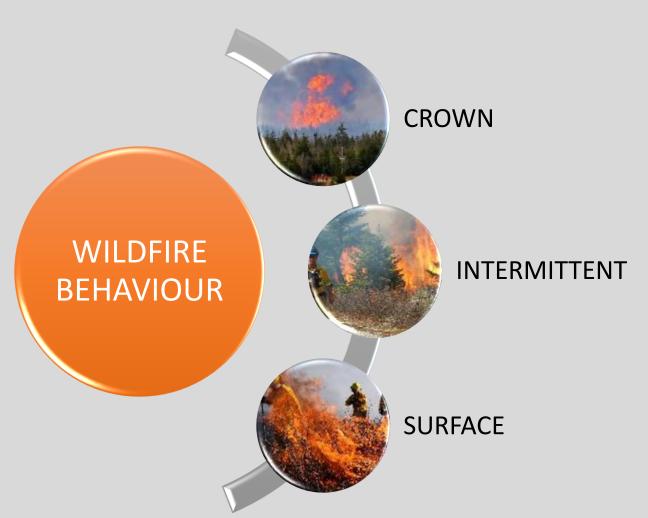




# WHO I AM?

- 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

## UNDERSTANDING WILDFIRE BEHAVIOUR



#### **FACTORS**

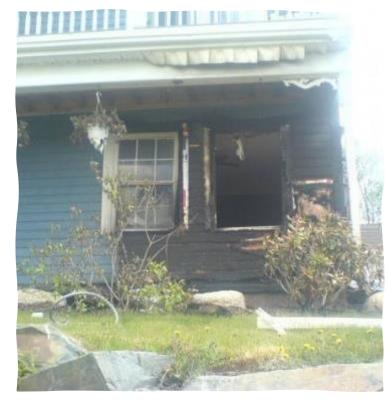
- **Fuel** (Softwood/Hardwood/Grass/Slash) arrangement
- Topography
- Weather Fronts/Winds, rain, humidity/temp
- Aspect South (Warmer/Drier)North (Cooler/wetter)
- Time of Year:
  - Spring Surface, frozen ground, ice in forests
  - Late Spring/Early Summer Dry fine fuels, spring dip, fast moving, not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







**CONVECTIVE/RADIANT HEAT** 



**FIRE EMBERS** 

# FIRE IMPACTS ON STRUCTURES – METHODS

**PORTERS LAKE FIRE 2008** 



Understanding Wildfire spread and devastation

- Westwood Structure loss patchy
- Carmel Crescent Large losses, slope, forest and head fire intensity
- Yankeetown Patchy

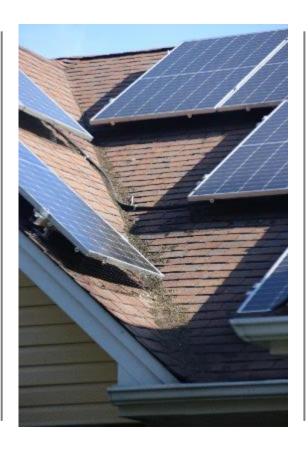
## **Challenges**

- Wind Changes/Weather
- Drought
- Access
- Evacuations
- Resources
- Fuels
- Structures
- Firefighter Safety









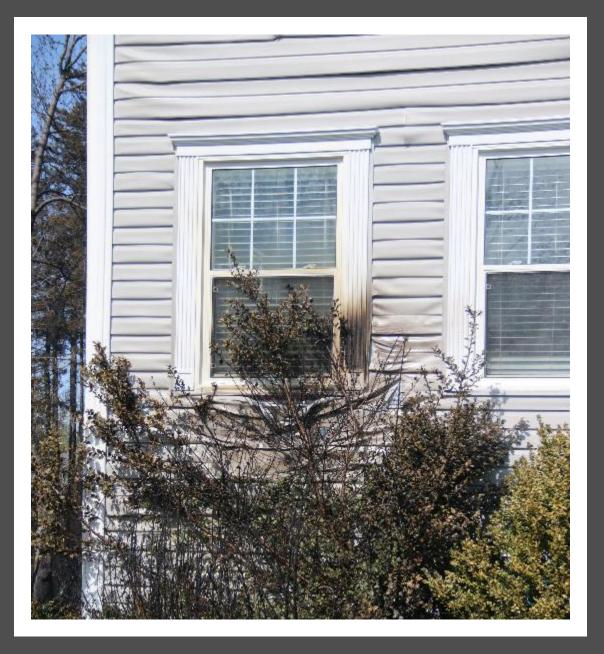














#### FIRE IMPACTS ON STRUCTURES – HOME IGNITION ZONES

- 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



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





#### NEIGHBOURHOOD RECOGNITION PROGRAM

FIRESMART*	NEIGHBOURHOOD F	PLAN

FIRESMART* NEIGHBOURHOOD PLAN	
NEIGHBOURHOOD INFORMATION	
Neighbourhood Name	Neighbourhood FireSmart Committee
ner segmenten some	
Committee Chair/Champion	FireSmart Committee Chair/Champio
trair form	
Committee Member 1	FireSmart Committee Member 1
Tailer Manne	
Committee Member 2	FireSmart Committee Member 2
ser see	
FireSmart Representative, Town/Village	Local FireSmart Representative
treer home, thurs-hittige	
Fire Chief, Town/Village	Fire Chief
Daire Mann, Soury Wage	
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.





## 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 (ME) we complete an assessment.
- Compile a report and plan of action
- Plan a community cleanup day/larger scale project
- Track volunteer hours and resources used/rented etc.
- Apply for Community recognition status

#### FIRE SMART HOMES-ADVANCED ASSESSMENTS TRAINING

- 45 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.





#### FIRE SMART LANDSCAPES – PLANTS & MULCH

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







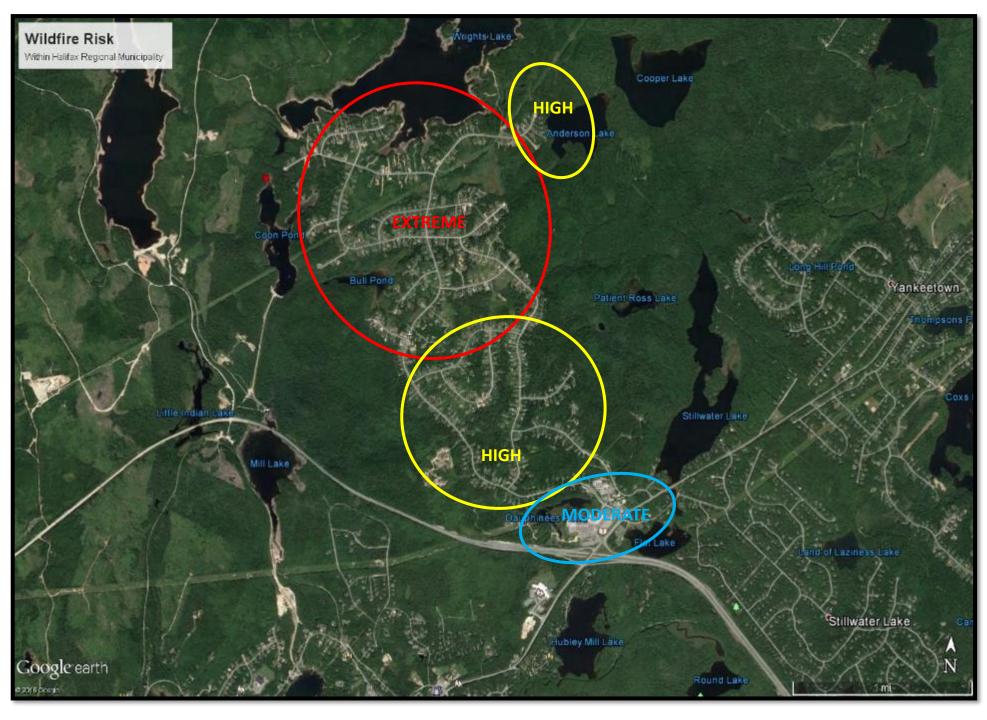
# Hurricane/Wind Damage Issues

- 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.

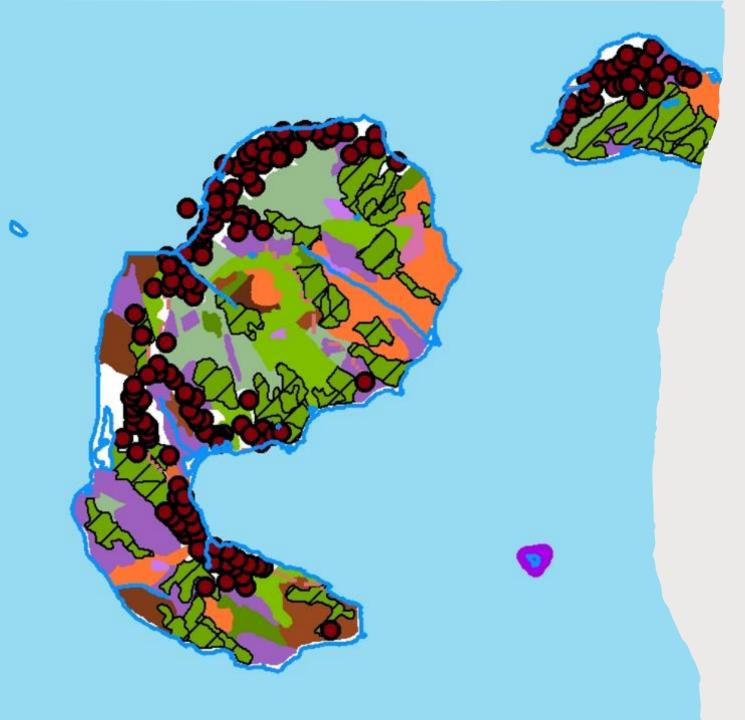






# Westwood Hills & Area

Based on Home
Construction
Proximity to woods
Fuel types
Recreational usage
Past fire occurrences
Landscaping Practises



### 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 FIRST RESPONDERS - TRAINING

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

# 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









# FireSmart Nova Scotia

#### **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)



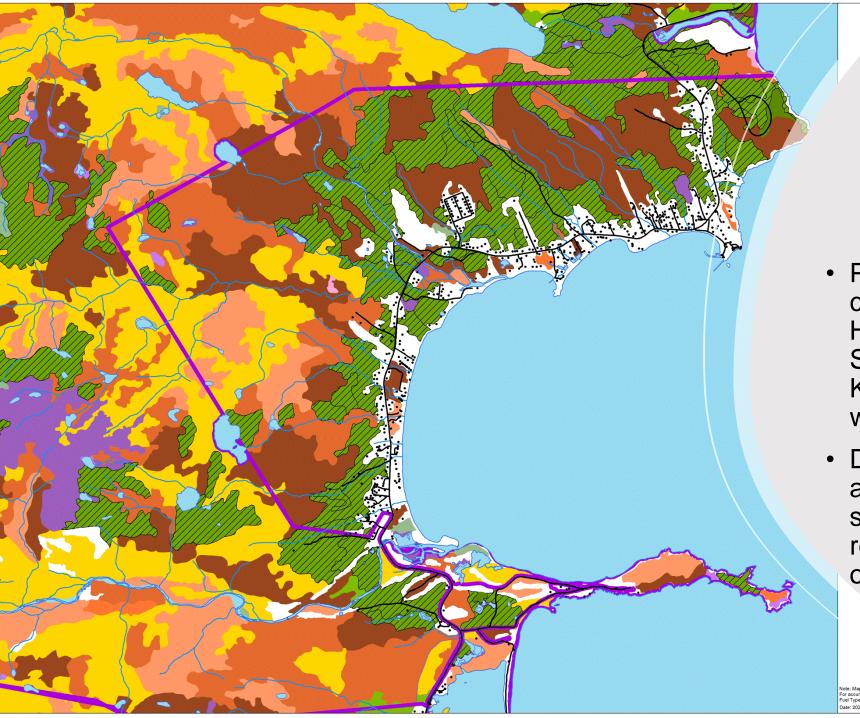






# West Hants & Lunenburg

- 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.



# 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.

Note: Map is for demonstration purposes only.

For accurate fuel types conduct a ground truthing survi
Fuel Type data is from 2018.

Data: 2021 40.08

# FIRESMART 101 AFREE 101 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** 



# WHERE CAN YOU FIND

- FireSmart Canada or Nova Scotia Facebook Pages
- www.firesmartcanada.ca
- https://experience.arcgis.com/ experience/0ee935539ce549 5d86ce607d11a57a30 - Nova Scotia Wildfire Viewer
- https://novascotia.ca/burnsafe/
- www.smokeybear.com
- https://firesmartbc.ca/ember/
- (96) Mi'kmag Wildfire Prevention and Mitigation Bear River NS - YouTube





# THANK-YOU

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