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## Tree Mortality Task Force Monthly Update

### December 30, 2016

#### **HIGHLIGHTS**

- There was an initial concern in air quality regulations that Tier 0 engines used to facilitate hazard tree removal and disposal would no longer be allowed to operate after the first of the year due to a regulation change. Tuolumne County Air Pollution Control District working with ARB have determined that Tier 0 diesel engines can be used during the tree mortality emergency. The Governor's Emergency Declaration is the basis for allowing this exemption.
- BioRAM1 (Order 9): 120 MW of forest biomass power has been contracted through the Bioenergy Renewable Auction Mechanism (BioRAM) by PG&E, SCE, and SDG&E. The BioRAM contract requires each plant to consume significant high hazard zone (HHZ) material each year. It is estimate that over 4 million bone dry tons (BDT) of HHZ material will be consumed over the 5-year period of the contracts.

#### **CURRENT TREE MORTALITY CONDITIONS**

- 102,000,000 dead trees since 2010.

#### **MAIN TASK FORCE REPORT**

- The next Task Force meeting will be held on Monday, January 9, 2017 from 1:00-3:00 P.M.

#### **WORKING GROUP REPORTS**

##### **Forest Health and Resilience**

**(Pete Cafferata/ Stewart McMorrow)**

The FHRWG met on December 7th. Progress is being made on several different projects. These include:

- FHRWG is finalizing a draft document titled "Recommendations for Comprehensive Sierra Nevada Ecological Restoration", which supports the SNC's Watershed Improvement Program and outlines the actions needed across the Sierra Nevada to reduce tree mortality.
- FHRWG is continuing to construct a reforestation strategy for the high hazard counties with extensive tree mortality areas. This strategy is developing around a need for education, and to enable landowners to gain access to seedlings and information about post-mortality stand dynamics. The strategy also includes providing assistance with planning and implementing their reforestation work on their property.



- A speculative seedling order of 130,000 seedlings consisting of ponderosa pine, sugar pine, with a small component of giant sequoia was recently placed to be ready for planting in fall/winter of 2017/18.
- FHRWG is working with MMWG in finalizing a mapping product that overlays mortality areas with seed zones that will inform cone collection and speculative sowing of reforestation seedlings. Working group members will discuss the finalization of the work at the next meeting in January 2017.
- FHRWG continues to work with the POWG and UC Cooperative Extension on public outreach regarding forest health and resilience. Currently, a series of three reforestation workshops are being planned to take place in the late winter and early spring. More details will follow as the plans for the workshops are solidified. The first of these workshops is scheduled for February 11, 2017 in Auberry.
- FHRWG members will be participating in a new FHRWG/Mapping and Monitoring WG sub-working group to address emerging remote sensing technologies for assessing and monitoring forest health. The goal is to use LiDAR and hyperspectral (HS) imaging to determine dead tree heights and assess potential impacts to nearby assets-at-risk from tree fall.

## **Mapping and Monitoring**

**(Mark Rosenberg/Chris Fischer)**

- High Hazard Zones are being updated to reflect the recently completed aerial detection survey data released by the US Forest Service in November. This reflects the final data on tree mortality available from this program in 2016 and completes the survey of California Forest land for the year. We anticipate updated HHZ Tier 1 and Tier 2 GIS data will be available by the next Statewide TMTF meeting on January 9<sup>th</sup>, 2017.
- The Project Tracking web based application was demonstrated at local TMTF meetings in Fresno, Madera, and the Sequoia Tribal Forum. The tool has continued to evolve with improvements in the map making functionality and the addition of an export tool for users to retrieve only the data for their agency. FRAP staff also met with Tulare county to review the application. There are over 1000 projects in the database, with almost 150 completed projects. Data has been submitted by CALTRANS, USFS, CAL FIRE, and some of the counties. Although information requests about accomplishments should still be directed to individual agencies, the tool and standardized database may help support such requests.
- MMWG participated in cross-workgroup meetings to improve the supply chain needed to bring wood from dead trees to biomass and wood utilization markets. MMWG generated a map of Biomass facilities with contracts to utilize HHZ materials and is working to validate and deliver



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a map of wood storage and processing facilities established to support dead tree removal efforts.

## **Regulations**

**(Matthew Reischman/Sandy Goldberg)**

- **Air Curtain Incinerators:** Use of several CALFIRE air curtain incinerators began in early December. The Governor's Office was notified, so the letter to US EPA requesting a longer exemption from federal regulation for the equipment can be sent by the end of January.
- **Insurance Workshop: Planning, Logistics, Topics**  
The REGWG discussed the scope of the upcoming (likely February due to availability of presenters) insurance workshop. Per the TMTF counties, there is a general lack of knowledge on 1) insurance regulation and 2) the fire risk models and how they are used by insurers to assign fire risk. The insurance workshop will target the TMTF counties and is intended to disseminate information and maintain open communication on insurance regulation and use of the fire risk models. During the call, the counties were asked to provide information on what they would like addressed and presented in the workshop. This information will be developed into a workshop scoping plan to provide the presenters more information on workshop objectives and goals. The REGWG will develop the initial draft scoping plan and circulate to the counties for review and comment.
- **ARB Portable Equipment Regulations-Tier 0**  
There was an initial concern that Tier 0 engines used to facilitate hazard tree removal and disposal would no longer be allowed to operate after the first of the year due to a regulation change. Tuolumne County Air Pollution Control District working with ARB have determined that Tier 0 diesel engines can be used during the tree mortality emergency. The Governor's Emergency Declaration is the basis for allowing this exemption. The following are a summary:
  1. All Tier 0 engines operating during the Emergency must be registered with CARB and complete Form 40 (attached);
  2. These engines may only be used for tree mortality work consistent with the parameters of the Declaration;
  3. Only Tier 0 engines operating 100% of the time for tree mortality purposes can participate;
  4. These engines are allowed to operate as long as the Declaration is in place;
  5. There will be no permitting requirements, recordkeeping/reporting, or fees involved with this exemption (other than the submittal of Form 40); and,
  6. CARB "recommends" only certified engines (Tier 1 and above) be used for tree mortality work and they will be sending a list of available compliant chippers from their State database for potential hiring.



**Utilization – Bioenergy**

**(Angie Lottes/Sandy Goldberg)**

- BioRAM1 (Order 9): 120 MW of forest biomass power has been contracted through the Bioenergy Renewable Auction Mechanism (BioRAM) by PG&E, SCE, and SDG&E. The BioRAM contract requires each plant to consume significant high hazard zone (HHZ) material each year. It is estimate that over 4 million bone dry tons (BDT) of HHZ material will be consumed over the 5-year period of the contracts.

Facility	IOU	Gross Capacity (MW)	Capacity contracted under BioRAM (MW)	Estimated Annual Generation (GWh)
Burney Forest Power	PG&E	31.0	29.0	217
Greenleaf Honey Lake	SDG&E	35.0	24.0	175
Rio Bravo Fresno	SCE	25.0	24.3	182
Rio Bravo Rocklin	SCE	25.0	24.4	182
Pacific UltraPower Chinese Station	SCE	22.0	18.0	129

- “BioRAM2” (Order 9): In addition to the BioRAM contracts, PG&E filed an advice letter for approval of a contract with Wheelabrator Shasta for 34 MW. The contract was achieved through bilateral negotiations, which is allowed under CPUC Resolution E-4805. The contract includes the fuel requirements set forth in SB 859, use of HHZ material for 60% of annual fuel consumption and use of “sustainable forest fuel” for 80% of annual fuel consumption. The deadline to protest the advice letter is January 9, 2017. If no protests are filed, the CPUC can issue a Disposition Letter approving the contract shortly after January 9.
- “BioRAM2” (Order 9): SB 859 also requires the large publicly owned utilities to procure 29 MW of bioenergy. There is no deadline for this procurement, but the publicly owned utilities are working together on joint procurement that is expected to be completed mid-year 2017. The work on this procurement will begin now that the IOUs have completed contracting required through BioRAM and SB 859.
- Clear cutting and HHZ fuel tracking: Power procured under BioRAM must meet HHZ origin requirements, and contracts under SB 859 also cannot be fueled by clear cutting material, so the Forest Service, Board of Forestry and CALFIRE developed a definition of clear cutting. IOUs are using this and documentation developed by the facilities to develop a fuel reporting and auditing methodology for BioRAM contracts. This work will help the utilities and facilities remain in compliance with the fuel requirements, which will be strictly enforced.
- BioMAT (Order 9): IOUs filed advice letters adopting changes to the BioMAT tariff as required by the CPUC and for implementation of SB 840. 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 several 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.

- EPIC funding (Order 11): Final applications for California Energy Commission's Electric Program Investment Charge grant funding Opportunity 15-325 have been turned in. The Commission's review and selection of grant recipients will occur between December and March 2017. 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. Additionally, the California Energy Commission will award \$1 million for reporting on environmental impacts of forest biomass and field residue fueled bioenergy through Grant Funding Opportunity 16-306 in the coming months.

### **Public Outreach**

**(Daniel Berlant/Staci Heaton)**

- The POWG will be meeting on January 10 with leadership from the FHRWG to start a more targeted effort at identifying landowner assistance opportunities. The POWG will also be establishing a subcommittee to work with County representatives on a legislative outreach strategy.

### **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, Placer County, Calaveras County, Halcumb Cemetery District.
- **Submitted CDAA Applications:** Calaveras Public Utility District, El Dorado Irrigation District, & Amador County Water Agency.

### **LOCAL GOVERNMENT**

- **Local Emergency Proclamations:** Amador, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, Tuolumne, Nevada County, City of Grass Valley.
- **County Tree Mortality Task Forces:** Amador, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, Tuolumne, Nevada, Butte, Modoc, Yuba, Lassen, & Plumas.



## **EQUIPMENT ALLOCATION AND TRAINING**

CAL FIRE Tree Mortality Equipment Allocation:											
County Name (CAL FIRE Unit):	Delivered	Kern (KRN)	Tulare (TUU)	Fresno (FKU)	Madera (MMU)	Mariposa (MMU)	Tuolumne (TCU)	Calaveras (TCU)	Amador (AEU)	Eldorado (AEU)	Placer (NEU)
<b>Burner Module A (2):</b>											
3 Fire Box (burners)	6			3	3						
1 Track Loader	2			1	1						
1 Wheel Loader	2			1	1						
<b>Burner Module B (2):</b>											
2 Fire Box (burners)	4		2				2				
1 Track Loader	2		1				1				
1 Wheel Loader	2		1				1				
<b>Single Resources:</b>											
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		

## **UPCOMING EVENTS**

- Reforestation Workshop planned for February 11, 2017 in Auberry.
- Insurance Workshop planned for February 2017 (specific date currently not set).

### **TREE MORTALITY RELATED WEBSITES FOR MORE INFORMATION**

**California's Tree Mortality Information Clearinghouse for Stakeholders**

[www.treetaskforce.org](http://www.treetaskforce.org)

**California's Tree Mortality Information Clearinghouse for the Public**

[www.prepareforbarkbeetle.org](http://www.prepareforbarkbeetle.org)

**California's Tree Mortality Viewer**

[egis.fire.ca.gov/TreeMortalityViewer/](http://egis.fire.ca.gov/TreeMortalityViewer/)

**United States Forest Service-California Tree Mortality Information**

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