Hazard Resilience Index (HRI) *Fires*

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

Fires

Please refer to the *Hazard Resilience Index Instructions (HRI)* document for more information on using this document.

Note that since significant fires can lead to extensive air pollution from the smoke, communities at risk from fire should also refer to the "Contamination" guide.

Brush, Bush and Grass Fires

На	Hazard Resilience High Low Need More No Resilience Resilience Info Applic						
Yes	No	Need More Info	Not Applicable	FACTORS	This factor is important to my community		
				Before issuing a permit for any prescribed/controlled burns there must be adequate plans to avoid the fires getting out of control, including scenarios of high winds.			
				Community-based brush, bush and grass fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).			
				All residences and businesses have smoke detectors and fire extinguishers on each floor of the building.			
				Residents and businesses have participated in Fire Smart training offered by the community and know warning system, as well as prevention methods such as clearing flammable vegetation (e.g., dried grass) within 10 metres of structures and clearing all other combustible material (e.g., firewood, debris under porches, fuels) within 10 metres.			
				Residents who have burn barrels have placed them well away from their			

		homes and have proper ventilation and screens around them.	
		Residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the home.	
		Residents have home fire evacuation plans and have tested them.	
		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).	
		Residents have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to assist in suppressing brush, bush and grass fires.	
		Residents follow Traditional Knowledge and practices around sacred and ceremonial fires to maintain safe environments.	
		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 application to ceremonial and sacred fires also.	
		The community has cleared and pruned flammable brush, bushes and grasses in an extensive zone around the community core.	
		The community has developed designated evacuation routes.	
		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.	
		The community requires new construction to be built using fire-resistant building materials and to have sprinkler systems.	
		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.	
		The Fire Department conducts programs (e.g., such as <i>Learn Not To Burn</i>) within schools and with youth to prevent arson/fire setting.	
		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.	
		There is a warning system in place to notify emergency response personnel of a potential brush, bush or grass fire.	
		The community has emergency social service plans for housing persons who lose their home and belongings to fire.	
		The community has a means to consult Traditional Knowledge holders on typical fire regimes and bush and grass fire history in the area as well as appropriate responses and fire monitoring.	
		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.	

Community Structural Fires

На		Resil ating		e High Low Need More No Resilience Resilience Info Applic	
Yes	No	Need More Info	Not Applicable	FACTORS	This factor is important to my community
				Community-based structural fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).	
				All residences and businesses have smoke detectors and fire extinguishers on each floor of the building.	
				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.	
				Residents who have burn barrels locate them well away from their homes and have proper ventilation and screens.	
				Residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the building.	
				Residents have home-based fire evacuation plans and have tested them.	
				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).	
				Most 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.	
				Residents follow Traditional Knowledge and practices around sacred and ceremonial fires to maintain safe environments.	
				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.).	
				The community has plans in place to provide fire hydrants or access to large quantities of water in the community, especially in the densely populated area or community core.	
				The community has a warning plan to advise residents and visitors about fire bans.	
				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.	
				The community has policies in place for historical, wood frame buildings to install fire sprinkler systems.	
				The community has signage postage (which include the appropriate phone number) encouraging residents and visitors to report any observed fires no matter where or when they are spotted.	
				The community requires new buildings to have fire sprinkler systems and to use fire-resistant building materials.	
				The fire safety team conducts programs (e.g., such as <i>Learn Not To Burn</i>) within schools and with youth to prevent arson/fire setting.	

		There is a warning system in place to notify community residents and businesses of a community fire and how to prepare for it.	
		There is a warning system in place to notify emergency response personnel of a community fire.	
		The community has emergency social service plans for housing persons who lose their home and belongings to fire.	
		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.	
		The community has a means to consult Traditional Knowledge holders on typical fire regimes and structural fire history in the area as well as appropriate responses and fire monitoring.	

Community Interface Fires

На	Hazard ResilienceHigh ResilienceLow ResilienceNeed More InfoNot Applica						
Yes	No	Need More Info	Not Applicable	FACTORS	This factor is important to my community		
				Before issuing a permit for any prescribed/controlled burns there have to be adequate plans to avoid the fires getting out of control, including scenarios of high winds.			
				Community-based wildland/community interface fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).			
				Forestry practices around the community are sustainable and ecologically sound.			
				All residences and businesses have smoke detectors and fire extinguishers on each floor of the building.			
				Residents and businesses are able to access water to sprinkle/hose down roofs and areas surrounding their home to protect against wildfires.			
				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.			
				Residents who have burn barrels locate them well away from their homes and have proper ventilation and screens.			
				Residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the building.			
				Most residents have home-based fire evacuation plans and have tested them.			
				Most 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).			

			Residents have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to assist in suppressing wildfires.	
I			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.	
۱			Residents follow Traditional Knowledge and practices around sacred and ceremonial fires to maintain safe environments.	
			The community offers fire safety education in schools and to residents along with information on their individual risk of house fire.	
I			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.	
			The community has cleared and pruned flammable brush, bushes and grasses throughout the entire community.	
			The community has developed designated evacuation routes.	
1			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.	
۱			The community requires new buildings to have sprinkler systems and to use fire-resistant building materials.	
۱			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.	
۱			The fire safety team conducts programs (e.g., such as <i>Learn Not To Burn</i>) within schools and with youth to prevent arson/fire setting.	
I			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.	
			There is a warning system in place to notify emergency response personnel of a community interface fire.	
I			The community has emergency social service plans for housing persons who lose their home and belongings to fire.	
I			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.	
			The community has a means to consult Traditional Knowledge holders on typical fire regimes and wildland fire history in the area as well as appropriate responses and fire monitoring.	

Forest Fires or Wildfires

На	zard R	Resi ating		e High Low Need More No Resilience Resilience Info Applic				
Yes	No	Need More Info	Not Applicable	FACTORS	This factor is important to my community			
				Before issuing a permit for any prescribed/controlled burns (e.g., slash burning) there have to be adequate plans to avoid the fires getting out of control including scenarios of high winds.				
				Forest fire-fighting organizations have held forest fire exercises with scenarios including forests near the community (e.g., table-top or full-scale exercises).				
				Forestry practices around the community are sustainable and ecologically sound.				
				Forestry practices reduce the amount of forest fuel build-up.				
				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.				
				The fire safety team conducts programs (e.g., such as <i>Learn Not To Burn</i>) within schools and with youth to prevent arson/fire setting.				
				If the forested area around the community is covered by one of the 80 real-time sensors of the Lightning Detection Network (providing immediate feedback on local lightning), the fire safety team has access to the information to plan for potential forest fires.				
				There is a warning system in place to notify community residents and businesses of a potential forest fire and how to prepare for it.				
				The community offers fire safety education to residents and in schools, including information on warning signs for different types of fire (e.g., smoke).				
				There is a warning system in place to notify emergency response personnel of a potential forest fire.				
				The community has emergency social service plans for housing persons who lose their home and belongings to fire.				
				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.				
				The community has a means to consult Traditional Knowledge holders on typical fire regimes and forest fire history in the area as well as appropriate responses and fire monitoring.				

Peat Bog Fires

Hazard ResilienceHigh ResilienceLow ResilienceNeed More InfoNot Applica						
Yes	No	Need More Info	Not Applicable	FACTORS	This factor is important to my community	
				Before issuing a permit for any planned controlled burns residents have to demonstrate adequate plans to avoid the fires getting out of control, including scenarios of high winds.		
				Community-based peat bog fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises).		
				The community bans all fires in and around peat bogs.		
				The community protects all peat bogs and does not allow any water to be drained from the peat bog.		
				The fire safety team conducts programs (e.g., such as <i>Learn Not To Burn</i>) within schools and with youth to prevent arson/fire setting.		
				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.		
				There is a warning system in place to notify emergency response personnel of a potential peat bog fire.		
				Community maps identify any areas where peat bogs exist.		
				The community has emergency social service plans for housing persons who lose their home and belongings to fire.		
				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.		
				The community has a means to consult Traditional Knowledge holders on typical fire regimes and peat bog fire history in the area as well as appropriate responses and fire monitoring.		

References

- British Columbia Ministry of Forests. (2003). *The homeowners FireSmart manual.* Retrieved from <u>http://www.embc.gov.bc.ca/ofc/interface/pdf/homeowner-firesmart.pdf</u>
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Environment Canada (2013). *Canada's lightning detection network*. Retrieved from <u>https://www.ec.gc.ca/foudre-lightning/default.asp?lang=En&n=D88E34E8-1</u>

Federal Emergency Management Agency. (2014). *Wildfires*. U.S. Department of Homeland Security. Retrieved from <u>http://www.ready.gov/wildfires</u>

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