The Role of First Nations Guardians in Wildfire Response & Management

A PROPOSED NATIONAL STRATEGY



INDIGENOUS LEADERSHIP INITIATIVE

In partnership with:

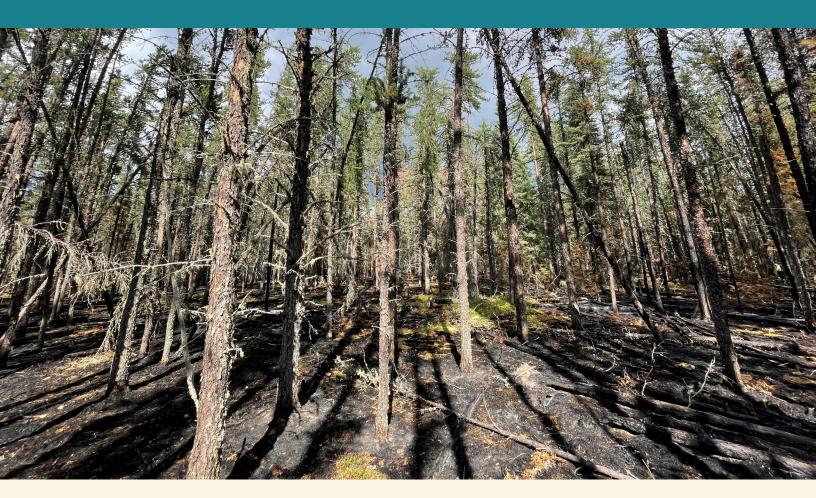
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Introduction

Every year, wildfires erupt in Canada's vast forests. Often driven by lightning or increased industrial activity, these fires can consume many millions of hectares of boreal and other forests annually.

On average, overall area burned is increasing in Canada, especially in the western and northern parts of the country. Most scientists attribute this to climate change, which is affecting ecosystems across the country.

The combined effects – of fire, melting permafrost, changing habitat, invasive species, extreme weather events, and unseasonably warmer temperatures with variable precipitation – are profound and disturbing. These impacts are made worse as development expands into fire-prone areas, where decades of fire suppression has resulted in significant fuel loading across the country. Crown governments and their institutions cannot react quickly enough to fully meet the challenges, particularly in sparsely populated, largely Indigenous, areas of Canada.

In the face of a rapidly changing climate and declining biodiversity, Indigenous-led conservation and stewardship offer hope for the future and powerful models for addressing both environmental challenges and reconciliation. Guardians lie at the heart of this approach; they are trained experts working on key

environmental, economic, cultural, and social priorities identified by their Nations and driven by the obligation to the land itself.

"Guardians", an umbrella term used to describe the hundreds of employees who work for First Nation governments and notforprofit organizations, undertake a variety of roles and responsibilities for the protection of lands and resources within their territories.

Located in over 70 First Nation communities across
Canada, they could play an essential role in addressing
increasing wildfire in the boreal forest and beyond, as part of
landscape-level conservation strategies that also contribute
to Canada's nature conservation and climate goals.

The national strategy presented here explores the potential for an expanded role for Guardians in wildfire management. It examines the roles Guardians could play in fire crew positions and delineates a pathway for First Nations leadership to become involved in management decisions related to forest ecosystems.

These roles would enable First Nations to fulfill their cultural responsibilities while permitting the exchange and use of Indigenous perspectives and knowledge for the benefit of all Canadians. Ensuring that First Nations are integral to designing and managing their environments, while finally recognizing Indigenous knowledge and science as related to fire, is an essential step to achieving the goal of reconciliation.



This document outlines the current context for action, including changing fire patterns across the country, current challenges faced by First Nation in asserting their rights within the realm of fire management, and the growing role of Guardians in supporting their communities through wildfire prevention, mitigation, planning, preparedness, response, and recovery.

Potential roles for First Nations Guardians in fire management are explored, as well as priority needs identified by Guardians themselves to build the capacity required to fulfil these roles. Finally, the document suggests immediate actions that could help build the partnerships, knowledge and momentum required to advance this work.

The strategy, developed by the Indigenous Leadership Initiative, as part of a joint project with the Centre for Northern Conservation, International Boreal Conservation Campaign, and the McCall MacBain Foundation, is offered as a draft for discussion with Guardians, First Nations, fire agencies, and others, including researchers and philanthropists. Further dialogue and early efforts on the ground will help to refine it.

Context



A Changing Climate

In most regions of Canada, overall increases in fire intensity, frequency and severity can be attributed to increased temperatures, decreased precipitation, and more variability in extreme weather events.^{1,2} These changes are often occurring more quickly than current fire risk management systems can adapt to, particularly for Indigenous territories.

According to Canada's Changing Climate Change Report,³ the warmer climate will intensify fire extremes due to an increase in regional and seasonal droughts and more extreme temperatures which will in turn contribute to increased risk of wildfire.¹ Predicting where and when the next major wildfire will occur is improved through an understanding of weather and climate variabilities, information that is made public through Regional Perspective Reports developed by Natural Resource Canada that provide information such as temperature projections, bioclimatic envelope model for redistribution of ecosystems type models and other vulnerabilities.³

Due to a limited ability to predict wildfire occurrence using climate data alone, more research is needed to determine how climate change will impact fire activity on Indigenous territories at regional and national scales. This must be done in partnership with local First Nations so that Indigenous science is more effectively harmonized with western science. Guardians can play an active role in monitoring current climate change impacts, identifying factors that contribute to wildfire risk, frequency, duration, and intensity.

Impacts of Wildfire on Indigenous Communities

First Nation communities are on the front lines of the devastating impacts of increasing frequency and severity of fires across Canada. With over 600 First Nation communities across the country, action must be taken to address this growing concern.

In fact, the frequency and severity of wildfires across Canada's largest biome is causing disproportionate impacts on Indigenous communities, largely due to their remoteness, lack of capacity and adequate funding, and the vulnerability of their infrastructure. This has led to increased community evacuations of remote communities throughout the boreal forest.⁴ Approximately 60% of First Nation communities in Canada are in, or intersect, the Wildland Urban Interface. Between 1980 and 2021, 45% of all wildfire evacuation incidents involved Indigenous communities.⁵

Unfortunately, only a fraction of First Nations currently have the capacity to mitigate, respond to and manage wildfire; exploring the potential role of emerging Guardian programs therefore offers one of the most immediate and available avenues to increase preparedness capacity where it's needed the most.⁶

Calls to improve prevention and mitigation, and to bolster wildfire response strategies, apply to all communities across Canada, but nowhere is the need more acute than for Indigenous communities. Moving forward, these strategies can be defined through forest management plans in partnership with First Nation communities, adding capacity where the community sees fit.⁷

Carbon and Fire

Forests play an essential role in both storing and cycling carbon, particularly for the Boreal region. The global Boreal region is the world's largest terrestrial carbon storehouse, containing almost twice as much carbon per unit as tropical forests.⁸



To avoid accelerating climate change, it is critical to actively manage forests and their resources for wildfire resilience, avoiding large catastrophic events while mitigating increases in intensity, frequency, and severity where possible.

Indigenous fire stewardship provides nature-based climate solutions by ensuring diversity of species and reducing fuel loads through periodic burns — and provides a toolbox to help Canada become a global leader in climate change adaptation. It is therefore essential that First Nations participate in all aspects of planning and management of their traditional territories.

In some regions, First Nations peoples traditionally used fire to clean up dead and downed surface litter, allowing new plants and undergrowth to flourish. However, government policies that sought to extinguish all fires has resulted in accumulating surface litter which creates a fire hazard to our communities. The disruption of natural and cultural burning practices, in favour of conventional fire management over the past 70 years, has contributed significantly to the tinderbox conditions faced by many First Nations. While cultural burning may not have been practiced in all regions or by all First Nations people, Guardians working in fire management should understand the principles involved in fire stewardship, and work towards supporting other communities to restore cultural burning where it once existed.

Nature-based climate solutions can offer important opportunities for implementation of climate and fire-resilient actions. For example, Canada's 2 Billion Trees Commitment (2021)⁹ is a genuine opportunity for Guardians to lead efforts to restore degraded landscapes across all regions in Canada, and is also a genuine and tangible reconciliation action.

It is important to integrate a fire-resiliency approach to all land management processes – from land use planning, to protected areas, to forest management planning and environmental assessment. In stewarding our own local fire regime, we not only protect our own livelihoods, but also protect vital carbon stores that are essential for life on earth.

Rights and Reconciliation

Canada is in a process of reckoning with its colonial past and reconciling its relationship with Indigenous Peoples on whose land Canada was built. Prime Minister Justin Trudeau has said:

"No relationship is more important to Canada than the relationship with Indigenous Peoples. Our Government is working together with Indigenous Peoples to build a nation-to-nation, Inuit-Crown, government-to-government relationship – one based on respect, partnership, and recognition of rights." ¹⁰

The Right Honourable Justin Trudeau, P.C., M.P., 2017

The First Nations defense of Indigenous rights and title in Canada has always been rooted in a movement to ensure that our territories will continue to support Indigenous ways of life. As stated in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)¹¹, Article 18:

"Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions."

To strengthen Indigenous Nationhood, it is therefore essential that First Nations and their communities participate as much as possible in the planning, decision-making and management of all their lands and waters.

Guardians can make a significant contribution to these efforts. For example, Guardians have an important role in establishing and maintaining deep relationships with other governments and land users, effectively acting as "agents of reconciliation" who can help articulate concerns and perspectives of their Nations. In a practical sense, the Guardians movement is an opportunity for non-Indigenous governments to reach durable solutions while advancing the needs and aspirations of the First Nation communities themselves. Although fire management is only one aspect of lands and resource management, it could become a meaningful outlet for improving Nation-to-Nation relationships.

"... Guardians, as protectors, as we protect our families. We make it a family thing because for me, I come from a very strong matriarchal society in my culture. Like here, I've noticed that women are leading this movement. We have to call it a movement because we have to keep moving and telling people, telling the stories, telling the impacts, everything that is related to protecting our environments, our territories, our communities. We have to be diligent into that way of informing and educating our neighbors"

Elder Roland Duquette, speaking to First Nations Guardians at the "Rekindling our Relationship with Fire" virtual workshop [October 2021]



The Growing Movement of Indigenous-led Conservation and Stewardship

The growing movement of conservation and First Nations Guardians offers an unprecedented opportunity for First Nations to grow their capacity to engage in wildfire management to contribute and, where appropriate, lead in the protection and restoration of resiliency in their territories.

The movement of Indigenous-led conservation and stewardship has been building over the past two decades. In fact, most established protected areas in Canada in the last 20 years — such as Edéhzhíe, Thaidene Nëné, Ts'udé Nilįné Tuyeta, Akamuiapishku/Mealy Mountains National Park, and Torngat National Park — have been led or co-led by Indigenous Nations.

In addition, Guardians programs have exploded in the past few years (in part due to expanded funding), from approximately 20 programs in 2017, to over 70 recognized programs today. With the announcement of additional funds for Indigenous-led conservation in Federal Budget 2021, the ILI expects that the number of Guardian programs will continue to grow exponentially. Through this lens, trained and equipped Guardians could undertake fire-management projects and activities that would provide much needed revenue for Guardian programs, improving their sustainability.

An important development in the movement of Guardians across Canada is the building up of the First Nations National Guardians Network. While the schedule has been affected by the pandemic, the ILI expects that the Network will finally launch in the fall of 2022. Over time, this Network could be a powerful factor in support of the expanded role of Guardians in wildfire response and management.

The ILI's overall goal for Guardians is to see that all First Nations and their communities that desire Guardian programs have the opportunity and support, including financial support, to be able to build them.

Wildfire Management in Canada

Wildfire Response

Emergency response to wildfires is the responsibility of federal, provincial, and territorial Crown governments. The activities carried out to prepare for (and respond to) wildfires fall under the authority of federally or provincially mandated environment and/or public safety agencies. Each province and territory, except for Nunavut, has a fire management agency. Fires that occur

within the boundaries of National Parks, or on land owned by the Department of National Defence, are the responsibility of their respective departments and managed differently based on their mandate.

These agencies are members of the Canadian Interagency Forest Fire Centre Inc.¹² (CIFFC), an independent not-for-profit corporation that coordinates mutual aid requests between member agencies and helps facilitate the transfer of resources across Canada. The system is designed so that when one region experiences a higher degree of forest fire activity, CIFFC member agencies can request and receive assistance from other provinces, territories, or countries as necessary.



Although CIFFC is responsible for the

coordination of interagency resource sharing among its members, each jurisdiction operates independently and reports to its own elected officials responsible for forest management. In addition to responsibilities placed on CIFFC in 2022 (including the coordination of national wildfire mitigation and prevention projects), CIFFC works with member agencies to develop nationally approved training standards that are recognized across the country and outlines the minimum certification and qualification for wildland firefighters on interprovincial or international deployment. This "typing" of resources has had an impact on how local emergencies are managed and, more pointedly, on how local and regional contracts are granted.

Currently there is no First Nations representation at the CIFFC table. As a result, wildfire agencies are depended upon to represent the needs of all First Nation communities responsibly and adequately. This is a significant barrier to accessing appropriate training programs for First Nations wildland firefighters who are not affiliated with a CIFFC-recognized agency.

While there are subtle differences between CIFFC member agencies, they all prioritize the safety and protection of human life. The second priority varies slightly across jurisdictions, but generally provides for the protection of communities, public infrastructure, and commercial timber, where applicable.

In areas where timber values have been identified by the province or territory, fires will be fully suppressed so long as public safety is provided for first. Full suppression activities may also occur in areas that hold significant cultural or societal value. Fire management areas, sometimes referred to as "response zones", are prioritized based on the mandate of the jurisdiction. Wildfires that fall outside the full and/or modified response zones typically are monitored with little to no intervention. Fires occurring in observation zones often pose a threat to outlying structures, such as trappers' cabins, trails, and portages. Inventories of outlying structures existing on a particular landscape,

and how to approach values protection, are detailed within a "Values At Risk" database. This database is an important tool for fire managers in deciding when and where to deploy sprinkler kits to protect structures, while letting the fire burn in other areas with no further intervention.

As interprovincial and international mobilization of fire crews increases in response to the growing concern about wildfires across Canada, there has also been a marked decrease in the number of local First Nations being hired for this important work. Indeed, CIFFC agencies have worked hard to standardize the qualifications for interprovincial mobilization of fire crews, but these policies have become an indirect impediment for First Nations firefighters who are not represented at the CIFFC table.

Indigenous communities face a disproportionate risk of wildfire with over 60% of First Nation reserves located



in remote and isolated areas across the boreal forest.⁴ The Assembly of First Nations indicates there are 114 communities without road access, which severely limits the mobilization of resources needed to evacuate and protect remote and isolated communities.

Fires at the Wildland Urban Interface (WUI) are made worse by the presence of continuous forest fuels between buildings, providing a path for wildfire to travel from structure to structure. Wildland firefighters are not trained or equipped to deal with structural fires, and therefore do not engage fires that involve buildings, vehicles, or other infrastructure. Instead, wildland firefighters working at the WUI focus on limiting spread by clearing vegetation and deploying sprinkler kits on buildings, and potentially burning off the remaining fuels in the path of an incoming wildfire. Preparedness and interagency cooperation are key to the success of any WUI fire incident. However, funding has been inadequate, leaving communities unprepared for the increased frequency and severity of wildfires.¹³

Forest Management

Forest management on First Nation reserves is the responsibility of the federal government, due to the Lands Transfer Act, 1930. Wildfire and forest management on public lands are the responsibility of the provincial or territorial governments. Responsibility includes, but is not limited to, drafting and implementation of legislation, regulation and policies related to forest management, and the determination of the annual allowable cut. Forest tenure varies by province and territory in that some annual allowable cuts are area-based while others are volume-based.

Ecosystem-based forest management has been practiced by First Nations communities for millennia, with the goal of long-term sustainability of ecosystem function and services while meeting social, economic, and cultural needs. First Nations authority and responsibility for the care of their lands, and the intrinsic value of resilience, is inherent in this approach.

While reserve lands in Canada represent only a fraction of its area, First Nations assert that they retain both Title and Rights, and therefore responsibilities, to their traditional lands and waters. For example, the Innu's traditional territory, called "Nitassinan", is known to be the entire Québec-Labrador Peninsula, and is over 300,000 km² in size. It is essential to recognize, and provide opportunity for, leadership by First Nations in fire response and management over their whole traditional territory.

Although most First Nation communities are in forested lands, participation in forest management is primarily accessed through on-reserve forestry, tenure agreements, sustainable forest management certification, and government consultation processes. Some capacity and economic benefits have accrued from this but for most First Nation communities active involvement at the decision-making level is limited, and ultimate authority is held at the provincial or territorial level. First Nations need to increase expertise, capacity, and decision-making in all aspects of forest management, including strategies of fire risk reduction and the inclusion of Indigenous values.

Canadian forest ecosystems will be greatly affected by climate change, which will impact regions at varying rates depending on regional features. For example, in the long-term boreal forests will have increased productivity though this could be constrained by increased fire risk. Due to the high degree of diversity of forest types and ecosystems across Canada, no one recommendation or method will fit all situations. Research is/will be needed on activities that will best suit the requirements of a given region.

Forest managers will need to focus on collaborating with First Nations, through Guardians, on strategies to manage future forests and to reduce wildfire risk. New strategies will need to be adapted to local eco-systems, and address their variation, environmental conditions, and cultural needs.

Challenges Facing First Nations in Participating in Fire Management



There are several systemic issues facing First Nations communities interested in participating more fully in fire management. These issues stem from the complex jurisdictional constraints that limit First Nations' access to, and participation in, fire management and emergency services.

Collectively, First Nation reserves make up only 0.2% of Canada's landmass, meaning most wildfires that impact Indigenous communities originate from Crown lands where First Nations often have little decision-making power. On reserve, jurisdiction is defined by the Indian Act and fire and emergency services are administered by Indigenous Services Canada. As a federal department not directly involved in fire or emergency management, Indigenous Services Canada defers to provincial and territorial agencies for the provision of emergency services on reserve. This can result in an unbalanced, inappropriate, and inadequate approach to emergency response, and more instances in which First Nation communities are neglected during times of crisis.

The Canadian Council of Forest Ministers identified this as a significant issue; unlike municipal jurisdictions across Canada, First Nations do not have the same access to mutual aid from neighbouring communities (2016). Federal-provincial MOUs that define the roles and responsibilities for fire and emergency management often make provisions for hiring an Indigenous workforce where feasible. Over time this has resulted in a diminished capacity for First Nations to deal with local emergencies.

Government underfunding is another key theme in many publications on this subject, underscored by a recent House of Commons report, *From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities*, ¹⁴ which provides specific recommendations to Indigenous Services Canada, including:

- Work with First Nations, provincial, and territorial governments to clarify the roles and responsibilities for emergency management on reserves;
- Provide adequate funding for emergency preparedness for First Nations;
- Include communities in the review, development, and update of local emergency plans;
- Adequately fund and support training and employment opportunities for local communities in fire prevention and fire suppression;
- Include First Nations in emergency coordination activities agreements, including mutual aid; and
- Work with fire/emergency service providers to include First Nations' expertise and cultural knowledge in fire management.



In addition, one of the most striking realities facing First Nations is that there is no mechanism for requesting mutual aid in emergency situations. Other levels of government – whether provincial, federal, or municipal – can request emergency resources through Mutual Aid and Resource Sharing agreements. Through these MOUs, lending agencies can authorize crew/resource deployment into other jurisdictions and recover the costs later. This is in stark contrast to First Nations who must request assistance through a Band Council Resolution to seek approval from Indigenous Affairs Canada, who in turn will contract an emergency service provider – typically the regional provincial/territorial agency responsible for fire management outside of reserve boundaries. It is a contractual relationship between Crown governments that was established without consultation or consideration for First Nation communities.

"Indigenous peoples have an inherent right to manage our territories, which ties into our individual and collective health. That's why reclaiming our role in fire management is about so much more than fire – it's about the recognition of sovereignty and autonomy over our territories and cultural practices."

Dr. Amy Cardinal-Christianson

Towards a National Strategy



As outlined above, many First Nation communities are increasingly vulnerable to more frequent and severe forest fires because of the evolution of wildfire and forest management practices, acute staffing shortages, and global climate change.

At the same time, the Guardians movement, which is emerging as an expression of Indigenous nationhood from coast to coast to coast, offers a powerful model for change and reason for hope.

First Nations Guardians are uniquely placed to provide front-line emergency response, support to broader fire and forest management, and environmental monitoring capacity. There is no better opportunity to increase Indigenous capacity in fire management than through Guardians.

The vision underpinning this proposed strategy is:

All First Nation communities who want to engage Guardians on the ground to support them in managing and responding to wildfires have the capacity, training, and resources to do so.

This section outlines a three-pronged strategy that includes roles for Guardians in:

- 1. Emergency response;
- 2. Fire and forest management; and
- 3. Knowledge and science.

Emergency Response

Given the scale of the pressures placed upon emergency systems because of climate change, there is considerable scope to expand the role of Guardians in emergency response at the local, regional, and national levels. Over time, Guardians could provide many of the same services currently offered by Crown agencies.

Local efforts would focus on ensuring that individual communities or areas (such as Indigenous Protected and Conserved Areas, or IPCAs), have some level of fire management capacity, such as local crews or individual Guardians who can supervise volunteers. Access to training in all-

hazard emergency response and the development of incident command systems and action plans to ensure that objectives, roles and responsibilities are clearly identified will be key to the success of these efforts.

Regional First Nation organizations and/or Guardians networks could support local operations and play a significant role in the coordination of mutual aid between communities. They could also provide supports such as access to personal protective equipment, appropriate transportation, camping gear, commissary systems, fuel cards, and communications.



National-level work could include training and mobilization of 20-person, Type-1 and Type-2

sustained action crews, national access to specialized resources (such as high-volume trailers and first responder/medic vehicles), and access to immediate and appropriate air support for First Nation communities.

Other initiatives to improve and enhance emergency preparedness over time could include a national training database and information system, and work to establish and maintain a national cache of both fire equipment (pumps, hoses, hand tools, etc.) and purpose-built vehicles that could be accessed on an as-needed basis. A national inventory of fire resources available to First Nation communities could also be developed to support these efforts.

Fire and Forest Management

Effective fire management includes not only the emergency response efforts outlined above but also an equal focus on prevention, mitigation, and restoration.

As such, this strategy aims to empower Guardians to exercise fire and forest management responsibilities both within IPCAs and more broadly on the landscape.



Other initiatives that could contribute to enhanced fire and forest management, along with attendant benefits for both climate and biodiversity, include:

- Participation by Guardians in the development of fire management plans (to support decision-making on when and where fires should burn, water sources to be used, areas to be avoided, etc.);
- Participation by Guardians in the development of forest/land use management plans (support
 decision-making on pre- and post-harvesting silviculture activities to increase forest resilience),
 road layout, innovative harvesting methods, and afforestation and recovery on non-productive
 sites and recently burned sites. Silviculture activities would include identifying culturally relevant
 species that promote fire resiliency and address habitat needs;
- Ongoing partnerships with fire agency partners to monitor fuel moisture codes and update communities about local/regional/national fire hazards;
- Ongoing collaborations with forest and wildfire researchers to include fire history studies and post-fire monitoring (integrating Indigenous and western science);
- Guardian involvement in purchasing and maintaining wildfire equipment;
- Guardians play an active role in monitoring current climate change impacts, identifying factors that contribute to wildfire risk, frequency, duration, and intensity;
- Guardian-led eco-site classification, mapping, and inventory of traditional territories to identify archeological sites and other priority areas;
- Working with research partners to undertake and better understand carbon stores within Indigenous territories, including IPCAs; and
- More research needed to determine how climate change will impact fire activity on Indigenous territories at regional and national scales. This must be done in partnership with local First Nations so that Indigenous science is more effectively harmonized with western science.





In addition, mitigation projects could be pursued by Guardians. For example, existing community-level *FireSmart* projects could be maintained through chainsaw training and certification training blitz events. ¹⁵ Also, Guardians could help establish landscape-level fuel breaks, manage for infestations and disease, and maintain trail networks and other key access routes.

Knowledge and Science

Another key element of this proposed strategy is enhanced knowledge and science. An expanded role for Guardians would allow for valuable contributions to the social and physical science of fire and fire management, and greater recognition of knowledge by Crown agencies and other stakeholders. As this work unfolds, Guardians could become national champions of fire stewardship, implementing cultural burns to help improve ecological health and community well-being, while reducing fire hazards.

Aspects of this work could include:

- Enhanced understanding and practice of cultural burning and biocultural restoration;
- Expanded climate and other related monitoring activities by Guardians;
- Land-based gatherings and training programs to foster Elder/Youth exchanges and learning opportunities;
- · Knowledge exchanges with regional, national, and international Indigenous fire practitioners; and
- · Greater networking through existing and emerging initiatives.

How Guardians Can Support their First Nations in Wildfire Response & Management: Priority Needs

To implement the strategy and vision outlined above, ILI and its partners have engaged with existing and emerging Guardians programs to identify key shared needs.

For example, ILI hosted a virtual First Nations Guardians Wildfire Response & Management Workshop in October 2021 that profiled fire experts sharing their experiences from across the country. Following a live session, Guardians and potential partners were placed into working groups where they were asked what supports they would need to engage in wildfire response and management (see Figure 1).



Figure 1: Rekindling our Relationship with Fire - First Nations Guardians Wildfire Response & Management

Participating Guardians underscored that they are more than front-line firefighters. They aim to exercise their inherent duty to take care of lands, including the fires that act upon them. They see themselves working in specialized positions and taking on the multiple roles that are needed during fire incidents, including managing equipment and developing work plans. In regions where First Nations are reviving cultural burning practices, they require targeted funding in addition to assistance from other Guardian programs and agency staff. Importantly, their local knowledge and

land-based skills can support their First Nations by representing their communities, acting upon community priorities, and working with agency partners to update regional Values at Risk databases.

Guardians also made clear that they want to maintain control over their knowledge practices yet expressed great interest in sharing this knowledge with agency partners to help alleviate the environmental pressures we face. Their presence on the land, and the direct link that Guardians provide to the land, makes them key partners in fire management going forward.

Partnerships

The first priority identified was the need for meaningful partnerships with local, regional, and national fire management agencies. These partnerships will be critical in addressing key barriers that prevent First Nations and their Guardians

initiatives from fully and effectively participating in fire management activities.

Many Guardians expressed the need to be in control of projects that could impact their communities. They also noted that enhanced partnerships could help Guardians gain access to training and certifications only available to Crown fire agencies, helping further professionalize and standardize the role of Guardians across the country.

Potential relationships and partnerships with federal, provincial, and territorial Crown agencies will differ widely across the country, based on a variety of factors including how fire is managed and the rights context for



First Nations in that jurisdiction. Targeted strategies will therefore be required for each jurisdiction, to identify relevant policies, barriers, and partnership opportunities.

The implementation of UNDRIP legislation in Canada and within Provinces or Territories, through action planning and other mechanisms that are key aspects of the adopted legislations, offers an important opportunity to advance Indigenous leadership and decision-making on fire response and management.

A high-level relationship could be pursued with one or several CIFFC member agencies to address common training shortfalls across the country. In addition, at the federal level, there may be opportunities to work with both Natural Resources Canada and Indigenous Services Canada to address the gaps and potential areas for early collaboration.





Resources

Another key priority is the need for sustained, predictable sources of funding for First Nations Guardians programs. Guardians carry out a variety of activities based on the needs and direction of their Nations. As such, targeted funding would be required to support an increased role in fire management.

For example, funding could be directed towards training resources and equipment to build capacity at regional and national scales and ensuring that standard operating procedures, organizational structure, safety requirements, and liability insurance are in place before Guardians become involved in fire management activities.

Funding is required for basic fire management, and to support the high-quality expansion of monitoring and mapping forest ecosites and fire history information within IPCAs and other traditional territories.

Training and Capacity

Finally, Guardians have consistently expressed the need for training beyond basic certifications. Coupling their existing land-based skills and knowledge with the highest level of training available would accelerate their involvement locally and provide a path towards recognition and partnerships with other agencies.

A national approach to training that develops a standard of practice prioritizing workplace safety will be key. Moving beyond basic-level courses would help fill a void in national emergency management, whereby Guardians could begin developing their own emergency response teams to both support their own communities and provide others with mutual aid.

Over the long-term, this could include:

- Standardizing, professionalizing, and tracking credentials of Guardians trained as responders;
- Developing capacity so that First Nations emergency managers can share the "unity of command" with government agencies to support mutual aid;
- Training for Guardian leaders in Incident Command System (ICS) 100, 200 and 300 levels, and other position-specific training courses offered through ICS Canada;
- Increasing the efficiency and rollout of training First Nations firefighters by establishing a First Nations wildland fire training centre in western Canada; and
- Establishing a national coordination centre that tracks fire activity across the country, collects information on the status of priority fires, and helps manage travel and other supports.

Other initiatives that could be explored include partnering with aircraft operators to introduce Guardians into careers in aviation, establishing a national Indigenous training and operations centre, and working with First Nations interested in the development of associated business ventures, such as mobile accommodations, catering services, transportation, fuel delivery, etc.

Immediate Next Steps

ILI recognizes that this proposal will benefit from review by project partners (including the Advisory Committee to this project), Guardians programs, and policymakers prior to its finalization. A more detailed implementation may also be developed, outlining a road map for moving forward that reflects feedback from Guardians on the ground.

While that process is underway, some early actions that could advance this work and generate information to support the design of the strategy are outlined below.

Initiate Pilot Projects

Implementing three to four pilot projects across the country would provide an opportunity to explore in more detail how Guardians could become more active in fire management and response, recognizing the highly variable fire patterns, governance systems, needs, and interests of First Nations across the landscape.

To be effective, it will be important for pilot projects to represent the diversity of approaches and needs reflected within this strategy. Suggested themes include:

Theme 1: Build Capacity to Empower Community-led Partnerships

The pilot project would focus on building response capacity through training and provincial accreditation to empower communities to better negotiate with Crown agencies and to fulfill obligations concerning the development of a fire management plan.

Theme 2: Integrate Indigenous Science and Cultural Burning

This pilot would focus on building the basic knowledge and skills needed to carry out prescribed fire safely in accordance with provincial/federal standards. This training would be supplemented by hands-on experience so that Guardians become familiar with emergency management, remote camping, and wilderness survival. The purpose of this pilot project would be to use cultural teachings, language, and customs to support the revival of cultural burning practices and the advancement of cultural fire stewardship, while meeting regionally standardized prescribed fire protocols and procedures.

Theme 3: Integrate Indigenous Science to Increase Forest Resilience to Fire Risk

This pilot would focus on building capacity and expertise pertaining to reforestation of areas adjacent to communities or culturally relevant areas with tree and plant species that are of cultural relevance to promote a healthy, diverse, and fire resilient landscape. Depending on the site and community, this pilot will identify ideal locations where cultural burning can occur, building on the knowledge and skills needed to carry out cultural burning safely and in accordance with provincial/federal standards. As a planning exercise, the area and fire resilient species therein which meet an Forest Stewardship Council (FSC) standard (environmentally friendly, socially beneficial, and economically viable) will be identified through community consultation in collaboration with knowledge holders (community and western science). Silviculture treatments will focus on those which create resilient, diverse, and healthy systems to address climate, pests, and pathogens and reduce fire risk in an area experiencing more frequent and intense fires every year.

Develop Tailored Jurisdictional Approaches

As noted above, more detailed jurisdictional scans and strategies will be important to ensure that the specific context, barriers, policy needs, and resources for Guardians in different parts of the country are addressed.

Such strategies could be initiated in two jurisdictions over the coming 18 months. Priority jurisdictions could include British Columbia and the Northwest Territories (to be confirmed).

Explore Creation of an Initial Training Cohort

In addition to the pilot projects, work could be initiated with interested Guardian programs to train 50 Guardians to a CIFFC agency-recognized Type-2 certification in 2022. This would demonstrate that Guardians training can meet and exceed national standards.

This work could be coordinated with provincial/territorial fire agencies to have Guardian fire management courses audited and recognized as meeting or exceeding jurisdictional standards.

Build Guardians Networks

The emerging **First Nations National Guardians Network** represents a powerful opportunity to support the refinement and implementation of this strategy.

Though still in an early stage of development, the Network has generated significant support among First Nations governments and Crown agencies. Over time, it will offer an invaluable place for knowledge exchange, capacity building, and skills development.

While the Network is under development, the ILI can support immediate efforts to advance the role of Guardians in fire management and response. It will be important to ensure that the Network is set up to convene, catalyze, and support Guardians involved in this work.

"A fire on reserve is an emergency. There is no difference in structural or wildland firefighting on-reserve to a volunteer firefighter. My job is to put water on the fire it could be a house one day and in the bush the next. We are Guardians of fire on-reserve"

- Michelle Vandervord

Appendix 1: Advisory Committee for ILI Fire Strategy

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References

- Tymstra, C., Stocks, B.J., Cai, X., and Flannigan, M.D. (2020). Wildfire management in Canada: Review, challenges and opportunities, Progress in Disaster Science, Volume 5, 100045, ISSN 2590-0617. https://doi.org/10.1016/j.pdisas.2019.100045
- Vincent, L.A., Zhang, X., Brown, R.D., Feng, Y., Mekis, E., Milewska, E.J., Wan, H. and Wang, X.L. (2015). Observed trends in Canada's climate and influence of low-frequency variability modes. Journal of Climate, 28, 4545–4560. doi: http://dx.doi.org/10.1175/JCLI-D-14-00697.1
- 3. Bush, E. and Lemmen, D.S., editors (2019). Canada's Changing Climate Report; Government of Canada, Ottawa, ON. 444 p. https://changingclimate.ca/CCCR2019/about/
- 4. Young, David., Cardinal-Christianson, Amy., and MacDonald, Heather (2021). Data presented at the 16th International Wildland Fire Safety Summit and the 6th Human Dimensions of Wildland Fire Conference. Available on request.
- Council of Canadian Academies. (2022). Building a Resilient Canada, Ottawa (ON). The Expert Panel on Disaster Resilience in a Changing Climate, Council of Canadian Academies. https://www.cca-reports.ca/wp-content/uploads/2022/01/Building-a-Resilient-Canada-web-EN.pdf
- 6. Canadian Council of Forest Ministers. (2016). Canadian wildland fire strategy. A 10-year review and renewed call to action [Online] Available at https://cfs.nrcan.gc.ca/pubwarehouse/pdfs/37108.pdf
- Dickson-Hoyle, S. and John, C. (2021). Elephant Hill: Secwépemc leadership and lessons learned from the collective story of wildfire recovery. Secwepemcúlecw Restoration and Stewardship Society. November 2021. https://www.srssociety.com/docs/elephant_hill_-_secw%C3%A9pemc_leadership_and_lessons_learned.pdf
- 8. Carlson, M., Wells, J., & Robert, D. (2009). The carbon the world forgot: conserving the capacity of Canada's boreal forest region to mitigate and adapt to climate change. Retrieved from Boreal Songbird Initiative website: https://www.borealbirds.org/sites/default/files/pubs/report-execsummary.pdf
- 9. Canada's 2 Billion Trees Commitment. (2021). Retrieved January 10, 2022 from Government of Canada website: https://www.canada.ca/en/campaign/2-billion-trees.html
- 10. Trudeau, J. (2017). Statement by the Prime Minster of Canada on National Aboriginal Day. Retrieved from Government of Canada website: https://pm.gc.ca/en/news/statements/2017/06/21/statement-prime-minister-canada-national-aboriginal-day
- United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). (2007). https://documents-dds-ny.un.org/doc/UNDOC/GEN/N06/512/07/PDF/N0651207.pdf?0penElement
- 12. Canadian Interagency Forest Fire Centre Inc. (2020, 2019, 2018, 2017). Canada Reports. Annual summaries from CIFFC agencies [Online] available at https://ciffc.ca/publications/canada-reports
- 13. Ferguson, Michael. (2013). The 2013 fall report of the auditor general of Canada. Retrieved January 10, 2022 from Government of Canada website at: https://www.canada.ca/en/news/archive/2013/11/2013-fall-report-auditor-general-canada.html
- 14. Mihychuk, M. (2018). House of Commons Report. From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities. Retrieved on January 10, 2022 from Indigenous Fire Safety Council website at: https://indigenousfiresafety.ca/wordpress/wp-content/uploads/2019/06/FromTheAshes.pdf
- FireSmart Canada. (2020). Blazing the trail: celebrating Indigenous fire stewardship. Natural Resources Canada.
 Copies available at
 - https://www.firesmartcanada.ca/product/blazing-the-trail-celebrating-indigenous-fire-stewardship/