

CARCD 72ND ANNUAL CONFERENCE

“DYNAMIC PARTNERSHIPS, RELEVANT RESULTS”

The Tree Mortality Emergency: An Impetus for an Integrated Approach to Forest Management

Kristen Merrill, CAL FIRE

Thursday, November 16th, 2017
Sacramento, CA



RESOURCE
CONSERVATION DISTRICTS

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

THE TREE MORTALITY EMERGENCY AN IMPETUS FOR INTEGRATED FOREST MANAGEMENT



Kristen Merrill

CAL FIRE

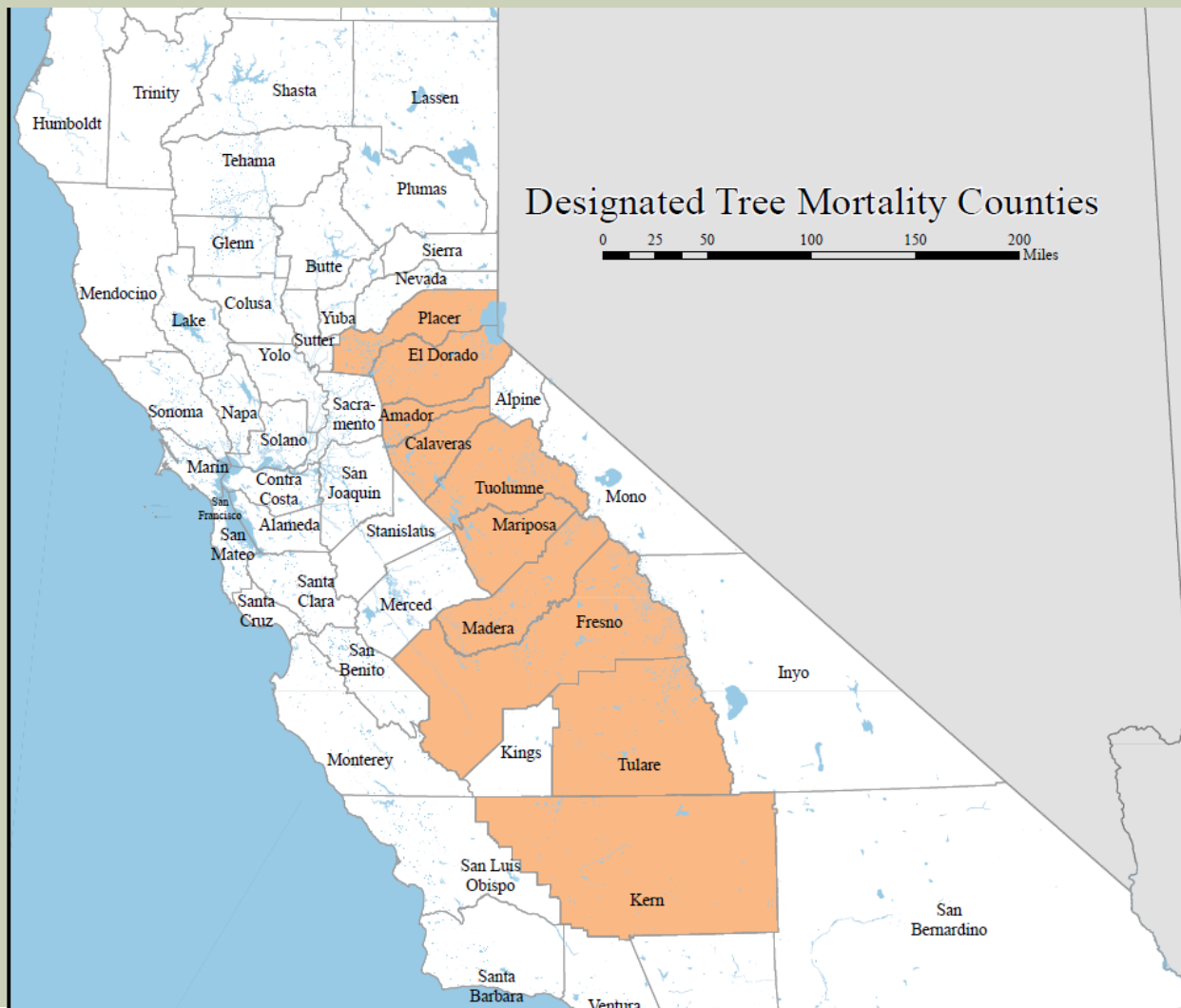
TMTF Logistics Section Chief



TREE MORTALITY TASK FORCE



Cal OES







TREE MORTALITY TASK FORCE



In Response to the State of
Emergency Proclamation

Incident Action Plan

2017

www.treetaskforce.org
Updated April 24, 2017

TMTF WORKING GROUPS



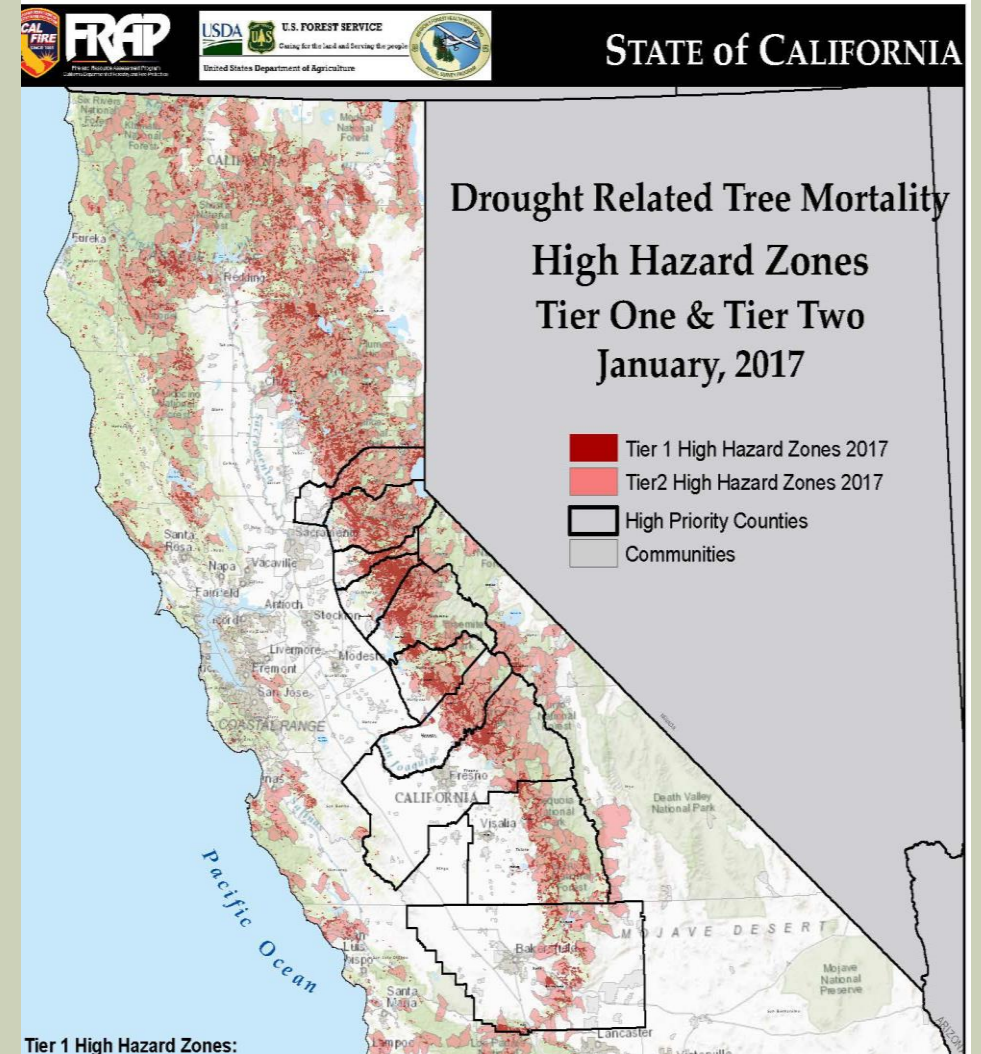
- Mapping & Monitoring
- Public Outreach
- Regulations
- Resource Allocation
- Utilization- Bioenergy
- Utilization – Market Development
- Forest Health & Resilience



MAPPING & MONITORING



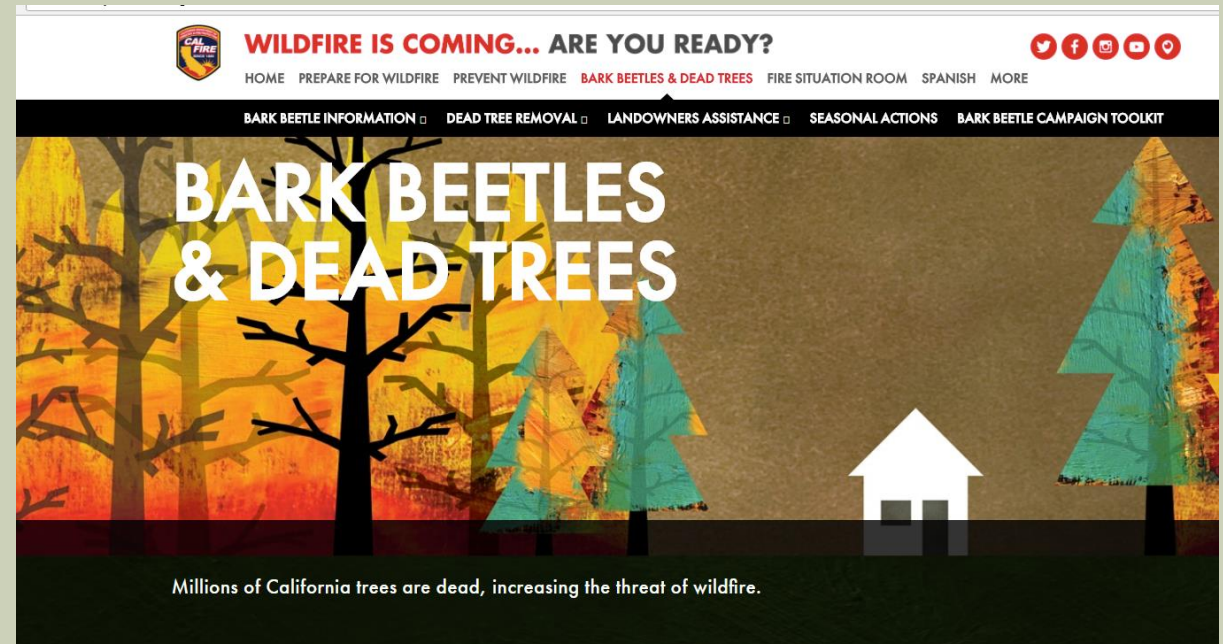
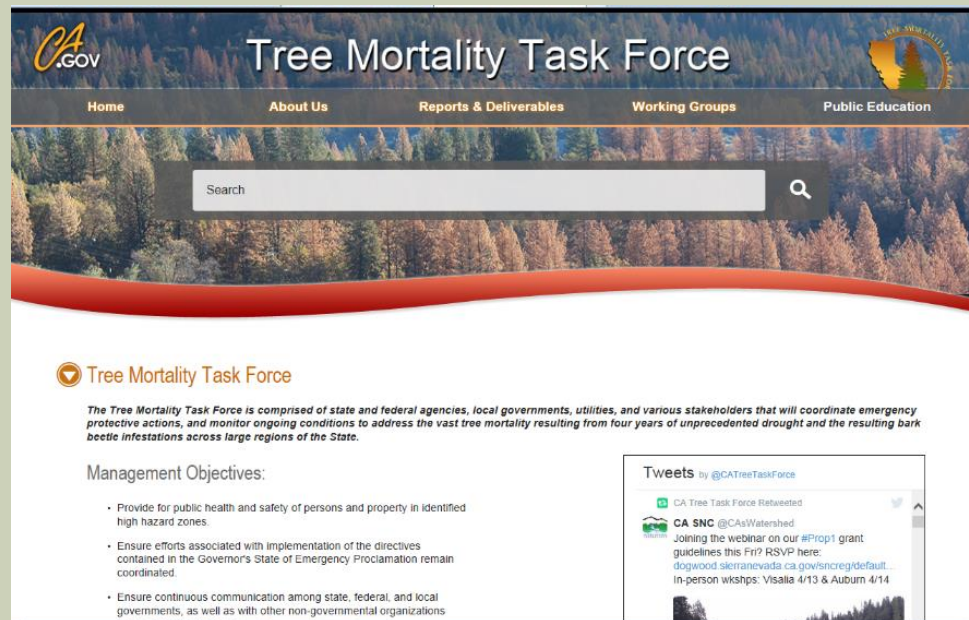
- Mapped tree mortality in CA
- Identified Tier 1 and Tier 2 High Hazard Zones
- Developed a web-based tool for agencies to track tree removal projects
- Mapped active wood storage and processing facilities



PUBLIC OUTREACH



- Designed TMTF Website www.treetaskforce.org
- Created a “Prepare for Bark Beetle” campaign www.prepareforbarkbeetle.org



REGULATIONS



- Provided guidance on the siting of temporary log storage and processing facilities
- Published *Guidelines for High Hazard Zone Tree Removal*
- FAQ: Contracting for Tree Removal





RESOURCE ALLOCATION

- Purchased and distributed to the affected counties and CAL FIRE Units heavy equipment necessary to dispose of material from hazard tree removal projects
- Developed list of grants with giving interests relating to the tree mortality issue (TreeTaskForce.org)



UTILIZATION – BIOENERGY



- CPUC extended contracts on existing bioenergy facilities receiving feedstock from HHZs
- CEC has contracted \$15M for community-scale forest bioenergy power plants in Mariposa, Lassen, Yuba counties
- Performed analysis to estimate biomass feedstock availability for use at bioenergy facilities.



UTILIZATION – MARKET DEVELOPMENT



- Funded a feasibility study on options for woody biomass utilization
- Coordinated with CA Resources Agency's SB 859 Working Group focused expanding wood product markets in California
- Examined export markets and possible barriers including federal restrictions



FOREST HEALTH & RESILIENCE



- Published *Recommendations for Comprehensive Sierra Nevada Ecological Restoration*
- Published *Achieving Long-Term Forest Health and Resilience in CA*
- Completing an ESRI story map regarding the need for reforestation
- Placed a seedling sowing order to make seedlings available to private landowners in the HHZs



COLLABORATION & COMMON GOALS

“The Tree Mortality Task force has provided an essential venue for coordination of response efforts, exchange of ideas, reporting, and accountability for the ongoing statewide response to this incident.”

“This has been the most successful group effort that I have been involved in.”



WORKING TOGETHER: WORKING GROUPS



- Regulations WG gathered guidance from ARB, Cal EPA, and US EPA on permitting
- Developed an Equipment Use Agreement for counties to use the equipment
- Resource Allocation WG provided training on use of equipment
- Transferred an ACI from CAL FIRE to Calaveras County



WORKING TOGETHER: WORKING GROUPS & ACADEMIA



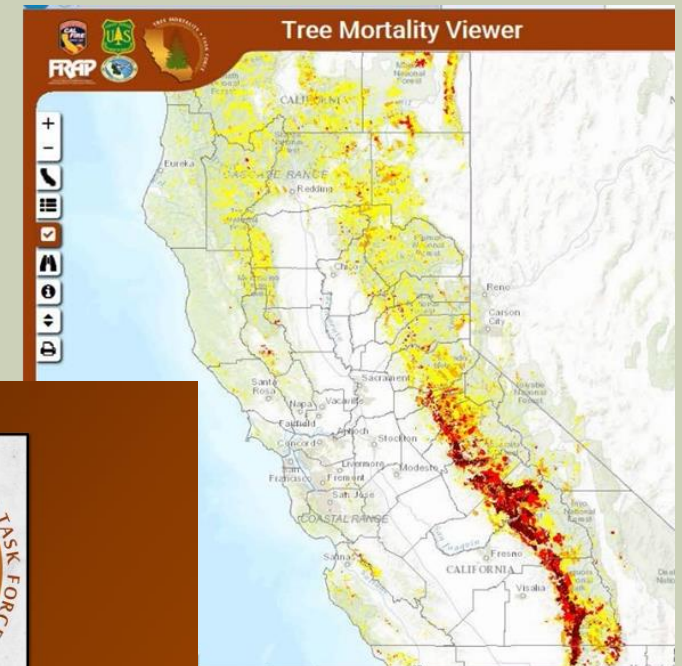
- Coordinated with UC Cooperative Extension on a series of reforestation workshops
- Created the Sierra Nevada Forest Science Coordination Group to perform a gap analysis of science and management information



WORKING TOGETHER: FEDERAL & STATE AGENCIES



- CAL FIRE-FRAP & U.S. Forest Service continue to map tree mortality in CA
<http://egis.fire.ca.gov/TreeMortalityViewer>
- Continue to coordinate on summaries of mortality by county



Tree Mortality: Facts
and
Figures

Tree Mortality Task Force

April 2017



WORKING TOGETHER: STATE & COUNTY AGENCIES



- CAL FIRE and Caltrans collaborated on door hangers to notify landowners of hazardous tree identification efforts. Template is being adopted by Placer County.
- Caltrans and Tuolumne County are coordinating to use e-signatures to obtain right-of-entry agreements for hazardous tree removal projects



WORKING TOGETHER: REGULATORY AGENCIES & INDUSTRY



- Bioenergy WG hosted technical- & policy-focused interconnection meetings between BioMAT projects, utilities, & regulatory agencies
- Result: \$5 million in reduced costs for BioMAT facilities
- The Governor appointed a CPUC Interconnection Ombudsman to mediate disputes in the interconnection agreement process.



WORKING TOGETHER: GRASSROOTS EFFORTS



- Fire safe councils, homeowners associations, resource conservation districts & other non-profits played an important role in funding tree removal projects on private land
- Small grants helped the elderly and low-income households



WORKING TOGETHER: BETWEEN COUNTIES



- Met monthly to exchange ideas & share successes
- Learned from each other how to develop/implement hazard tree removal projects & utilized CDAA funding
- Coordinated support for related legislation

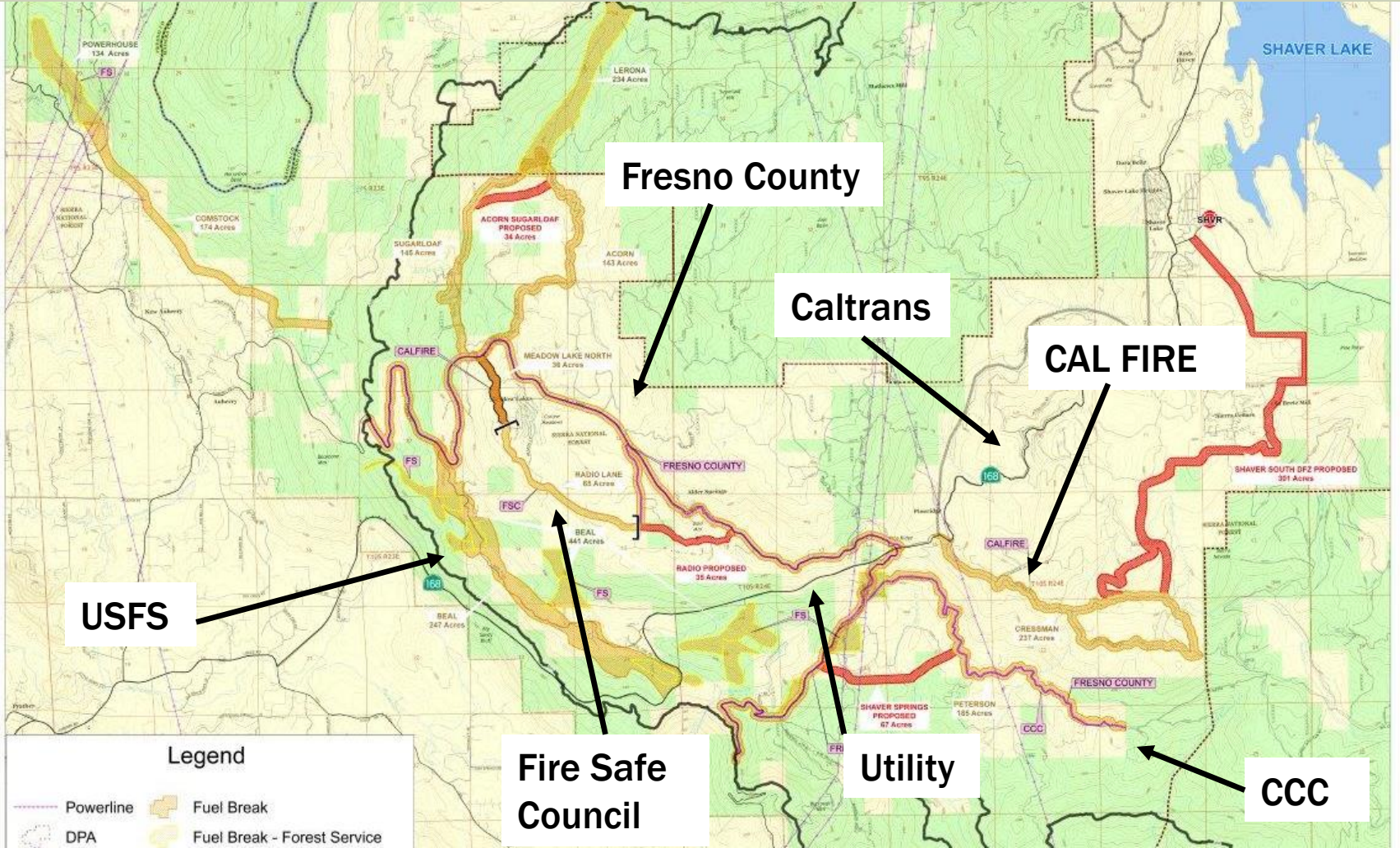
WORKING TOGETHER: WITHIN THE COUNTIES



- Local task forces are an essential venue for the coordination of response efforts
 - County Supervisors
 - County OES
 - PG&E
 - Caltrans
 - Local water & Utility districts
 - Fire Safe Councils
 - Homeowners Associations
 - Resource Conservation Districts
 - U.S. Forest Service



WORKING TOGETHER: ON THE GROUND



WORKING TOGETHER: ON THE GROUND



THE COLOR OF MONEY



Entity	Department	'15-16 Expended	'16-17 Expended	'17-18 Budgeted
State	CAL FIRE	\$13,868,814	\$24,875,347	\$15,166,000
State	OES	\$231,988	\$2,601,938	\$2,000,000
State	Caltrans	\$40,927,000	\$115,800,000	\$70,000,000
State	CCC	\$133,232	\$157,000	\$93,000
State	CA Volunteers	\$1,000,000	\$1,000,000	\$1,000,000
Local	Priority Counties	\$475,592	\$4,988,062	\$7,404,969
Federal	USDA	\$1,559,316	\$1,468,257	Pending budget
Federal	USFS	\$43,220,000	\$41,432,000	Pending budget
Federal	NRCS	\$4,100,000	\$4,944,000	Pending budget
Non-profit	Fire Safe Councils	\$2,000,000	\$2,100,000	\$2,100,000

PARTNERSHIPS MAKING PROGRESS

Through October 2017



<u>Agency</u>	<u>Trees Removed</u>
CAL FIRE	42,054
Caltrans	107,608
USFS	291,736
Priority Counties	13,714
PG&E	351,908
SCE	34,981
TOTAL	842,001



TREE MORTALITY NORTHERN FRESNO COUNTY



MAY 2015



FEBRUARY 2016



APRIL 2017



WORKING INTO THE FUTURE



- Crafting a reforestation and vegetation management strategy
- Increasing the pace and scale of prescribed fire
- Raising awareness of urban audiences about forest health
- Addressing expanded wood product markets in California
- Improving fire risk assessment related to homeowners insurance underwritings
- Working with the RCDs??



Kristen Merrill

CAL FIRE

Tree Mortality Task Force

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