

Joining forces: How collaboration can help tackle Canada's escalating wildfire threat

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Wildfires have become a hot topic in Canada this year—and for good reason. Thousands of Canadians have been evacuated from their homes. Millions have experienced smoky skies and air quality advisories. More

hectares of land in Canada were burned by [mid-June than in any previous year](#) since records began.

As our experiences with wildfires [become more and more common](#) in concert with [changing climates](#), one pressing question keeps cropping up: How do we manage wildfires more effectively and efficiently to minimize impacts on Canadians?

A part of the answer lies in how emergency response decisions are made.

Decisions made by those in charge of wildfire response can have a major impact on how quickly the fire is contained. The [federal government](#) has flagged [disaster response as a national priority](#) and paved the way for a new [disaster response](#) agency that could support stronger co-ordination and response to disasters across Canada.

As experts in management and governance (including disaster response, planning, policy and collaboration) we examined two major wildfires—the Fort McMurray, Alta. wildfire of 2016 and Sweden's Västmanland wildfire of 2014 —and found that the key to minimizing the impacts of wildfires is effective collaboration.

What does wildfire management look like?

Most fires, when first identified, are addressed at the municipal or regional levels by local teams. When a fire escalates in size or severity, governments at the provincial or territorial levels [take over management](#) roles. Resources at the federal level are engaged if this escalates further.

During the critical response phase of an ongoing wildfire emergency—where the fire is not considered contained—a wide range of [resources and co-ordination](#) is required. This includes monitoring, communications, evacuation, logistics and firefighting efforts.

Each of these roles have different agencies, departments and organizations in charge. And those in charge during these volatile times need to quickly adapt to the shifting risks and effects associated with uncontrolled wildfires.

However, practically managing and co-ordinating this critical emergency response continues to be a major challenge.

In the [Fort McMurray wildfire](#) in 2016, a State of Local Emergency was declared when the fires were spotted seven kilometers away from the town. A Regional Emergency Operations Center was then established to support the needs of the region in terms of emergency response.

But two days later, the fire grew to a size and severity that prompted the [evacuation of 88,000 people](#) and the highest operational level of emergency response engaged.

The [wildfire](#) management required a quick '[scaling up](#)' from regional to full provincial control. This included the active involvement of regional, municipal, provincial and federal resources including firefighters and evacuation supports.

Despite management efforts at levels from regional to federal, the fire ultimately burned more than 500,000 hectares and destroyed 2,400 structures including many homes.

Minimizing wildfire impacts

As we studied the Fort McMurray and Västmanland wildfires we looked closely at the role of collaboration in emergency response under conditions of urgency and uncertainty during major [wildfires](#). We studied not only how people communicated with each other, but also the tasks they tackled and the connections between those tasks.

As Canadians and policy makers engage in nationwide conversations and new plans on emergency response, our research offers three key lessons from the past that could shape a safer future.

1) Establishing the right connections

Working together with various emergency response teams is critical to the success of its management.

However, it is not a matter of "the more collaboration, the better." That strategy can decrease the effectiveness. Instead, it is critical to establish the ["right" connections](#) between emergency managers.

Strategic collaborations enable organizations and decision-makers to co-ordinate their work across tasks that rely on each other in some way. For example, evacuation and logistics teams can work well with co-ordinated efforts as evacuation routes need to be organized in a way that leads to shelters for evacuees and vice versa.

2) Building relationships in calmer times

Relationships tend to be formed with supervisors, previous contacts, members of the same organization and others that are connected to existing contacts. While these ways of connecting can be useful, they may not be the 'right' collaborators in times of urgency.

The preparatory phase of emergency management must focus on [how—and with whom—connections are made](#). Making purposeful efforts to build relationships and trust among those who will work on the same, or connected, tasks in non-emergency times can be very valuable in increasing effectiveness and efficiency of emergency response.

An emergency manager from Alberta we interviewed stated that response happens at the "speed of trust," where trust is assumed and second-guessing decisions is not an option. The only way to do that is to build relationships ahead of the emergency.

3) Structure and flexibility

Structured systems, like the [Incident Command System](#) (ICS), are used across Canada to help manage emergency incidents and planned events. These systems set out who does what, and how, in clear terms.

Sweden's approach is much more flexible and self-organized. They operate on the principle of "responsibility" that supports those in management roles retaining those same roles in times of emergency. However, Sweden has no planned approach to co-ordinate across multiple organizations and agencies in emergency situations.

We found that combination of [structure and flexibility](#) is needed for effective emergency management.

Structure, like in the ICS system, provides strength in having a clear framework for how to co-ordinate among those who do not usually interact. Flexibility, like in Sweden's system, creates opportunities to work with trusted others. We advise creating more opportunities within a structured system for strategic relationship building.

Co-ordination is not enough

In the wake of disasters, emergency response teams working in different capacities and different levels [need to agree on goals and working procedures for the specific scenario](#), and not only on improving co-ordination.

These agreements are especially critical in efficiently [scaling up](#) crisis management from a local level to a broader and more collaborative one. This can be challenging as local emergency managers are connected to the place in which they work and are often the first to take control.

This shift, or scaling up, is further challenged by uncertainty. Wildfires are unpredictable and the situation can change quickly, leaving no room for delayed decisions. Timing is essential to mobilize resources when most urgently needed.

Emergency managers should consider the art and timing of scaling up—managing the shifts in authority and uncertainty—by building relationships that support agreement and collaborative skill-sets of those likely to be involved in future emergency response situations.

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