

Forest Service Response to Elevated Tree Mortality

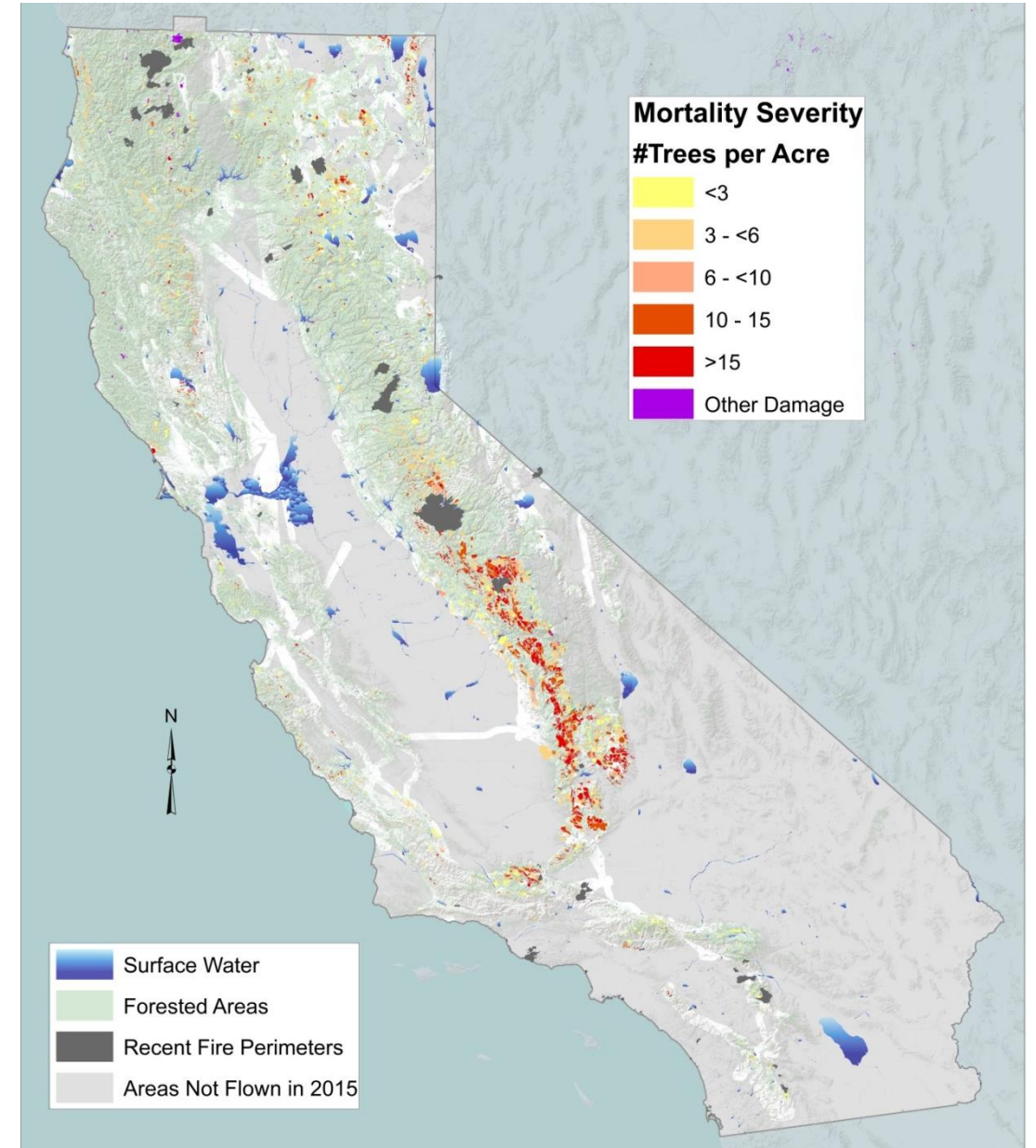
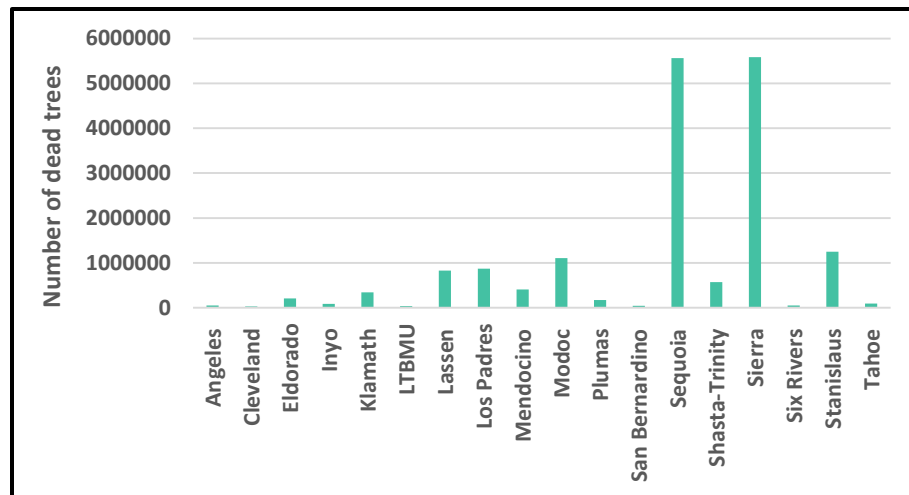
Pacific Southwest Region

California State Association of Counties
March 24, 2016



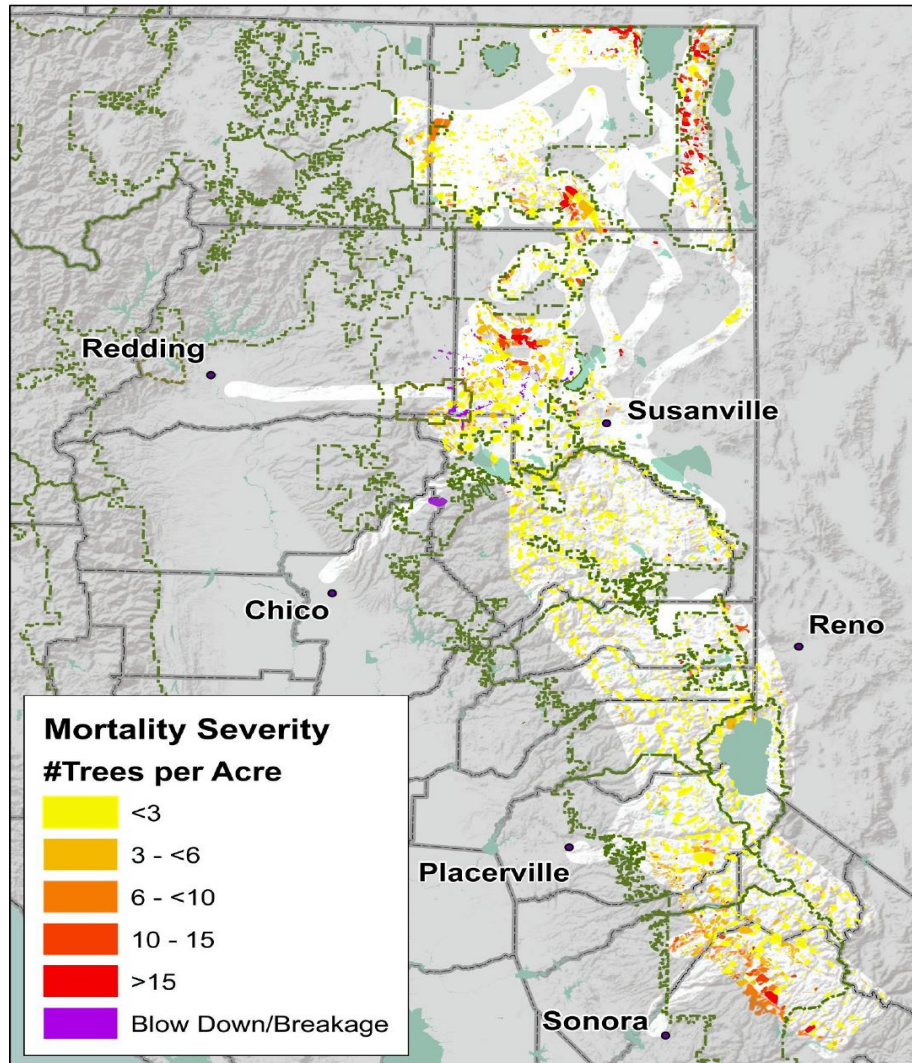
A Little Background

- 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)

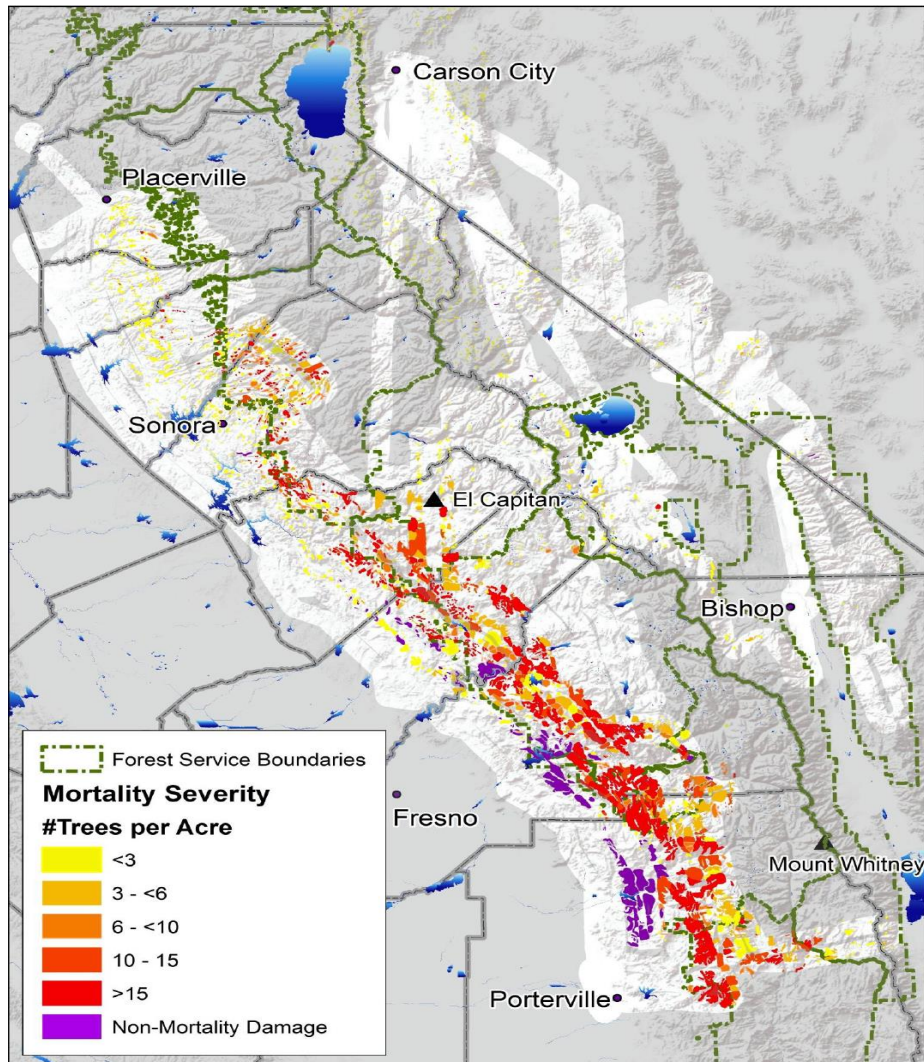


Lassen NF - pine





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





Areas within Stanislaus 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

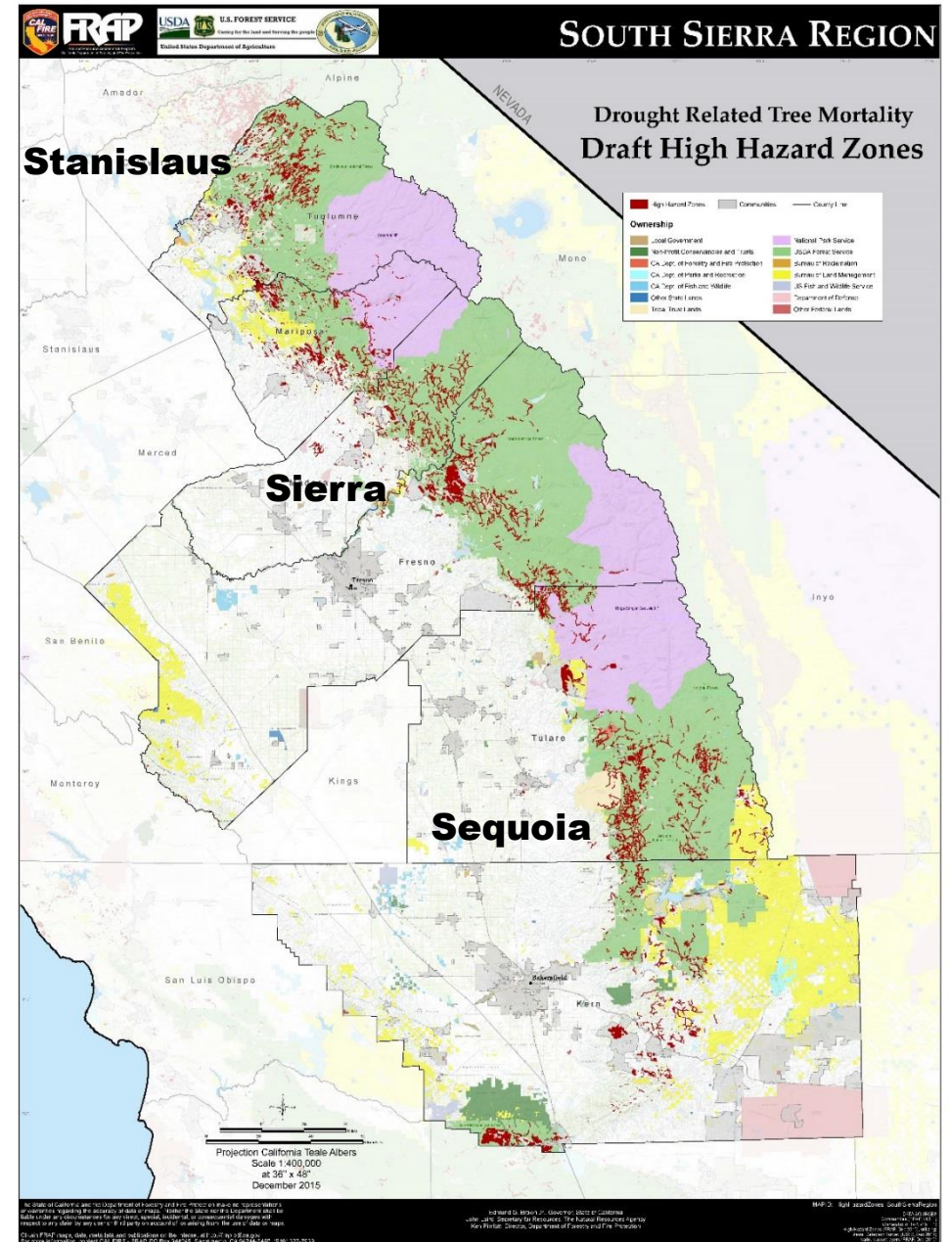


Responding *Size up*

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
TOTAL	141	51	3,429	385	683	1,055,548

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



Responding

GNA Use on Sierra NF

- Agreement with Cal Fire on multi-jurisdictional fuels project
 - re-create a firebreak that is 400' wide and 1.9 miles long along a strategic ridge in the WUI zone.
- Remove dead trees and flammable vegetation from the ridgeline firebreak on both USFS and Private (State SRA lands) via tree felling, chipping, mastication, use of air curtain burns or biomass removal for co-generation to effectively reduce the flammability and create a place for strategic and tactical engagement of fire fighters in the event of a wildfire.
- Target implementation date: April 2016



Responding

GNA Use on Sierra NF

- SNF and Cal Fire a straight forward project with common activities that are achievable with little to no complex resource or funding issues
- Will facilitate coordination of a more complex project in the future
- Model for future successes



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