



Wildfire response

Background on how we decide how each wildfire is managed



Determining a fire response is a balance between the value fire provides and protecting things people value.

Fire is an important part of the ecosystem, and essential to the health of our forests and the animals that live there. We manage wildfires because some of them pose a threat to **communities, people, and things we care about** – socially, culturally, and economically.

Here's how wildfire managers work to find the balance between the value fire provides and protecting values important to people.

When a fire starts...

- **Every wildfire is assessed.** What to do next is based on an assessment of the values being threatened using a hierarchical approach:
 - Human life is **ALWAYS** first priority – including the **life and safety of responders**.
 - Property (i.e. communities, property, infrastructure)
 - Cultural values (i.e. traditional cabins, historic/archaeological sites)
 - Natural resource values (i.e., key caribou habitat, wildlife harvesting areas,, commercial timber harvesting areas)
- The assessment also considers:
 - Land and resource management objectives.
 - The available resources (equipment, people,

and services) to address the threats to these values.

- The current and expected fire weather (and the way it will influence how a wildfire behaves), and current and potential fire activity in regions across the NWT.
- Where property or resources are threatened the relative value of that being threatened.
- The best available local, indigenous and scientific knowledge gained through engagement with communities, the public, researchers and fire management staff.

Making the response decision

- If a fire is threatening people, property or key infrastructure, **it is highly likely to be actioned immediately**. In some cases, people can be protected by moving away from the area threatened by the fire.
- These decisions can evolve throughout a fire response as resource availability, fire activity, and weather changes.
- Decisions are **NEVER** made lightly. They are **ALWAYS** made by multiple trained fire managers with as much information available as possible – including Indigenous and local knowledge.

Types of response

- **Initial attack:** the fire has resources sent to it right away to work to control it.
- **Limited (or modified) action:** the fire is being managed to limit potential risks to structures or other values. Examples could be putting sprinklers up or burning out around cabins or infrastructure.
- **Sustained action:** a fire which requires long-term firefighting efforts beyond the initial attack period.
- **Delayed response:** a fire response that is activated when a trigger point is met by the fire growth or when available resources are freed up from existing assignments.
- **Monitored:** the fire is being watched closely to allow it to run its natural course, while being ready to protect values where necessary as the fire progresses.
- Some fires may receive a certain response at the start and receive a different response as the situation changes. For example – if all structures in a fire's path have been protected, the fire has now passed, and there are no more values to protect, the fire may be monitored.



Some realities

- When a large fire burns, **it generally does not burn everything in its path.**
 - There will be areas of high severity and areas where little or no fire activity occurs.
 - There are often corridors with pre-fire wildlife habitat remaining.
 - The burned areas can also provide new habitat for different wildlife.
- The NWT has the **largest response area (80 million hectares forested land)** of any forest fire management agency in Canada.
 - Lack of roads in many locations, is a **major challenge** in the NWT which is not faced by most other provinces.
- When we undertake wildfire responses, **there is no guarantee every fire can be controlled.**
 - When fires are too large, driven by heavy winds, or burning with too much intensity (driven by things like drought and built-up fuel), there is sometimes **very little which can be done to stop a fire from growing.**
 - Under these extreme conditions, airtankers may also become ineffective, and it can reach the point where **no amount of staff power** could stop a fire from growing.
- We **do not** send firefighters and pilots into situations where they **cannot be safe.**
 - That means if serious hazards exist – like bad visibility and extreme fire behaviour – then we wait to respond to the fire until conditions are safe.

Types of tactics

- **Direct attack:** firefighters, aircraft, and heavy equipment are working directly at the fire's perimeter. Examples are spraying water directly on a fire to reduce its intensity. Usually only suitable for less active fires which can safely be actioned.
- **Indirect attack:** firefighters, aircraft, and heavy equipment are working away from the fire's perimeter to get rid of forest fuel in the fire's path (i.e. building fuel breaks/control lines, ignition operations) or protect values (i.e. setting up sprinklers, laying fire retardant) to guide the fire away from places we don't want it to go, and reduce the risk of a fire damaging values at risk.
- A combination of direct and indirect attack tactics is often used when responding to large wildfires.
- Available resources, size and intensity of a fire, features of the location (i.e. swampy vs. dry; rocky vs. stable terrain), weather, visibility, and many other factors are considered in choosing which tactics are best.

You can't – and shouldn't - fight every fire

- It's not **possible**, nor **desirable**, to fight every wildfire.
- Typically, we action about one of every three wildfires in the NWT.
- In big fire years like 2023, this still results in major challenges in our ability to:
 - Dedicate enough resources to ensure people are well-rested.
 - Get the resources we need (and use them effectively) in places across our vast territory where most areas are only accessible by air.
- Removing wildfire from the landscape removes their important natural benefits, and sets us up for larger, more difficult to control wildfires in the future.

The consequences of fighting all wildfires

- In the past, wildfire managers in Canada (including the NWT) worked to put most fires out. This took fire off the landscape and resulted in changes to

the natural makeup of the forest – with trees of different ages, sizes, and species being replaced by more uniform, mature forests.

- Without fire, forest fuels (like twigs, leaves, dead trees) builds up and are available to burn. When it ignites, it can cause large fires that can be **extremely difficult** to control. Fewer and fewer Canadian agencies fight every fire.
- If all fires are fought, the forest **will not regenerate or regrow** in a natural way. Fuels will build up in the forest, some nutrients won't return to the soil, and some tree species (Jackpine) won't be able to reproduce. Others will have a more difficult time doing so (Spruce).
- Wildlife suffer – burned areas provide critical habitat for some animals. In heavily suppressed forest, these animals would not have suitable habitat.
- **We always act action fires most likely to threaten things people value**, while allowing fire to **play its natural, important role in the environment**, and prevent more challenging fires in the future.

