



# Southeastern Wildfires

## Fall 2016

Subcommittee on Disaster Reduction

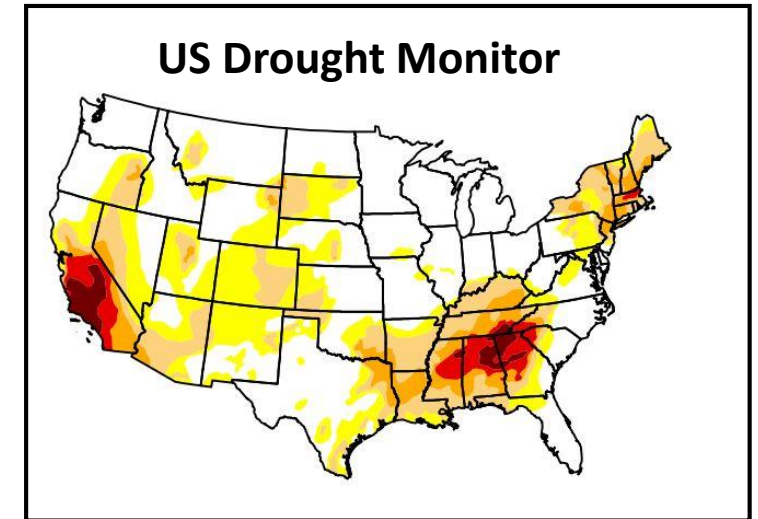
Matt Rollins

USDA Forest Service R&D



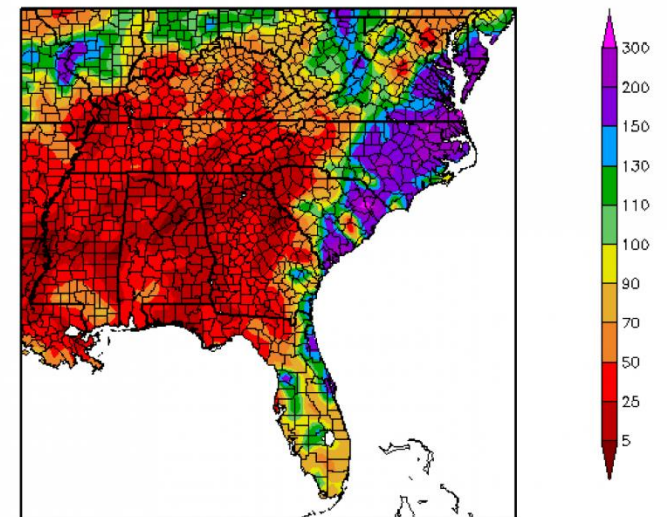
# Southeast Wildfires – Fall 2016

- To-date wildfires have burned 1.5 m acres in the Southeast U.S. in 2016.
- In late October, an area of exceptional drought developed in southern TN & KY, NC, SC, and northern AL & GA.



**November 8, 2016**

Percent of Normal Precipitation (%)  
9/9/2016 – 11/7/2016

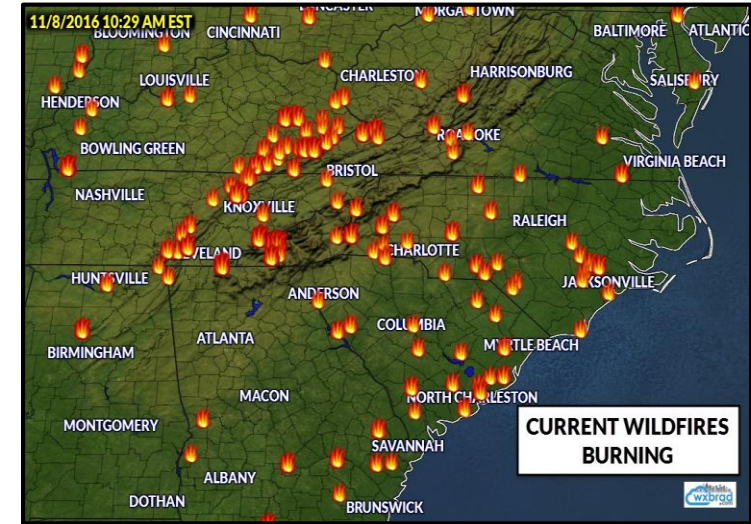


Generated 11/8/2016 at HPRCC using provisional data.

Regional Climate Centers

# Southeast Wildfires – Fall 2016

- By the first week of November, dozens of wildfires were burning across the southeastern states, centered on the southern Appalachians.
- The vast majority of these fires were human caused, with arson as the cause of most.
- Air quality was extremely low in the region, as fires tended to have extended smoldering periods due to deep organic soil layers.

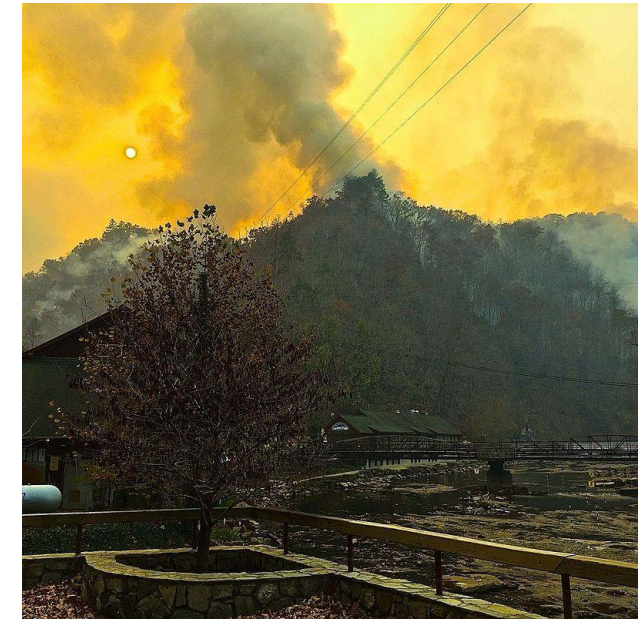


**MODIS – Nov. 2016**



# Southeast Wildfires – Fall 2016

- By the middle of Nov. the US Forest Service was tracking 33 large fires that had burned over 90,000 acres.
- In NC , the Tellico and Party Rock fires caused thousands to evacuate and burned 22,000 acres
- In GA the Rough Ridge Fire in the Couhutta Wilderness burned 28,000 acres



*Tellico Fire, NC, 2016*



*Party Rock Fire, NC, 2016*

# Rough Ridge Fire, GA, 2016



# Southeast Wildfires – Fall 2016

- By Nov. 21 64 fires had burned nearly 23,000 acres in TN with well over half arson-caused.
- On Nov. 28 the Chimney Tops 2 and Cobbly Knob fires started in Great Smoky Mountains National Park.
- With the aid of strong winds, the fires spotted across ridges and burned throughout the mountains surrounding Gatlinburg.



*Great Smoky Mountains NP*

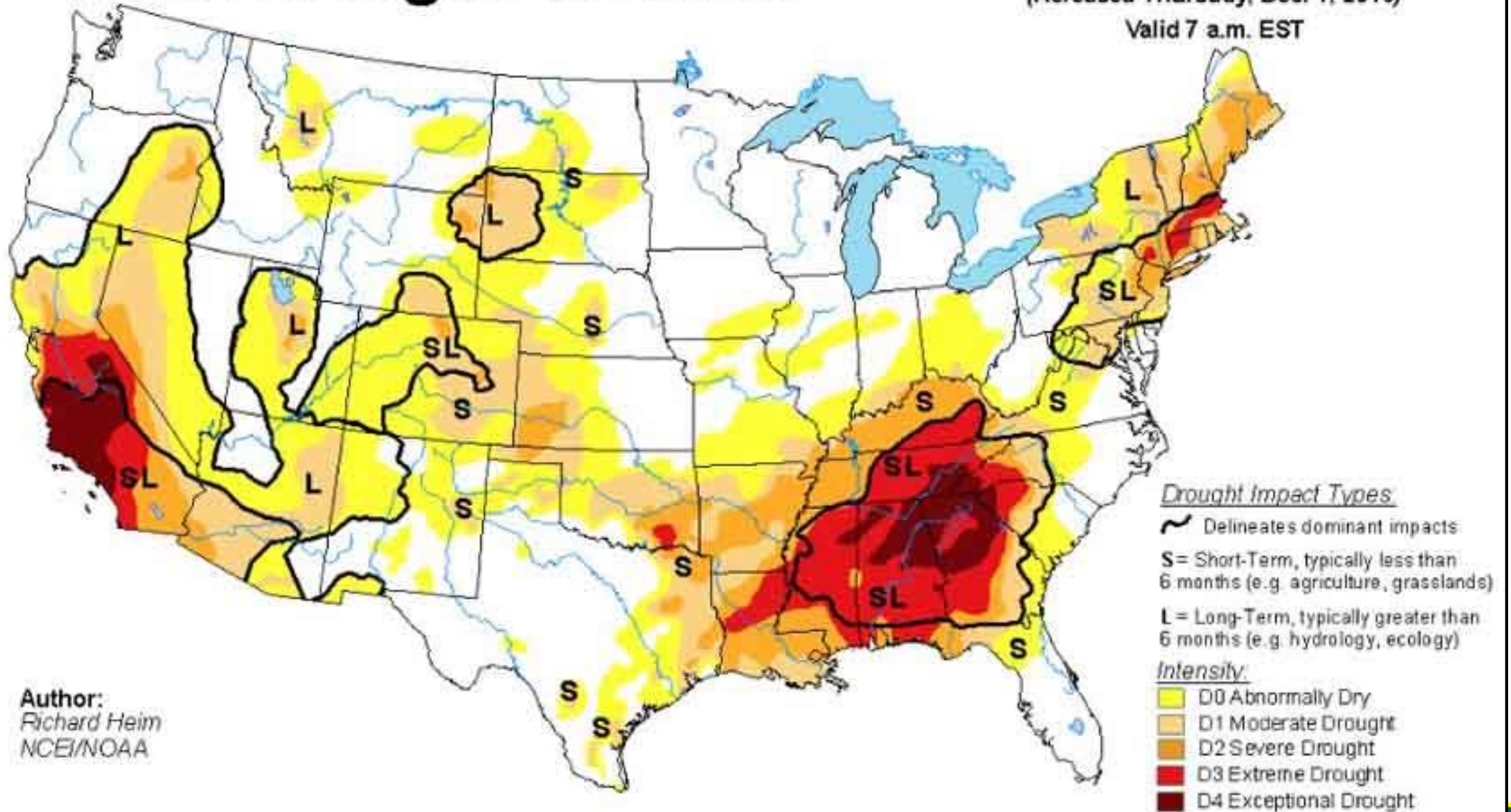


*Chimney Tops 2 Fire, TN, 2016*



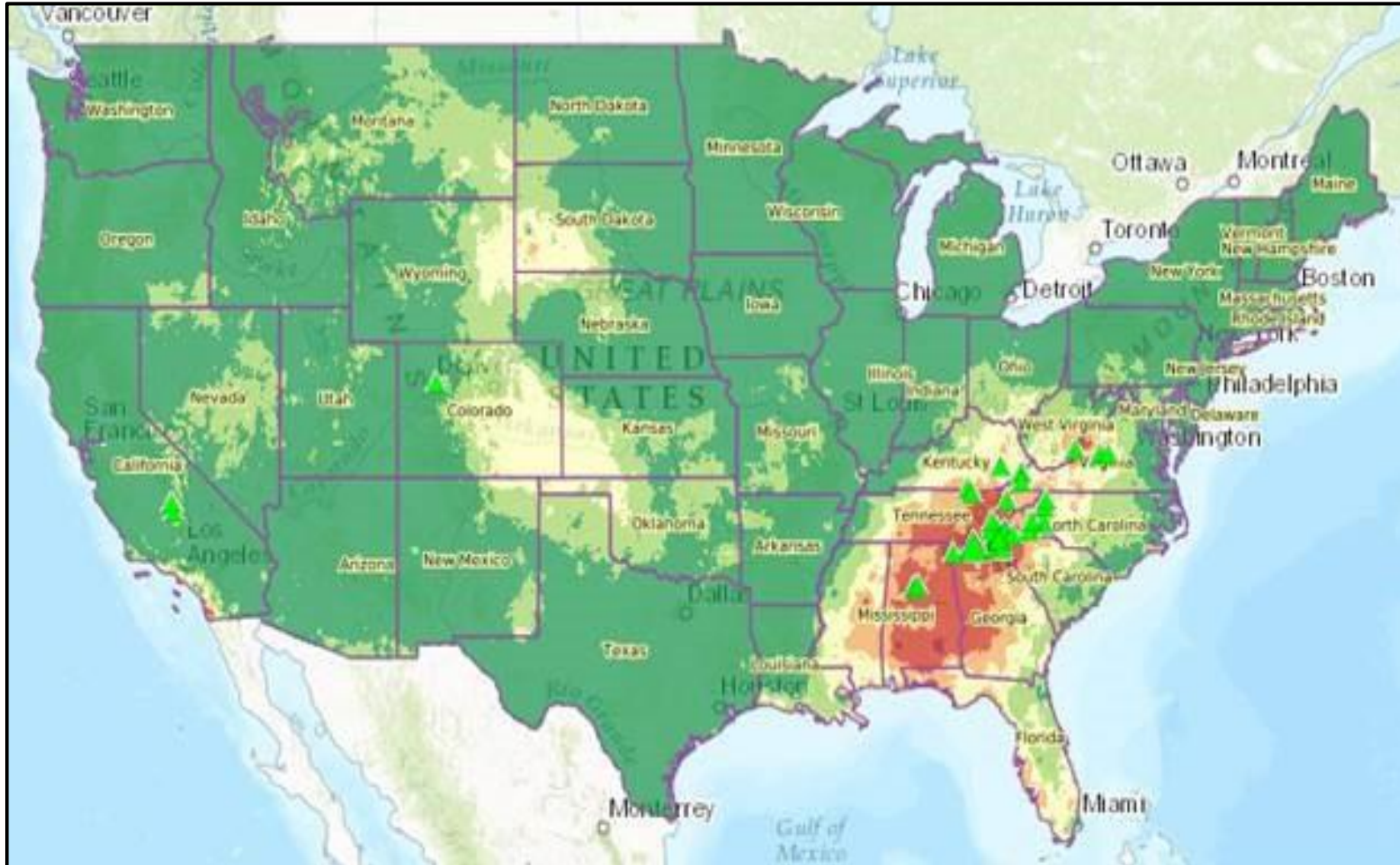
# U.S. Drought Monitor

November 29, 2016  
(Released Thursday, Dec. 1, 2016)  
Valid 7 a.m. EST



Author:  
Richard Heim  
NCEI/NOAA

# National Fire Danger Rating System – Nov. 26, 2016





# Gatlinburg, TN, 2016



Science Serving Society



# Southeast Wildfires – Fall 2016

- The Chimney Tops 2 fire, caused by arson, burned 18,000 acres.
- Overall, the effects of the fire were caused by extended, exceptional drought and strong, sustained winds.
- 14 fatalities, 1,700 structures damaged or destroyed, and 14,000 residents originally forced to evacuate.



*Chimney Tops 2 Fire, TN, 2016*



# Southeast Wildfires – Fall 2016

- The Chimney Tops 2 Fire, caused by arson, burned 18,000 acres.
- Overall, the effects of the fire were caused by extended, exceptional drought and strong, sustained winds.
- 14 fatalities, 1,700 structures damaged or destroyed, and 14,000 residents originally forced to evacuate.
- <http://wildfiretoday.com/2016/12/05/analyzing-the-fire-that-burned-into-gatlinburg>

# Chimney Tops 2 Fire, TN, 2016



Science Serving Society





# Chimney Tops 2 Fire, TN, 2016





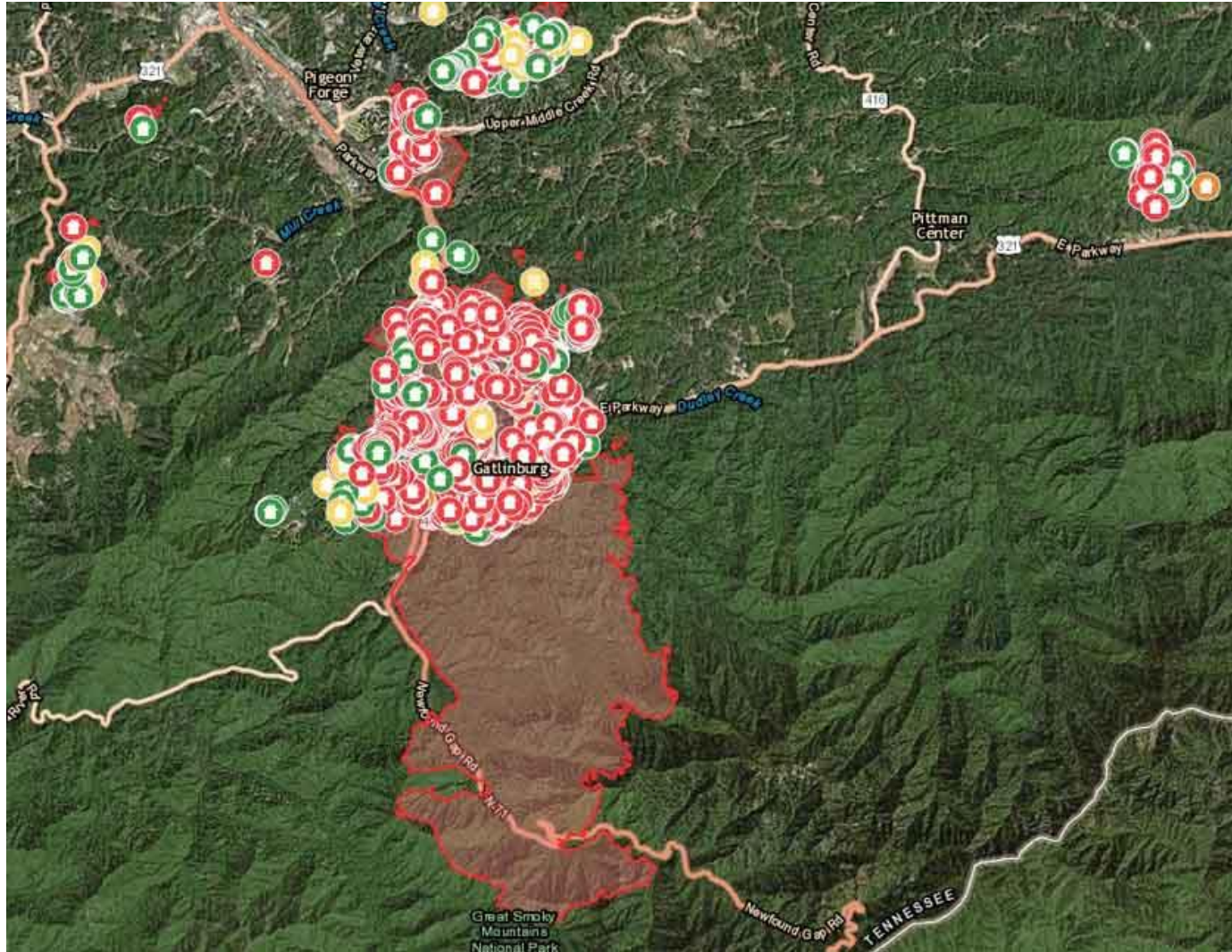
# Southeast Wildfires – Fall 2016

- Nearly 7,000 Firefighters from 21 states responded to the fire situation in the SE.
- National Guard units were mobilized across the region to provide firefighting, logistics, aerial, and medical support
- The cost in GA alone, to date, has been over \$10m.





# Chimney Tops 2 Fire, TN – Dec. 12 2016







**Questions?**  
**matthewgrollins@fs.fed.us**  
**202.288.4535**



### Zone 16 Potential Vegetation Type

**Actual**



