

To help manage wildfires in Canada's boreal forest, Will you choose to create fire breaks or conserve wetlands?

Canada's boreal forest is one of the largest intact forests in the world. It is home to thousands of species and is used by half of the birds in North America every year. Not just trees, the boreal forest contains thousands of lakes, rivers and and wetlands, which occupy 30% of the land.

Fire plays an important role in forest growth. It burns moss and lichen on the forest floor, which releases valuable nutrients, and opens up the canopy for sun to shine through, helping new plants to grow. When wildfires get too severe, however, it can slow the regeneration of trees and permanently change forest composition. Over the last 50 years, we have seen more intense wildfires in the boreal forest as a result of hotter, drier and longer fire seasons under climate change.



Above: Canada's boreal forest spans 270 million hectares, stretching from Yukon to Newfoundland & Labrador.

For this case study, you will think critically about wildfire management in the boreal forest and decide: will you choose to create firebreaks, conserve wetlands, or both?



Research Questions

In order to build your case, you need to make sure you fully understand the problem and possible solutions. The research questions below will guide you.

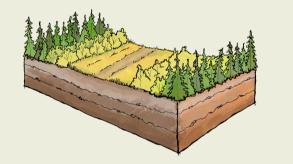
- 1 How is climate change contributing to more severe wildfires and how does this affect the boreal forest?
- 2 What benefits do boreal wetlands provide for wildlife and people?
- 3 How do wetlands slow down wildfires?
- 4 Under what circumstances do wetlands accelerate wildfires?
- 5 What are firebreaks and how do they manage wildfires?
- 6 What are the different types of firebreaks?
- 7 What are the advantages and disadvantages of each type of firebreak?
- 8 Are there areas in the boreal forest where it would be better to use firebreaks and areas where it would be better to conserve wetlands?

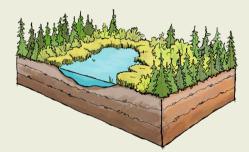
Build your case

After you've answered the research questions, you're ready to build your case. Choose one of the options below to be part of your wildfire management strategy:

Option A: Create firebreaks

Option B: Conserve wetlands





The final step is to develop your case and present it on Competition Day. **Presentations should be no longer than 7 minutes** and can be delivered by one or more of your team members. Find out how judges will be evaluating each presentation by checking out the Case Study Competition Rubric.

Competition Day will happen virtually on March 7 at 5pm CST / 6pm EST / 7pm AST. For more information, check out the Wetland Centres of Excellence Case Study Competition webpage.

