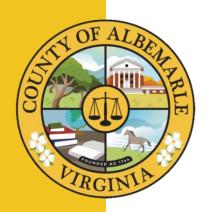


Wildland Fire Prevention Strategies - Albemarle County Fire Rescue



Increase in Wildfire Risk

Climate Change & Urbanization are the primary drivers

- Climate changes that impact wildfire risk:
 - Rising temperatures increases the rate of evaporation drying out soil and vegetation
 - Longer dry spells between storms contributes to the drying of fuel layers
 - Lower air humidity further dries out vegetation
- Wildland Urban Interface (WUI) Wildfire impact mostly driven by human behaviors



Wildfire Risk Assessment

- VA Hazard Mitigation Plan (2023)
- TJPDC Hazard Mitigation Plan (2023)
- County's Climate Vulnerability & Risk Assessment (2022)
 - Recognizes local wildfire risk and provides starting point
 - Experience over last two years suggests it underestimated the growing risk of wildfire risk in Albemarle
 - Report does not address smoke and air quality impacts from wildfires in other places (Canadian wildfires - summer 2023)
- Working closely with County's Climate Program staff to monitor and evaluate the impact on wildfires

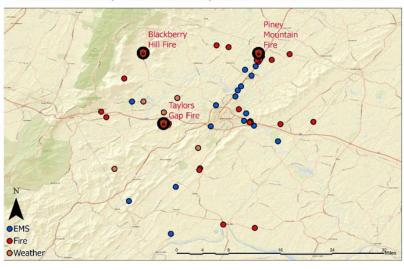


Events of March 20, 2024

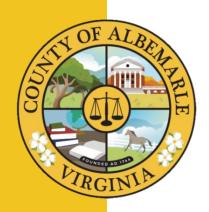
ACFR managed exceptional demand for service

- From 12-8pm- 49 total calls for service (3x typical dispatch)
- Clean-up/wrap-up extended thru March 22
- Activated our local EOC
- Total OT = 60k
- Local declaration of emergency & requested statewide mutual aid thru VDEM

Albemarle County Fire Rescue Responses 12-8 PM on 3/20/2024



*26 outdoor fire incidents, 3 significant fires totaling 520 acres



March 20th After Action Review

- Resource allocation amidst concurrent incidents
 - Three major brush fires within an hour span, all county resources depleted
- Mutual aid resources
 - Surrounding localities dealing with similar fires
 - Statewide resources took several hours to respond
 - Cumberland, Amelia, Pulaski, & Carrolton Counties
 - Virginia Department of Forestry
- Evacuation & Notification
 - Gaps in notification systems identified
 - Also need for additional public education

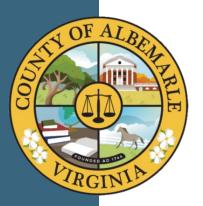


Enhanced Preparedness

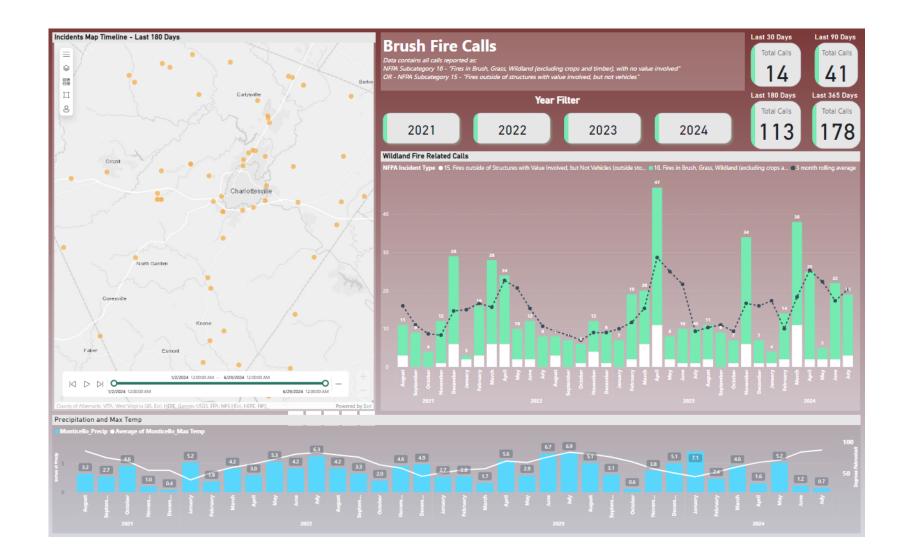
Improved Analytic Capabilities

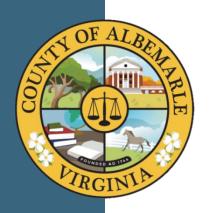
- Analyst products Situational Awareness Dashboard
- Environmental Services Division dataset purchase

Daily Wildfire Threat Analysis during peak periods Resilient Together Initiative – long term mitigation



Situational Awareness Dashboard

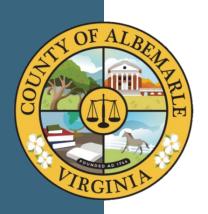




Daily Wildfire Threat Analysis

Daily assessment based on the following sources:

- 1. Virginia Forestry Fire Danger Rating
- 2. Precipitation and Weather Forecast National Weather Service (NWS)
- 3. Wildland Fire Assessment System (WFAS) U.S. Forest Service
- 4. National Weather Service (NWA) Fire Weather
- 5. Rainfall Observations (NWS)
- 6. Dead Fuel Moisture
- 7. Drought Conditions U.S. Drought Monitor
- 8. Air Quality DEQ AirNow

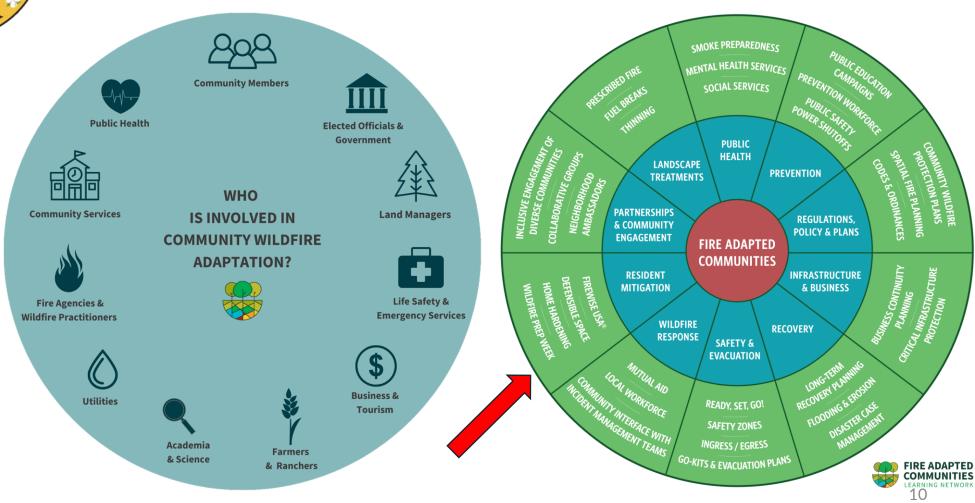


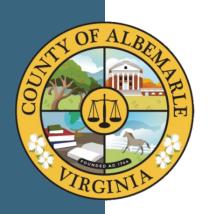
Future ACFR Preparedness

- Develop a Fire Adapted Communities plan
- Develop and implement an enhanced wildfire training program
- Evaluate and identify essential equipment needs for wildfire management
- Work with The Virginia Department of Forestry to develop a fuel management plan for Albemarle County
- Update the Open Burning Ordinance (Chapter 6, Article IV "Burning of Brush") to address identified gaps



Fire Adapted Communities



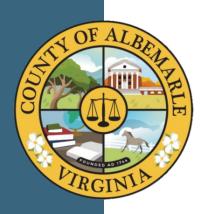


Firewise USA



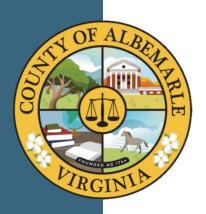


- Firewise USA originated in 1985 after a devastating fire season which destroyed 1,400 homes.
- The U.S. Department of Agriculture's Forest Service partnered with the National Fire Protection Agency (NFPA) to create Firewise.
- Provides a collaborative framework to help neighbors get organized and take action to reduce wildfire risks at the local level.



Benefits of Firewise Communities

- Reduces risk of property damage and loss of life
- Decreases firefighting resource needs
- Empowers and educates community members
- Increases community resilience



Firewise Principles

Creating defensible space

Hardening homes

- Building materials
- Landscaping
- Regular maintenance and upgrades

Planning for evacuations

- Importance of having a plan
- Routes, meeting points, communication
- Alerts & notifications

Community-wide preparedness and education

 Conduct Firewise workshops & clean-up days

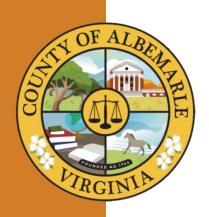


Creating Defensible Space - Home Ignition Zone



Implementing Firewise

- 1. Complete comprehensive community risk assessment
- 2. Identify and prioritize areas of highest risk
- 3. Conduct outreach to highest risk neighborhoods to seek participants in Firewise.
- 4. Conduct Firewise program (Emerald Ridge Community Pilot in 2019)



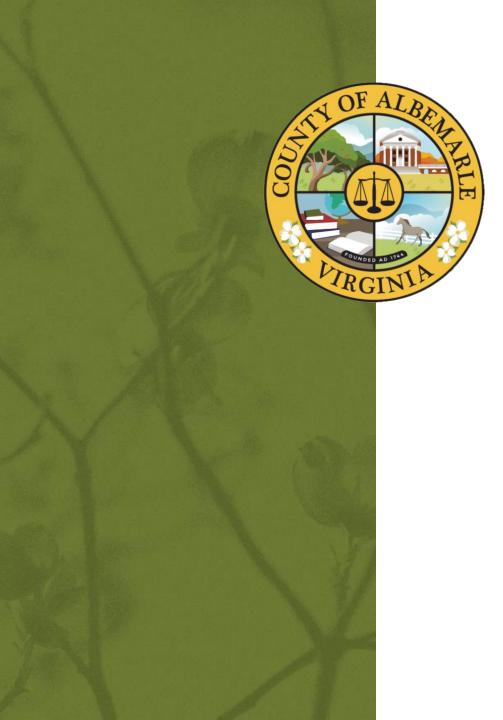
Burn Ordinance Update

Research/comparative analysis of other localities in Virginia completed

Gap analysis of existing ordinance completed

Recommendations for revisions include:

- Clarify categories of burning & make easier to understand
- Clarify/simplify permit requirements
- Clarify air quality impacts and actions that can be taken
- Consider adding fall burn ban period (10/1-11/15)



Questions?