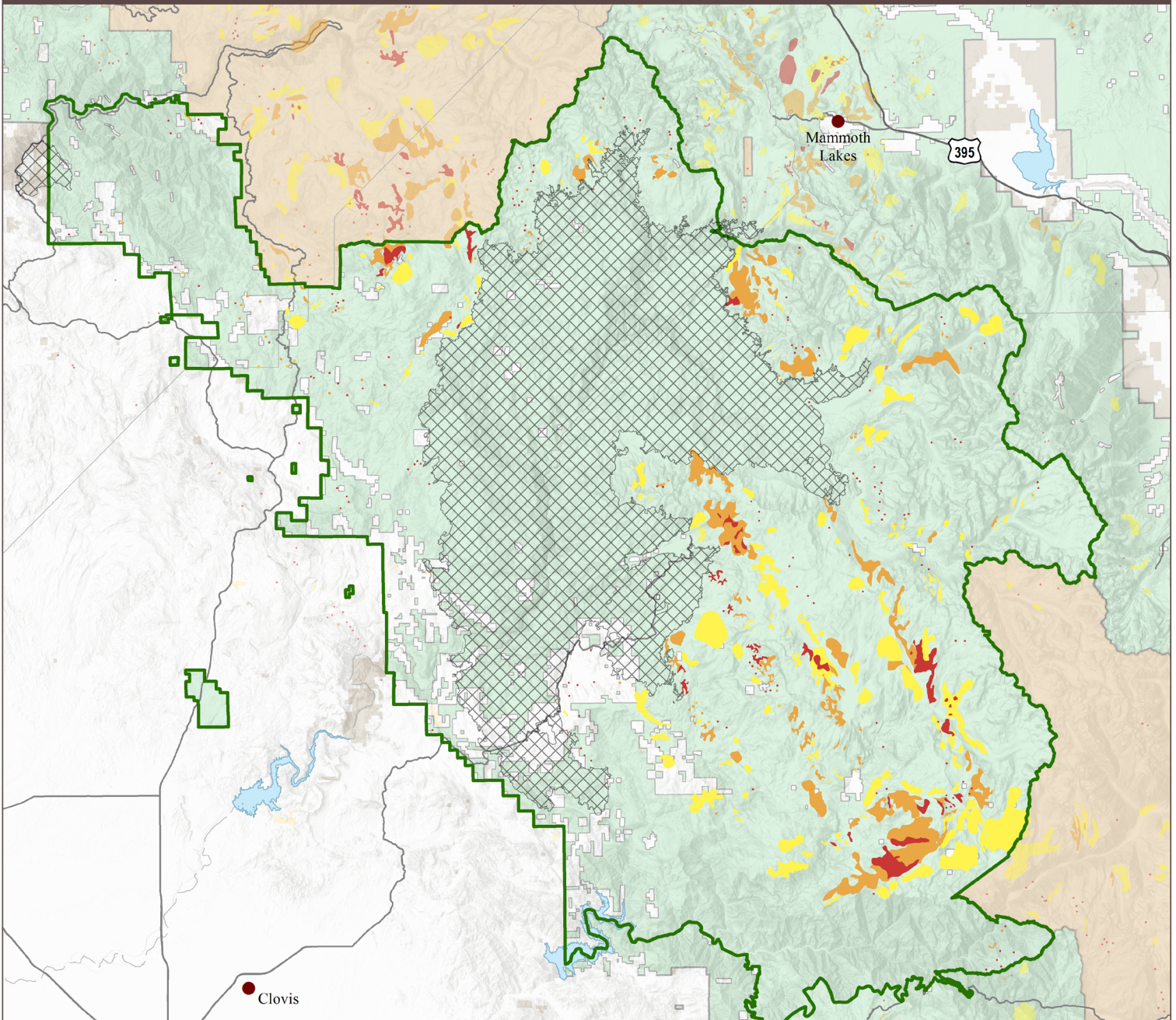




AERIAL DETECTION SURVEY, 2021 SIERRA NATIONAL FOREST



Forest Disturbance Activity and Trends

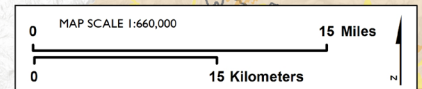
Affected Host	Acres 2019	Acres 2021
California red fir	156,685	74,659
White fir	10,087	5,471
Lodgepole pine	8,437	3,845
Whitebark pine	957	3,276
Jeffrey pine	15,483	2,310
Ponderosa pine	4,324	1,210
Limber pine	669	0

LAND

- Forest Service
- Tribal Land
- National Park
- Bureau of Land Management

BOUNDARIES

- Area of Interest
- County



USGS, NGA, NASA, CGIAR/I, Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community



Highlights

Overall mortality decreased, from an estimated 1,131,000 trees across 185,000 acres in 2019 to ~860,000 dead trees across 91,000 acres in 2021. Large wildfires in 2020 and 2021 account for much of this decrease because these portions of the Forest were not surveyed.

- California red fir mortality decreased from an estimated 889,000 trees across 157,000 acres in 2019 to ~786,000 dead trees across 75,000 acres in 2021 and was common in many areas of the Forest.
- White fir mortality decreased from an estimated 88,000 trees across 10,000 acres in 2019 to ~13,000 dead trees across 5,500 acres in 2021 and was most concentrated in the Dinkey Mountain area.
- Lodgepole pine mortality decreased from an estimated 85,000 trees across 8,400 acres in 2019 to ~37,000 dead trees across 3,800 acres in 2021, located in areas around Wishon Reservoir.
- Whitebark pine mortality increased from an estimated 4,600 trees across 960 acres in 2019 to ~7,200 dead trees across 3,300 acres in 2021, located east of Courtright Reservoir.
- Jeffrey pine mortality decreased from an estimated 31,000 trees across 15,000 acres in 2019 to ~13,000 dead trees across 2,300 acres in 2021. Mortality was common in many areas but was particularly concentrated east and south of Wishon Reservoir.
- Ponderosa pine mortality decreased from an estimated 30,000 trees across 4,300 acres in 2019 to ~4,600 dead trees across 1,200 acres in 2021. Mortality was common at light intensities along western low elevation areas; Hhowever, moderate-intensity areas were recorded southeast of the Chowchilla Mountains.



Light California red fir mortality attributed to fir engraver, south of Elizabeth Lake, Sierra National Forest.