ADAPTATION OPTIONS

Wildfire

This document offers different ways to adapt to wildfire for individuals, communities, and municipalities including planning ahead, using nature-based approaches, built infrastructure, and policies and programs. It also includes options specifically for forests and woodlots. It is not intended to be comprehensive. Instead, this is a short summary of well-researched adaptation approaches that may be relevant for Atlantic Canada.

Context

- Wildfires used to occur naturally, supporting healthy ecosystems. Today, fires are actively suppressed across landscapes, and many wildfires are caused by people.
- Climate change is increasing the potential for wildfires in Atlantic Canada as hot, dry, and windy weather may become more common. These conditions can help wildfires to intensify and spread quickly.
- Where communities meet with fire-prone forests or fields, wildfires can damage property, the environment, and human health.

Individuals & Homeowners

- **Stay informed.** During wildfire season, there may be restrictions on campfires or burning brush. The level of concern is usually updated daily. Emergency alerts on cellphones or by email can help people be aware and prepared.
- **Planning ahead.** A household emergency plan can identify evacuation routes from the community. Fire extinguishers and smoke detectors should always be operational. Emergency supply kits can be created for every member of the household. Including family, friends, or neighbours in planning can help everyone feel more prepared.
- **Home preparation.** Outdoor spaces can be regularly maintained by removing debris from gutters, cleaning vents, and removing materials that can easily burn from around the home. Simple home upgrades can include replacing weather stripping, adding fire-resistant screens to external vents, or switching to fencing that doesn't burn easily. More expensive upgrades could include metal roofing, multi-pane tempered glass windows, or fire rated exterior doors.

Communities

- **Education programs.** Sharing resources on wildfire hazards and preparedness can help educate residents. Education programs can focus on those individuals who may be most severely affected, such as those least likely to receive or be able to act on emergency alerts.
- **Emergency planning.** Community emergency plans need to be clearly communicated and easily accessible. Special care needs to be taken to include people often left out of preparedness processes, such as older adults, people experiencing homelessness, or persons living with disabilities. Emergency planning can identify multiple routes for emergency vehicles to access the community and for residents to evacuate.
- **Land use planning.** Communities can be designed to be more resilient to wildfires, such as by creating fire break zones to limit the spread of fire. Landscaping regulations or subdivision design standards could be used to limit the potential for fire spreading between structures.
- **Infrastructure upgrades.** Using materials that don't burn easily or fire-rated materials can help to make buildings more wildfire resistant. Power supply lines and other essential services can be relocated underground.

Forests and Woodlots

- **Forest diversity.** Forests with a high diversity of tree species, sizes, and ages can better recover from wildfire disturbance. Managed forests can maintain or improve diversity by limiting clearcutting, using harvesting methods that preserve diversity, or ensuring that more diverse species are planted.
- **Fire regime.** Since fire has been a part of our forest dynamics in the past, prescribed burning can mimic naturally occurring fires, and minimize the amount of fuel available for a wildfire (fuel loads) to reduce wildfire spread. Led by Indigenous communities, re-introducing cultural burning practices and supporting Indigenous leadership in land relations can promote sustainable fire regimes.
- **Active management.** Targeted harvesting can be used to alter species composition and forest structure to reduce fire risk. Fuel breaks could be established around high-risk areas. Large scale disturbances like wildfires could be used as an opportunity to re-establish forests that are less sensitive to future climate change (e.g., different species). An increased focus on planting species that are less prone to fire in high hazard areas may reduce future risks.

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