

# Hazard Resilience Strategies

## Fires

Brush, Bush and Grass Fires  
Community Interface Fires  
Community Structural Fires  
Forest Fires or Wildfires  
Peat Bog Fires

### Brush, Bush and Grass Fires

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- Before issuing a permit for any prescribed/controlled burns, confirm and verify that there are adequate plans to avoid the fires getting out of control, including scenarios of high winds.
- Ensure community-based brush, bush and grass fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).
- Ensure all residences and businesses have smoke detectors and fire extinguishers on each floor of the building.
- Ensure residents and businesses have participated in Fire Smart training and cleared flammable vegetation (e.g., dried grass) within 10 metres of structures and cleared all other combustible material (e.g., firewood, debris under porches, fuels) within 10 metres.
- Ensure residents who have burn barrels have placed them well away from their homes and have proper ventilation and screens around them.
- Ensure residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the home.
- Ensure residents have home fire evacuation plans and have tested them.
- Ensure residents have homes that do not have single-paned glass and have metal, clay tile and asphalt shingles with outer surfaces of stucco, metal, brick and concrete which offer superior fire resistance to wildfire (wood and vinyl siding offer very little protection).
- Ensure residents have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to assist in suppressing brush, bush and grass fires.
- Ensure residents follow Traditional Knowledge and practices around sacred and ceremonial fires to maintain safe environments.

- Ensure the community offers fire safety education in schools and to residents along with information on their individual risk of house fire, including information on warning signs for different types of fire (e.g., smoke). For example, programs such as FireSmart.
- Ensure community and Parks Boards have policies in place to ban outdoor fires and to advise residents and visitors about these fire bans and their application to ceremonial and sacred fires also.
- Ensure the community has cleared and pruned flammable brush, bushes and grasses in an extensive zone around the community core.
- Ensure the community has developed designated evacuation routes.
- Ensure the community has signage in multiple languages posted (with the appropriate phone number) encouraging residents and visitors to report any fires which are observed no matter where or when they are spotted.
- Ensure the community requires new construction to be built using fire-resistant building materials and to have sprinkler systems.
- Ensure the fire safety team checks frequently with fire risk monitoring and weather forecasting agencies such as the Canadian Wildland Fire Information System, provincial/territorial fire agencies and Environment Canada.
- Ensure the Fire Department conducts programs (e.g., such as [Learn Not to Burn](#)) within schools and with youth to prevent arson/fire setting.
- Ensure there is a warning system in place to notify community residents and businesses of a potential brush, bush or grass fire and how to prepare for it.
- Ensure there is a warning system in place to notify emergency response personnel of a potential brush, bush or grass fire.
- Ensure the community has emergency social service plans for housing persons who lose their home and belongings to fire.
- Ensure the community has a means to consult Traditional Knowledge holders and subject matter experts on typical fire regimes and bush and grass fire history in the area as well as appropriate responses and fire monitoring.
- Ensure the community has an inventory of buildings not meeting modern building codes and posing a public risk; an action plan for financing and retrofitting/rebuilding these buildings is underway.
- Consider plans to bring herds of cows and goats into area fields each summer to eat large patches of dried grass and weeds (cows only eat grass while goats only eat weeds).

## Community Interface Fires

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- Before issuing a permit for any prescribed/controlled burns, ensure there are adequate plans to avoid the fires getting out of control, including scenarios of high winds.
- Ensure community-based wildland/community interface fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).
- Ensure forestry practices around the community are sustainable and ecologically sound.
- Ensure all residences and businesses have smoke detectors and fire extinguishers on each floor of the building.
- Ensure residents and businesses are able to access water for sprinklers or to hose down roofs and areas surrounding their homes or buildings to protect against wildfires.

- Encourage all residents to adopt [FireSmart](#) principles and to have the community publicly recognize [FireSmart](#) neighbourhoods.
- Ensure residents and businesses have cleared and pruned flammable trees and vegetation (e.g., dried grass) within 10 metres of structures and cleared all combustible material (e.g., firewood, debris under porches) within 10 metres.
- Ensure residents who have burn barrels locate them well away from their homes and have proper ventilation and screens.
- Ensure residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the building.
- Ensure residents have home-based fire evacuation plans and have tested them.
- Ensure homes do not have single-paned glass and have metal, clay tile and asphalt shingles and homes have outer surfaces of stucco, metal, brick and concrete which offer superior fire resistance to wildfire (wood and vinyl siding offer very little protection).
- Ensure residents have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to assist in suppressing wildfires.
- Ensure residents have spaced trees so that the crowns of individual trees are 3 to 6 metres apart and have removed or reduced the number of evergreen trees within 10 to 30 metres from their homes.
- Ensure residents follow Traditional Knowledge and practices around sacred and ceremonial fires to maintain safe environments.
- Ensure the community offers fire safety education in schools and to residents along with information on their individual risk of house fire.
- Ensure the community and Parks Boards have policies in place to ban outdoor fires and to advise residents and visitors about these fire bans and their applicability to ceremonial and sacred fires.
- Ensure the community has cleared and pruned flammable brush, bushes and grasses throughout the entire community and holds annual work parties to focus on fuel removal, including dryfall, dead timber, and making use of community chippers.
- Ensure the community has developed designated evacuation routes.
- Ensure the community has signage posted (which include the appropriate phone number) encouraging residents and visitors to report any observed fires no matter where or when they are spotted.
- Ensure the community requires new buildings to have sprinkler systems and to use fire-resistant building materials.
- Ensure the fire safety team checks frequently with fire risk monitoring and weather forecasting agencies such as the Canadian Wildland Fire Information System, and Environment Canada.
- Ensure the fire safety team conducts programs (e.g., such as [Learn Not to Burn](#)) within schools and with youth to prevent arson/fire setting.
- Ensure there is a warning system in place to notify community residents and businesses of a potential community interface fire and how to prepare for it.
- Ensure there is a warning system in place to notify emergency response personnel of a community interface fire.
- Ensure the community has an emergency social service plans for housing persons who lose their home and belongings to fire.

- Ensure the community has an inventory of buildings not meeting modern building codes and posing a public risk; an action plan for financing and retrofitting/rebuilding these buildings is underway.
- Ensure the community has a means to consult Traditional Knowledge holders and subject matter experts on typical fire regimes and fire history in the area as well as appropriate responses and fire monitoring.
- Ensure that the community has land-use development plans in place to restrict building near forested areas or has development permits in place to reduce the risk of fire to homes.
- Encourage the community fire department to actively follow up on bylaws, regulations and building code enforcement.
- Encourage the community, within wildland urban interface areas, to regularly visit post-harvest replanting requirements for forest licensees so community safety is considered first and foremost.
- Ensure that Land and Resource Management plans (LRMP) can address fire management in a meaningful way and to consider fire management strategies and their impacts on ecosystems and other forest management practices.
- Organize community meetings at the start of the fire season to help to educate the community, especially including newcomers, and prepare the community for the potential threat of wildland interface fires.
- Encourage the community to have plans to manage vacant land.
- Encourage the community to conduct regular needs assessments; provide local first responders with geography-specific training; engage with youth, incorporate traditional knowledge into wildfire education; and provide cultural awareness/sensitivity training for volunteers, responders and government representatives.
- Ensure that the community has posted “No Smoking” signs in wildland interface areas and along roadways.
- Encourage the community to implement a partners’ program where, prior to wildfires, local resources are assigned to containment line teams consisting of heavy equipment, forest professionals, technicians and workers who use their local knowledge and expertise to establish containment lines as part of tactical operation.
- Ensure that the community holds annual meetings with all the key fire-fighting organizations to promote good working relationships, trust and understanding.
- Encourage the community to regularly review existing land use plans to ensure that the location of Old Growth Management Areas, ungulate winter ranges, visual corridors and other land-use designations do not preclude the reduction of wildfire risk adjacent to communities
- Encourage the community to provide developers with incentives to make available open spaces and trails to provide fire breaks in new developments.
- Ensure that community development planning practices have put in place steep slope development permits that prohibit development in high-risk wildfire locations.

## Community Structural Fires

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- Ensure community-based structural fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).
- Ensure all businesses have smoke detectors and fire extinguishers on each floor of the building.
- Ensure residents who have burn barrels locate them well away from their homes and have proper ventilation and screens.
- Ensure residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the building.
- Ensure residents have home-based fire evacuation plans and have tested them.
- Ensure the community offers fire safety education in schools and to residents along with information on their individual risk of house fire (e.g., never leave candles or fires unattended, safe placement of flammable materials in the kitchen, cleaning & checking chimney and wood stoves regularly etc.).
- Ensure the community provides fire hydrants, standpipes or access to large quantities of water in the community, especially in the densely populated area or community core, for fire-fighting purposes.
- Ensure the community has a warning plan to advise residents and visitors about fire bans.
- Ensure the community has policies in place limiting the number of levels in the construction of multi-level wood frame buildings in order to offset fire hazards.
- Ensure the community has policies in place for historical, wood frame buildings to install fire sprinkler systems.
- Ensure the community has signage posted (which include the appropriate phone number) encouraging residents and visitors to report any observed fires no matter where or when they are spotted.
- Ensure the community requires new buildings to have fire sprinkler systems and to use fire-resistant building materials.
- Ensure the fire safety team conducts programs (e.g., such as [Learn Not to Burn](#)) within schools and with youth to prevent arson/fire setting.
- Ensure there is a warning system in place to notify community residents and businesses of a community fire and how to prepare for it.
- Ensure there is a warning system in place to notify emergency response personnel of a community fire.
- Ensure the community has emergency social service plans for housing persons who lose their home and belongings to fire.
- Ensure the community has an inventory of buildings not meeting modern building codes and posing a public risk; an action plan for financing and retrofitting/rebuilding these buildings is underway.
- Ensure the community has a means to consult Traditional Knowledge holders and subject matter experts on typical fire regimes and structural fire history in the area as well as appropriate responses and fire monitoring.
- Encourage homes to have smoke alarm detectors and for the fire department to conduct “Check Your Smoke Detectors” promotions twice a year.

- Encourage the fire department to hold regular drills for residents on how to use a fire extinguisher safely and promote checking on expiry dates for fire extinguishers in every home.
- Ensure that the fire department practices routine, regular fire inspections of commercial and industrial sites.

## Forest Fires or Wildfires

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- Before issuing a permit for any prescribed/controlled burns (e.g., slash burning), ensure there are adequate plans to avoid the fires getting out of control, including scenarios of high winds.
- Ensure forest fire fighting organizations have held forest fire exercises with scenarios including forests near the community (e.g., table-top or full-scale exercises).
- Ensure forestry practices around the community are sustainable and ecologically sound.
- Ensure forestry practices reduce the amount of forest fuel build-up.
- Ensure the community and Parks Boards have policies in place to ban outdoor fires and to advise residents and visitors about these fire bans and their applicability to ceremonial and sacred fires.
- Ensure the fire safety team conducts programs (e.g., such as [Learn Not to Burn](#)) within schools and with youth to prevent arson/fire setting.
- Ensure the forested area around the community is covered by a real-time Lightning Detection Network (providing immediate feedback on local lightening) and that the fire safety team has access to the information to plan for potential forest fires.
- Ensure there is a warning system in place to notify community residents and businesses of a potential forest fire and how to prepare for it.
- Ensure the community offers fire safety education in schools and to residents along with information on their individual risk of house fire, including information on warning signs for different types of fire (e.g., smoke). For example, such programs as FireSmart.
- Ensure there is a warning system in place to notify emergency response personnel of a potential forest fire.
- Ensure the community has emergency social service plans for housing persons who lose their home and belongings to fire.
- Ensure the community has a means to consult Traditional Knowledge holders and subject matter experts on typical fire regimes and forest fire history in the area as well as appropriate responses and fire monitoring.
- Ensure the community has an inventory of buildings not meeting modern building codes and posing a public risk; an action plan for financing and retrofitting/rebuilding these buildings is underway.
- Encourage the community to implement low-cost, landscape-level treatments (including prescribed burns) that can slow, divert or even halt large-scale wildfires.
- Ensure that the community participates in the [Community Forests Program](#).
- Encourage the community to have a comprehensive strategic plan identifying how the community is at greatest risk from wildfire, coupled with a commitment to treat those areas most at risk regardless of the ability to pay.
- Encourage the community to conduct needs assessments; provide local first responders with geography-specific training; engage with youth, incorporate traditional knowledge

into wildfire education; and provide cultural awareness/sensitivity training for volunteers, responders and government representatives.

- Ensure that the community's fire-fighting plans include archaeological considerations, and the importance of placing value on cultural and historic sites.
- Encourage the community to regularly review existing land use plans to ensure that the location of Old Growth Management Areas, ungulate winter ranges, visual corridors and other land-use designations do not preclude the reduction of wildfire risk adjacent to communities.
- Ensure that the community has clearly marked signs in areas leading to forest trails and camping sites that bans campfires during fire season.
- Ensure that the community has sufficient park rangers or wardens to adequately monitor forest trails or campsites.
- Ensure that the community has protocols for closure of back-country when the risk of fire increases.

## Peat Bog Fires

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- Before issuing a permit for any planned controlled burns, ensure residents demonstrate adequate plans to avoid the fires getting out of control, including scenarios of high winds.
- Ensure community-based peat bog fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).
- Ensure the community bans all fires in and around peat bogs.
- Ensure the community protects all peat bogs and does not allow any water to be drained from the peat bog.
- Ensure the fire safety team conducts programs (e.g., such as [Learn Not to Burn](#)) within schools and with youth to prevent arson/fire setting.
- Ensure there is a warning system in place to notify community residents and businesses of a potential peat bog fire and how to prepare for it.
- Ensure there is a warning system in place to notify emergency response personnel of a potential peat bog fire.
- Ensure community maps identify any areas where peat bogs exist.
- Ensure the community has a means to consult Traditional Knowledge holders and subject matter experts on typical fire regimes and peat bog fire history in the area as well as appropriate responses and fire monitoring.
- Ensure that the community has plans to monitor water tables and source water for bogs and to note when conditions are creating added risk of fire to peat bogs.
- Ensure that the community has policies, signage and enforcement prohibiting peat harvesting.
- Ensure that the community has protocols and signage to close access to peat bogs during times of high risk of fire.

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