

# Forest Service Response to Elevated Tree Mortality

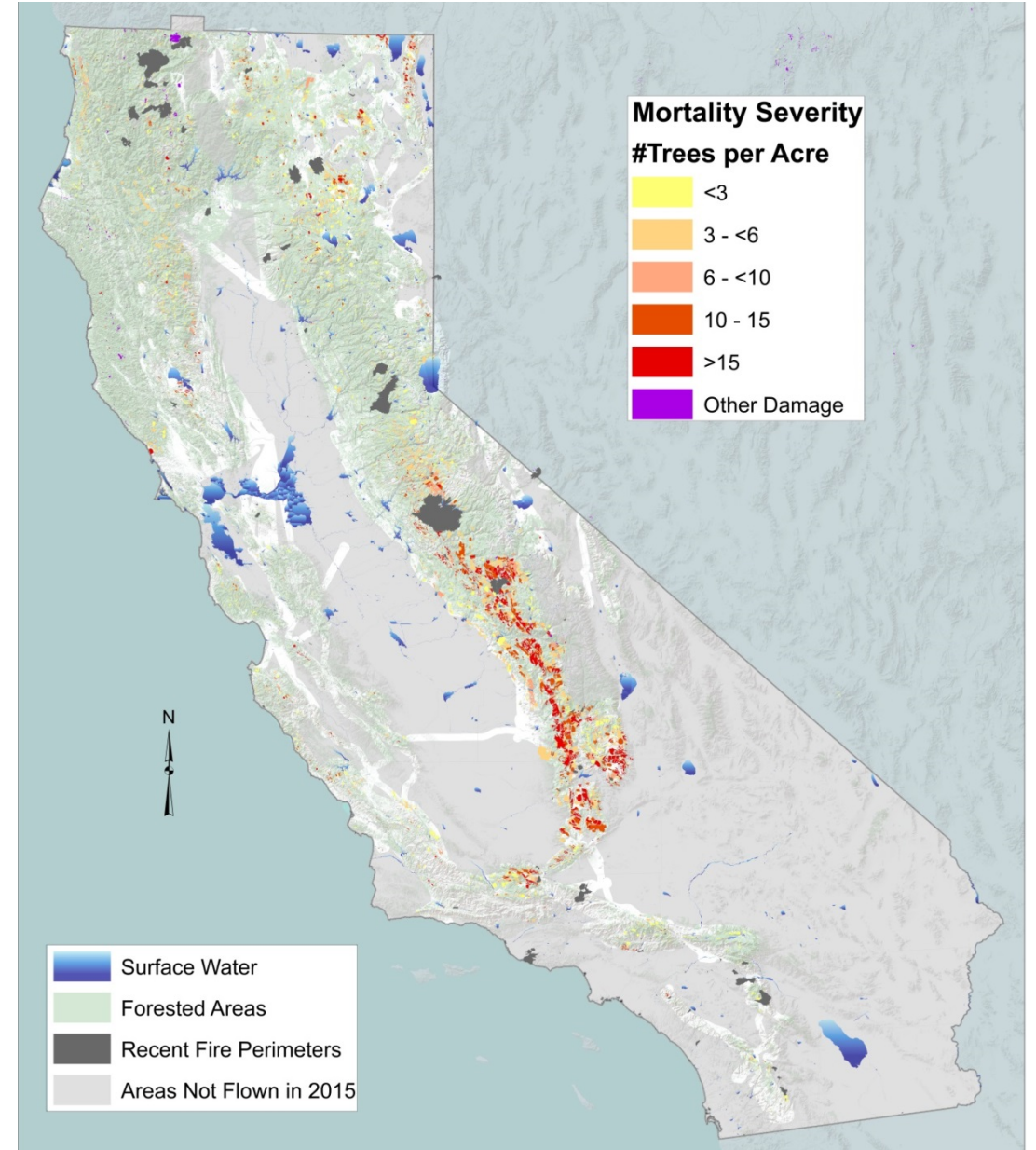
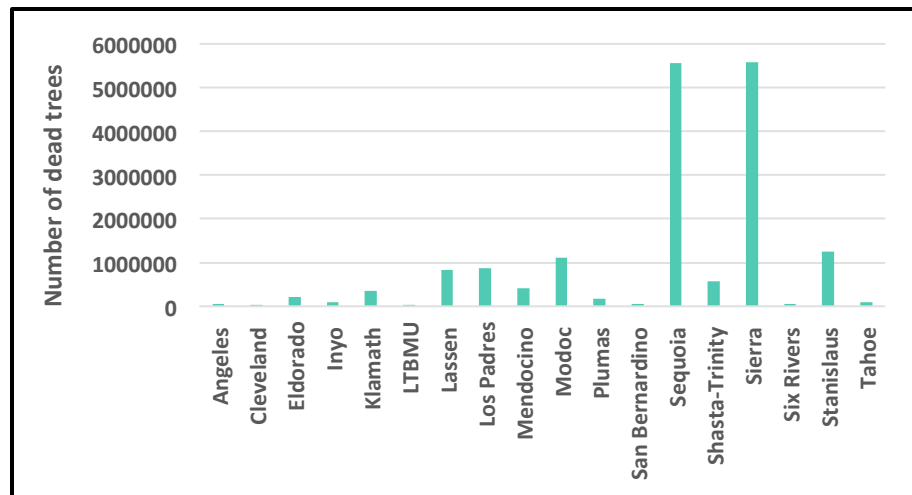
Pacific Southwest Region

**Status of Forests and Forestry in California  
Northern California Society of American Foresters &  
UC Cooperative Extension  
Webinar Series  
March 8, 2016**



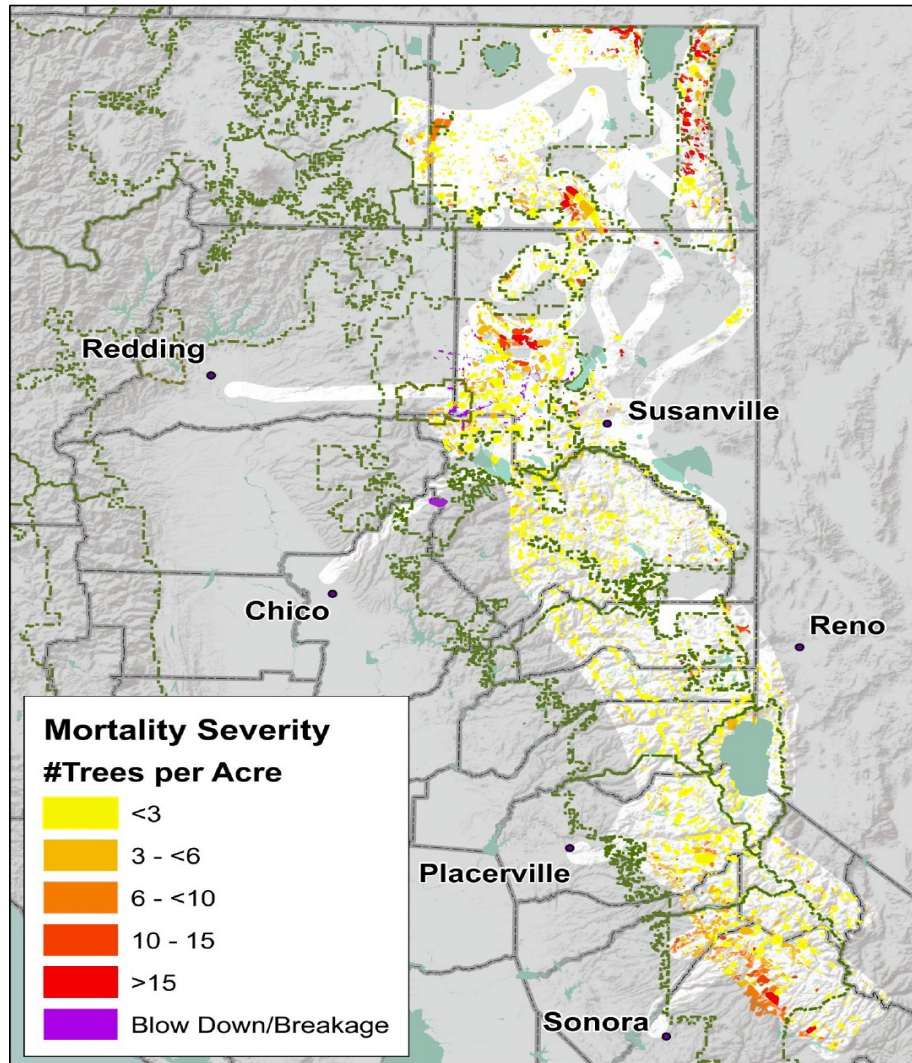
# A Little Background

- Estimated 27 million dead trees statewide
- Mortality became increasingly intense into southern Sierra Nevada Range, continuing into southern CA
- Conifers especially in the low elevation pine type were most severely impacted.
- There are more than 10 times as many dead trees mapped in 2015 than in 2014 and more than triple the acres of tree mortality in 2014.





# Sierra Nevada & Modoc areas: July - Aug



- 7.59 million acres surveyed
- ~524,000 acres with mortality
- ~2.8 million dead trees
- Ponderosa pine: west of Goose Lake; areas around Goose Mtn; northern part of the Lassen NF
- White fir (Warner Mtns.) , whitebark pine, lodgepole pine





Warner Mts. – pine & white fir



Joseph Creek watershed, Warner Mts. - wf



west of Fort Bidwell, Warner Mts. – lpp (older mortality)



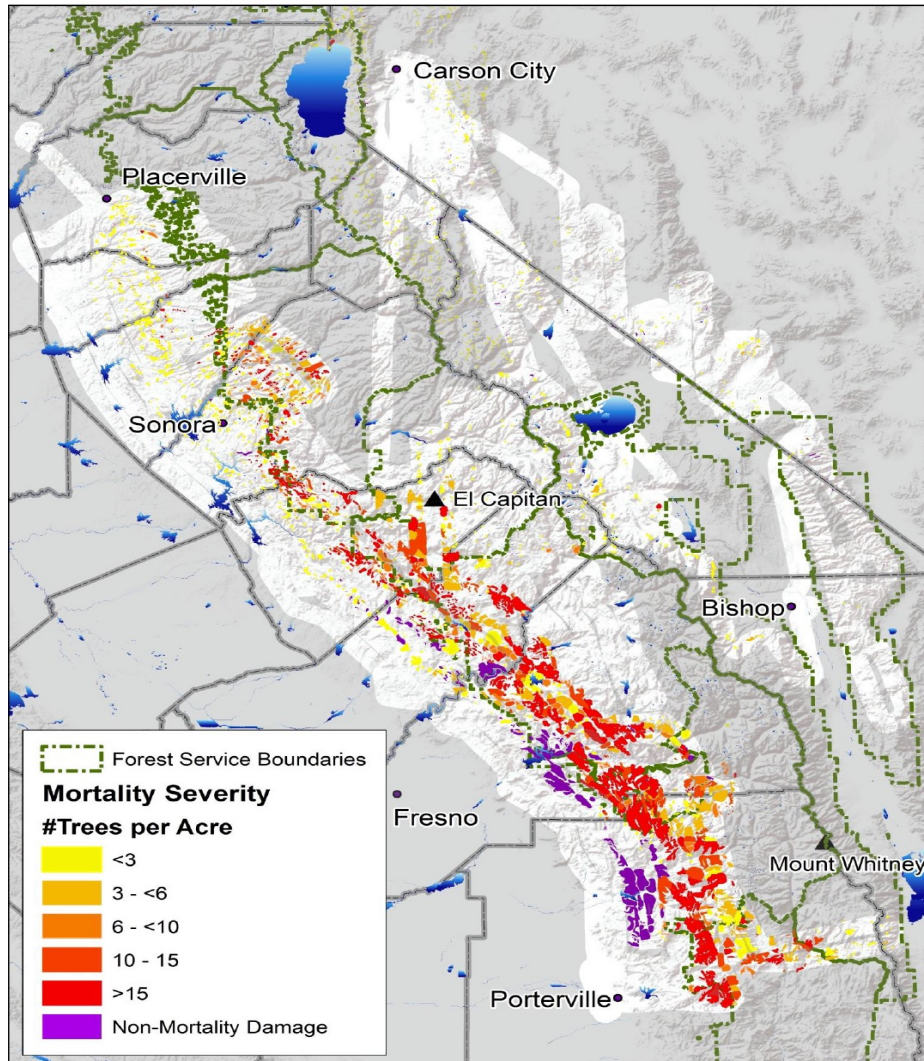
Lassen NF - pine







# Southern Sierra Nevada: July, Aug., Sept., Oct



- Millions of dead trees across thousands of acres
- High levels of mortality
  - Ponderosa pine, Sugar pine, Pinyon Pine, Incense cedar, red fir, Jeffrey pine, lodgepole
- Continuing mortality of grey pine
- Seeing between 50% to 95% conifer mortality between 3000' to 5000'





## Pine mortality, lower elevations, Sequoia NF







## High levels of sugar pine mortality – Sequoia NF







## Pinehurst, CA (western edge of the Sequoia NF)







## Bass Lake within Sierra NF







# Responding

- Coordination
- Focus
- Size up
- Actions
- Continued Actions





# Responding

## *Coordination*

- Collaboratively working with the Governor's Tree Mortality Task Force to ensure a unified and strategic approach
- Limiting negative impacts in identified high hazard zones and to provide consistent messaging to the public.
- Participating in all Task Force Working Groups (Forest Health and Resilience; Mapping and Monitoring; Prescribed Fire; Public Outreach; Regulations; Resource Allocation; Utilization-Bioenergy; Utilization-Market Development).





# Responding

## *Focus*

- Concentrating efforts on Forests currently most impacted by tree mortality:
  - Stanislaus National Forest
  - Sierra National Forest
  - Sequoia National Forest
- Prioritizing our efforts by removing hazardous trees near communities, along roads and powerlines, and in Forest Service recreation sites
- Also continuing our monitoring efforts across the state through Forest Service aerial survey program and ground surveys

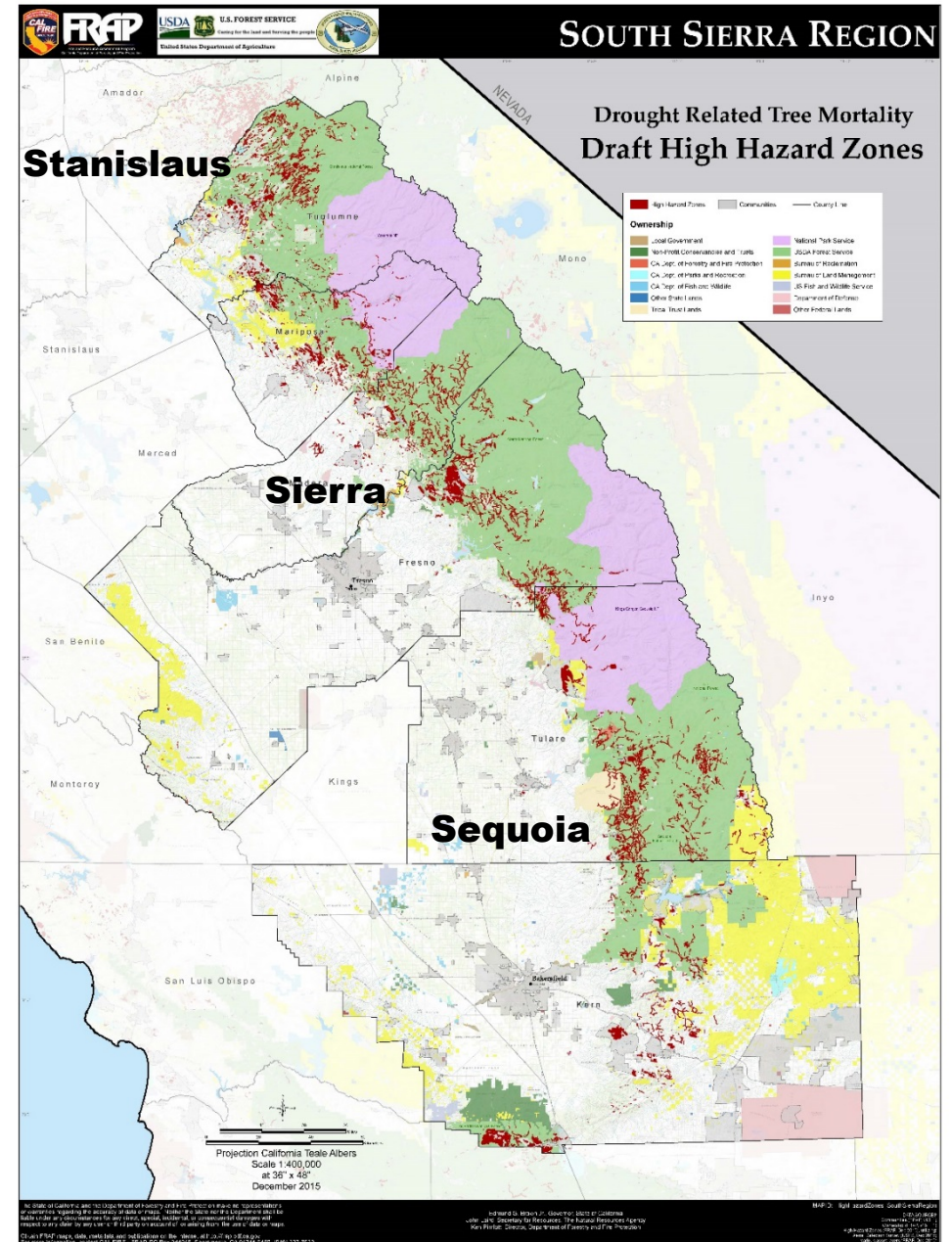


# Responding *Size up*

## Preliminary Estimates

Forest Name	Recreational Facilities	Powerlines (miles)	Roads all ML (miles)	Roads ML 3,4 (miles)	Trails (miles)	WUI (acres)
Sequoia	40	5	1,011	159	397	184,916
Sierra	80	37	1,453	158	197	179,198
Stanislaus	21	9	965	68	89	691,434
<b>TOTAL</b>	<b>141</b>	<b>51</b>	<b>3,429</b>	<b>385</b>	<b>683</b>	<b>1,055,548</b>

Assets within high mortality mapped areas







# Responding

## *Actions*

- Hazardous tree removal from roads, trails and campgrounds
- Hazardous tree removal from administrative sites and the wildland urban interface (WUI), adjacent to community infrastructure
- Work with permittees who are removing hazardous trees from infrastructure such as powerlines and recreational residences
- Public information about the hazards of falling trees
- Inform public of road, recreation site closures



# Responding

## *Continued Actions*

- Re-assess areas for new hazards as more trees die
- Begin planning to treat areas outside hazard zones and assess reforestation needs
- Aid development of biomass energy markets
- Use authorities provided in 2014 Farm Bill
  - Insect & disease designations using CE authority – 547 watersheds, 6.7 million acres
  - Good Neighbor Authority – Master Agreement in place with CA Natural Resources Agency





# Conclusion

- Public safety top priority
- Event covers a vast area
- Event is dynamic with many moving pieces
- Response will be long-term
- We are using our existing resources to fullest
- Seeking additional opportunities for resources and funding
- Collaboration, Collaboration, Collaboration





Thank You