

PUBLIC HEALTH & SAFETY IMPACTS FROM THE TREE MORTALITY EMERGENCY



TREE MORTALITY NORTHERN FRESNO COUNTY



MAY 2015



FEBRUARY 2016



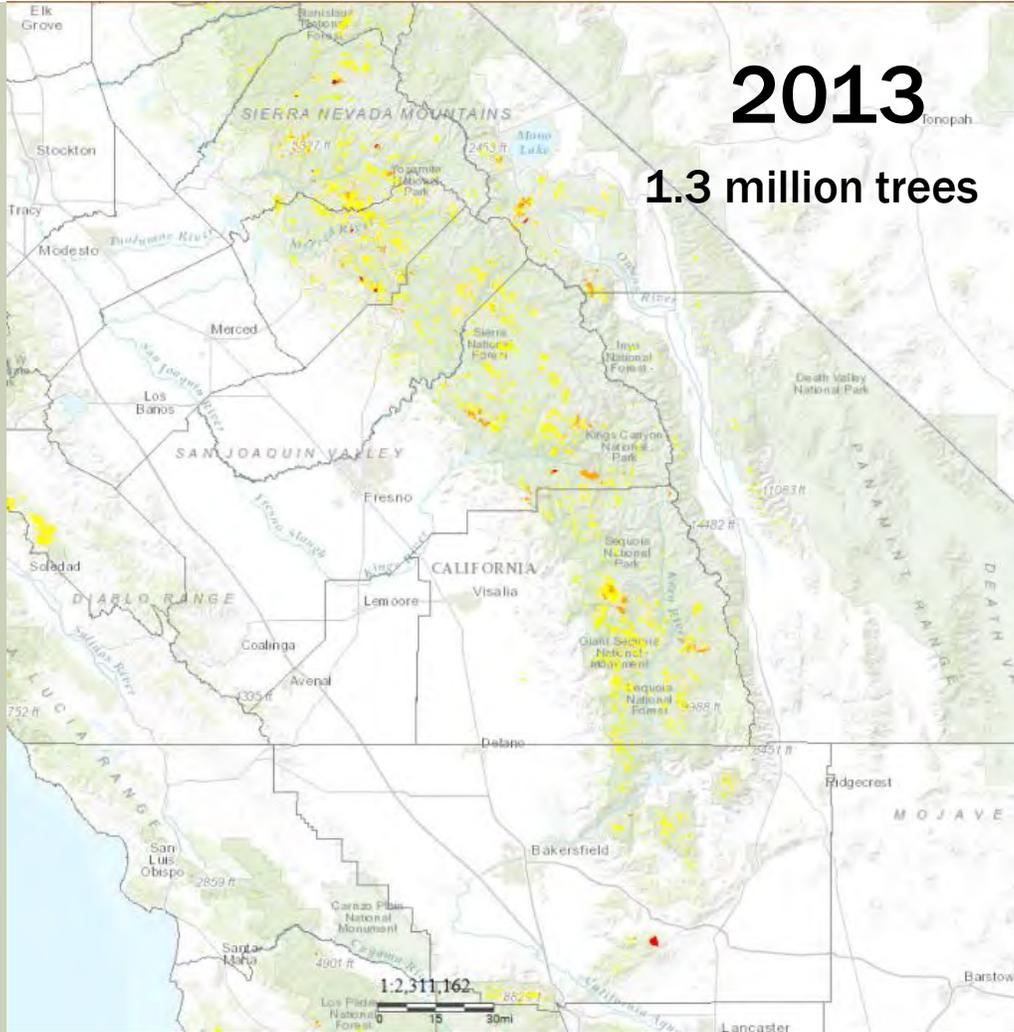
APRIL 2017



TREE MORTALITY PROGRESSION

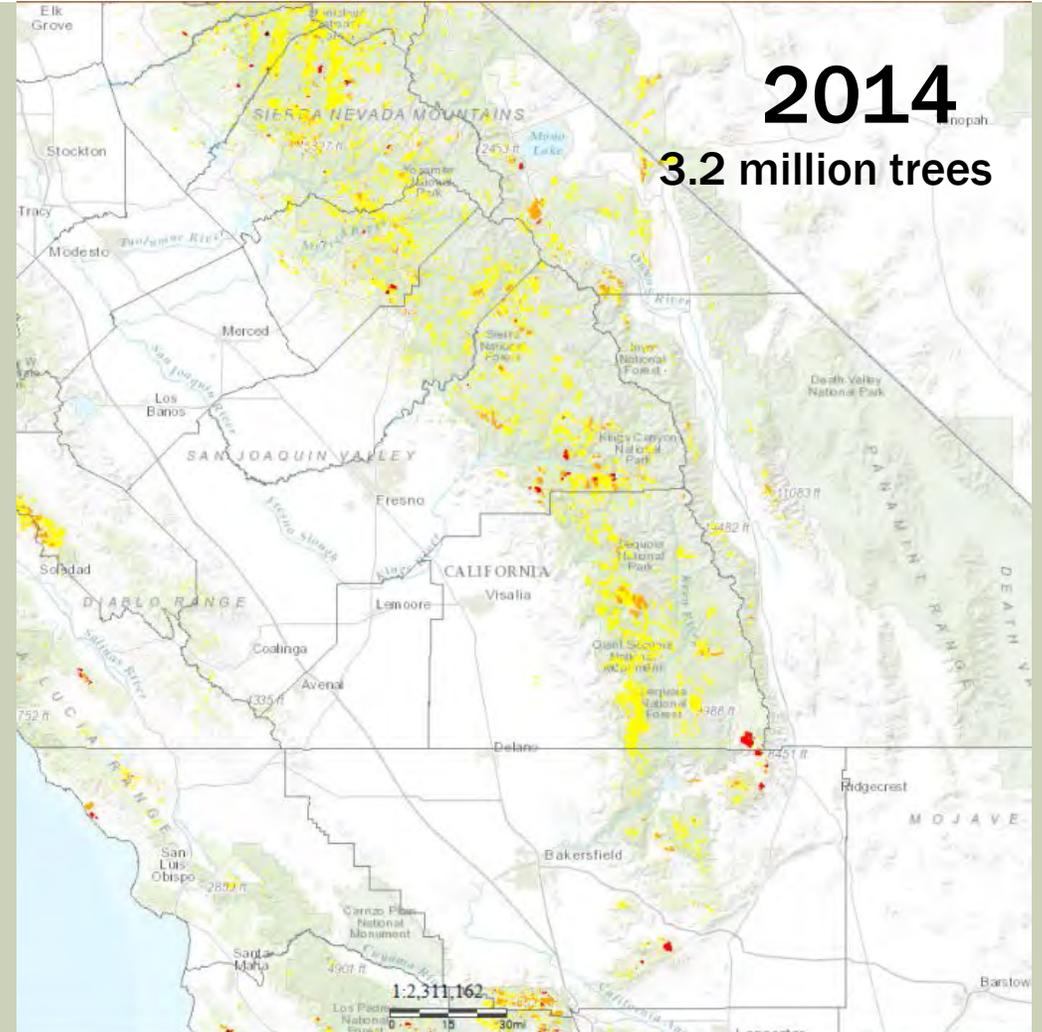
2013

1.3 million trees



2014

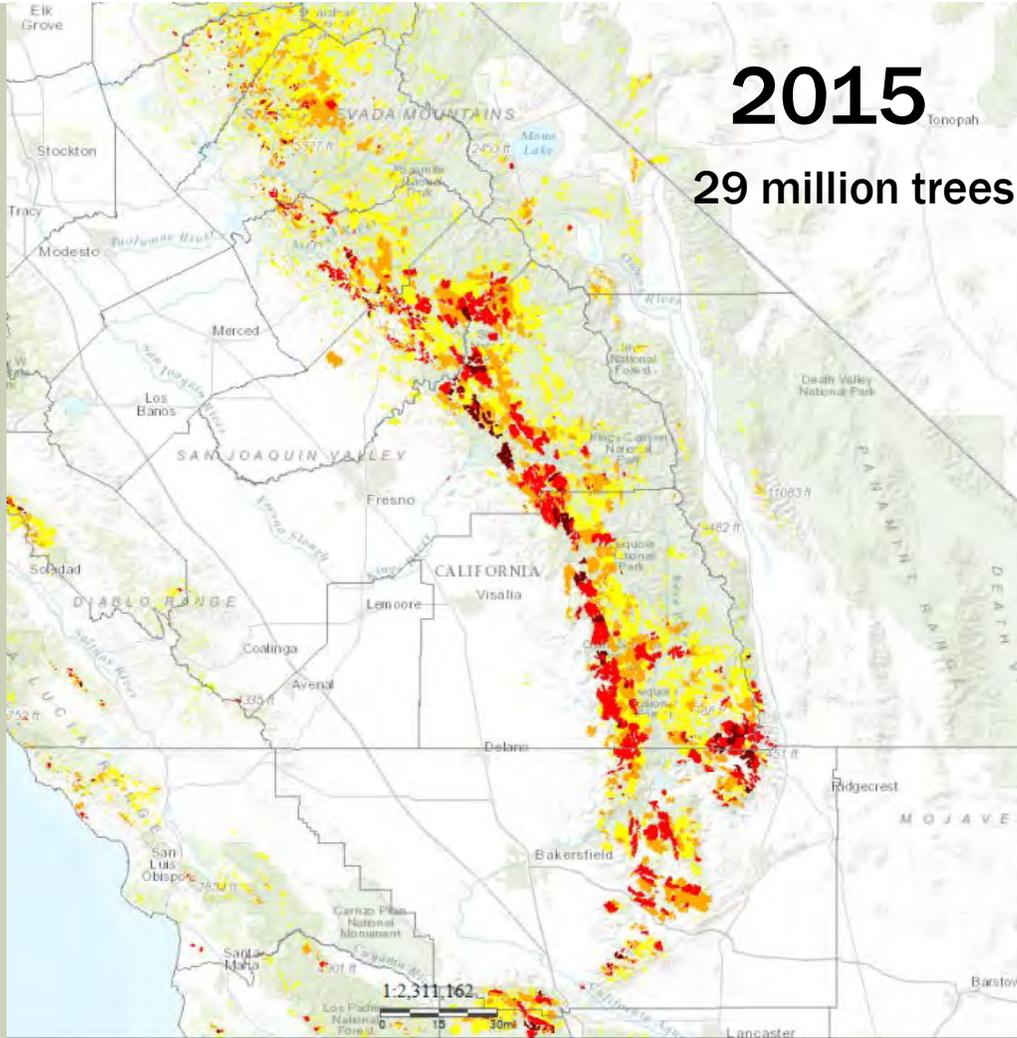
3.2 million trees



TREE MORTALITY PROGRESSION

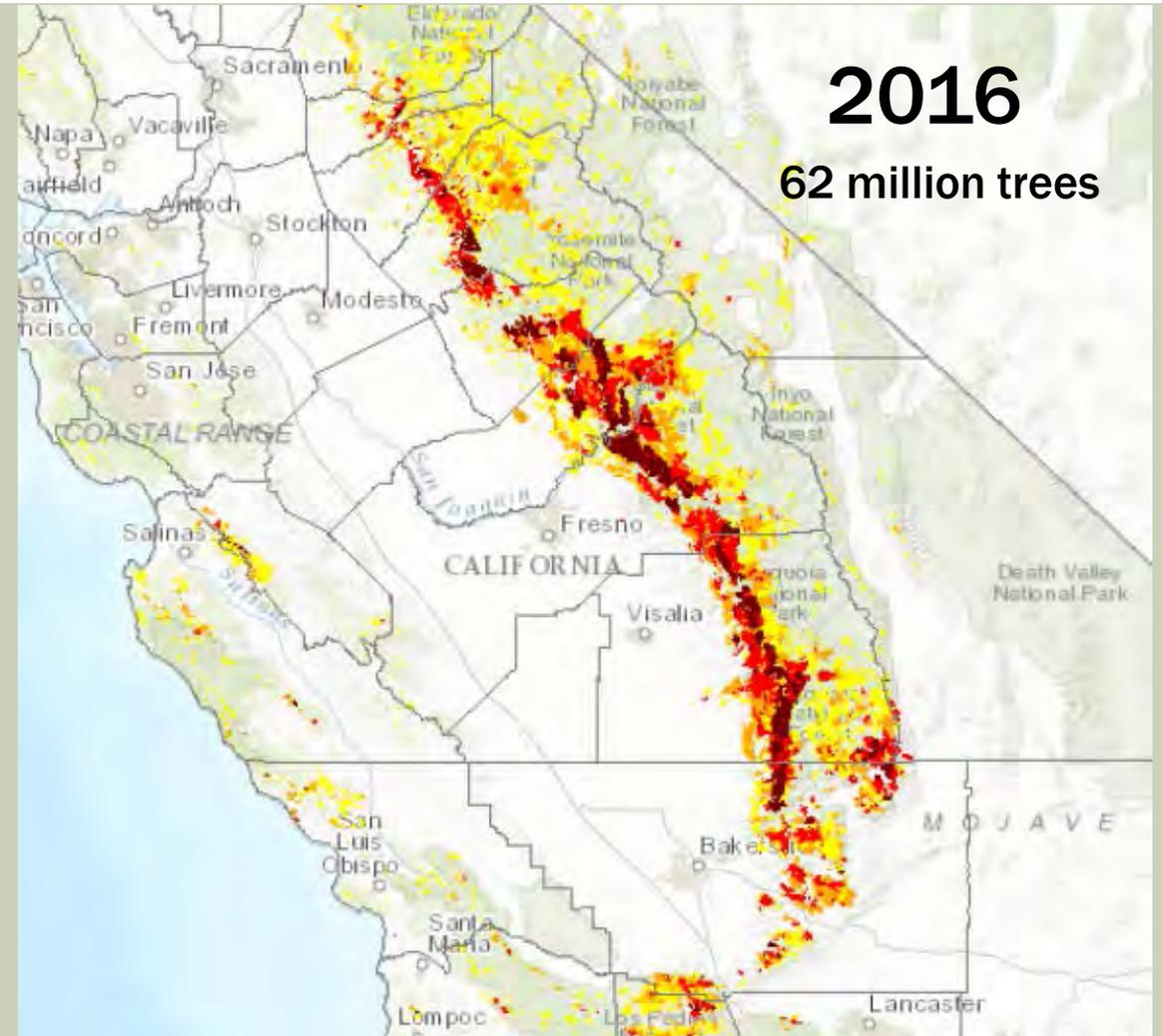
2015

29 million trees



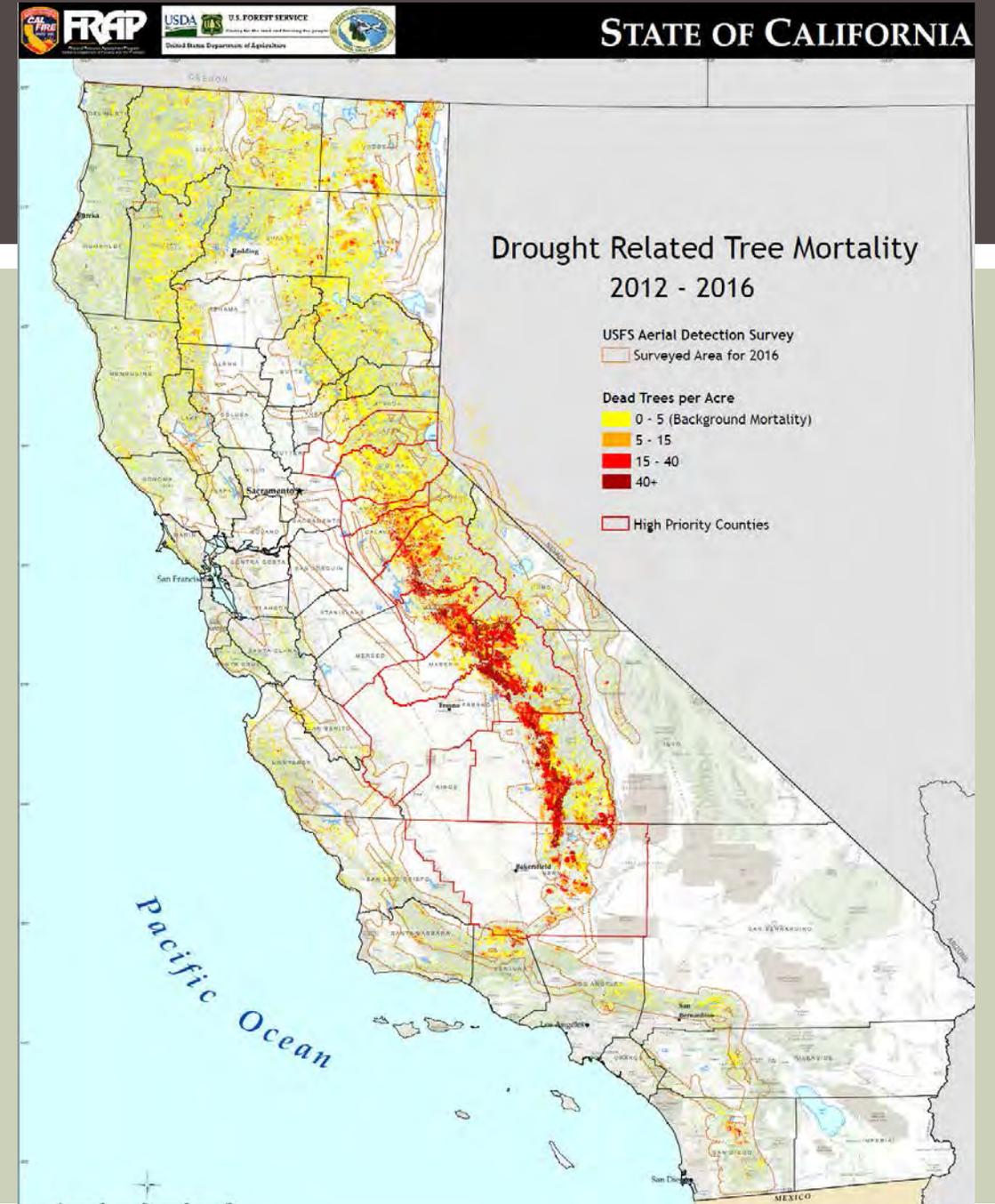
2016

62 million trees



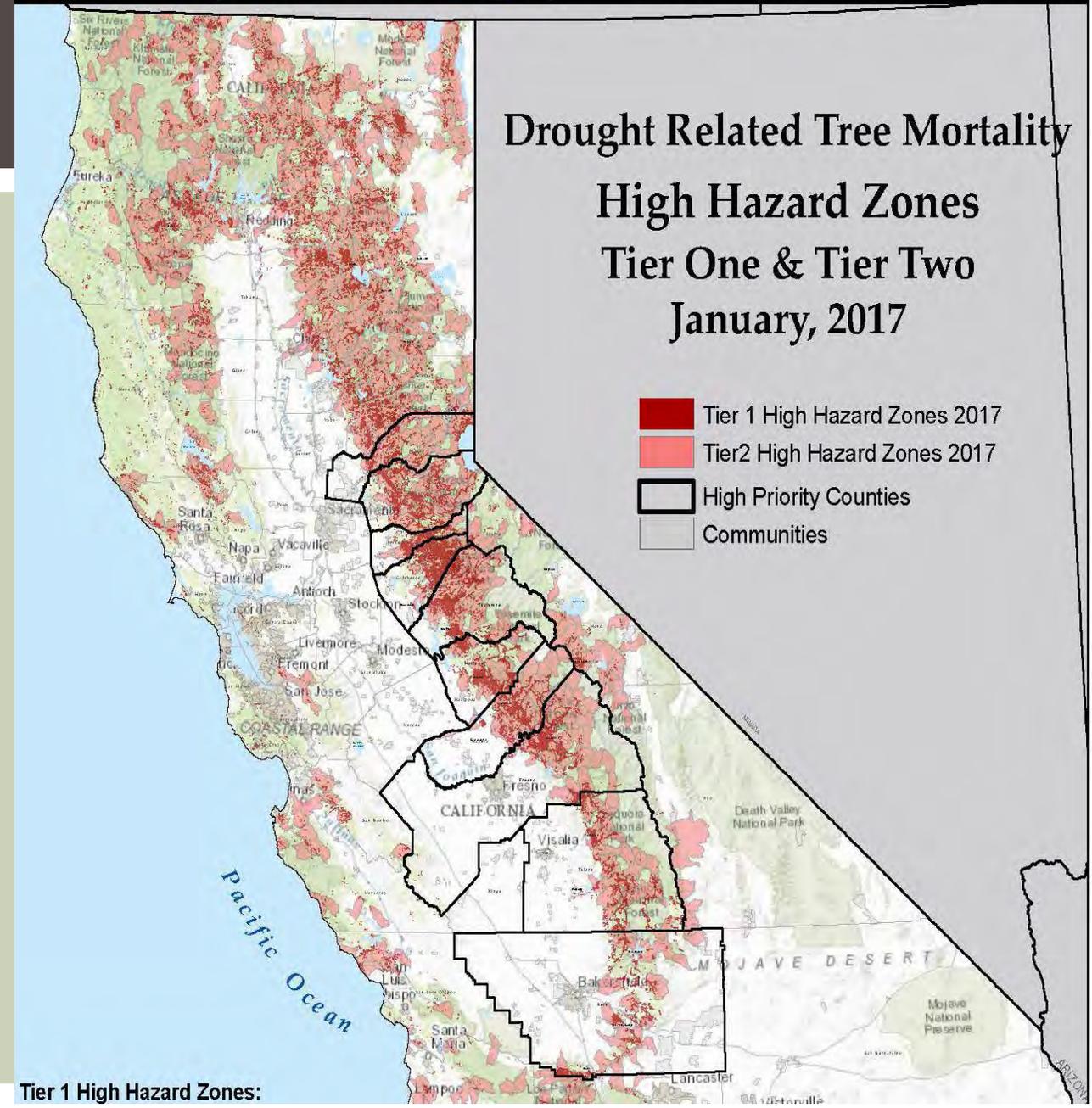
CURRENT SITUATION

- 102 million dead trees statewide since 2010
- 76 million dead trees in high priority counties
- *2017 tree mortality data expected soon*



HIGH HAZARD ZONES

- Tier 1 HHZ = Areas where critical infrastructure and mortality coincide
 - 957,213 acres
 - 14.6 million dead trees in Tier 1 HHZ (2012-2016)
- Tier 2 HHZ = Watersheds with significant mortality and community or natural resource assets.



PUBLIC HEALTH AND SAFETY IMPACTS

**5.5 million hazardous
(life threatening)
trees have been
identified**

- **2/3 on Forest Service Land**
- **1/3 on Private lands**



PUBLIC HEALTH AND SAFETY IMPACTS COMMUNITIES



Blue Lake Springs, Calaveras County
April 2017

PUBLIC HEALTH AND SAFETY IMPACTS COMMUNITIES



Sugar Pine, Tuolumne County
April 2017

PUBLIC HEALTH AND SAFETY IMPACTS COMMUNITIES



Madera County

PUBLIC HEALTH AND SAFETY IMPACTS COMMUNITIES



Tuolumne County, 2016

PUBLIC HEALTH AND SAFETY IMPACTS ROADS



Blue Lake Springs, Calaveras County
April 2017



PUBLIC HEALTH AND SAFETY IMPACTS ROADS

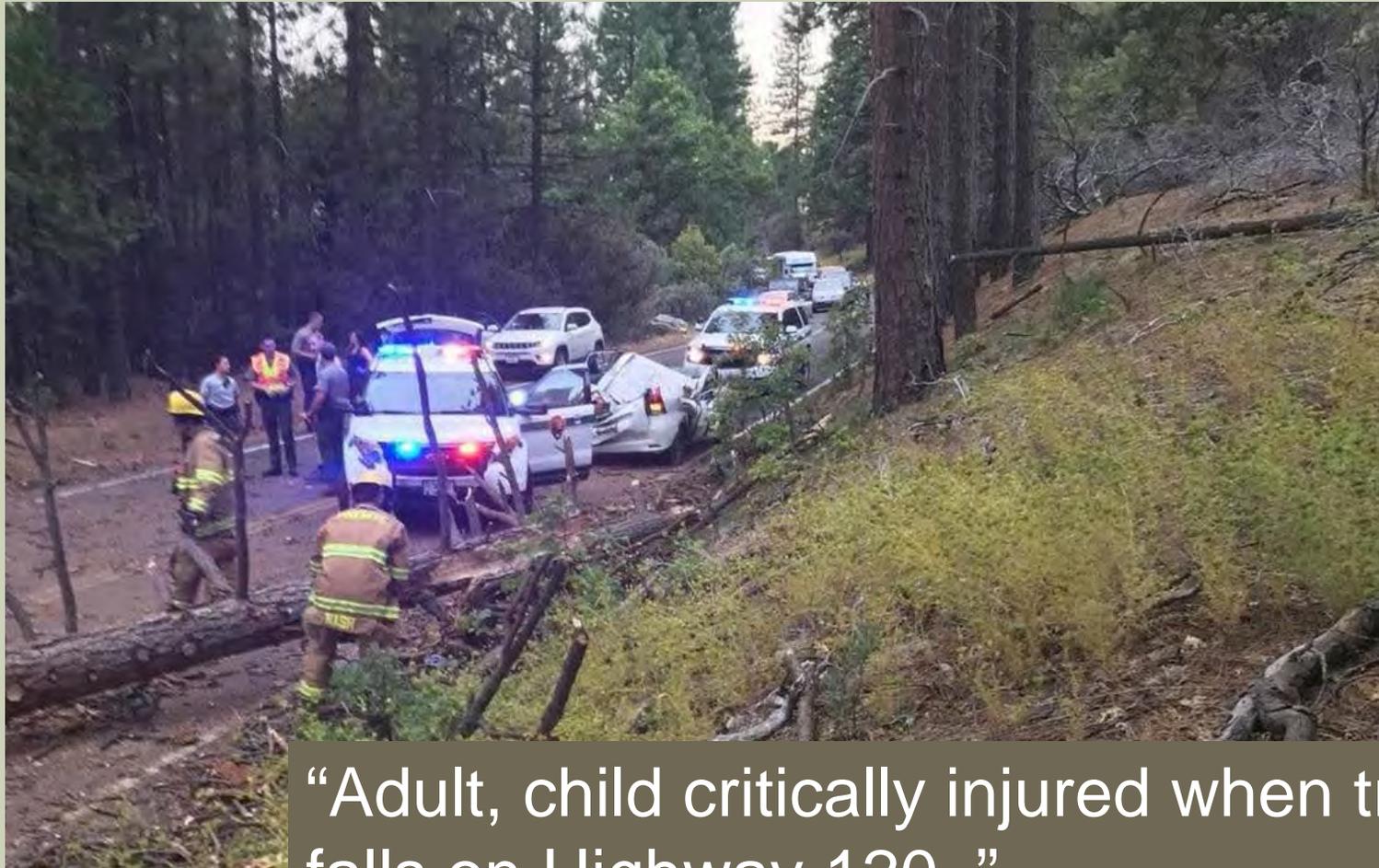


Mariposa County, 2016

Fresno County, 2016

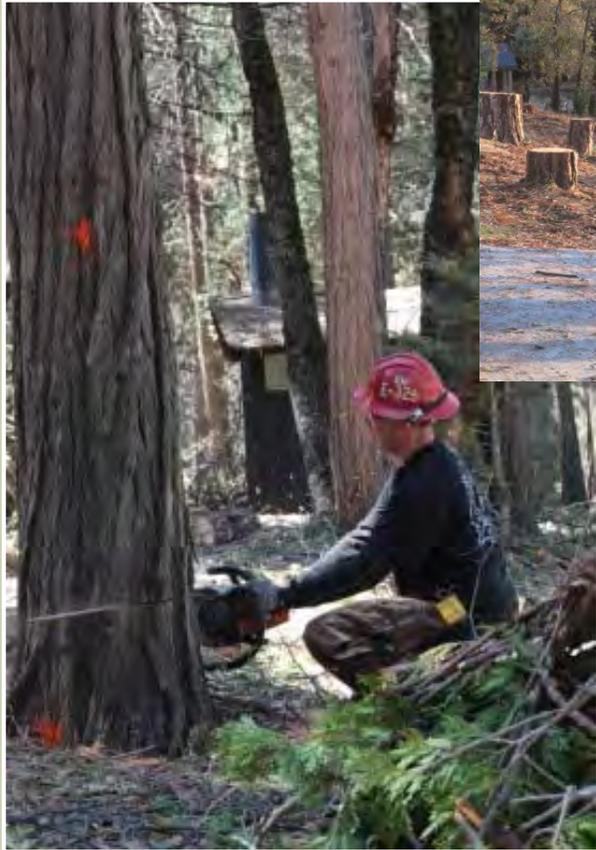


PUBLIC HEALTH AND SAFETY IMPACTS ROADS



“Adult, child critically injured when tree limb falls on Highway 120.”
Modesto Bee – September 5, 2017

PUBLIC HEALTH AND SAFETY IMPACTS RECREATION



Photos courtesy of USFS

PUBLIC HEALTH AND SAFETY IMPACTS RECREATION



“Woman killed by falling 200-foot tree at Half Dome Village in Yosemite National Park.”

Los Angeles Times – March 6, 2017

PUBLIC HEALTH AND SAFETY IMPACTS WORKERS



PUBLIC HEALTH AND SAFETY IMPACTS WORKERS

“Local 1245 Tree Trimmer Dies in Work Accident”

IBEW 1245
Mariposa County
December 2016

“Worker Killed In Tree Falling Accident”

Ledger Dispatch
Calaveras County
April 2017



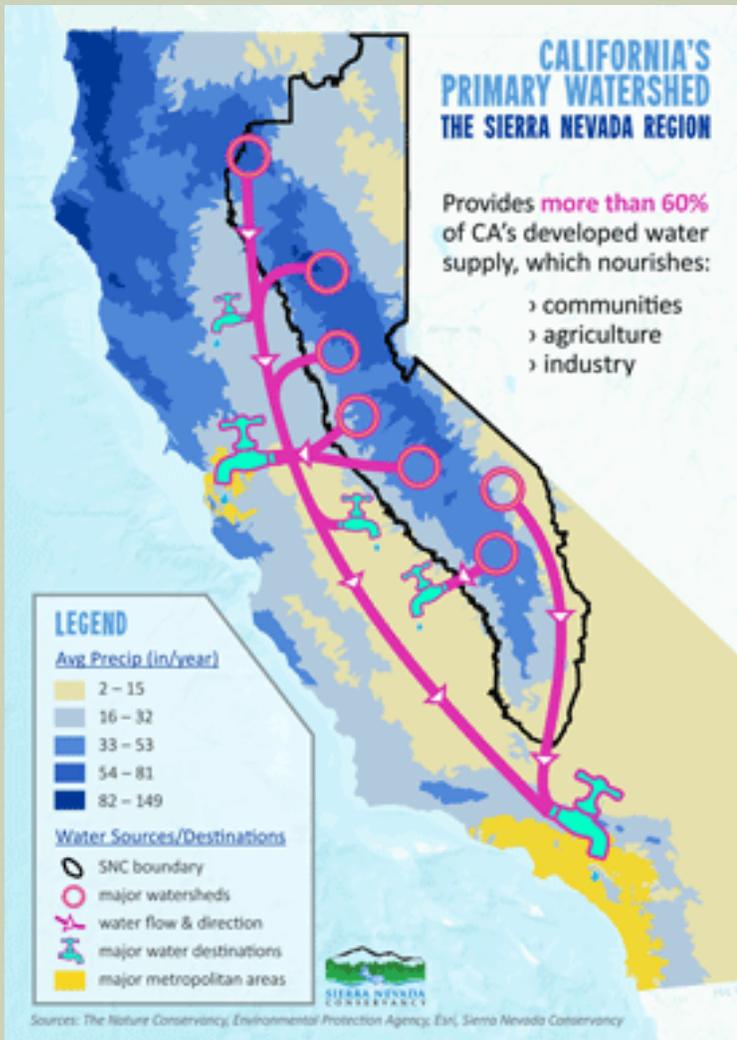
“Tree Trimmer Dies After 100-Foot Tree Falls into Power Lines”

Fox 40 News
Tuolumne County
April 2017

“Cal/OSHA Investigates Four Recent Tree Trimming Deaths, Announces Safety Campaign”

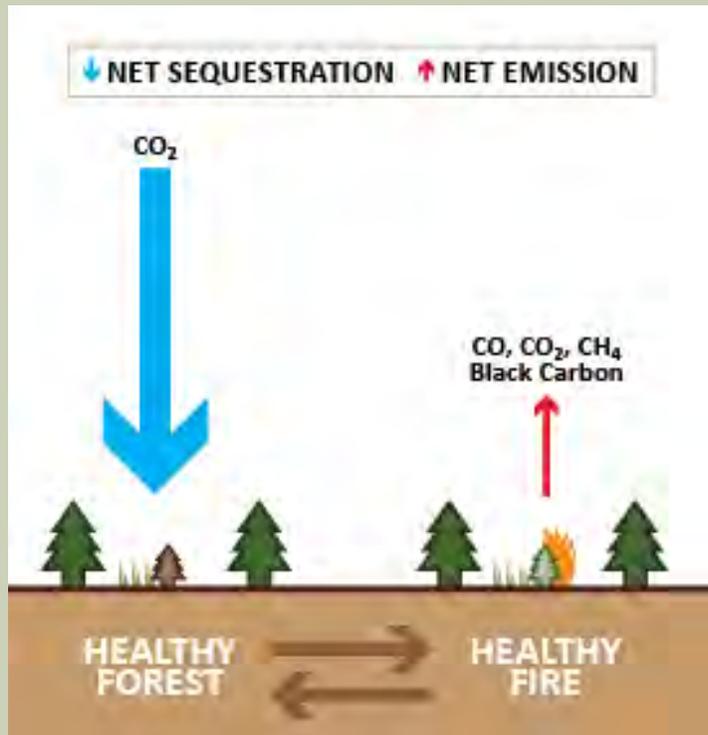
Department of Industrial relations
January 2016

PUBLIC HEALTH AND SAFETY IMPACTS WATER SUPPLY

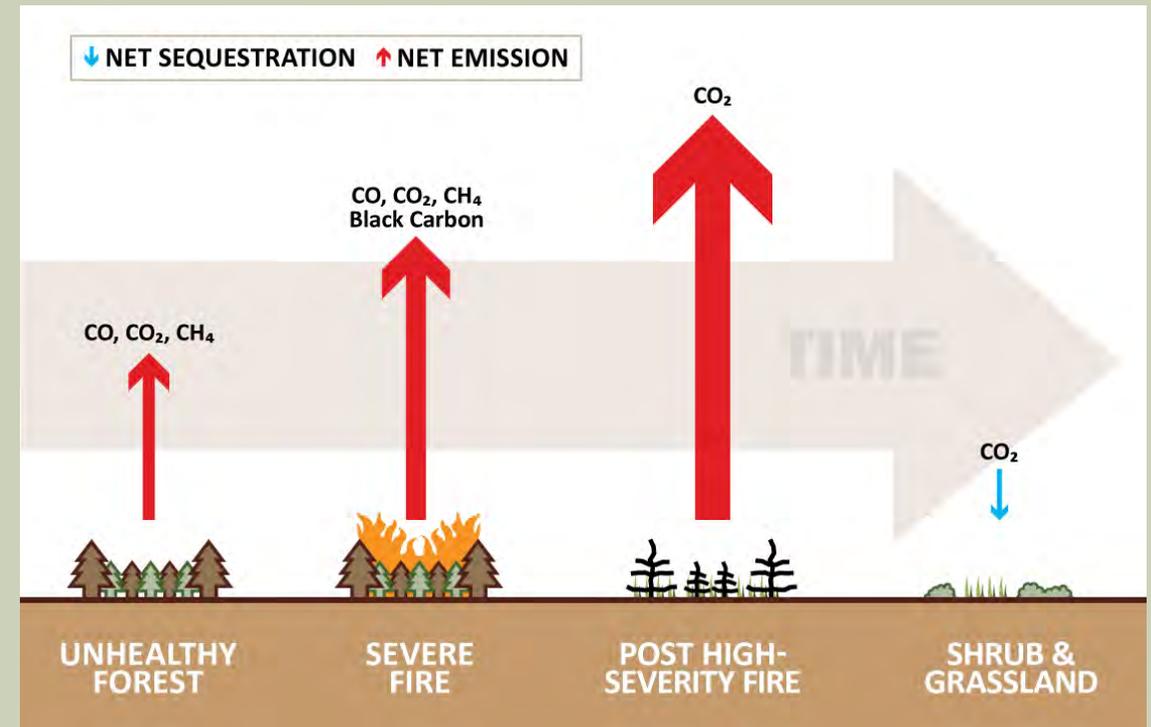


PUBLIC HEALTH AND SAFETY IMPACTS CLIMATE CHANGE

Healthy Forests = Carbon Storage



Unhealthy Forest = Carbon Emission



STATE OF EMERGENCY

OCTOBER 30, 2015

Executive Department
State of California

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS the State of California is experiencing record drought conditions, which have persisted for the last four years; and

WHEREAS on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

WHEREAS a lack of precipitation over the last four years has made trees in many regions of California susceptible to epidemic infestations of native bark beetles, which are constrained under normal circumstances by the defense mechanisms of healthy trees; and

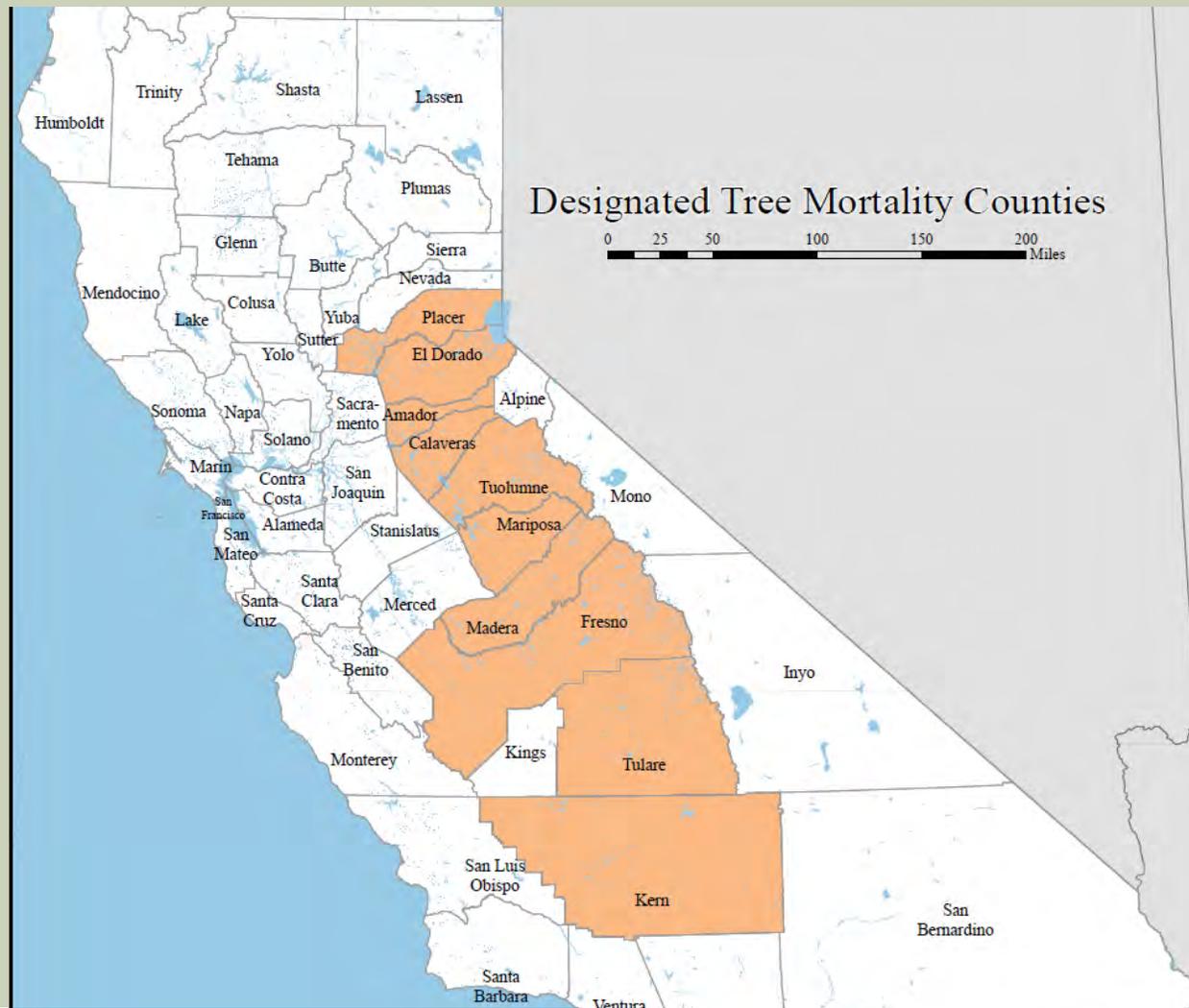
WHEREAS these drought conditions and resulting bark beetle infestations across broad areas have caused vast tree mortality in several regions of the state, with the United States Forest Service estimating that over 22 million trees are dead and that tens of millions more are likely to die by the end of this year; and

WHEREAS recent scientific measurements suggest that the scale of this tree die-off is unprecedented in modern history; and

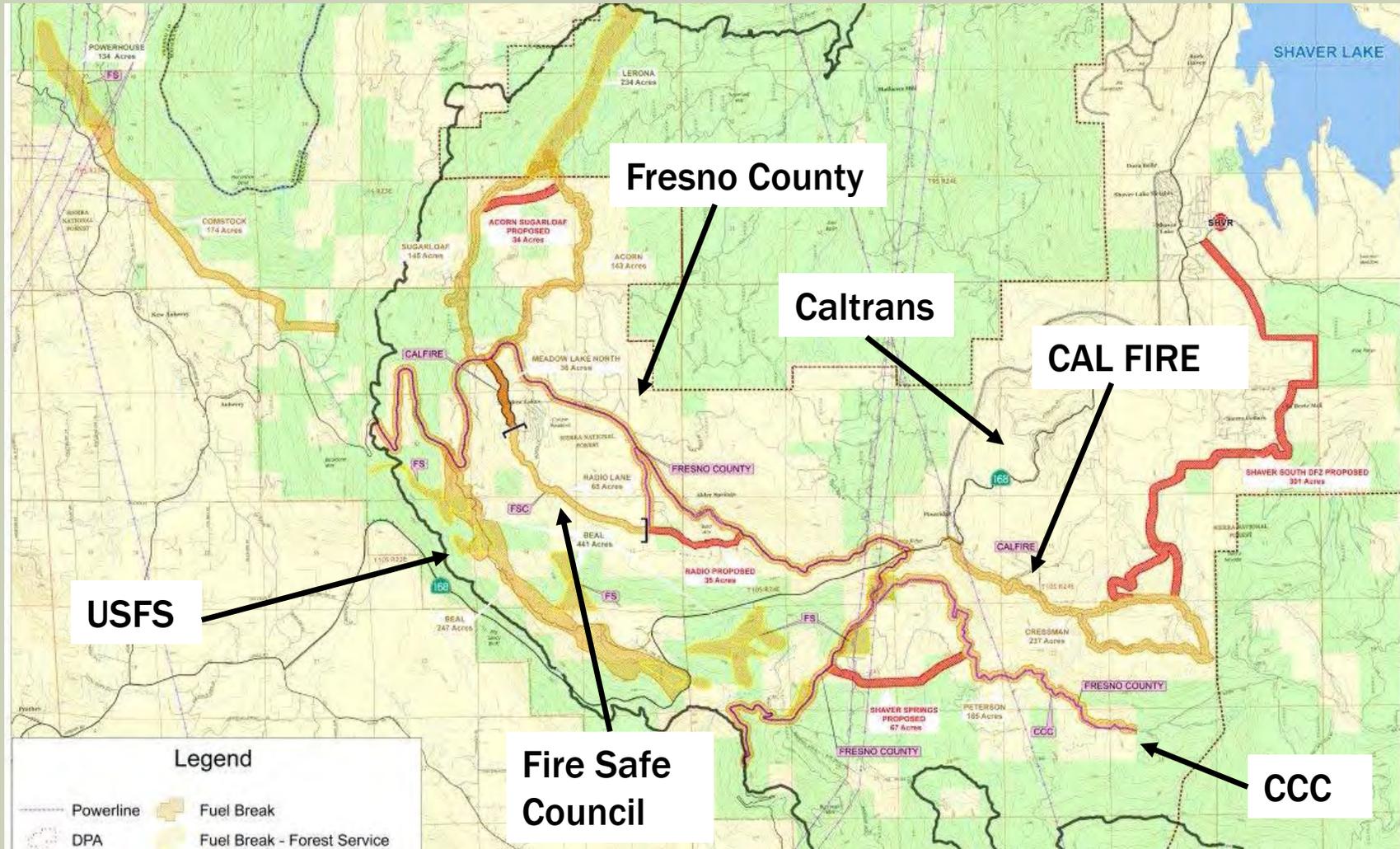
TREE MORTALITY TASK FORCE



Cal OES



COOPERATIVE EFFORTS



COOPERATIVE EFFORTS



PARTNERSHIPS MAKING PROGRESS

Through March 2017

Unit/County/Agency	Trees Removed	Acres Treated	Miles of Roads & Powerlines
USFS	185,910	71,899	534
NEU	8,653		3,410
AEU	580	20	
KRN	1,149	194	
TUU	22,836	14,455	715
MMU	31,162	862	147
TCU	9,981	689	47
FKU	35,932	579	33
PG&E	294,000		95,630
CalTrans	57,000		
SCE	No report		
TOTALS	647,203	88,698	100,516

PRIVATE TREE REMOVAL PROJECTS





Google





LAKE ARROWHEAD IN 2003



LAKE ARROWHEAD IN 2016



THE IMPACTS TO THE SIERRA NEVADA WILL BE FELT FOR DECADES

Kristen Merrill

CAL FIRE

Tree Mortality Task Force

Kristen.Merrill@fire.ca.gov

(916) 651-2022

