

# FIRESMART

NOVA SCOTIA 2023



# Who Am I?



- West Hants Volunteer Fire Fighter
- Captain/Training Officer/Fire Prevention Educator
- Resilient Minds for Fire Fighters Instructor
- Regional Fire Prevention Committee
- Previous Municipal Councillor
- Local FireSmart Representative

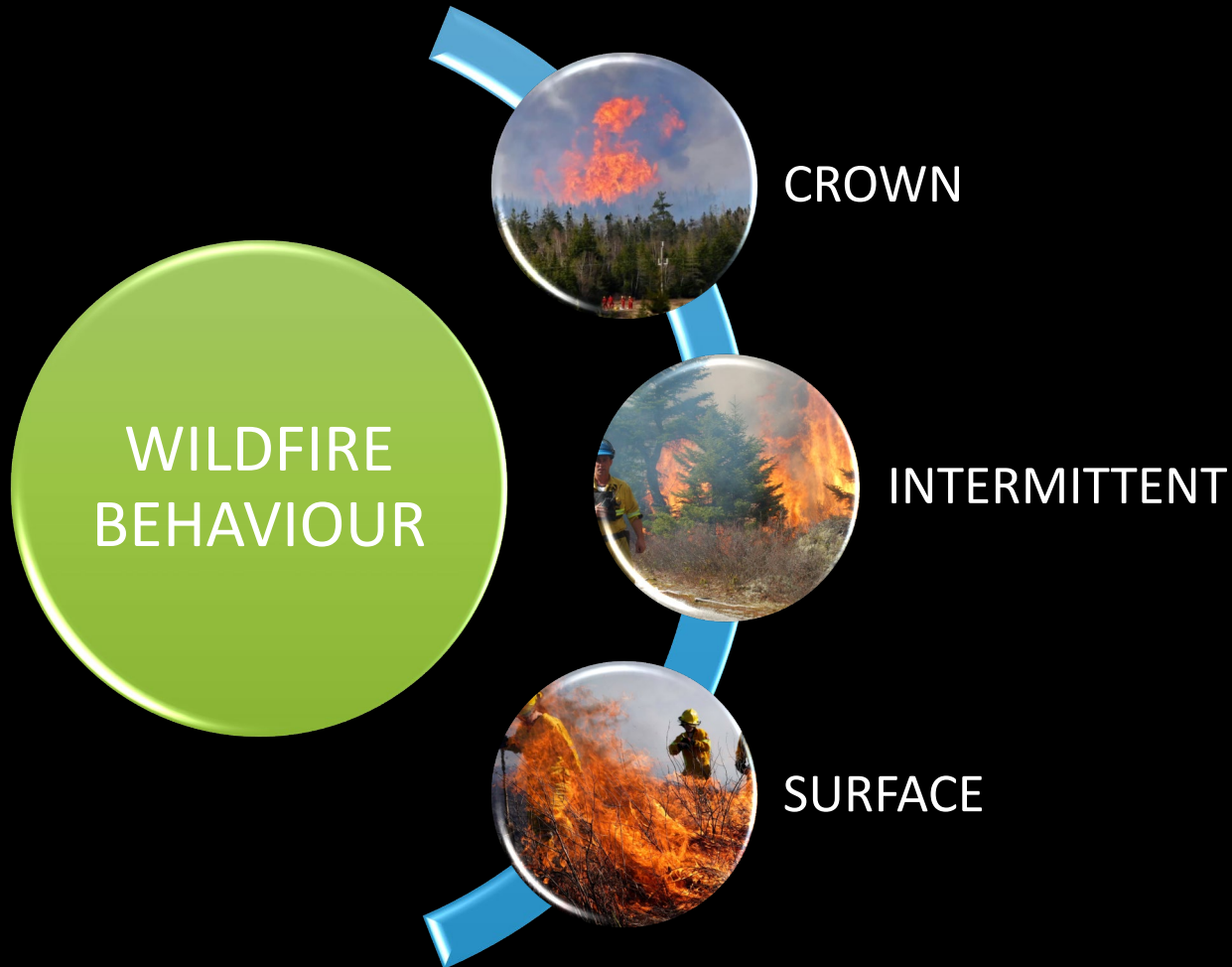




- 30 YEARS AS VOLUNTEER FIREFIGHTER
- 30 YEARS AS WILDLAND FIREFIGHTER
- 25 YEARS AS SEARCHER WITH SEARCH AND RESCUE
- WILDFIRE PREVENTION OFFICER
- PUBLIC INFORMATION OFFICER/FIRE INVESTIGATOR

Kara McCurdy  
FireSmart Provincial  
Liaison

# UNDERSTANDING WILDFIRE BEHAVIOUR



## FACTORS

- **Fuel** (Softwood/Hardwood/Grass/Slash) arrangement
- **Topography**
- **Weather** – Fronts/Winds, rain, humidity/temp
- **Aspect** – South (Warmer/Drier)North (Cooler/wetter)
- **Time of Year:**
  - Spring – Surface, frozen ground, ice in forests
  - Late Spring/Early Summer – Dry fine fuels, spring dip, fast moving, not deep
  - Mid to late Summer – Drought, deep burning, shorter days = lower temp/higher humidity but also hurricane season.



## FIRE SMART LANDSCAPES – FOREST AND LANDSCAPE

- Hardwoods – Low risk
- Mixedwoods – Medium/high depending on percent of dead
- Softwoods – Most fire receptive ( pitch/resin)
- Clearcuts – Approximately 10 fires per season/low risk
- Grass/Bog – High risk of control/injury

# Hurricane/Wind Damage Issues

- Species and arrangement dependent on how much more it will spread (Acts like S3 fuel)
- After the fine fuels (needles/leaves) die, the logs are less of a risk and eventually contain more moisture.
- Access/Firefighter safety
- Less recreational use or operations in – So less human related fire but chance for lightning. Where we may have issues is from machinery and cleanup/sparks
- Key messages for public is burn restrictions/mitigation – where you burn materials or provide alternatives.





**DIRECT FLAME**



**CONVECTIVE/RADIANT HEAT**

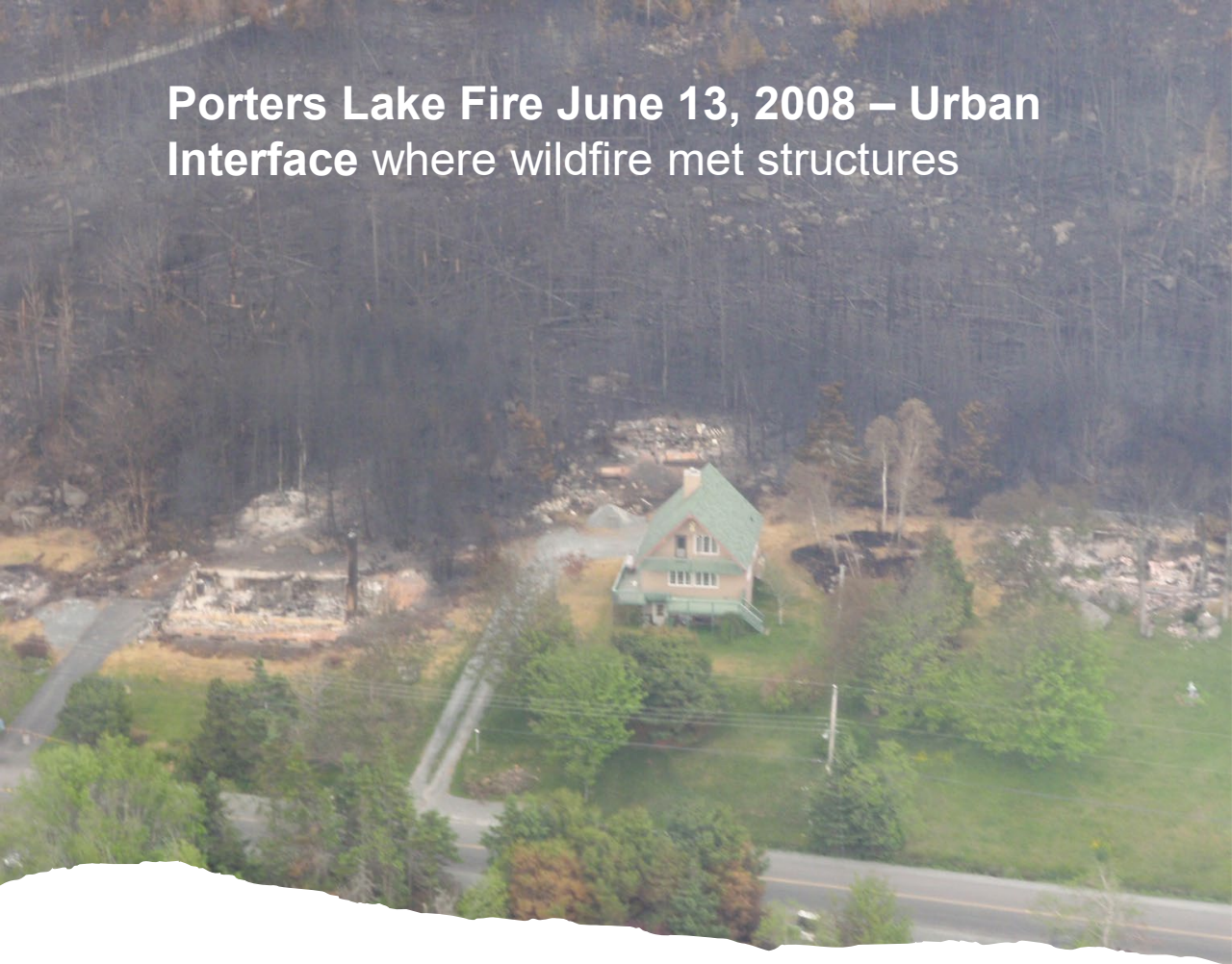


**FIRE EMBERS**

# **FIRE IMPACTS ON STRUCTURES – METHODS**

**PORTERS LAKE FIRE 2008**

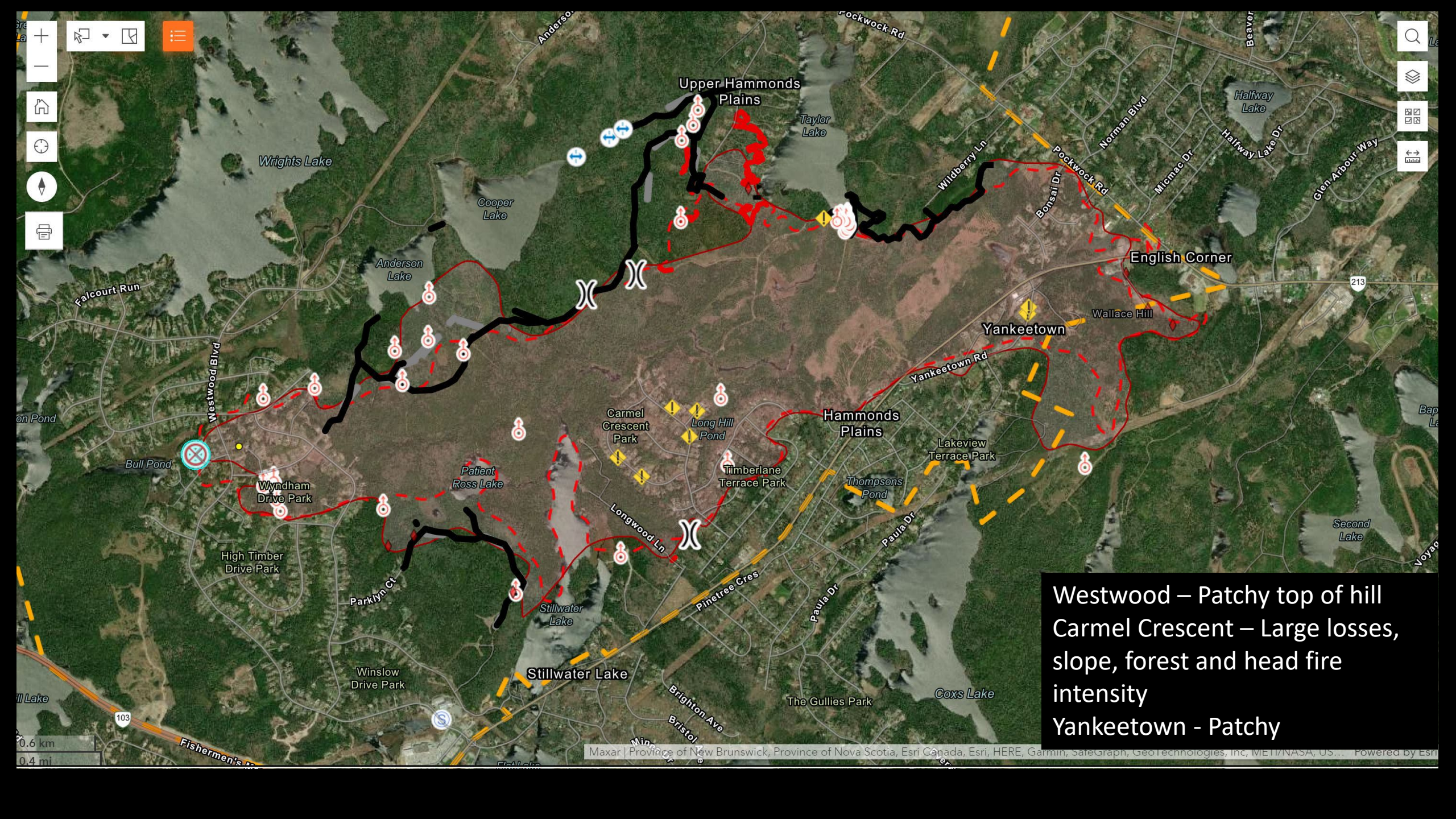
Porters Lake Fire June 13, 2008 – Urban Interface where wildfire met structures



Spryfield Fire April 29, 2009 – Fringe is where there are separated structures



## **FIRE IMPACTS ON STRUCTURES- W.U.I (wildland urban interface)**



Westwood – Patchy top of hill  
Carmel Crescent – Large losses, slope, forest and head fire intensity  
Yankeetown - Patchy











## FIRE IMPACTS ON STRUCTURES – HOME IGNITION ZONES

- 0-1.5m – Non-Combustible
- 1.5m-10m – Reduced combustibles (pruning, thinning, mowing and raking, moving wood etc)
- 10m-30m – Increasing the barrier with same techniques, promoting hardwood, mowing if possible, removing dead/dying and SW

# NOT SO FIRE SMART HOMES





FIRE SMART HOMES



FIRE SMART HOMES

# FIRE SMART LANDSCAPES – PLANTS & MULCH

- High Water Content
- Low Shed
- Drought Tolerant
- Avoid evergreen shrubs, mulch



# So How Do We Become FireSmart?

Community involvement is the cornerstone of the FireSmart Canada Program. Through this program, residents who live near or within areas susceptible to wildfires will learn how to decrease risk and create a defensible space against advancing fires, ultimately saving homes and lives.



## FIRE SMART COMMUNITIES – LOCAL FIRE SMART REPRESENTATIVE/CHAMPIONS

- LFR – Is a first responder or agency rep who has taken the one-day training in community risk assessments
- With the Provincial Liaison, we complete an assessment.
- Compile a report and plan of action
- Work with the community champion to plan a community cleanup day/larger scale project
- Track volunteer hours and resources used/rented etc.
- Apply for Community recognition status



# FIRESMART


# 101

A FREE  
1 HOUR COURSE

REDUCE YOUR HOME'S VULNERABILITY TO WILDLAND FIRE



## LEARN ABOUT:

-  FireSmart and FireSmart principles
-  the seven FireSmart disciplines
-  the Wildland Urban Interface
-  the Home Ignition Zone



# FIRESMART AWARDS

## Community Prep Day Grants \$500 2023

- Acadia First Nation - Western NS
- Chalet Hamlet - West Hants
- Falls Lake Resort - West Hants
- Lake Charlotte Heritage Village - HRM
- North Preston - HRM
- The Pointe at Aspotogan - Lunenburg County

**Wawanesa Insurance - \$10-15000 grant  
Chateau Village in West Hants**

**Climate Change and other grants**



Applications for Prep Day grant \$500 open in fall

- Chalet Hamlet
- Chateau Village
- Falls Lake Resort

Neighbourhood Recognition- Chateau Village



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## NEIGHBOURHOOD RECOGNITION PROGRAM

**FIRESMART™ NEIGHBOURHOOD PLAN**

**NEIGHBOURHOOD INFORMATION**

Neighbourhood Name  Neighbourhood FireSmart Committee  
Enter Neighbourhood Name

Committee Chair/Champion  FireSmart Committee Chair/Champion  
Enter Name

Committee Member 1  FireSmart Committee Member 1  
Enter Name

Committee Member 2  FireSmart Committee Member 2  
Enter Name

FireSmart Representative, Town/Village  Local FireSmart Representative  
Enter Name, Town/Village

Fire Chief, Town/Village  Fire Chief  
Enter Name, Town/Village

**FIRESMART NEIGHBOURHOOD PLAN**

Background:

Background information

The Plan is:

Plan information



# FIRE SMART COMMUNITIES – ASSESS/PLAN AND ACTION

- Looks at neighbourhoods or subdivisions as a whole and gives percentages to evaluate
- Looks at water supply, forest stand and management, home construction, past fire occurrences, recreational uses, critical infrastructure, access
- Pull together a report and plan and action items, present to community.

# What's Been Going on So Far In Nova Scotia



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# FIRE SMART NOVA SCOTIA

## CMM – Trial with Bear River

- Community Assessment/home assessments
- Clean-up around community centre, and other large buildings
- Fuel Break around boundary
- Road and Civic Signs
- Fire and Chainsaw Training
- Awareness sessions
- Applied for FireSmart Community status
- Gold River, Wildcat and Ponhook will be doing similar work with a new grant



# FIRE SMART HOMES- ADVANCED ASSESSMENTS TRAINING

- 19 Trained Assessors
- 3 Agencies (HRM Fire, CMM, DNRR)
- Individual homes assessed
- Private report goes to only homeowner.
- Looks at home construction, access, forest stand and proximity, landscaping.





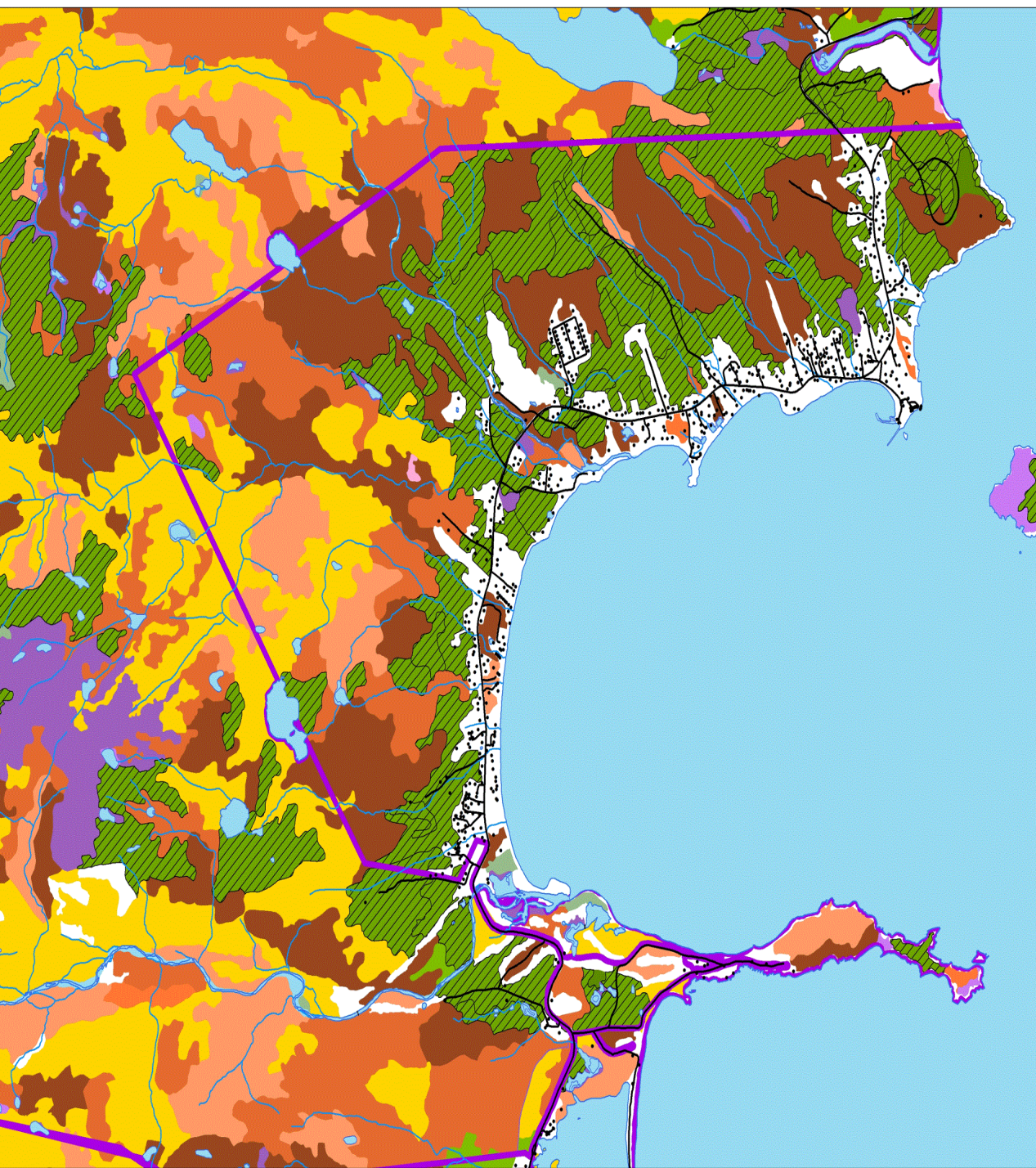
# SMART FIRST RESPONDERS - TRAINING

- Community Champion Workshop
- Local FireSmart Representative training
- Advanced Home Assessments
- Community Risk assessments and public workshops

# Halifax Regional Fire

- Implementing a new FireSmart Strategy
- Trained firefighters in Advanced Assessments
- Pulling together a plan to implement assessments and action
- Westwood Hills, Bayside ongoing assessment work ( dry hydrants, mitigation plan)





## Ingonish Fuel Types



### Legend

— Roads

Water

Protected Area

### Fuel Types

C2 Fuels of Concern

<all other values>

### FuelType

C5 Red/White Pine

C1 Conifer

C3 Mature Softwoods

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 (Ericaceous 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: 2021-10-06



# FIRESMART PARKS CANADA AND DND

- Parks Canada has completed mitigation in Highlands and is working at Seaside adjunct and Kejimikujik Parks, working with communities.
- DND has completed work around magazine hill and some other bases/lands to reduce fire spread in and out.



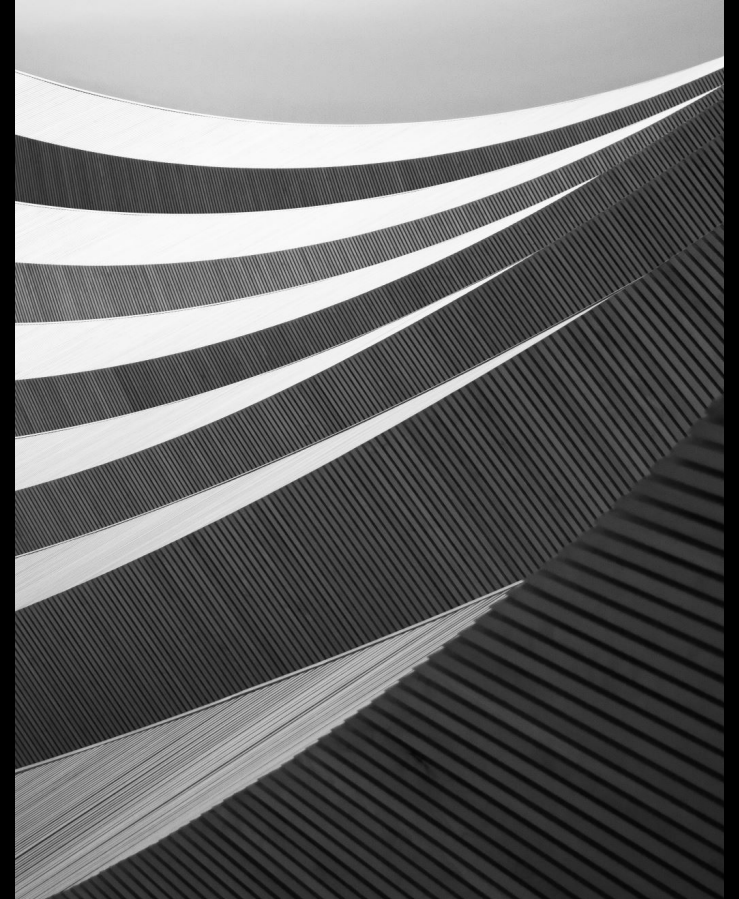
# West Hants & Lunenburg

Led by LFR Jennifer Daniels

- Vaughan area Falls lake, Chateau Village and Chalet Hamlet all working together to complete community assessments.
- Chateau village awarded \$10,000 grant for work
- Aspotogan, Chester area ongoing work much of the work in Lunenburg is Bruce Blackwood/Angela Henhoeffer with EMO pushing.



# What can be done to help mitigate negative impacts, and support our municipality in building its climate resilience?





- Create a prioritized list of communities that are within the wildland urban interface
- Community Risk Assessments
- 
- Study emergency preparedness strategies, building codes and land-use policies to make districts and homes more fire-resistant
- Review standards for new property developments and explore requirements for evacuation routes, emergency water sources and buffer zones
- Fire Smart mitigation efforts in Municipal Parks
- Support Fire Departments with pre-incident planning and training

# Public Education

- Planning & Development
- Regional Fire Prevention Committee-  
Community Outreach
- Buy in and support through regional  
fire departments
  - Sharing of resources for effective  
outreach
- Partnership with Municipal EMO
- Build capacity for **Local FireSmart  
Representatives (LFR)** and **Advanced  
Home Assessors** through regional fire  
departments
- Create Regional FireSmart Working  
Group
- Build partnerships with private sector





## FIRE SMART FIRST RESPONDERS - PREPLANNING

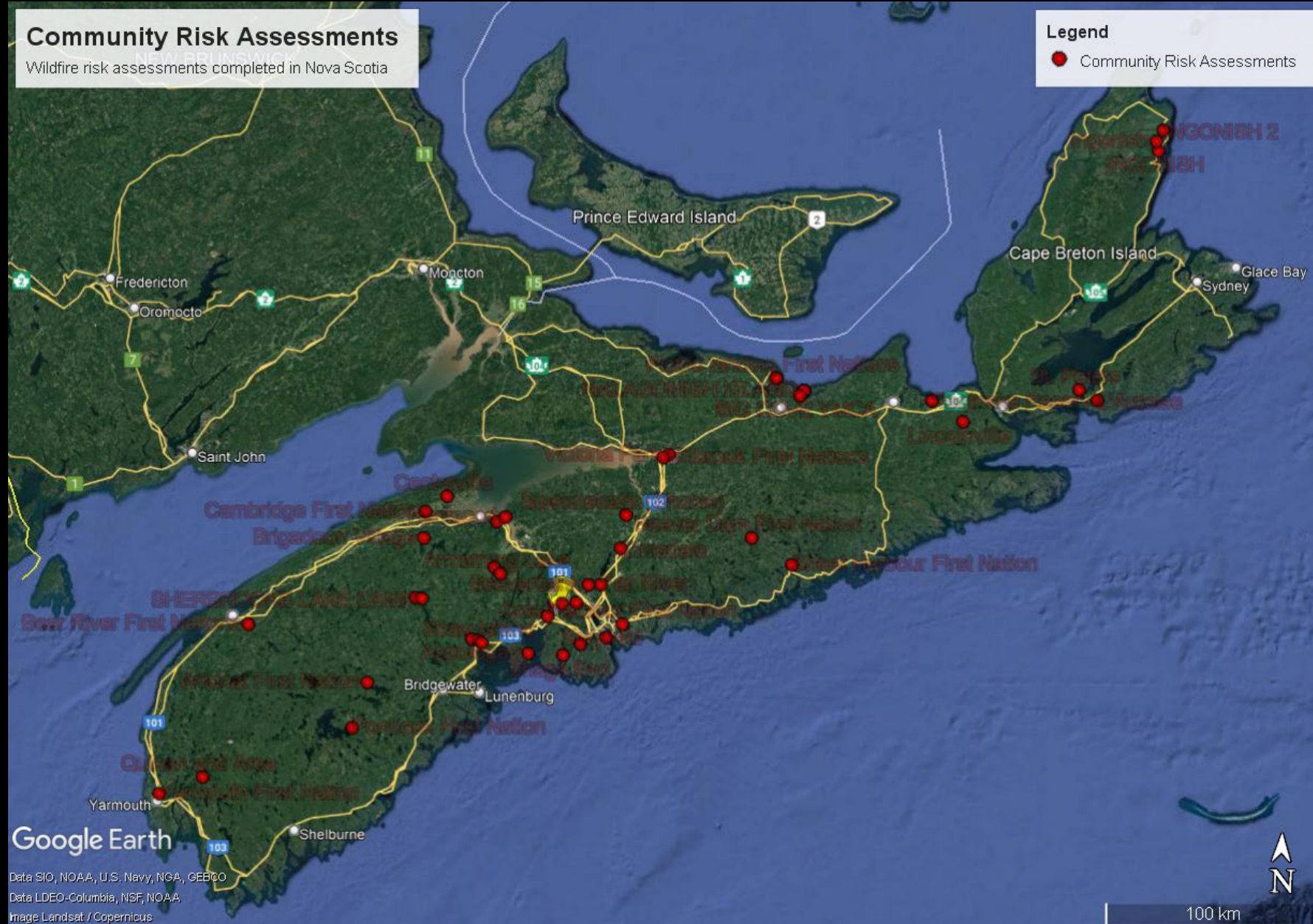
- If you are doing structural preplanning, you can add in home/business assessment
- Let's you know where your highest risk area of response zone are
- This helps in focusing resources and tactics.
- You can let community know how they fared out for more awareness and mitigation.

FIRE SMART  
– NOVA  
SCOTIA

**Community Risk Assessments**  
Wildfire risk assessments completed in Nova Scotia

**Legend**

- Community Risk Assessments



Google Earth  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Data LDEO-Columbia, NSF, NOAA  
Image Landsat / Copernicus



NOVA SCOTIA  
**FireSmart**™

# WHERE CAN YOU FIND RESOURCES

- FireSmart Canada or Nova Scotia Facebook Pages
- [www.firesmartcanada.ca](http://www.firesmartcanada.ca)
- <https://experience.arcgis.com/experience/0ee935539ce5495d86ce607d11a57a30> - Nova Scotia Wildfire Viewer
- <https://novascotia.ca/burnsafe/>
- [www.smokeybear.com](http://www.smokeybear.com)
- <https://firesmartbc.ca/ember/>
- [\(96\) Mi'kmaq Wildfire Prevention and Mitigation - Bear River NS - YouTube](#)

## FireSmart Nova Scotia

641 likes • 937 followers



 Promote

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# THANK-YOU

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Jennifer Daniels

[j.daniels71@live.ca](mailto:j.daniels71@live.ca)

902-792-8253