemorial. Rather than adopting a deficit-based lens, the recommendations acknowledge that many barriers to wildfire readiness and resilience are the result of colonial policies and their historical and ongoing impacts. Recommended policies and programs build on community strengths and capacities, empowering communities to advance their own visions for wildfire readiness and resilience.

Data Sovereignty

Indigenous communities have the right to govern the collection, ownership, and application of data about their peoples and territories. All three recommendations adhere to the First Nations principles of OCAP® (Ownership, Control, Access, and Possession).²⁵³

Equitable and Sustainable Funding

Financing the recommended policies and programs moves away from chronic underfunding and short-term, proposal-based funding toward long-term, flexible, equitable, and sustainable resources that reflect the costs of Indigenous-led wildfire readiness and resilience.

Culturally Responsive Indigenous Evaluation

Evaluation of the recommended policies and programs must be co-designed with communities, use community-defined indicators, treat Indigenous knowledges as legitimate forms of evidence, and return findings to community.

Annex F

Indigenous Leadership Initiative (ILI), Guardians Program, and Indigenous Fire Stewardship

ILI is an Indigenous-led national conservation organization created in 2013. Its mission is to facilitate the strengthening of Indigenous Nationhood for the fulfillment of the Indigenous cultural responsibility to their lands, the emergence of new generations of Indigenous leaders, and helping communities develop the skills and capacity that they will need as they continue to become fully respected and equally treated partners in Canada's system of governance and its economic and social growth.²⁵⁴

Modelled on Australia's "Working on Country" program, now called the Indigenous Rangers Program, ILI's Guardians program helps Indigenous Nations care for their lands and waters. Guardians are trained experts who are on the ground, acting as the "eyes and ears" of their Nations on traditional territories. They monitor and manage the land, gather knowledge, data, and research that helps Nations strengthen decision-making on their territories, and create good-paying jobs and foster local and regional economic opportunity. Rooted in Indigenous knowledges and cultures, the Guardians program has grown from 30 programs in 2016 to over 200 by 2024, with over 1,000 Guardians across the country, supported by a \$25 million federal investment in 2017 over five years and a \$200 million federal investment in 2021.²⁵⁵

Indigenous fire stewardship is part of ILI's work and Guardians program, but is not a distinct stream. It restores the land and asserts Indigenous Nations' sovereignty and inherent rights to care for their territories. Fire stewardship is carried out year-round (not just during fire season) and includes emergency response and firefighting, cultural burns, and landscape planning. As ILI notes, "by investing in Guardians, we can beef up the country's capacity to make communities and landscapes more resilient. We can create a fleet of professionals ready to prevent, respond to, and recover from fires." ILI's goal is to ensure all communities that want Guardians have the capacity, training, and resources to do so. In 2022, ILI released *The Role of First Nations Guardians in Wildfire Response and Management: A Proposed National Strategy*, and in 2023 conducted pilot projects to explore its implementation, including a Fire Guardians Workshop, a Fire Guardians Scoping Project, training, and collaborations with fire stewardship expert organizations such as the Thunderbird Collective. ILI continues to advance policies and programs for fire stewardship, including training Guardians, developing year-round fire Guardian programs, and supporting Nations to develop fire stewardship plans.²⁵⁶

Annex G

Detailed Stewards Costing

Base Guardians Program Costs

In 2024-25, Environment and Climate Change Canada provided baseline federal funding of approximately \$350,000 per year, per community Guardians programs in Alberta and the NWT, covering a range of community and project-specific costs including wages, training, equipment, and operations.²⁵⁷ However, none of ECCC's programs funded at the \$350,000 baseline include fire-specific training, equipment, or cultural burns, meaning a dedicated fire stewardship stream requires additional costs beyond the standard Guardian program model.

Additional Fire Stewardship Costs

Based on approximately 1,000 Guardians across roughly 200 programs nationally, Guardian programs average five Full-time Equivalents (FTEs) per community. However, given the size and capacity constraints of northern and remote pilot communities, Stewards programs are anticipated to be smaller and have less stewards, with exact staffing determined through co-design. In addition to Stewards members, each pilot community would have a dedicated Stewards coordinator responsible for managing day-to-day program administration, liaising between the four pilot community Stewards programs and between the Stewards and the Hubs, supporting co-design and co-development processes, tracking and reporting social risk, impact, and outcome data, and coordinating with the CRC and ILI. Stewards members are land-based practitioners responsible for monitoring lands, gathering knowledge from the land, developing and implementing community fire stewardship plans, conducting cultural burns, responding to wildfires, and contributing knowledge and practices back to the Hubs.

Because no national salary dataset currently exists for Indigenous Guardians in Canada, assumptions were developed using wage ranges reported in recent Guardian and Guardian Coordinator job postings from Indigenous governments and organizations across Canada. Based on these postings, Guardian positions are generally within the range of approximately \$25-\$35 per hour, corresponding to an estimated annual salary of approximately \$50,000-\$70,000 per FTE.²⁵⁸ Guardian Coordinator positions are generally within the range of approximately \$35-\$45 per hour, corresponding to an estimated annual salary of approximately \$70,000-\$90,000 per FTE.²⁵⁹

These estimates may vary depending on region, Indigenous government or organization, experience requirements, and role responsibilities. Given that Indigenous fire stewardship is a specialization requiring advanced experience, skills, training, and equipment, salary estimates are assumed at the higher end of these ranges: \$70,000 per Guardian FTE and \$90,000 per Coordinator FTE, thus $\$70,000 \times 5 \text{ Guardian FTEs} = \$350,000 + \$90,000 \times 1 \text{ Coordinator FTE} = \$90,000 = \$440,000$ in wages per community = \$1.76 million in wages across the four communities. Stewards must be full-time because Indigenous fire stewardship is year-round.²⁶⁰

The Blood Tribe (Kainai First Nation) Fire Guardianship Program is the first Indigenous fire guardianship program in Canada.²⁶¹ Funded through a \$500,000 NRCAN grant from March 2025 to March 2028, it provides benchmark for the additional costs of a dedicated fire stewardship stream.²⁶² At approximately \$166,000 per year, this grant supports the development of tools and resources, dissemination of Indigenous fire knowledge, and the integration of cultural practices into fire management.²⁶³ Combined with the personnel costs of approximately \$440,000 per community, a dedicated fire Stewards program is estimated at \$606,000 per community per year, or approximately \$2.42 million annually across four pilot communities, thus \$14.54 million over the six-year pilot phase.

Cultural burns are an additional variable cost. Cultural burns are typically small and controlled, carried out intentionally to achieve specific ecological and cultural objectives. Costs range from \$1,500 to \$8,000 per hectare, depending on scale and terrain.²⁶⁴ The number of hectares burned is difficult to estimate in advance, as cultural burns vary substantially in size depending on community objectives and local conditions.

Total Stewards Cost Estimate

The Stewards represent an estimated total investment of at least \$14.4 million over the six-year pilot phase (approximately \$606,000 per community per year), with cultural burns representing an additional variable cost. The true total cost of the pilot phase will therefore exceed \$14.4 million, with the full amount to be determined in collaboration with pilot communities, the CRC, and ILI.

Should the Stewards expand nationally, costs would scale proportionally with the number of communities adopting a dedicated fire stewardship stream. ILI's 2021 *Business Case for a National First Nations Guardians Network* estimated that a fully scaled national network of 400 Guardians programs would require approximately \$260 million annually.²⁶⁵ We halved this given the smaller, northern, and remote communities. Based on the \$606,000 per community cost estimated for the pilot phase (without the extra variable cost of cultural burns), a national Stewards across 200 communities would cost a minimum of \$121 million annually.

Annex H

Potential Fund Partners, Outcome Payers, and Investors

Potential Philanthropic Foundations

Foundation	Relevance
McConnell Foundation	Reconciliation; systems change; community resilience
Trottier Family Foundation	Climate and environment; Indigenous land stewardship
Metcalf Foundation	Indigenous nature-based solutions; climate
United Way Alberta & NWT	Community resilience; northern communities

Potential Government Departments

Department	Jurisdiction
Alberta Forestry and Parks	Provincial
Alberta Public Safety & Emergency Services	Provincial
Natural Resources Canada	Federal
Environment & Climate Change Canada	Federal
Housing, Infrastructure and Communities	Federal
Public Safety Canada	Federal
Indigenous Services Canada	Federal
Crown-Indigenous Relations and Northern Affairs Canada	Federal
NWT Department of Executive and Indigenous Affairs	Territorial
NWT Department of Environment and Climate Change	Territorial
NWT Department of Municipal and Community Affairs	Territorial

Potential Outcome Payers

Example Outcome Payer	Interest to pay/participate	Payment trigger
Federal government (Public Safety Canada / ISC)	Avoided emergency response and recovery costs	Risk reduction metrics
Provincial governments (AB / GNWT)	Avoided suppression costs	Annual fire season outcomes
Insurance sector	Reduced claims exposure in insured communities	Loss reduction verification

Potential Institutional Investors

Example Investor Type	Motivation	Example Organization
Philanthropic foundations	Mission-aligned, may accept below-market returns	Inspirit, McConnell, Trottier
Development finance	Indigenous economic reconciliation mandate	BDC
Insurance sector	Direct financial interest in wildfire loss reduction	Intact

Endnotes

- [1] "Canada's Record-Breaking Wildfires in 2023: A Fiery Wake-Up Call," Natural Resources Canada, April 21, 2026, <https://natural-resources.canada.ca/stories/simply-science/canada-s-record-breaking-wildfires-2023-fiery-wake-call>
- [2] Natural Resources Canada, "Canada's Record-Breaking Wildfires in 2023."
- [3] "Fact Sheet: Climate Change and Wildfires," Canadian Climate Institute, May 13, 2026, <https://climateinstitute.ca/news/fact-sheet-wildfires/>.
- [4] "Canada Wildfires, 2023 – Forensic Analysis," United Nations Office for Disaster Risk Reduction (UNDRR), September 17, 2024, <https://www.undrr.org/resource/canada-wildfires-2023-forensic-analysis>.
- [5] United Nations Office for Disaster Risk Reduction, "Canada Wildfires, 2023."
- [6] "Insurance Bureau of Canada Provides Jasper Wildfire Recovery Update," Insurance Bureau of Canada, January 29, 2025, <https://www.ibc.ca/news-insights/news/insurance-bureau-of-canada-provides-jasper-wildfire-recovery-update>.
- [7] "Red Cross 2025 wildfires response is largest domestic operation in recent history," Canadian Red Cross, August 21, 2025, <https://www.redcross.ca/about-us/media-news/news-releases/red-cross-2025-wildfires-response-is-largest-domestic-operation-in-recent-history#:~:text=This%20year%27s%20wildfire,registering%2052%2C000%20people%2C>.
- [8] "Climate Change and Wildland Fire," Natural Resources Canada, January 22, 2026, <https://natural-resources.canada.ca/forests-forestry/wildland-fires/climate-change-wildland-fire>.
- [9] "Rapid Review: An Intersectional Analysis of the Disproportionate Health Impacts of Wildfires on Diverse Populations and Communities," Public Health Agency of Canada, July 18, 2024, <https://www.canada.ca/en/public-health/services/publications/healthy-living/rapid-review-intersectional-analysis-disproportionate-impacts-wildfires-diverse-populations-communities.html>.
- [10] Public Health Agency of Canada, "Rapid Review."
- [11] Henok Workeye Asfaw et al., "A Qualitative Study Exploring Barriers and Facilitators of Effective Service Delivery for Indigenous Wildfire Hazard Evacuees During Their Stay in Host Communities," *International Journal of Disaster Risk Reduction* 41 (2019): 1-10, <https://doi.org/10.1016/j.ijdr.2019.101300>.

- [12] Amy Cardinal Christianson et al., "Wildland fire evacuations in Canada from 1980 to 2021," *International Journal of Wildland Fire* 33, no. 7 (2024): 1-18. <https://doi.org/10.1071/WF23097>.
- [13] "Canada's Record-Breaking Wildfires in 2023: A Fiery Wake-Up Call," Natural Resources Canada, April 21, 2026, <https://natural-resources.canada.ca/stories/simple-science/canada-s-record-breaking-wildfires-2023-fiery-wake-call>.
- [14] Natural Resources Canada, "Canada's Record-Breaking Wildfires in 2023."
- [15] "Fact Sheet: Climate Change and Wildfires," Canadian Climate Institute, May 13, 2026, <https://climateinstitute.ca/news/fact-sheet-wildfires/>.
- [16] "Canada Wildfires, 2023 – Forensic Analysis," United Nations Office for Disaster Risk Reduction (UNDRR), September 17, 2024, <https://www.undrr.org/resource/canada-wildfires-2023-forensic-analysis>.
- [17] United Nations Office for Disaster Risk Reduction, "Canada Wildfires, 2023."
- [18] "Climate Change and Wildland Fire," Natural Resources Canada, January 22, 2026, <https://natural-resources.canada.ca/forests-forestry/wildland-fires/climate-change-wildland-fire>.
- [19] "Rapid Review: An Intersectional Analysis of the Disproportionate Health Impacts of Wildfires on Diverse Populations and Communities," Public Health Agency of Canada, July 18, 2024, <https://www.canada.ca/en/public-health/services/publications/healthy-living/rapid-review-intersectional-analysis-disproportionate-impacts-wildfires-diverse-populations-communities.html>.
- [20] Natural Resources Canada, "Climate Change and Wildland Fire."
- [21] "Forest Fires: Impacts," Ouranos, November 2023, <https://www.ouranos.ca/en/climate-phenomena/forest-fires-impacts>.
- [22] Canadian Climate Institute, "Fact Sheet: Climate Change and Wildfires."
- [23] "A Giant Carbon Shield," Boreal Conservation, 2024, <https://www.borealconservation.org/giant-carbon-shield>.
- [24] Canadian Climate Institute, "Fact Sheet: Climate Change and Wildfires."
- [25] "Insurance Bureau of Canada Provides Jasper Wildfire Recovery Update," Insurance Bureau of Canada, January 29, 2025, <https://www.ibc.ca/news-insights/news/insurance-bureau-of-canada-provides-jasper-wildfire-recovery-update>.
- [26] "Human Health Effects of Wildfire Smoke," Health Canada, June 6, 2024, <https://www.canada.ca/en/health-canada/services/publications/healthy-living/human-health-effects-wildfire-smoke.html>.

- [27] Health Canada, "Human Health Effects of Wildfire Smoke."
- [28] Public Health Agency of Canada, "Rapid Review."
- [29] Public Health Agency of Canada, "Rapid Review."
- [30] Henok Workeye Asfaw et al., "A Qualitative Study Exploring Barriers and Facilitators of Effective Service Delivery for Indigenous Wildfire Hazard Evacuees During Their Stay in Host Communities," *International Journal of Disaster Risk Reduction* 41 (2019): 1-10, <https://doi.org/10.1016/j.ijdr.2019.101300>
- [31] Amy Cardinal Christianson et al., "Wildland fire evacuations in Canada from 1980 to 2021," *International Journal of Wildland Fire* 33, no. 7 (2024): 1-18. <https://doi.org/10.1071/WF23097>.
- [32] Public Health Agency of Canada, "Rapid Review."
- [33] Public Health Agency of Canada, "Rapid Review."
- [34] "Forest Fires," Natural Resources Canada, December 23, 2025, <https://natural-resources.canada.ca/forests-forestry/wildland-fires/forest-fires>.
- [35] "Requests for Federal Assistance," Public Safety Canada, April 21, 2026, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/gvrnmnt-prtns-cntr/rqst-fdrl-sstssnc-en.aspx>.
- [36] "About the Government Operations Centre," Public Safety Canada, June 10, 2025, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/gvrnmnt-prtns-cntr/bt-en.aspx>.
- [37] "Wildland Fires," Natural Resources Canada, April 13, 2026, <https://natural-resources.canada.ca/forests-forestry/wildland-fires>
- [38] "Wildfire Management," Parks Canada, 2026, <https://parks.canada.ca/nature/science/conservation/feu-fire/incendies-wildfires>.
- [39] "Emergency Management Assistance Program," Indigenous Services Canada, April 15, 2026, <https://www.sac-isc.gc.ca/eng/1534954090122/1535120506707>.
- [40] "About," Canadian Interagency Forest Fire Centre, 2026, <https://ciffc.ca/about/>.
- [41] Canadian Red Cross. "About the Canadian Red Cross." 2026. <https://www.redcross.ca/about-us/about-the-canadian-red-cross>.
- [42] Public Health Agency of Canada, "Rapid Review."
- [43] Mika Rantanen et al., "The Arctic Has Warmed Nearly Four Times Faster than the Globe since 1979," *Communications Earth & Environment* 3(168), 2022, <https://doi.org/10.1038/s43247-022-00498-3>

- [44] M. Razu Ahmed and Quazi K. Hassan, "Occurrence, Area Burned, and Seasonality Trends of Forest Fires in the Natural Subregions of Alberta over 1959–2021," *Fire* 6, no. 3 (March 2023): 96, <https://doi.org/10.3390/fire6030096>
- [45] Maowei Bai et al., "Driving Factors and Future Trends of Wildfires in Alberta, Canada," *Fire* 7, no. 11 (November 2024): 419, <https://doi.org/10.3390/fire7110419>.
- [46] Cardinal Christianson et al., "Wildland Fire Evacuations in Canada from 1980 to 2021," WF23097.
- [47] Government of Alberta, *Disaster History in Alberta, 2003–2023* (Edmonton: Public Safety and Emergency Services, 2024), <https://open.alberta.ca/dataset/84ece3ce-97c0-4063-a07c-919b09f775d7/resource/e0e645c7-ab51-47b6-bd1b-48f4c5368c4c/download/pses-disaster-history-in-alberta-infographic-2003-2023.pdf>.
- [48] KPMG LLP, *May 2016 Wood Buffalo Wildfire Post-Incident Assessment Report*, prepared for Alberta Emergency Management Agency (Edmonton: Alberta Emergency Management Agency, May 2017), <https://open.alberta.ca/dataset/accfd27e-5e08-4f6c-8cd9-188be0e1e1b2/resource/541f276f-2fb4-4789-a41f-ef5ce7c0eec5/download/2016-wildfire-kpmg-report.pdf>.
- [49] "Indigenous Peoples in Alberta," Indigenous Services Canada, March 18, 2022, last modified August 7, 2025, <https://www.sac-isc.gc.ca/eng/1647614714525/1647614742912>
- [50] Matthew Brown and Mark Brown, "Estimates of Gross Domestic Product in Wildfire-Affected Areas During the 2023 and 2024 Wildfire Seasons," Statistics Canada, June 25, 2025, <https://doi.org/10.25318/36280001202500600004-eng>
- [51] Northwest Territories Bureau of Statistics, *2021 Census Population and Dwelling Counts*, Newstats 2022-04 (February 9, 2022), https://www.statsnwt.ca/census/2021/Census_Pop-and-Dwell.pdf
- [52] Executive and Indigenous Affairs, Government of the Northwest Territories, "Indigenous Governments of the Northwest Territories," n.d., <https://www.eia.gov.nt.ca/en/indigenous-governments>
- [53] CIFFC, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, May 28, 2026.
- [54] Canadian Wildland Fire Prevention and Mitigation Strategy: Taking Action Together, Canadian Council of Forest Ministers, 2024, https://www.ccfm.org/wp-content/uploads/2024/06/CWFPM-Strategy-EN-2024-06-05-FINAL-_V09.pdf.
- [55] Emergency Management Act, SC 2007, c 15, <https://laws-lois.justice.gc.ca/eng/acts/e-4.56/page-1.html>.

- [56] Federal Policy for Emergency Management: Building a Safe and Resilient Canada, Public Safety Canada, December 2009, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/plc-mrgnc-mngmnt/plc-mrgnc-mngmnt-eng.pdf>.
- [57] Federal Emergency Response Plan, Public Safety Canada, January 2011, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/mrgnc-rspns-pln/mrgnc-rspns-pln-eng.pdf>.
- [58] An Emergency Management Framework for Canada – Third Edition, Public Safety Canada, May 2017, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2017-mrgnc-mngmnt-frmwrk/index-en.aspx>.
- [59] Emergency Management Strategy for Canada: Toward a Resilient 2030, Public Safety Canada, 2019, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/mrgncy-mngmnt-strtg/mrgncy-mngmnt-strtg-en.pdf>.
- [60] Public Safety Canada, An Emergency Management Framework for Canada.
- [61] United Nations Declaration on the Rights of Indigenous Peoples Act, SC 2021, c 14, <https://laws-lois.justice.gc.ca/eng/acts/u-2.2/page-1.html>.
- [62] UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples, 2007, https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.
- [63] Government of Alberta, Protocol between the Government of Alberta and the Stoney Nakoda-Tsuut'ina Tribal Council for Discussions on Matters of Mutual Concern (Edmonton: Indigenous Relations, 2020), <https://open.alberta.ca/dataset/ec3129d7-d8d6-4fc2-a46e-a9d5524ae8ff/resource/244c4dbc-15d4-4b36-9bd4-137be4ffa01e/download/ir-protocol-between-government-of-alberta-and-stoney-nakoda-tsuut-ina-tribal-council-2020.pdf>.
- [64] Government of Alberta, Protocol between the Government of Alberta and the Blackfoot Confederacy for Discussion on Matters of Mutual Concern (Edmonton: Indigenous Relations, 2019), <https://open.alberta.ca/dataset/1ab96f7d-9062-4e23-80ca-3bde0c98617d/resource/88d8620e-bce6-42f5-b5bc-76f69f234f58/download/ir-signed-protocol-agreement-2019.pdf>.
- [65] Government of Alberta, Relationship Agreement between the Confederacy of Treaty Six First Nations in Alberta and the Minister of Indigenous Relations for Discussion on Matters of Mutual Concern (Edmonton: Indigenous Relations, 2022), <https://open.alberta.ca/dataset/dfbdf0dc-8ba9-4b1c-ade4-4f76df4c1b39/resource/982551f0-a13e-40a5-984f-8d2263197c41/download/ir-relationship-agreement-confederacy-of-treaty-six-first-nations-and-minister-indigenous-relati.pdf>.

- [66] Indigenous Services Canada, "Alberta Region Emergency Management Plan," Government of Canada, published February 20, 2026, last modified June 4, 2026, <https://www.sac-isc.gc.ca/eng/1771591948979/1771592093656>.
- [67] Government of Alberta, Alberta Emergency Plan (Edmonton: Alberta Emergency Management Agency, 2022), <https://open.alberta.ca/dataset/576d251a-b163-4924-805d-9a29f89a91ad/resource/04e48cb8-6303-4b5f-bf3d-eda96e584ec1/download/ma-alberta-emergency-plan-2022.pdf>.
- [68] Indigenous Services Canada, "Alberta Region Emergency Management Plan."
- [69] Government of Alberta, Public Safety and Emergency Services Annual Report 2024–25 (Edmonton: Public Safety and Emergency Services, 2025), <https://open.alberta.ca/dataset/2b228e33-89ac-42d0-9c60-218d9ffb9f30/resource/0808ace0-ea4b-4139-bded-c100af68639d/download/ps-es-annual-report-2024-2025.pdf>.
- [70] Confederacy of Treaty Six First Nations, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, February 20 2026.
- [71] Government of Alberta, Public Safety and Emergency Services Business Plan 2023–26 (Edmonton: Public Safety and Emergency Services, 2023), <https://open.alberta.ca/dataset/2073266e-e717-4ef1-9080-7fe50ddff14f/resource/75d82bb9-486f-4837-b435-740bc29f9fd4/download/ps-es-public-safety-and-emergency-services-business-plan-2023-26.pdf>.
- [72] Confederacy of Treaty Six First Nations, interview
- [73] Government of Alberta, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, February 24 2026.
- [74] Emergency Management Act, SNWT 2018, c 17, <https://www.justice.gov.nt.ca/en/files/legislation/emergency-management/emergency-management.a.pdf>.
- [75] City of Yellowknife, Yellowknife Community Wildfire Protection Plan Review (CWPP): Community Wildland Fire Protection Plan (2025), <https://www.yellowknife.ca/yellowknife-community-wildfire-protection-plan-2025>
- [76] Government of the Northwest Territories, "Community Wildland Fire Protection Plans (2018–2021)," Environment and Climate Change, <https://www.gov.nt.ca/ecc/en/services/wildfire-operations/community-wildland-fire-protection-plans/Community%20Wildland%20Fire%20Protection%20Plans%20-%20by%20community>.

- [77] Government of the Northwest Territories, Department of Municipal and Community Affairs, Northwest Territories Hazard Identification and Risk Assessment (2024), p.95, https://www.maca.gov.nt.ca/sites/maca/files/resources/northwest_territories_hazard_identification_risk_assessment.pdf.
- [78] Environment and Climate Change, "Resources," n.d., https://www.gov.nt.ca/ecc/en/resources?f%5B0%5D=field_resource_category%3A834.
- [79] Environment and Climate Change, "Prepare for Wildfire with FireSmart NWT," n.d., <https://www.gov.nt.ca/ecc/en/services/prepare-wildfire-firesmart-nwt/seven-disciplines-firesmart#:~:text=The%20FireSmart%20program%20helps%20reduce%20wildfire%20risks,in%20existing%20emergency%20response%20and%20neighborhood%20preparedness>.
- [80] Environment and Climate Change, "Wildfire Operations: Community Wildland Fire Protection Plans," n.d., <https://www.gov.nt.ca/ecc/en/services/wildfire-operations/community-wildland-fire-protection-plans>
- [81] Environment and Climate Change, Government of the Northwest Territories "Wildfire Operations: Community Wildfire Protection Plans by Community," n.d., <https://www.gov.nt.ca/ecc/en/services/wildfire-operations/community-wildland-fire-protection-plans/Community%20Wildland%20Fire%20Protection%20Plans%20-%20by%20community>
- [82] Emergency Management Act, SNWT 2018, c 17.
- [83] House of Commons, "From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities," Report of the Standing Committee on Indigenous and Northern Affairs, June 2018, 42nd Parliament, 1st Session, <https://www.ourcommons.ca/Content/Committee/421/INAN/Reports/RP9990811/inanrp15/inanrp15-e.pdf>
- [84] Kira M. Hoffman et al., "The Right to Burn: Barriers and Opportunities for Indigenous-Led Fire Stewardship in Canada," *Facets* 7 (2022): 464-481, <https://www.facetsjournal.com/doi/10.1139/facets-2021-0062>.
- [85] Shayna Mihalus et al. "Wildfire Management and Evacuation in Indigenous Communities in Canada and the United States: A Scoping Review," *International Journal of Disaster Risk Reduction* 100 (2024): 1-12, <https://doi.org/10.1016/j.ijdr.2023.104170>.
- [86] Office of the Auditor General of Canada, "Report 8: Emergency Management in First Nations Communities – Indigenous Services Canada," Reports of the Auditor General of Canada to the Parliament of Canada, 2022, https://www.canada.ca/content/dam/oag-bvg/2021-2024-reports/documents/parl_oag_202211_08_e.pdf.

- [87] Emergency and Disaster Management Act, SBC 2023, c 37, <https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/23037>.
- [88] Jocelyn Stacey, "Confronting Modern Disaster? British Columbia's New Emergency and Disaster Management Act," Peter A. Allard School of Law at the University of British Columbia Law Review, 2024, <https://researchers.allard.ubc.ca/en/publications/confronting-modern-disaster-british-columbias-new-emergency-and-d/>.
- [89] "B.C. Supports Implementation of Emergency Management Act, Keeping People Safe," British Columbia Government News, December 15, 2023, <https://news.gov.bc.ca/releases/2023EMCR0080-001992>.
- [90] Indigenous Services Canada, "Emergency Management Assistance Program."
- [91] "National All Hazards Emergency Management Plan," Indigenous Services Canada, June 4, 2026, <https://www.sac-isc.gc.ca/eng/1324572607784/1535123607689>.
- [92] "Emergency Management Service Agreements," Indigenous Services Canada, May 21, 2025, <https://www.sac-isc.gc.ca/eng/1669207681911/1669207720136>.
- [93] Indigenous Services Canada, "Emergency Management Service Agreements."
- [94] Métis Settlements Act, RSA 2000, c M-14.
- [95] Henry Robertson and Thomas Anderson, "Membership in a Métis Organization or Settlement: Findings from the 2021 Census of Population," Statistics Canada Catalogue no. 98-200-X (Ottawa: Statistics Canada, September 21, 2022), <https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021006/98-200-X2021006-eng.cfm>.
- [96] Otipemisiwak Métis Government, Otipemisiwak Métis Government Constitution (Edmonton: Otipemisiwak Métis Government, 2022), https://albertametis.com/app/uploads/2023/09/Otipemisiwak_Metis_Government_Constitution.pdf.
- [97] Métis National Council, Métis Nation Emergency Management Report (Ottawa: Métis National Council, 2025).
- [98] Otipemisiwak Métis Government, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, March 2 2026.
- [99] Otipemisiwak Métis Government of the Métis Nation within Alberta and The Resilience Institute, Mâmawi Nistam Ahkamîmowin Iyakohci Siwipana / Together First: Resilience Through Seasons — Climate Risk and Vulnerability Summary Report for Policy Makers (Edmonton: Otipemisiwak Métis Government, November 2025), https://albertametis.com/app/uploads/2025/11/Mamawi-Nistam-Climate-Risk-Summary-FINAL_Nov_2025.pdf.
- [100] Otipemisiwak Métis Government and The Resilience Institute, Mâmawi Nistam / Together First

- [101] Otipemisiwak Métis Government, Mâmawi Nistam Ahkamimowin Iyakohci Siwipana / Together First.
- [102] Métis National Council, Métis Nation Emergency Management Report.
- [103] Municipal and Community Affairs, "Emergency Management Organizational Portal," n.d., <https://www.maca.gov.nt.ca/en/services/emergency-management-organizations-portal/emergency-management>.
- [104] Executive and Indigenous Affairs, Government of the Northwest Territories, "Current Negotiations," n.d., <https://www.eia.gov.nt.ca/en/priorities/concluding-and-implementing-land-and-resources-and-self-government-agreements-2>
- [105] Government of the Northwest Territories, Department of Municipal and Community Affairs, After Action Review: Northwest Territories 2023 Wildfire Season (May 2025), [p.87] https://www.maca.gov.nt.ca/sites/maca/files/resources/nwt_after-action_review_-_bilingual.pdf
- [106] Emergency Management Act, SNWT 2018, c 17.
- [107] Emily Blake, "MLA Wants Indigenous Governments Involved in Emergency Decisions," Cabin Radio, August 29, 2023, <https://cabinradio.ca/147612/news/politics/mla-wants-indigenous-governments-involved-in-emergency-decisions/>
- [108] Office of the Auditor General of Canada, "Report 8."
- [109] Sonal Gupta, "Ottawa Falls Short on Emergency Response for First Nations as Climate Disasters Climb: Audit," Canada's National Observer, October 21, 2025, <https://www.nationalobserver.com/2025/10/21/news/ottawa-emergency-response-first-nations-isc-audit>.
- [110] Office of the Auditor General of Canada, "Report 8."
- [111] "Our Approach," Firesticks, 2024, <https://firesticks.org.au>.
- [112] "NSW Cultural Fire Strategy," Government of New South Wales, June 2, 2026, <https://www.environment.nsw.gov.au/topics/fire/nsw-cultural-fire-strategy>.
- [113] Office of the Auditor General of Canada, "Report 8."
- [114] "Disaster Mitigation and Adaptation Fund: Overview," Housing, Infrastructure and Communities Canada, August 8, 2024, <https://housing-infrastructure.canada.ca/dmaf-faac/index-eng.html>.
- [115] "How the DFAA Program Works (Beginning April 1, 2025)," Public Safety Canada, March 4, 2026, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rcvr-dsstrs/dsstr-fnncl-ssstnc-rrngmnts/2025/hw-dfaa-prgrm-wrks-bgnng-prl-1-2025-en.aspx>.
- [116] Public Safety Canada, "How the DFAA Program Works."
- [117] Hoffman et al., "The Right to Burn," 464–481.

- [118] "Reciprocity, Ecology, and Diversity in Fire Lab," Natural Resources Canada, March 6, 2025, <https://natural-resources.canada.ca/forests-forestry/wildland-fires/reciprocity-ecology-diversity-fire-lab>.
- [119] Hoffman et al., "The Right to Burn," 464–481.
- [120] Hoffman et al., "The Right to Burn," 464–481.
- [121] "Indigenous Fire Stewardship," Parks Canada, 2026, <https://parks.canada.ca/nature/science/conservation/feu-fire/autochtones-indigenous>.
- [122] Government of Alberta, Budget 2025: Fiscal Plan 2025–28 (Edmonton: Treasury Board and Finance, 2025), <https://open.alberta.ca/dataset/5ebd05dc-d598-440b-9da2-25f37cd99a49/resource/43bccd72-36fa-41a4-becd-cb8c28da9683/download/budget-2025-fiscal-plan-2025-28.pdf>.
- [123] Office of the Auditor General of Alberta, Provincial Hazard Assessment for Emergency Management (Edmonton: Office of the Auditor General of Alberta, September 2020), https://www.oag.ab.ca/wp-content/uploads/2020/12/oag-ma-hazard-assessment_emerg-mngt-sep2020.pdf.
- [124] Government of Alberta, Budget 2026: Fiscal Plan 2026–29 (Edmonton: Treasury Board and Finance, 2026), <https://open.alberta.ca/dataset/3393a7b5-07bf-4b9f-8aaf-a6d89273297b/resource/58a8d024-398f-482e-b1c2-81a754a97253/download/budget-2026-fiscal-plan-2026-29.pdf>.
- [125] Government of Alberta, Budget 2025: Fiscal Plan 2025–28.
- [126] Government of Alberta, Budget 2026: Fiscal Plan 2026–29.
- [127] Government of Alberta, Forestry and Parks Annual Report 2024–25 (Edmonton: Forestry and Parks, 2025), <https://open.alberta.ca/dataset/2dedbb29-e005-4802-bf6e-03bf77536add/resource/971986a2-35bb-4aa6-8316-05e3ba568a8a/download/fp-annual-report-2024-2025.pdf>.
- [128] Government of Alberta, Budget 2026 Capital Plan: Details by Ministry, 2026–29 (Edmonton: Treasury Board and Finance, 2026), <https://open.alberta.ca/dataset/3c46f857-aa60-430f-ba52-f9ec96fc8ccf/resource/238bb26f-22e2-4c9b-ad9e-25c0fc14d380/download/budget-2026-capital-plan-details-by-ministry-2026-29.pdf>.
- [129] Emergency Management Act, SNWT 2018, c 17.
- [130] Emergency Management Act, SNWT 2018, c 17, s 6.
- [131] Northwest Territories Emergency Management System: Annual Report 2025.

- [132] Government of the Northwest Territories, Northwest Territories Emergency Management System: Annual Report 2025,
https://www.maca.gov.nt.ca/sites/maca/files/resources/nwt_emergency_management_annual_report_2025.pdf.
- [133] Government of the Northwest Territories, Department of Finance, Main Estimates 2026-2027 (2026, https://www.fin.gov.nt.ca/sites/fin/files/resources/2026-27_main_estimates_final_online-compressed.pdf.pdf
- [134] City of Yellowknife, 2026 Our Yellowknife Budget: Readyng Today for a Stronger Tomorrow (Yellowknife: City of Yellowknife, 2026), p.77
<https://www.yellowknife.ca/consolidated-2026-budget>
- [135] "Emergency Management Placemat," Public Safety Canada, September 8, 2025,
<https://www.publicsafety.gc.ca/cnt/trnsprnc/brfng-mtrls/trnstn-bndrs/20250910-1/12c-en.aspx>.
- [136] Hoffman et al., "The Right to Burn," 464–481.
- [137] "Operation LENTUS," Department of National Defence Canada, May 19, 2026,
<https://www.canada.ca/en/departement-national-defence/services/operations/military-operations/current-operations/operation-lentus.html>.
- [138] Department of National Defence Canada, "Operation LENTUS."
- [139] Public Health Agency of Canada, "Rapid Review."
- [140] Lynne Keevers et al., "Supporting Recovery, Healing and Wellbeing with Aboriginal Communities of the Southeast Coast of Australia: A Practice-Based Study of an Aboriginal Community-Controlled Health Organisation's Response to Cumulative Disasters," BMC Health Services Research 24 (2024): 1-17, <https://doi.org/10.1186/s12913-024-11546-3>.
- [141] R. de Moraes Falleiro et al., "Wildfire Protection in Indigenous Lands of Brazil: The Role of Fire Brigades Programs," Humanities and Social Sciences Communications 13 (2026): 87,
<https://doi.org/10.1057/s41599-025-06390-7>
- [142] "Canadian Wildland Fire Information System," Natural Resources Canada, June 8, 2026,
<https://cwfis.cfs.nrcan.gc.ca/en/>.
- [143] "WildFireSat: A Canadian Operational Mission," Natural Resources Canada, May 6, 2026,
<https://natural-resources.canada.ca/forests-forestry/wildland-fires/wildfiresat-canadian-operational-mission>.
- [144] "Canada's Wildfire Blindspot: The Missing Data on Social Impacts," The Conference Board of Canada, December 15, 2025, <https://www.signal49.ca/wp-content/uploads/2022/10/canadas-wildfire-blind-spot-dec2025.pdf>.

- [145] "National Risk Profile: Strengthening Canada's All-Hazards Approach to Emergency Management," Public Safety Canada, August 7, 2026, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/ntnl-rsk-prfl/index-en.aspx#s3>.
- [146] Conference Board of Canada, "Canada's Wildfire Blindspot."
- [147] Conference Board of Canada, "Canada's Wildfire Blindspot."
- [148] ISC, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, March 24, 2026.
- [149] Emergency Management Act, RSA 2000, c E-6.8.
- [150] Government Emergency Management Regulation, Alta Reg 248/2007.
- [151] Local Authority Emergency Management Regulation, Alta Reg 203/2018.
- [152] Emergency Management Act, RSA 2000, c E-6.8.
- [153] Government of Alberta, Public Safety and Emergency Services Annual Report 2024–25.
- [154] Rural Municipalities of Alberta, RMA Wildfire Working Group Report (February 2025), <https://rmalberta.com/wp-content/uploads/2025/02/RMA-Wildfire-Working-Group-Report.pdf>.
- [155] Alberta Municipalities, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, April 1 2026.
- [156] Rural Municipalities of Alberta, interview by McGill University Max Bell School of Public Policy Policy Lab 2026 team, February 27 2026.
- [157] Confederacy of Treaty Six First Nations, interview.
- [158] Emergency Management Act, SNWT 2018, c 17.
- [159] Government of the Northwest Territories, After Action Review: Northwest Territories 2023 Wildfire Season.
- [160] Government of Northwest Territories, 2021 Spring Flooding After Action Review. (June 2023), https://www.maca.gov.nt.ca/sites/maca/files/resources/2021_spring_flooding_after_action_review.pdf
- [161] Colleen Mooney, Effectiveness of Stand Thinning as a Fuel Treatment in Jack Pine/Black Spruce (2012), Wildfire Operations Research, <https://www.gov.nt.ca/ecc/en/node/26502>
- [162] Stew Walkinshaw, Dave Schroeder, and Steven Hvenegaard, Evaluating the Effectiveness of FireSmart™ Priority Zones for Structure Protection (2012), Wildfire Operations Research, <https://www.gov.nt.ca/ecc/en/node/26499>
- [163] K. Young and S. I. G. Roher, "Exploring the Impacts of the 2023 Wildfire Evacuations in the Northwest Territories: A Grey Literature Review," International Journal of Circumpolar Health 84, no.1, (2025), <https://doi.org/10.1080/22423982.2025.2557701>

- [164] United Way Northwest Territories, *Resilient Together: Strengthening NWT Communities* (2025), [p.28], https://nwt.unitedway.ca/wp-content/uploads/sites/5/2025/07/UWNWT-Resilient-Together_Report_v1.pdf.
- [165] United Ways Northwest Territories. Interview by McGill University Max Bell School of Public Policy, Policy Lab 2026 Team. May 22, 2026.
- [166] Environment and Climate Change, "Resources."
- [167] Office of the Auditor General of Canada, "Report 8: Emergency Management in First Nations Communities – Indigenous Services Canada," *Reports of the Auditor General of Canada to the Parliament of Canada*, 2022, https://www.canada.ca/content/dam/oag-bvg/2021-2024-reports/documents/parl_oag_202211_08_e.pdf.
- [168] UNDRR, "Canada Wildfires, 2023."
- [169] William Nikolakis and Emma Roberts, "Wildfire Governance in a Changing World: Insights for Policy Learning and Policy Transfer," *Risk, Hazards, and Crisis in Public Policy* 13, no. 2 (2021): 144-164, <https://doi.org/10.1002/rhc3.12235>.
- [170] Emergency Management Act 2013 (Vic) (Act No. 73/2013), <https://content.legislation.vic.gov.au/sites/default/files/2025-10/13-73aa023-authorised.pdf>.
- [171] "IGEM Inquiry and Review Implementation Plans," Government of Victoria, April 19, 2022, <https://www.vic.gov.au/igem-inquiry-review-implementation-plans>.
- [172] IPCA Knowledge Basket, *Beyond Conservation: A Toolkit for Respectful Collaboration with Indigenous Peoples* (April 2023), <https://ipcaknowledgebasket.ca/resources/beyond-conservation-principles/#10GuidingPrinciples>
- [173] Wildfire Resilience Consortium of Canada, *WRCC Strategic Plan: A Bold Vision with a Strong Foundation*, 2025, <https://cdn.sanity.io/files/0eysxi5t/production/0ad15a92228a3c2375258f56286e7df4d646c166.pdf>
- [174] House of Commons, Standing Committee on Indigenous and Northern Affairs, *From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities*, 42nd Parl., 1st Sess., Report 15 (Ottawa: House of Commons, 2018), <https://www.ourcommons.ca/Content/Committee/421/INAN/Reports/RP9990811/inanrp15/inanrp15-e.pdf>.
- [175] Public Safety Canada, "Backgrounder: Wildland Fires," Government of Canada, last modified January 24, 2024, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/ntnl-rsk-prfl/bckgrndr-wldlnd-frs-en.aspx>.

- [176] FireSmart Canada, *Blazing the Trail: Celebrating Indigenous Fire Stewardship*, 2024, https://firesmartcanada.ca/wp-content/uploads/2024/06/Booklet_Blazing-the-Trail_Web-version.pdf.
- [177] First Nations Information Governance Centre, "The First Nations Principles of OCAP," accessed July 2026, <https://fnigc.ca/ocap-training/>.
- [178] Maggie Walter and Michele Suina, "Indigenous Data, Indigenous Methodologies and Indigenous Data Sovereignty," *International Journal of Social Research Methodology* 22, no. 3 (2019): 233-243, <https://doi.org/10.1080/13645579.2018.1531228>
- [179] Wildfire Resilience Consortium of Canada, *WRCC Strategic Plan: A Bold Vision with a Strong Foundation*, 2025, <https://cdn.sanity.io/files/0eysxi5t/production/0ad15a92228a3c2375258f56286e7df4d646c166.pdf>.
- [180] "Indigenous Guardians," Indigenous Leadership Initiative, 2026, <https://www.ilinationhood.ca/guardians>.
- [181] Social Ventures Australia Consulting, *Analysis of the Current and Future Value of Indigenous Guardian Work in Canada's Northwest Territories*, November 2016, <https://static1.squarespace.com/static/5f8367238502ed181766aaf0/t/5fb4067a20b4fb44c16568e1/1605633660632/value-in-indigenous-guardian-work-nwt.pdf>.
- [182] Hoffman et al., "The Right to Burn," 464-481.
- [183] R. de Moraes Falleiro et al., "Wildfire Protection in Indigenous Lands of Brazil," 87.
- [184] "Fire Stewardship," Indigenous Leadership Initiative, 2026, <https://www.ilinationhood.ca/fire-stewardship>.
- [185] Indigenous Leadership Initiative, *The Role of First Nations Guardians in Wildfire Response and Management: A Proposed National Strategy*, September 2022, <https://static1.squarespace.com/static/5f8367238502ed181766aaf0/t/6345b504eeaf036eac9acc78/1665512739046/Wildfire+Strategy+Report+-+draft+v5+%281%29.pdf>.
- [186] "Indigenous Guardians and Wildfire Management: Project Summary," Indigenous Leadership Initiative, 2026, <https://www.ilinationhood.ca/guardians-fire-summary>.
- [187] "First Nations National Guardians Network Takes Legal Action to Recover Funds," National Guardians Network Council, April 2, 2026, <https://rng-ngn.ca/news/first-nations-national-guardians-network-takes-legal-action-to-recover-funds/>.
- [188] Office of the Auditor General of Canada, "Report 8."
- [189] Public Safety Canada, *An Emergency Management Framework for Canada*.
- [190] Office of the Auditor General of Canada, "Report 8."
- [191] House of Commons, "From the Ashes."
- [192] Indigenous Leadership Initiative, "Fire Stewardship."

- [193] Confederacy of Treaty Six First Nations, interview.
- [194] Emergency Management, Confederacy of Treaty Six First Nations, interview.
- [195] Métis National Council, interview by McGill University Max Bell School of Public Policy Lab 2026 team, March 2 2026.
- [196] Métis National Council, interview.
- [197] Liam Gatensby, Scaling Outcomes-Based Funding for a Stronger Canada (Raven Outcomes, June 2026), <https://ravenimpact.org/wp-content/uploads/2026/06/RavenOutcomes-PolicyReport-June5.pdf>.
- [198] Nature Focus, interview by McGill University Max Bell School of Public Policy, Policy Lab 2026 team, June 12, 2026.
- [199] Felipe Larrain Bascunan, Dominic Molloy and Berend Sauer, "What Are Resilience Bonds and How Can They Protect Us Against Climate Crises?" Global Centre on Adaptation (24 July 2020), <https://gca.org/what-are-resilience-bonds-and-how-can-they-protect-us-against-climate-crises/>.
- [200] United Nations Office for Disaster Risk Reduction, "CAF Issues the First Resilience Bond for Latin America and the Caribbean with Support from UNDRR" UNDRR (14 November 2025), <https://www.undrr.org/news/caf-issues-first-resilience-bond-latin-america-and-caribbean-support-undrr>
- [201] Farinaz Motlagh et al., "Bonds for Disaster Resilience: A Review of Literature and Practice," International Journal of Disaster Risk Reduction 104 (2024): 104318, <https://doi.org/10.1016/j.ijdrr.2024.104318>.
- [202] First Nations Information Governance Centre, "The First Nations Principles of OCAP."
- [203] Canadian Mountain Network, 2022-2023 Annual Report: Advancing Reconciliation Through Research, 2023, https://braidingknowledgescanada.ca/wp-content/uploads/2025/02/annual-report-2023_en_4oct2023.pdf.
- [204] Indigenous Guardians Toolkit, "What Does a Program Cost?"
- [205] Indigenous Guardians Toolkit, "What Does a Program Cost?"
- [206] Indigenous Guardians Toolkit, "What Does a Program Cost?"
- [207] "Indigenous Guardians Projects 2024-2025," Environment and Climate Change Canada, December 11, 2024, <https://www.canada.ca/en/environment-climate-change/news/2024/09/indigenous-guardians-projects-20242025.html>.
- [208] "Grants and Contributions: Blood Tribe Fire Guardianship: Reigniting Kinship Relationships," Natural Resources Canada, 2025, <https://search.open.canada.ca/grants/record/nrcan-rncan,115-2024-2025-Q4-16715,current>.

- [209] Indigenous Leadership Initiative, "Indigenous Guardians."
- [210] Songhees Nation, "Land Referral Guardian – Job Posting," Accessed July 2026, <https://www.songheesnation.ca/files/2025-09-24-land-referral-guardian-job-posting.pdf>; Champagne and Aishihik First Nations, "Competition #25-26-49 Dákéyi kwák'änitá – "I watch our country" (CAFN Guardian), January 2026, <https://cafn.ca/job-posting/competition-25-26-49-dakeyi-kwak'anita-i-watch-our-country-cafn-guardian/>; Tsawout First Nation, "Indigenous Guardian Coordinator," n.d, <https://tsawoutfirstnation.talentnest.com/en/posting/209350>; Council of Yukon First Nations, "Stewardship Coordinator," Accessed July 2026, <https://www.yuwin.ca/jobs/536940062-stewardship-coordinator-at-council-of-yukon-first-nations>.
- [211] "Prescribed and Cultural Burns for Wildfire Resilience: Guidance, Costing and Examples for Municipalities," Green Municipal Fund, 2026, <https://greenmunicipalfund.ca/resources/prescribed-and-cultural-burns-wildfire-resilience>.
- [212] Indigenous Leadership Initiative, The Business Case for a National First Nations Guardians Network, May 28, 2021, https://rng-ngn.ca/wp-content/uploads/2024/04/NGN_Business-Case_Exec-Summary_May-28-2021-1.pdf.
- [213] Andreea Anastasiu, Eleanor Carter, and Mara Airoidi, Transforming Public Services: Key Findings from the Evaluation of the Life Chances Fund (Government Outcomes Lab, Blavatnik School of Government, University of Oxford, February 2026), https://assets.publishing.service.gov.uk/media/69a589ccbdca0a628ece17f2/Transforming_public_services_accessible_.pdf.
- [214] Maycomb Capital, "Maycomb Capital Community Outcomes Fund II: An Outcomes-Based Financing Investment Option Available on the ImpactAssets Investment Platform," Marin Community Foundation, January 2, 2025, <https://assets.marincf.org/pdfs/MCF-Maycomb-Fact-Sheet-01.02.25.pdf>.
- [215] Raven Outcomes, Raven Indigenous Outcomes Fund I: 2025 Fact Sheet (Raven Outcomes, 2025), https://cdn.prod.website-files.com/680bba6478e740671c2526d5/6814b8842f66facfb339bbd6_RavenOutcomes_FactSheet_Web.pdf.
- [216] An Emergency Management Framework for Canada – Third Edition, Public Safety Canada, May 2017, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2017-mrgnc-mngmnt-frmwrk/index-en.aspx>.
- [217] An Emergency Management Framework for Canada, 2017.
- [218] "Forest fires," Natural Resources Canada, December 23, 2025, <https://natural-resources.canada.ca/forests-forestry/wildland-fires/forest-fires>.

- [219] Emergency Management Act, SC 2007, c 15, <https://laws-lois.justice.gc.ca/eng/acts/e-4.56/page-1.html>.
- [220] "Requests for federal assistance," Public Safety Canada, April 21, 2026, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/gvrnmnt-prtns-cntr/rqst-fdrl-sstssnc-en.aspx>.
- [221] "About the Government Operations Centre," Public Safety Canada, June 10, 2025, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/gvrnmnt-prtns-cntr/bt-en.aspx>.
- [222] "Wildland fires," Natural Resources Canada, April 13, 2026, <https://natural-resources.canada.ca/forests-forestry/wildland-fires>.
- [223] "Wildfire management," Parks Canada, 2026, <https://parks.canada.ca/nature/science/conservation/feu-fire/incendies-wildfires>.
- [224] "Emergency management," Indigenous Services Canada, June 1, 2026, <https://www.sac-isc.gc.ca/eng/1309369889599/1535119888656>.
- [225] "Emergency Management Assistance Program," Indigenous Services Canada, April 15, 2026, <https://www.sac-isc.gc.ca/eng/1534954090122/1535120506707>.
- [226] "About," Canadian Interagency Forest Fire Centre, 2026, <https://ciffc.ca/about/>.
- [227] Rural Municipalities of Alberta, Bill 49: Public Safety and Emergency Services Statutes Amendment Act — RMA Member Resource (Edmonton: Rural Municipalities of Alberta, May 2025), <https://rmalberta.com/wp-content/uploads/2025/05/Bill-49-Member-Resource.pdf>.
- [228] Alberta, Bill 49, Public Safety and Emergency Services Statutes Amendment Act, 2025, 31st Legislature, 1st Session (Edmonton: Legislative Assembly of Alberta, 2025), https://docs.assembly.ab.ca/LADDAR_files/docs/bills/bill/legislature_31/session_1/20230530_bill-049.pdf.
- [229] Government of Alberta, Alberta Wildfire Mitigation Strategy (Edmonton: Forestry and Parks, 2026), <https://open.alberta.ca/dataset/a205dcde-1f02-4a23-a306-1416bd25683f/resource/e135d79c-2bbb-4481-9962-da4a30922652/download/fp-alberta-wildfire-mitigation-strategy-2026.pdf>.
- [230] Government of Alberta, Public Safety and Emergency Services Annual Report 2023–24 (Edmonton: Public Safety and Emergency Services, 2024), <https://open.alberta.ca/dataset/2b228e33-89ac-42d0-9c60-218d9ffb9f30/resource/15e58606-1375-4070-97e2-b331fc44cea2/download/pses-annual-report-2023-2024.pdf>.

- [231] Emergency Management Act, RSA 2000, c E-6.8.
- [232] Government Emergency Management Regulation, Alta Reg 248/2007.
- [233] Local Authority Emergency Management Regulation, Alta Reg 203/2018.
- [234] Forest and Prairie Protection Act, RSA 2000, c F-19.
- [235] Municipal Government Act, RSA 2000, c M-26.
- [236] Local Authority Emergency Management Regulation, Alta Reg 203/2018.
- [237] Rural Municipalities of Alberta, RMA Wildfire Working Group Report (Edmonton: Rural Municipalities of Alberta, February 2025), <https://rmalberta.com/wp-content/uploads/2025/02/RMA-Wildfire-Working-Group-Report.pdf>.
- [238] Assembly of First Nations, Closing the Infrastructure Gap by 2030: A Collaborative and Comprehensive Cost Estimate Identifying the Infrastructure Investment Needs of First Nations in Canada, Summary Document (Ottawa: Assembly of First Nations, December 2023), <https://afn.bynder.com/m/4cefcc8de0fbd2d5/original/Closing-the-Infrastructure-Gap-by-2030-Summary-Document.pdf>.
- [239] Rural Municipalities of Alberta, Asset Deficit Summary Report (Edmonton: Rural Municipalities of Alberta, November 2024), https://rmalberta.com/wp-content/uploads/2024/11/Asset-Deficit-Summary_0.0.pdf.
- [240] Government of Alberta, Alberta Emergency Plan (Edmonton: Alberta Emergency Management Agency, 2022), <https://open.alberta.ca/dataset/576d251a-b163-4924-805d-9a29f89a91ad/resource/04e48cb8-6303-4b5f-bf3d-eda96e584ec1/download/ma-alberta-emergency-plan-2022.pdf>.
- [241] Government of Alberta, Provincial Recovery Framework (Edmonton: Alberta Emergency Management Agency, 2021), <https://open.alberta.ca/publications/provincial-recovery-framework>.
- [242] Government Emergency Management Regulation, Alta Reg 248/2007.
- [243] Government of Alberta, Alberta Emergency Plan (Edmonton: Alberta Emergency Management Agency, 2022), <https://open.alberta.ca/dataset/576d251a-b163-4924-805d-9a29f89a91ad/resource/04e48cb8-6303-4b5f-bf3d-eda96e584ec1/download/ma-alberta-emergency-plan-2022.pdf>.
- [244] Alberta Municipalities, AEMA's Hazard Identification and Risk Assessment (HIRA): Public Risk Conference Presentation (Edmonton: Alberta Municipalities, 2024), <https://www.abmunis.ca/system/files/2024-04/HIRA%20AM%20Public%20Risk%20Conference%20Presentation.pdf>.

- [245] Office of the Auditor General of Alberta, Provincial Hazard Assessment for Emergency Management (Edmonton: Office of the Auditor General of Alberta, September 2020), https://www.oag.ab.ca/wp-content/uploads/2020/12/oag-ma-hazard-assessment_emerg-mngt-sep2020.pdf.
- [246] Protected Areas Act, SNWT 2019, c 11, <https://www.justice.gov.nt.ca/en/files/legislation/protected-areas/protected-areas.a.pdf>
- [247] Forest Act, Bill 74, 19th Legislative Assembly, 2nd Session (Northwest Territories, 2023), https://www.justice.gov.nt.ca/en/files/bills/19/2023.2/Bill_74.pdf.
- [248] Government of the Northwest Territories, Northwest Territories Emergency Plan (Yellowknife: Government of the Northwest Territories, 2024), https://www.maca.gov.nt.ca/sites/maca/files/resources/nwt_emergency_plan_-_april_2024.pdf
- [249] Executive and Indigenous Affairs, "Current Negotiations."
- [250] Tlicho Land Claims and Self-Government Act, SC 2005, c 1, https://laws-lois.justice.gc.ca/eng/annualstatutes/2005_1/FullText.html
- [251] Sahtu Dene and Métis Land Claim Settlement Act, SC 1994, c 27, <https://laws-lois.justice.gc.ca/eng/acts/s-1.5/page-1.html>
- [252] Gwich'in Land Claim Settlement Act, SC 1992, c 53, <https://laws-lois.justice.gc.ca/eng/acts/G-11.8/page-1.html>
- [253] First Nations Information Governance Centre, "The First Nations Principles of OCAP."
- [254] "Mission and History," Indigenous Leadership Initiative, 2026, <https://www.ilinationhood.ca/mission-history>.
- [255] "Indigenous Guardians," Indigenous Leadership Initiative, 2026, <https://www.ilinationhood.ca/guardians>.
- [256] "Fire Stewardship," Indigenous Leadership Initiative, 2026, <https://www.ilinationhood.ca/fire-stewardship>.
- [257] "Indigenous Guardians projects 2024-2025," Environment and Climate Change Canada, December 11, 2024, <https://www.canada.ca/en/environment-climate-change/news/2024/09/indigenous-guardians-projects-20242025.html>.

- [258] Songhees Nation, "Land Referral Guardian – Job Posting," Accessed July 2026, <https://www.songheesnation.ca/files/2025-09-24-land-referral-guardian-job-posting.pdf>; Champagne and Aishihik First Nations, "Competition #25-26-49 Dákéyi kwāk'ānità – "I watch our country" (CAFN Guardian), January 2026, <https://cafn.ca/job-posting/competition-25-26-49-dakeyi-kwak'anita-i-watch-our-country-cafn-guardian/>;
- [259] Tsawout First Nation, "Indigenous Guardian Coordinator," n.d, <https://tsawoutfirstnation.talentnest.com/en/posting/209350>; Council of Yukon First Nations, "Stewardship Coordinator," Accessed July 2026, <https://www.yuwin.ca/jobs/536940062-stewardship-coordinator-at-council-of-yukon-first-nations>.
- [260] Kira M. Hoffman et al., "The right to burn: barriers and opportunities for Indigenous-led fire stewardship in Canada," *Facets* 7 (2022): 464-481, <https://www.facetsjournal.com/doi/10.1139/facets-2021-0062>.
- [261] Joy SpearChief-Morris, "Kainai Nation ignites the first Indigenous fire guardians program in Canada," June 12, 2025, <https://thenarwhal.ca/kainai-fire-guardians/>.
- [262] "Grants and Contributions: Blood Tribe Fire Guardianship: Reigniting Kinship Relationships," Natural Resources Canada, 2025, <https://search.open.canada.ca/grants/record/nrcan-rncan,115-2024-2025-Q4-16715,current>.
- [263] "Grants and Contributions: Blood Tribe Fire Guardianship: Reigniting Kinship Relationships," Natural Resources Canada, 2025, <https://search.open.canada.ca/grants/record/nrcan-rncan,115-2024-2025-Q4-16715,current>.
- [264] "Prescribed and cultural burns for wildfire resilience: Guidance, costing and examples for municipalities," Green Municipal Fund, 2026, <https://greenmunicipalfund.ca/resources/prescribed-and-cultural-burns-wildfire-resilience>.
- [265] Indigenous Leadership Initiative, The Business Case for a National First Nations Guardians Network, May 28, 2021, https://rng-ngn.ca/wp-content/uploads/2024/04/NGN_Business-Case_Exec-Summary_May-28-2021-1.pdf