



Tree Mortality Task Force Monthly Update

Sept 30, 2016

HIGHLIGHTS

- The Mapping and Monitoring workgroup is currently updating High Hazard Zone Tier 2 designated watersheds to reflect the most recent survey data available (May, 2016) from the USFS. This update incorporates additional information on utility company assets and the May, 2016 Aerial Detection Survey conducted over the western slope of the Sierra Nevada to identify new Tier 2 High Hazard Zones. We anticipate updated information will be available on the TMTF web viewer in time for the next full TMTF meeting in October.
- On September 15 members from the RWG participated in a meeting with the CA Department of Insurance, Fair Plan, Office of Planning and Research and several County representatives. The meeting focused on several issues the Counties are experiencing regarding insurance. The FireLine model used by insurers to evaluate fire risk is one tool that helps decide where to write and how to price policies. The models do not just take into account the attributes of that one property – they also look at the likelihood that a wildfire will sweep over the area surrounding the property and neighborhood. The main, common factors used by all fire risk models are (1) vegetation type and density, (2) steepness of slope, and (3) access to the property (e.g., dead-end road). The concern is that the FireLine model relies on satellite imagery and may not be accurately capturing or considering common fuel break efforts including PRC 4291 clearance. CAL FIRE is planning a meeting with the CDI and Verisk (makers of the FireLine model) to review and evaluate the model.

CURRENT TREE MORTALITY CONDITIONS

- 66,000,000 dead trees since 2010

MAIN TASK FORCE REPORT

- The next Task Force meeting will be held on Monday, October 10 from 1:00-3:00 P.M.



WORKING GROUP REPORTS

Forest Health and Resilience

(Pete Cafferata/ Stewart McMorrow)

- The Forest Health and Resilience Working Group (FHRWG) met on September 7th. There was continuing discussion regarding edits submitted for the FHRWG document titled “Achieving Long-Term Forest Health and Resilience in California.”
- The FHRWG began discussing a draft white paper titled “Sierra Forest Health Report” authored by John Amodio and Larry Camp. This document stresses the critical need for a comprehensive forest restoration program in the Sierra Nevada to improve forest health conditions. The goal is to get all landowners, including small nonindustrial owners, to invest in forestry to improve forest health and resiliency in this region. The document remains incomplete; sections on adaptive management and monitoring remain to be written. The group generally agreed that a coordinated state and federal effort in the Sierra Nevada would be valuable.
- Work has continued on developing a strategy for reforestation of areas heavily impacted by bark beetles, including investigating which species should be replanted considering elevation zones and seed zones, areas with high rates of mortality, and other considerations (e.g., climate change). Stewart McMorrow developed a list of questions to help move this process forward.
- UC Cooperative Extension specialists Dr. Rick Standiford and Susie Kocher have volunteered to assist the FHRWG, and in particular assist with the group’s reforestation objective. The TMTF Mapping and Monitoring Working Group has also volunteered to assist the FHRWG with this endeavor by overlaying GIS data on tree seed zones, 500 foot elevation bands, and forest type vegetation maps to summarize the number of acres of in each forest type/tree seed zone/elevation band combination.
- The FHRWG has also been in discussion with TMTF Public Outreach Working Group representatives regarding a forest health outreach campaign. They will discuss their ideas at our meeting scheduled for October 5th.



Mapping and Monitoring

(Mark Rosenberg/Chris Fischer)

- The Mapping and Monitoring workgroup is currently updating High Hazard Zone Tier 2 designated watersheds to reflect the most recent survey data available (May, 2016) from the USFS. This update incorporates additional information on utility company assets and the May, 2016 Aerial Detection Survey conducted over the western slope of the Sierra Nevada to identify new Tier 2 High Hazard Zones. We anticipate updated information will be available on the TMTF web viewer in time for the next full TMTF meeting in October.
- MMWG have created a draft Facts and Figures document for estimates of dead trees and other relevant figures as a reference document for the TMTF and the public. This fact sheet will be maintained by the MMWG, in coordination with the Communications WG. We anticipate sending the draft document to the Communications Workgroup in the next couple of weeks. Current information contained in the Facts and Figures document include estimates of dead trees, acres of mortality, acres of HHZ and estimates of live trees on forestland and in urban areas. A process for vetting and approving new estimates used in the MMWG F&F document has been established by Task Force Leadership.
- The MMWG is currently working to coordinate submittal of tree removal project data at the local level. There are currently two ways to provide information, either by submittal, or by using an online tree mortality project tracking mapping application developed by FRAP. There have been 8 approved requests for a login to the online web map application, 5 in the north and 3 in the south. One request was denied because the intended use was deemed inappropriate by Task Force leadership.

Regulations

(Matthew Reischman/Sandy Goldberg)

- On September 15 members from the RWG participated in a meeting with the CA Department of Insurance, Fair Plan, Office of Planning and Research and several County representatives. The meeting focused on several issues the Counties are experiencing regarding insurance. The FireLine model used by insurers to evaluate fire risk is one tool that helps decide where to write and how to price policies. The models do not just take into account the attributes of that one property – they also look at the likelihood that a wildfire will sweep over the area surrounding the property and neighborhood. The main, common factors used by all fire risk models are (1) vegetation type and density, (2) steepness of slope, and (3) access to the property (e.g., dead-end road). The concern is that the FireLine model relies on satellite imagery and may not be accurately capturing or considering common fuel break efforts



including PRC 4291 clearance. CAL FIRE is planning a meeting with the CDI and Verisk (makers of the FireLine model) to review and evaluate the model.

- The RWG is assisting Mariposa County with questions regarding hazard tree removal around power lines and power poles. The County has requested clarification as to which trees the local utility, PG&E, is responsible to remove versus trees the residents need to pay to have removed. The RWG has consulted PG&E and the local CAL FIRE Unit for resolution.
- The Regulations Working Group is working with the Governor's Office to finalize a letter that will request US EPA to authorize emergency use of air curtain incinerators without a Title V permit. Because of fire season, none of the air curtain incinerators have been used beyond testing, but CAL FIRE hopes to begin use soon. Once use begins, the letter to EPA asking to continue emergency use must be sent within 8 weeks (just sending the letter triggers an ability to continue use for another 8 weeks without a permit). To continue use for more than 16 weeks without a permit requires EPA authorization.

Utilization – Bioenergy

(Angie Lottes/Sandy Goldberg)

- As directed by the Governor's Tree Mortality Proclamation, the three investor-owned utilities are to purchase a minimum of 50 MWs of power from facilities using feedstock primarily from the high hazard zones. To stay in compliance with the CPUC process and deadlines, PG&E, SCE and SDG&E issued Bioenergy Renewable Auction Mechanism (BioRAM) Request for Offers for forest biomass plants consuming significant high hazard zone material. PG&E and SCE are to purchase a minimum of 20 MWs of power each. SDG&E is required to purchase a minimum of 10 MWs of power. Bidders submitted offers to the utilities last month and utilities are now reviewing those bids. Facilities will be notified of their application status in October, and contracts will be submitted to the CPUC for approval in November. It is estimated power purchase agreements will be signed and facilities will begin power generation around January 2017.
- In addition to the BioRAM requirements passed by the CPUC early this year, a bill requiring 125 MW of power procurement from existing power plants (SB 859) was passed by the legislature and signed by the Governor. The CPUC issued Draft Resolution E-4805 to address the requirements of SB 859. Included in this draft resolution is a breakdown of the capacity allocations for each IOU and the POUs, the methods of procurement that the IOUs can use to contract, and allows for a new non-bypassable charge:



Entity	Coincident Peak Demand (MW)	Share of Peak Demand (MW)	Allocation of MWs under Section 399.20.3
PG&E	17,523	34.30%	43
SCE	17,840	35%	44
SDG&E	3,725	7.30%	9
POUs with 100,000 or more customers	11,952	23.40%	29
Total	510,408	100%	125

IOUs must procure power in the amount allocated to them by executing contracts by December 1, 2016. Contracts can be offered through the current BioRAM, a second BioRAM with specific changes made to the program, or through bi-lateral contracting.

The new nonbypassable charge, called the "Tree Mortality Nonbypassable Charge" will allow IOUs to recover the cost of the 96 MWs that they are responsible to procure through this draft resolution. A nonbypassable cost allows the IOUs to recover costs of a program by charge that goes to all customers, including Direct Access and CCA customers, in an IOU territory.

- CPUC issued a Proposed Decision to make changes to the existing BioMAT program rules following passage of SB 840, which changes the requirements for maintaining a place in the BioMAT queue. Projects will no longer be required to maintain an active position in the utility's Interconnection queue to also hold a place in the BioMAT queue. This will enable a number of projects to enter the BioMAT queue and trigger the price mechanism. The proposed decision also shortens BioMAT "program periods", which will allow the price to rise and lower more quickly than before. The October 13 Commissioner's Meeting agenda currently lists this Proposed Decision for voting. These changes are expected to cut in half the time until projects get a Power Purchase Agreement and begin construction.



-
- As directed by the Governor's Emergency Proclamation, the California Energy Commission has prioritized Electric Program Investment Charge funding for woody biomass-to-energy technology development and deployment. Grant Funding Opportunity 15-325 was released on Monday, June 27, 2016. It includes \$5 million for research and development projects using woody biomass and \$10 million for technology demonstration and deployment to projects using high hazard zone material. Concept papers for this solicitation have been submitted and full proposals are due in December. The California Energy Commission will alert projects to their status for phase 1 applications next month. Additionally, the California Energy Commission has released Grant Funding Opportunity 16-306, part of which makes \$1 million available for reporting on environmental impacts of forest biomass and field residue fueled bioenergy.

Utilization – Market Development

(Evan Johnson)

- SB 859, signed by the Governor, directs the Resources agency to establish a working group on expanding wood product markets that can utilize woody biomass, especially biomass that is removed from high hazard zones. The new working group is to include members from this existing Market Development Working Group. By June 1, 2017, the working group must submit recommendations to the Legislature on actions that may be taken to encourage the development of the wood product markets, including the identification of potential pilot projects.
- In preparation, the Market Development Working Group has begun to catalog specific and general market opportunities considered and or supported by the members of the group. This catalog will help to inform the work moving ahead.
- The workgroup continues to pursue the opportunity of using high volumes of tree mortality wood chips for dust mitigation at the Salton Sea. The Salton Sea Authority is supporting a pilot project to establish the effectiveness of wood chips for this purpose.
- DGS continues to work towards a bulk purchase of mulch from tree mortality woody biomass for use at state facilities. Log decks that DGS has contacted for this purpose do not currently have an oversupply of wood, but this will likely change as more trees are removed from high-hazard zones.”



Public Outreach

(Daniel Berlant/Staci Heaton)

- Working group members are having discussion on messaging forest health to the general public. Initially the group focused on education for residents living in high tree mortality areas, and then provided awareness to residents in areas where tree mortality was expected to soon become an issue. Working group leaders will be meeting with the Forest Health and Resilience Working Group to discuss science and materials available on the topic.

Resource Allocation

(Thom Porter/Tom Lutzenberger)

- The Resource Allocation Working Group has been developing a new grid by which to match other department resources to CAL FIRE program resources committed to Tree Mortality. This grid is then expected to be a launching board for developing cooperative projects between CAL FIRE and departments to leverage maximum resource use on TM projects going forward. The details are expected to provide the framework for interagency agreements as well, if determined beneficial.
- Resource Allocation updated recent cost figures from state agencies and local government involved. Meeting to continue this effort is to be scheduled for next week.
- Ongoing efforts are hampered however due to the loss of key support staff and commitments with fire season response.
- Group staff has been finalizing review on equipment agreement templates with Legal in response to county comments regarding the contract language.

APPROVED CALIFORNIA DISASTER ACT FUNDING APPLICATIONS

- **Approved CDAA Applications:** El Dorado County, Fresno County, Madera County, Mariposa County, Tulare County, Tuolumne County, Big Creek School District, Chawanakee Unified School District, Curtis Creek School District, Tuolumne Utilities District, Twain Harte Community Services District, Columbia Public Cemetery District, Pine Ridge Elementary School District, Tehachapi Valley Recreation and Park District, Amador County.
- **Submitted CDAA Applications:** Placer County, Calaveras County, Calaveras Public Utility District, El Dorado Irrigation District, Halcumb Cemetery District.



LOCAL GOVERNMENT

- **Local Emergency Proclamations:** Amador, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, Tuolumne, Nevada County.
- **County Tree Mortality Task Forces:** Amador, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, Tuolumne.

TREE MORTALITY RESPONSE FUNDING

On Monday, June 27th, Governor Brown signed the 2016-2017 Fiscal Year (FY) Budget. The 16-17 FY Budget includes a one-time increase of \$11 million General Fund dollars for CAL FIRE to assist in the removal and disposal of trees in high hazard areas. This includes:

- \$6 million for the California Conservation Corps and grants to local entities, including local government, fire districts, local conservation corps, tribal entities, and fire safe councils, to provide support to local efforts to remove hazardous trees that pose a threat to public health and safety.
- \$5 million to support additional miscellaneous equipment, personnel overtime for foresters, hand crews, engine companies, and heavy equipment operators, for hazardous tree removal and fuels reduction efforts.

The 16-17 FY Budget also includes:

- \$10 million one-time funding in grants from the State Responsibility Area fund, with \$5 million of that being dedicated for tree mortality related work.
- The Budget also includes \$31.6 million for the Office of Emergency Services (Cal OES) to provide assistance to counties through the California Disaster Assistance Act.

CAL FIRE Grants update:

- CAL FIRE's State Responsibility Area Fire Prevention Fund and Tree Mortality Grant Program began accepting grant applications for dead and dying tree removal in August, 2016. The grant application period closed on September 28, 2016 at 3:00 pm. CAL FIRE received approximately 246 grant applications.



EQUIPMENT ALLOCATION AND TRAINING

CAL FIRE Tree Mortality Equipment Allocation:	#Delivered										
County Name (CAL FIRE Unit): >>>----->	V	Kern (KRN)	Tulare (TUU)	Fresno (FKU)	Madera (MMU)	Mariposa (MMU)	Tuolumne (TCU)	Calaveras (TCU)	Amador (AEU)	El Dorado (AEU)	Placer (NEU)
Burner Module A (2):											
3 Fire Box (burners)	6			3	3						
1 Track Loader	2			1	1						
1 Wheel Loader	2			1	1						
Burner Module B (2):											
2 Fire Box (burners)	4		2				2				
1 Track Loader	2		1				1				
1 Wheel Loader	2		1				1				
Single Resources:											
Masticator (2)	2			1	1						
Track Chipper (10)	10	1	2	2	1	1	2		1		
Tow Chipper (6)	6		1	1		1	2		1		
Sawmill (5)	5		1	1	1		1		1		
Total # of New Equipment Units	41	1	8	10	8	2	9	0	3	0	0

**Red numbers denotes that a piece of equipment is released to or active in the Unit

UPCOMING EVENTS

- The next full Tree Mortality Task Force meeting will be held on Monday, October 10th from 1:00-3:00 P.M.



TREE MORTALITY RELATED WEBSITES FOR MORE INFORMATION

California's Tree Mortality Information Clearinghouse for Stakeholders

www.treetaskforce.org

California's Tree Mortality Information Clearinghouse for the Public

www.prepareforbarkbeetle.org

California's Tree Mortality Viewer

egis.fire.ca.gov/TreeMortalityViewer/

United States Forest Service-California Tree Mortality Information

<http://www.fs.usda.gov/CATreeMortality>