

# **NEIGHBOURHOOD RECOGNITION PROGRAM**

# WILDFIRE HAZARD ASSESSMENT FORM

# INTRODUCTION

FireSmart Canada's Neighbourhood Recognition Program teaches people how to live with wildfire and increase their home's chance of survival through proactive actions, while encouraging neighbours to work together to reduce losses and damage. The Neighbourhood Wildfire Hazard Assessment is an important step in the FireSmart neighbourhood recognition process. It's a tool to help neighbourhood residents understand their wildfire hazard and how to reduce it.

Research has shown embers (burning pieces of airborne wood and/or vegetation that can be carried

up to two kilometres by the wind) and small surface fires to be the primary source of home ignitions during wildfires.

Residents must prepare their home to withstand embers and minimize the likelihood of flames or surface fire touching the home or any attachments. This can be accomplished by choosing ignitionresistant building materials and construction techniques and limiting the amount of flammable vegetation in the three home ignition zones that surround each home. Periodic maintenance of vegetation is also important.





# OVERVIEW

It is not uncommon for home ignition zones to overlap onto adjacent properties. This makes the conditions of neighbouringhomes and vegetation a part of the wildfire threat. To maximize benefits, it's important that neighbours work together to reduce their shared wildfire hazard and risk.

# The Neighbourhood Wildfire Hazard Assessment speaks to the general conditions in the neighbourhood and does not provide details on individual properties.

# The assessment process:

- Is completed by the Local FireSmart Representative during a walkthrough or a driveby of the neighbourhood and does not require each individual dwelling unit to have a home hazard assessment completed prior to the neighbourhood assessment.
- Needs a logical recognized neighbourhood boundary (defined by streets, adjacent public property, infrastructure right of ways etc.)

#### The assessment should focus on:

- Vulnerability of homes to embers, ignition of small surface fires, and crown fire
- Condition of the structures themselves
- Immediate hazards within the Home Ignition Zone on individual properties
- Concerns presented by common/open space areas or adjacent public lands.

Also consider factors that impact hazard and influence fire behaviour or structure ignitability:

- Home construction characteristics
  (materials used for roofs, siding, decks, etc)
- General landscaping characteristicsvegetation types and condition
- Slope and aspect (direction a neighbourhood faces - north, south, east, or west)
- Housing density

The recommendations provided by the completed Neighbourhood Wildfire Hazard Assessment will be prioritized in the FireSmart Neighbourhood Plan and used by the FireSmart Neighbourhood Committee to organize FireSmart Events within the neighbourhood boundaries.



# DEFINING THE FIRESMART NEIGHBOURHOOD

The size of the FireSmart Neighbourhood is largely determined by the FireSmart Neighbourhood Champion and Committee – their comfort level with the location and number of neighbourhood properties is all important. It may be most efficient to limit the size of the neighbourhood to 'block party sized' groups of between 20 and 50 homes. Larger neighbourhoods that feature existing homeowner or cottager associations may also be quite workable.

# General Neighbourhood Description

Neighbourhood Name:		
Community (Town/City):	Prov/Terr:	
Latitude:	Longitude:	

**Boundary Description:** (Provide a description of the neighbourhoods recognized boundaries such as streets, crown or municipal land parcels, utility or other infrastructure right of ways, etc.):

# **Boundary Description**



# **General Neighbourhood Information**

Number of properties – homes within the neighbourhood's identified boundary.

**Note**: Multiple neighbourhoods can be located within a single large community.

Description of Properties within the Boundary

For definition purposes, a dwelling unit is a:

- Household/residence built for occupancy by one person, a family, or roommates, including mobile homes and cabins; and for multi-family residential occupancies (i.e. duplexes or townhomes
- An apartment building with 10 units would be considered ten dwelling units

# Number of dwelling units: Number of residents:

# Residential types in the neighbourhood (check all that apply):

Single family		Townhomes
Apartment	Mobile/Manufactured	Other

# Types of ownership (check all that apply):

Private	Common	Public (Crown/Municipal)
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# Lot sizes (check all that apply):

Less than 0.05 hectares or 500 square metres - (30' x 100' lot = 0.03 hectares)
0.05 to 0.1 hectares or 500 to 1,000 square metres - (60' x 100' lot = 0.06 hectares)
0.1 to 0.25 hectares or 1,000 to 2,500 square metres - (100' x 100' lot = 0.1 hectares)
Greater than 0.5 hectares or 5,000 square metres

# Other Neighbourhood Information

eg-Full time residents vs vacation/absentee residents, commercial/business operations, existing Homeowners Association or other groups.

# Other Neighbourhood Information



#### **Description of Local Wildland Fire Characteristics**

Fire intensity and rate of spread depend on the vegetation type (coniferous/deciduous) and condition (live/dead), topography, and typical weather patterns.

Describe the common vegetation type(s) in the neighbourhood (i.e., grasses, shrubs, and trees):

# Description of local wildland fire characteristics

Describe the topography within the neighbourhood (geographical features such as steep slopes and what direction the slope faces, presence of ravines and gullies or is the area primarily flat):

Topography description		

#### Wind Exposure:

No regular exposure to winds	Regularly exposed to winds	Frequent severe winds

# History of Wildfire:

Area with recent history of fire occurrence	Area with history of fire occurrence
Area with no history of fire occurrence	Unknown



# NEIGHBOURHOOD OBSERVATIONS

Use this section to record observations from within the neighbourhood and recommendations for action that can be included in the Neighbourhood Plan. Photos that illustrate successful hazard reduction efforts and areas that need improvement are useful and may be filed with Neighbourhood Recognition Program documents.

Remember, this is a neighbourhood-wide view and should report on the overall conditions of the entire neighbourhood. Individual home ignition zone assessments are not required for the Neighbourhood Wildfire Hazard Assessment.

# Observations

The observation section is broken down by the characteristics of homes and the vegetation management within the home ignition zones and common areas. Mark the appropriate box for each category that best represents the conditions within the neighbourhood.

# The Immediate Zone

This zone includes the exterior of the structure and a non-combustible area that extends 0m-1.5m around the structure.

Homes - General building construction: Are the homes made from ignition resistant building materials?

Roofing Materials - Fire-rated: Good condition roof materials (metal, clay, asphalt shingles) vs Fire-rated: Poor condition or un-rated roof materials (wooden shake).

Greater than 75% of homes have fire-rated roof materials (metal, clay, asphalt shingles)
 50 to 75% of homes have fire-rated roof materials (metal, clay, asphalt shingles)
 25 to 50% of homes have fire-rated roof materials (metal, clay, asphalt shingles)
 Less than 25% of homes have fire-rated roof materials (metal, clay, asphalt shingles)

# **Gutter Type and Roof Cleanliness**

Gutter Type and leaf litter, pine needles, or debris on roof or in gutters.

Greater than 75% of homes have non-combustible gutters, with cleaned roof and gutters

50 to 75% of homes have non-combustible gutters, with cleaned roof and gutters

25 to 50% of homes have non-combustible gutters, with cleaned roof and gutters

Less than 25% of homes have non-combustible gutters, with cleaned roof and gutters



# Vents and Openings

Vents allow air to flow in or out of buildings and can be a potential ignition source.

Greater than 75% of homes have non-combustible, fire-rated vents with 3mm screening
50 to 75% of homes have non-combustible, fire-rated vents with 3mm screening
25 to 50% of homes have non-combustible, fire-rated vents with 3mm screening
Less than 25% of homes have non-combustible, fire-rated vents with 3mm screening

# **Building Exterior or Siding**

Non-combustible or ignition resistant siding - fibre cement, stucco, log, metal, brick/stone vs Combustible siding – vinyl or wood.

Greater than 75% of homes have non-combustible or ignition resistant siding
50 to 75% of homes have non-combustible or ignition resistant siding
25 to 50% of homes have non-combustible or ignition resistant siding
Less than 25% of homes have non-combustible or ignition resistant siding

# Ground-to-Siding Clearance

15 centimetres non-combustible vertical ground-to-siding clearance.

Greater than 75% of homes have 15 cms non-combustible vertical ground-to-siding clearance

50 to 75% of homes have 15 cms non-combustible vertical ground-to-siding clearance

25 to 50% of homes have 15 cms non-combustible vertical ground-to-siding clearance

Less than 25% of homes have 15 cms non-combustible vertical ground-to-siding clearance



# Balcony, Deck, Porch

Non-combustible decks feature no gaps or cracks, heavy timber, non-combustible or firerated construction with non-combustible surface and no combustible debris under deck.

Greater than 75% of homes have non-combustible deck with no combustibles under deck	
50 to 75% of homes have non-combustible deck with no combustibles under deck	
25 to 50% of homes have non-combustible deck with no combustibles under deck	
Less than 25% of homes have non-combustible deck with no combustibles under deck	

#### Window Glass

Tempered or multi-pane vs single pane windows.

Greater than 75% of homes have tempered or multi-pane windows
50 to 75% of homes have tempered or multi-pane windows
25 to 50% of homes have tempered or multi-pane windows
Less than 25% of homes have tempered or multi-pane windows

# 0 metres - 1.5 metres from the Structure

The area up to 1.5 metres from the ground-level exterior footprint of the structure, including any attachments or extensions, must feature a non-combustible surface with no combustible debris, materials, fences or plants present.

Greater than 75% of homes have treated non-combustible surface	
50 to 75% of homes have treated non-combustible surface	
25 to 50% of homes have treated non-combustible surface	
Less than 25% of homes have treated non-combustible surface	



#### Intermediate Zone

The area 1.5 metres to 10 metres from the home must feature:

- i) No coniferous (evergreen) forest vegetation
- ii) Surface vegetation of grass less than 10 centimetres long or non-combustible surface and low flammability (deciduous) plants
- iii) No woodpiles and other combustible materials, stored vehicles or outbuildings not meeting FireSmart guidelines.

Greater than 75% of homes have treated Intermediate Zone
50 to 75% of homes have treated Intermediate Zone
25 to 50% of homes have treated Intermediate Zone
Less than 25% of homes have treated Intermediate Zone

# **Extended Zone**

The area 10 metres to 30 metres from the home must feature:

- i) Separated coniferous (evergreen) forest vegetation (3 metres between adjacent treetops)
- ii) Reduced surface vegetation (dead branches, long grass, needles)
- iii) Flammable shrubs (coniferous) should be spaced out and away from coniferous trees
- iv) No low-lying coniferous tree branches (less than 2 metres from ground)

Greater than 75% of homes have treated Extended Zone
50 to 75% of homes have treated Extended Zone
25 to 50% of homes have treated Extended Zone
Less than 25% of homes have treated Extended Zone

# Additional considerations:

The area 30 metres to 100 metres from the home is often a common/open space area or an adjacent public/private land area.

This area is often not owned by neighbourhood residents but may feature accumulated wildland fuels that can support wildfires spreading towards or through the neighbourhood.

Neighbourhood is adjacent to wildlands with accumulated fuels

Neighbourhood is not adjacent to wildlands with accumulated fuels



Is there a management plan for the wildland fuels in the area 30 metres - 100 metres from homes and structures? If so, please describe:

# Management plan

Additional comments or observations regarding neighbourhood conditions:



# SUMMARY AND RECOMMENDATIONS

Use this section to summarize observations made in the Neighbourhood Wildfire Hazard Assessment.

Home Ignition Zone Hazard Factor Summary – Part 1					
Provide a percentage number in the blank provided to summarize approximate neighbourhood FireSmart compliance for each hazard factor.					
Roofing Materials - page 6	%	of homes have fire-rated roof materials (metal, clay, asphalt shingles)			
Gutter Type and Roof Cleanliness - page 6	%	of homes have cleaned and maintain their roof and gutters			
Vents and Openings - page 7	%	of homes have non-combustible, fire-rated vents with 3mm screening			
Building exterior or siding - page 7	%	of homes have non-combustible or ignition resistant siding			
Ground-to-siding clearance - page 7	%	of homes have 15 cms non-combustible vertical ground-to-siding clearance			
Balcony, deck, porch - page 8	%	of homes have non-combustible deck with no combustibles under deck			
Window Glass: Multi-pane vs single pane windows - page 8	%	of homes have multi-pane windows			
Immediate Zone - page 8	%	of homes have treated non-combustible surface			
Intermediate Zone - page 9	%	of homes have treated Intermediate Zone			
Extended Zone - page 9	%	of homes have treated Extended Zone			



#### Home Ignition Zone Hazard Factor Summary – Part 2

List issues identified and ranked as priorities for hazard mitigation as well as areas where there is high compliance with FireSmart guidelines within the neighbourhood.

Emphasis should be on the FireSmart status of the homes and the Immediate and Intermediate Zones.

Summary

Recommendations – Provide recommendations for neighbourhood activities to reduce wildfire hazard.

**Recommendations** 



# NEXT STEPS

The information collected during the Neighbourhood Wildfire Hazard Assessment process will help develop recommendations that can be applied to the neighbourhood's FireSmart Neighbourhood Plan - a prioritized list of hazard reduction projects and the related investments needed to achieve them for the neighbourhood. The FireSmart Neighbourhood Plan also highlights suggested homeowner actions and education activities – called FireSmart Events - that participants will strive to complete – generally one event per year, over a period of multiple years. FireSmart Neighbourhood Plans should be updated at least every three years.

Neighbourhood Wildfire Hazard Assessment recommendations may address other neighbourhood/ fire safety issues such as:

- Ingress/egress routes
- Street signs and address numbers
- Location of fire service and capabilities
- Water supply for fire service response hydrant locations

The local fire department can offer assistance in determining what other safety issues should be addressed.

#### **Assessment Participants**

List the principal participants who assisted in development of this document. This will be the Local FireSmart Representative, the Neighbourhood Champion or Committee members, local Fire Chief etc.

Name	Role/Organization	Phone	Email	Date
Name 1	Organization	Phone #	Email	Date
Name 2	Organization	Phone #	Email	Date
Name 3	Organization	Phone #	Email	Date

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