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 ignition-resistant 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 neighbouring homes 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 drive-by 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 characteristics– vegetation 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:	Greater Molega Lake Lot Owners Association		
Community (Town/City):	New Elm	Prov/Terr:	NovaScotia
Latitude:	44.384809	Longitude:	-64.870051

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

Molega Lake North is off of the New Elm Community main road access to the community is just off the New Elm Road, on Falkenhams Rd just in the county of Queens Nova Scotia. There are at least five parcels in or near the community that are Crown blocks some of which are the access road in (Labelled as Bridge Lot 12 Pleasant River on the mapping system. The community itself is primarily privately owned.
Roads within the community areFalkenham turns into Baker Point Rd, High POint Terrace, Bluejay Drive, Lakeview Hideaway, Pine Point Way, Uhlman Point Rd, Riverside Dr, Riverview Spur, Sandy Cove, Beach Cove Pathway, Molega Dream Estate Rd. There are close to 300 lots in the neighbourhood, not all of which are occupied. The residents are a mix of seasonal and permanent. The are is powered with primary phase lines form New Elm and run through out the roads to the lake. There are no other critical infrastructure such as transmission lines or communications towers, cell service is limited here.

NEIGHBOURHOOD RECOGNITION PROGRAM
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FireSmart™ Canada

General Neighbourhood Information

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

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

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

Description of Properties within the Boundary

Number of dwelling units:		Number of residents:	

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

■ Single family	☐ Duplex	☐ Townhomes
☐ Apartment	☐ Mobile/Manufactured	■ Other

Types of ownership (check all that apply):

■ Private	☐ Common	☐ Public (Crown/Municipal)

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

The neighbourhood is a mix of permanent and seasonal residents and is governed by the Greater Molega Lake Lot Owners Association, this area is considered the north side.

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

The neighbourhood is situated in the ecodistrict 740 Lahave Drumlins. LaHave Drumlins is dominated by coniferous forests, with tolerant hardwoods on the upper slopes of drumlins and well drained hills. Sugar maple, red oak, beech, birches, hemlocks, spruce, pine and fir dominate the area. The forest stand has been impacted by Hemlock Woolly Adelgid and the hemlock trees are dying. Often upper hills and crests are preferred by hardwood species with red spruce, pine and hemlock. Shrub layers include striped maple, fly-honeysuckle, mosses, ferns, lily, starflower and aster.

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

The area is sloped south-easterly towards the atlantic ocean and is approximately 40 km from the ocean. The neighbourhood stands about 100-140m above sea level with the highest points being on High point and Uhlman Rds. 136m max.
In between the drumlins the soil is less drained and where more hardwoods would stand there is a lot of water in the area.

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).

- [x] 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
- [x] 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 fire-rated 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

There is not a management plan for the adjacent fuels outside of the lots. Consideration should be given to the hemlock and beech impacted by forest health issues, in time if they die off they will become dead and more of a fire hazard. Fuels that create an environment for fire spread such as understory plants and trees, or any trees that can carry fire from surface to tree tops should be considered, pruning forest 8ft up and spacing trees 8ft apart will reduce the chance for fire spread and increase forest health. This may be something collectively the association group can look at as an option by bringing in a specialist to manage the forest.

Additional comments or observations regarding neighbourhood conditions:

Top observations from the assessment.

Because the forest is mature in the area and comprised of primarily softwoods there is alot of accumulated debris on the roof tops of seasonal structures and in gutters of both seasonal and permanent structures. Fire embers can land on roof/gutters and cause the structure to burn from the top down.

- The forest stand is too close to 90% of the structures in this community, if it is impossible to increase the distance from structure to forest then a minimum of 10m pruning/thinning with a sprinkler system that can be quickly setup when evacuated (https://waspwildfire.com/ is a recommended brand) promoting a clean under story, hardwoods and or pruned thinned mature forest is recommended.

- Roadways should provide safe and simultaneous access for emergency vehicles and public evacuation with a traveled way of not less than 7.5m(23ft) horizontally and 14ft vertically (4.5m), if two separate one way routes should be less than 16ft. The feeder roads in the neighbourhood are one way and less than 16ft, this will cause issues with evacuations and emergency vehicles trying to get into a structure whether it be for wildfire, structure fire or medical emergency. Dead end roads a should have a cul-de-sac for ease of turning for apparatus and bridges weight restricted for large tankers.

- Structures will have a better chance of survival with a metal roof and a log or heavy wood slat

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	90	%	of homes have fire-rated roof materials (metal, clay, asphalt shingles)
Gutter Type and Roof Cleanliness - page 6	50	%	of homes have cleaned and maintain their roof and gutters
Vents and Openings - page 7	50	%	of homes have non-combustible, fire-rated vents with 3mm screening
Building exterior or siding - page 7	40	%	of homes have non-combustible or ignition resistant siding
Ground-to-siding clearance - page 7	30	%	of homes have 15 cms non-combustible vertical ground-to-siding clearance
Balcony, deck, porch - page 8	0	%	of homes have non-combustible deck with no combustibles under deck
Window Glass: Multi-pane vs single pane windows - page 8	45	%	of homes have multi-pane windows
Immediate Zone - page 8	45	%	of homes have treated non-combustible surface
Intermediate Zone - page 9	10	%	of homes have treated Intermediate Zone
Extended Zone - page 9	0	%	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

- Firewood should be piled away from structures and combustibles. This should include construction materials or any other flammable objects in your lot.
- Maintain a firepit/burn barrel that is at minimum 3m from combustibles around and above the fire pit. Firepits should be placed on bare mineral soil or rock.
- Blue reflective civic signs are recommended, emergencys may take place in the dark and it is easier as a firefighter to see them and respond quicker.
- Fireworks in NS fall under the burn restrictions if it is a RED day then there are no fire works allowed according to the Fire Marshall.
- Water access closest to the area is at Bluejay Point where boat launch is, it is recommended that a dry hydrant be installed this speeds the process of hookup and water supply in an emergency not only for wildfires but also reduces the time fire trucks have to chip away at ice in winter and hookup for structure fires.

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

Recommendations

Educate residents on the dangers of fire and ways to mitigate fire around their own structures. Maintaining a neat and tidy yard will reduce the risk of fire spread and using fire resistive plant species.
Increase road width and have a regular vegetation management program for ditches and forest encroaching on roads.
Maintain burn safe signs and random back tanks in trail head locations or hangouts.
Road signs are good and easily read, maintain civic signs with better visibility.

Visit https://firesmartcanada.ca for more tips on plants, mitigation. Recommend residents take FireSmart101 training - 1hr online self training to learn more.

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 Rod Burgar	Organization	Phone # 904-440-3457	Email rod.burgar@acceleratorbusiness.com	Date
Name 2 Kara McCurdy	Organization DNRR	Phone # 902-758-5099	Email kara.mccurdy@novascotia.ca	Date August 10/23
Name 3	Organization	Phone #	Email	Date

Molega Lake North

Fuel Types

N

1:25,000

Legend

- Buildings
- Roads
- Properties
- Protected Area

Fuel Types

- C2 Fuels of Concern

FuelType

- C5 Red/White Pine
- C1 Conifer
- C3 MatureSoftwoods
- C2 Boreal Spruce
- C4 Immature Dense Softwoods
- C6 Conifer Plantation 2-6m crown base HT
- D1/D2 Leafless/Green Hardwood; D2
- M1/M2-25 Leafless/Green Mixedwood 21-39% Conifer
- M1/M2-50 Leafless/Green Mixedwood 40-59% Conifer
- M1/M2-75 Leafless/Green Mixedwood 60-79% Conifer
- M3/M4-30 Leafless/Green Mixedwood 26-50% Dead
- M3/M4-60 Leafless/Green Mixedwood 51-75% Dead
- M3/M4-100 Leafless/Green Mixedwood 76%+ Dead
- CC10 Clearcut
- NS1 Nova Scotia Special (Ericaeous heath)
- O1/O2 Cured/Green Grass
- S1 Slash
- S2 Spruce/Fir Slash
- S3 Heavy Slash/ Windthrow
- SF Seasonal Fuel
- Nonn/UR Nonfuel/Urban
- XX Not Classed
- WAT Water

Note: Map is for demonstration purposes only.
For accurate fuel types conduct a ground truthing survey
Fuel Type data is from 2018.
Date: May 14, 2019

WILDFIRE MANAGEMENT NOVA SCOTIA

FOREST PROTECTION

NOVA SCOTIA

Pleasant River

Baker Point Road

New Elm Road

Uhlman Point Road

Riverside Drive

Pine Point Way

Molega Dream Estate Road

River View Spur

Shady Cove

Heron Cove Pathway

Lakeview Highway

High Point Terrace

Blue Jay Drive

Molega Lake

Cobbles Cove

LEGEND

- ROADWAYS WITHIN ASSOCIATION
- ROADWAYS NOT WITHIN ASSOCIATION
- ROADWAY EASEMENTS
- ASSOCIATION GREENBELT AREAS

MOLEGA LAKE LOT OWNERS ASSOCIATION

SITE PLAN-NORTH SHORE

DATE : JUNE 2015
SCALE : 1 : 2500

NOTES:

1. MOLEGA LAKE LOT OWNERS ASSOCIATION MAKES NO REPRESENTATIONS, EXPRESS OR IMPLIED, AS TO THE ACCURACY, AND COMPLETENESS OF THE INFORMATION, MAPS, AND DATA CONTAINED HEREIN.
2. THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED FOR LEGAL, ENGINEERING, OR SURVEYING PURPOSES.
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5. ACTUAL CONSTRUCTED ROADWAYS HAVE NOT BEEN SURVEYED AND THEREFORE MAY OR MAY NOT BE ENTIRELY CONTAINED WITHIN THE ACTUAL ROADWAY CORRIDORS NOTED ON THIS DRAWING.

CROWN LAND

In around Molega North

Legend

- 02-002-2020
- 22-Apr-16
- 286 High Point Terrace
- Area Boundary
- Cameron's Brook Provincial Park
- Chris Crouse Machining Services
- Feature 1
- Feature 2
- Feature 3
- FS MOLEGA
- Guesthouse Skylarke
- Regional Boundary
- Sub Office Boundary

FS MOLEGA

286 High Point Terrace

02-004-2021

Google Earth

Image © 2023 CNES / Airbus

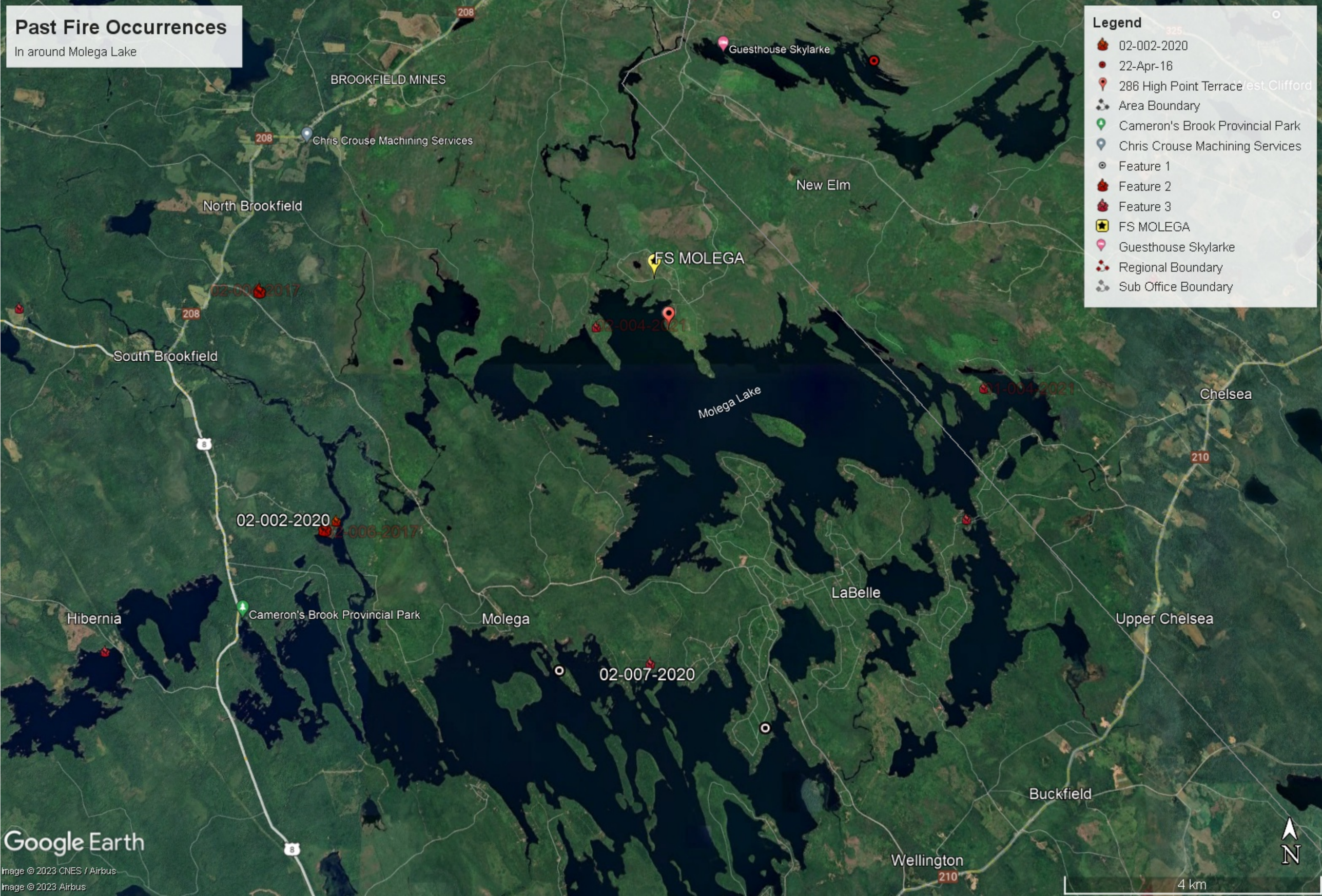
Image © 2023 Airbus

N

1 km

Past Fire Occurrences

In around Molega Lake



Legend

- 02-002-2020
- 22-Apr-16
- 286 High Point Terrace
- Area Boundary
- Cameron's Brook Provincial Park
- Chris Crouse Machining Services
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