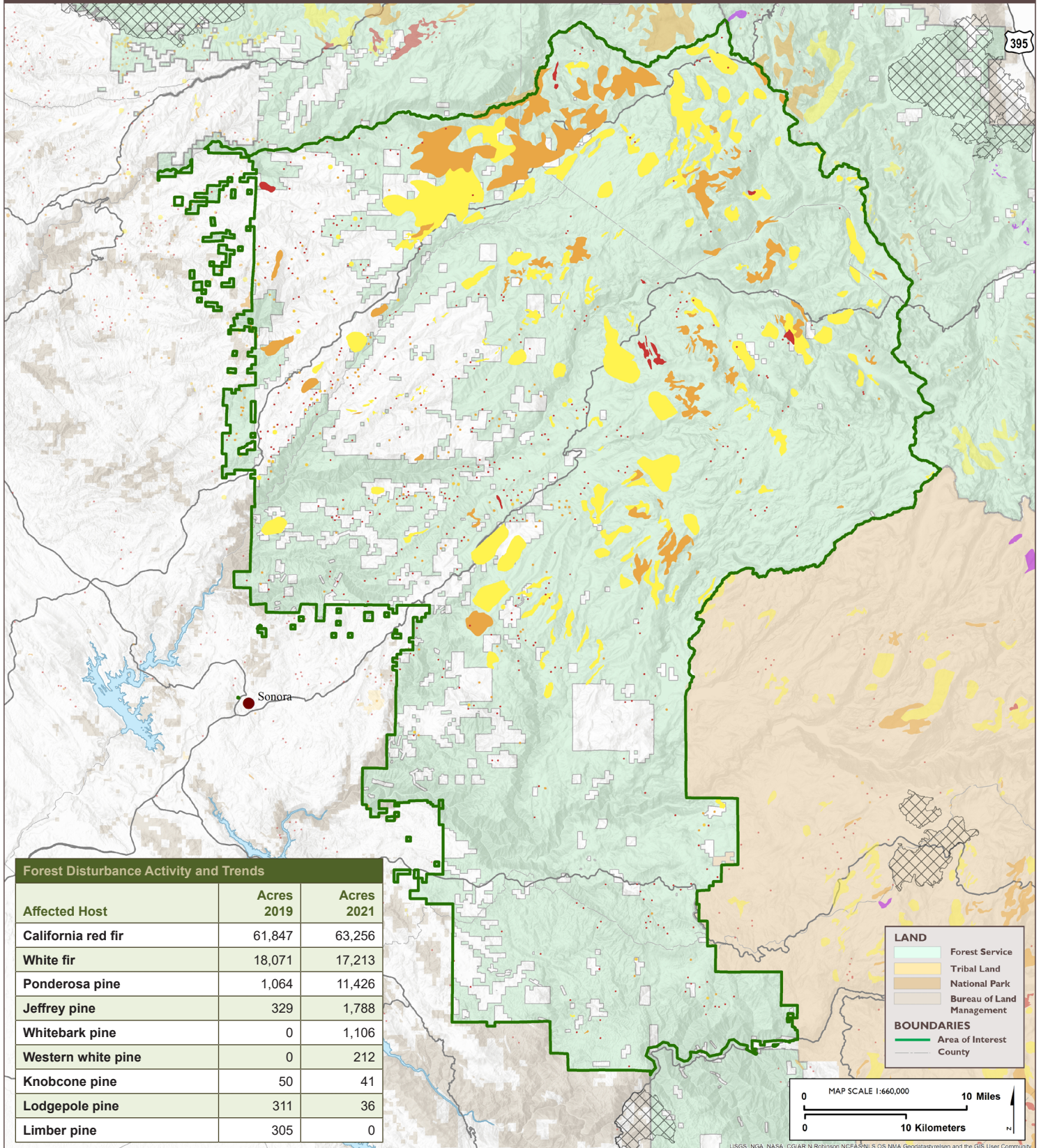




AERIAL DETECTION SURVEY, 2021 STANISLAUS NATIONAL FOREST



Forest Disturbance Activity and Trends

Affected Host	Acres 2019	Acres 2021
California red fir	61,847	63,256
White fir	18,071	17,213
Ponderosa pine	1,064	11,426
Jeffrey pine	329	1,788
Whitebark pine	0	1,106
Western white pine	0	212
Knobcone pine	50	41
Lodgepole pine	311	36
Limber pine	305	0

LAND

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

BOUNDARIES

- Area of Interest
- County

MAP SCALE 1:660,000

0 10 Miles

0 10 Kilometers

USGS, NGA, NASA, CCIAR, N. Robinson, NCEAS, S. OS, NMA, Geodatasystreisen and the GIS User Community

TREE MORTALITY
(dead trees per acre)

- Less than 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 35
- More than 35

TREE DAMAGE

- not mortality

MAJOR FIRES

- 2019 - 2021

Highlights

Overall mortality decreased from an estimated 474,000 trees across 53,000 acres in 2019 to ~50,000 dead trees across 8,000 acres in 2021.

- California red fir mortality remained elevated, with an estimated 407,000 trees across 62,000 acres in 2019 compared to ~446,000 dead trees across 63,000 acres in 2021. Mortality was widespread and often intense in northern areas of the Forest.
- White fir mortality decreased from an estimated 78,000 trees across 18,000 acres in 2019 to ~59,000 dead trees across 17,000 acres in 2021. Areas south of Pinecrest Lake were particularly active.
- Ponderosa pine mortality increased from an estimated 9,100 trees across 1,100 acres in 2019 to ~72,000 dead trees across 11,000 acres in 2021. Areas north of Arnold and northeast of Twain Harte were particularly active.
- Jeffrey pine mortality increased from approximately 1,900 trees across 330 acres in 2019 to ~3,100 dead trees across 1,800 acres in 2021, primarily in the Night Cap Peak area.
- Whitebark pine mortality increased from approximately 10 dead trees in 2019 to ~6,000 dead trees across 1,100 acres in 2021 in northeastern areas of the Forest.
- Western white pine mortality, located northwest of Night Cap Peak, has increased to an estimated 190 trees across 210 acres in 2021, up from zero reported in 2019.
- Knobcone pine mortality decreased slightly from an estimated 320 trees across 50 acres in 2019 to ~290 dead trees across 40 acres in 2021 west and south of Skunk Gulch.
- Lodgepole pine mortality decreased from an estimated 2,200 dead trees across 300 acres in 2019 to ~420 dead trees across 35 acres in 2021, located west of Sachse Monument.
- No limber pine mortality was recorded in 2021, down from approximately 400 dead trees across 300 acres in 2019.



Moderate ponderosa pine mortality attributed to western pine beetle east of Camp Connell, Stanislaus National Forest