



Tree Mortality Task Force Forest Health and Resilience Working Group Minutes

February 14, 2018

CAL FIRE Office of the State Fire Marshall
1131 S Street, Sacramento, CA

- I. **FHRWG Member Roll Call:** Stewart McMorrow (CAL FIRE), Kelly Larvie (CAL FIRE-FRAP), Tadashi Moody (CAL FIRE-FRAP), Dr. Jodi Axelson (UCB), Cedric Twight (SPI), Larry Camp (FLOC), Paul Mason (PFT), Rich Wade (BOF), Joe Sherlock (USFS), Chris Fischer (USFS), Heather Williams (CAL FIRE), Coreen Francis (BLM), George Gentry (CFA), Suzie Kocher (UCCE), Gabe Schultz (CAL FIRE), and Pete Cafferata (CAL FIRE).

FHRWG Participants: Liz van Wagtendonk (SNC/UW), Emily Meriam (CAL FIRE-FRAP), Topher Henderson (CAL FIRE), Sarah Campe (SNC), Dr. Steve Ostoja (CA Climate Hub), Tricia Maloney (UC Davis), Len Nielson (CAL FIRE), Dr. Curtis Ewing (CAL FIRE), and Elliot Chasin (DFW).
- II. **Approval of January 2018 Meeting Minutes:** The January 2018 meeting minutes were approved. Minutes from past FHRWG meetings are posted on the TMTF website: <http://www.fire.ca.gov/treetaskforce/workinggroups>
- III. **Update on the FHRWG Reforestation Story Map**
Heather Williams and Emily Meriam presented the final Reforestation Story Map to the Tree Mortality Task Force at the Capital on February 12th, receiving considerable positive feedback. **It is posted on the TMTF website at:** <http://calfire-forestry.maps.arcgis.com/apps/MapJournal/index.html?appid=3457736fb0dd45f98d41ab4030ebf048>. **The link to the story map for viewing and hyperlinking is:** <http://arcg.is/1XmneG>
The Story Map is available for posting on all the impacted counties' websites. Heather stated that it is to be considered a "living document" that can be updated in the future (a version and date will be added). Emily stated that she will update the seed zone map with the new 2017 tree mortality data.
- IV. **Update on the Third White Paper on the Long-Term Outlook for the Sierra Nevada**
Pete Cafferata rapidly updated the status for the third FHRWG white paper titled "Synthesis of Relevant Studies Exploring the Long-Term Outlook for Sierra Nevada Forests following the Current Bark Beetle Epidemic." The current working draft dated February 14th was provided as a handout. It includes new citations/brief paper summaries, including Paz-Kagen et al. 2017 (What mediates tree mortality during drought in the southern Sierra Nevada?). They reported (1) higher probability of conifer mortality was observed in the lower elevation gradient, SW and W-facing slopes, areas with shallow soils, on shallow



slopes, and at greater distances from water; and (2) selective mortality may drive long-term shifts in community composition along an elevation gradient in Sequoia National Park. Liz van Wagtendonk suggested citing the Brodrick and Asner (2017) paper titled “Remotely sensed predictors of conifer tree mortality during severe drought.”

Tadashi Moody stated that the modeling work he is conducting with Kelly Larvie for the white paper to determine areas most likely to experience type conversions from mixed-conifer forest to shrub lands is continuing. **The goal is to have a modeling product to discuss at the next FHRWG meeting.** The end result of the GIS modeling will inform landowners regarding the general locations where successful reforestation will be most challenging. The group discussed the value of providing guidance to managers regarding our ability to predict tree survivorship (number of trees per acre, the inverse of mortality). **We also agreed to examine whether we can set up a Box account to provide a library for pertinent papers related to forest health and resilience.**

V. **Discussion on Development of a Reforestation Strategy for California**

Stewart McMorrow briefly summarized the current status of the reforestation strategy for California. He stated that after direction from CAL FIRE Deputy Director Eng, the reforestation strategy project outline is being significantly revised/downsized, with Stewart acting as the lead on the project and contracting out limited writing assignments. The goal is to produce a short, concise document that provides practical advice on reforestation strategies to landowners. The revised version will place a strong emphasis on incorporating knowledge from field practitioners to create a practical “toolkit” that is easily understood and used by landowners. **Stewart stated that he is seeking volunteers to form a small sub-committee that can act as a steering committee for this revised project.**

Additionally, Stewart informed the group that we are rapidly moving ahead with reforestation education. CAL FIRE and UCCE are hosting three reforestation workshops: March 7th in Placerville, March 9th in Sonora, and March 16th in Mariposa. Landowners can register at: <http://ucanr.edu/reforestationworkshop>. Additional workshops are planned for Placer and Fresno counties. Kate Campbell, Forest Stewardship Newsletter editor, is also compiling existing information on reforestation into a short (4-5 page) guidance document for landowners. **Sarah Campe suggested working with local RCDs, NRCS, SAF, etc. to disseminate information about the workshops and reforestation guidance. Susie Kocher volunteered to conduct this outreach work.**

VI. **Update on Progress Made by the Seed Zone Map Update Group (FHRWG Subcommittee)**

Stewart McMorrow rapidly briefed the group on the status of the Seed Zone Map Update Group. The subcommittee met on February 6th and brainstormed guidelines for standardized cone and seed collection, and seed storage information/policies/procedures.



The goal is to have a set of consistent guidelines for both CAL FIRE and the USFS. Additionally, the group has received a revised UC Davis/USFS scope of work and budget for a project to develop species-specific climate-based seed transfer guidelines from Dr. Jessica Wright, USFS PSW. This contract will inform strategic planning and decisions with regard to updating the seed zone framework for the collection, curation, propagation, and planting of tree species in California.

VII. Update on Progress Made by the Sierra Nevada Forest Science Coordination Group (FHRWG Subcommittee)

Pete Cafferata briefly summarized the status of the Sierra Nevada Forest Science Coordination Group, which is identifying ongoing research and focused monitoring projects related to tree mortality in the Sierra Nevada. A web-based survey tool allows researchers to delineate a polygon(s) around their research or monitoring project area; they are then prompted to enter information about the project: <http://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=3d9ca2f2bc524d40a1ecedf078b6f5bc>.

The survey tool was launched on November 15th, with a detailed email message sent to 60 researchers requesting data input by December 15th. To date, we have received input from 18 researchers. **To improve our response rate, Kelly Larvie, Liz van Wagtendonk, and Tadashi Moody have produced a brief video to demonstrate the ease of use of the tool and generated a second large group email message that we will send the week of February 19th asking very simple questions to gauge researcher interest. When sufficient data have been received, the subcommittee will (1) work to identify additional research needs, and (2) determine how to best summarize the data to benefit current field researchers.**

VIII. Roundtable Discussion on Future Direction for the FHRWG

FHRWG participants were requested to provide input on what forest health and resilience topics would be most helpful to them. Responses included:

- Joe Sherlock—validate and present effective reforestation/forest management treatments (i.e., document treatments that work well).
- Chris Fischer—document when treatments such as prescribed fire are appropriate, particularly as large numbers of dead trees fall to the ground in the Sierra Nevada.
- Larry Camp—provide detailed information on prescribed fire for small landowners, including the mechanics of writing prescriptions.
 - Paul Mason—provide landowners with information on how to accomplish prescribed burning, without actually having to do the work themselves (e.g., people to contact).
 - Sarah Campe—provide accessible information on prescribed fire to people in the southern Sierra Nevada to help inform their decision making process.



- Tadashi Moody—it would be advantageous to broaden landowner’s knowledge regarding prescribe fire use, even if they do not conduct burning projects themselves.
- Paul Mason—provide detailed information on how to meet the goals stated in the 2017 Climate Change Scoping Plan by 2030, as well as those in the California Forest Carbon Plan.
- Heather Williams—provide expanded forest health education and outreach, a significant item included in the recently released Little Hoover Commission Report (see below).

If FHRWG participants have additional ideas, please provide them to Stewart McMorrow and Pete Cafferata.

IX. New Business and Announcements

Jodi Axelson stated that she and John Battles, UC Berkeley, are holding a Sierra Nevada Tree Mortality 2017 Field Season Results Workshop on March 12th in Sacramento at the McClellan Wildfire Training Center, 8:30 a.m. to noon. RSVP at <http://ucanr.edu/2017treemortality> by March 5th.

The Little Hoover Commission released a final report in February titled “***Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada.***” Key recommendations included (1) the TMTF should evolve into a forest management planning entity, with dedicated funding, (2) provide better education for Californians about benefits of healthy forests, (3) led by CAL FIRE, California must engage in collaborative landscape-level forest management for long-term forest resiliency, (4) California should lead a policy shift from fire suppression to increased prescribed burning, and (5) meet California Forest Carbon Plan goals of treating 500,000 acres of non-federal lands per year. It is available online at: <http://www.lhc.ca.gov/sites/lhc.ca.gov/files/Reports/242/Report242.pdf>

Governor Brown’s State of the State address on January 25th included: “Convene a task force composed of scientists and knowledgeable forest practitioners to review thoroughly the way our forests are managed and suggest ways to reduce the threat of devastating fires.” The Governor has asked a small group (<10 people) to meet the week of February 19th to begin the process of forming the new forest health task force, including Larry Camp. The goal is to establish membership and a charter by mid-March. Planned focus items include prescribed fire, forest resilience, and carbon sequestration.

Susie Kocher announced that UCCE is holding two two-day prescribed fire workshops in May at the Sierra Foothill Research Station and Blodgett Forest Research Station, led by Lenya Quinn-Davidson and Susie. The focus of the workshops will be for small landowners.



Sarah Campe stated that the Southern Sierra Federal Land Managers group plans to meet in May. This group, composed of southern Sierra federal agency leadership, was the original oversight group for the Southern Sierra Conservation Cooperative (SSCC). There is an interest in reconvening the southern Sierra leadership and expanding it to include state and regional partners. If FHRWG participants have ideas to provide to the leadership of these agencies, please provide them to Sarah.

X. Next FHRWG Meeting

The next meeting will be held on March 14th, 2:00 p.m. in Sacramento (note that this is the second Wednesday in March). Location to be determined.