

Effectiveness Monitoring Committee (EMC) Meeting Notes
April 12, 2022 9:30 AM

Hybrid Meeting

1. Participants (11):

Members Present - Loretta Moreno (Co-Chair), Elizabeth Forsburg Pardi (Co-Chair), Dr. Stacy Drury, Ben Waitman, Jessica Leonard, Drew Coe, Justin LaNier, Jim Burke, Matt House, Sal Chinnici, and Peter Freer-Smith

Members Absent - Clarence Hostler, Sarah Bisbing (vacant seat), Greg Giusti (vacant seat)

Members participating as public participants virtually* - Bill Short, Dr. Leander Love-Anderegg, and Dr. Matt O'Connor

* EMC members not attending from a publicly noticed location were not permitted to participate in the meeting in their capacity as members, but could attend virtually to observe.

Staff - Dr. Wolf, Andrew Lawhorn, and Jane Van Susteren

Participants - George Gentry, Will Olsen, Michael Baker, Kyle Farmer, Justin Fitt, Izaac Russo, Richard Gienger, Larry Hanson, Lee MacDonald, Forest Fortescue, Michael Jones, Lance Le, Richard Warmerdam, Peter Ansel, Elicia Goldsworthy, Dr. Richard Cobb, Dr. John Battles, and Mike Miles

2. Report by the Co-Chairs

a. Introduction of Liz

Co-chair Elizabeth "Liz" Forsburg Pardi received her PhD from University of California in Berkeley in Forest Policy and Economics. During the day, her job consists of working for The Nature Conservancy. Liz is filling the second co-chair position for the EMC.

b. Annual Report and Workplan Final Draft:

The Annual Report and Workplan is posted online, and committee members should have received an email back in January about that. Dr. Wolf will begin generating a report and workplan for 2022 later in the year, with final project updates from all project liaisons and principal investigators to be submitted by 12/31/2022.

c. Update on Strategic Plan Timeline

Co-chair Moreno discussed the Strategic Plan Draft and noted that it is supposed to be reviewed and updated if necessary every three years; the last update was completed in 2017. The Charter states that the EMC will review existing critical monitoring questions and make sure they are aligned with the Board priorities.

In addition, the question as to whether or not five critical monitoring questions should be identified as priorities for research proposals in the coming 2022/23 Fiscal Year (FY) Request for Research Proposals (RFP) was presented, with the hypothesis that identifying those five questions from the suite of all questions may have had the unintended effect of reducing the number of applicants to the EMC for research in the 2021/22 FY.

Comments from EMC members:

Member Chinnici: Agrees that the EMC should revisit the critical monitoring questions and seek comments from stakeholders. Also stated that the five priority questions in the RFP from the prior FY should remain the same for this year.

Member Coe: stated that the RFP should identify five priority critical monitoring questions as part of the RFP. Relates to exemption and emergency monitoring program and relationship to critical monitoring questions Theme 6, questions (a) and (c).

Member Drury: seconds Member Coe's comments.

Member LaNier: seconds the other members'; would like to review and possibly update all of the critical monitoring the questions since they were developed in 2017.

Member Waitman: Agrees that the five priority questions in the RFP from the prior FY should remain the same for this year, but be revisited for next year.

A new Strategic Plan draft was prepared in 2021; however, presentation to the EMC was delayed due to the co-chair appointment change, to allow for inclusion of Liz's input before submitting to the committee for review.

Dr. Wolf will email out information about member and public comments on the critical monitoring questions. The five priority monitoring questions identified by vote in the previous FY will be used again in the 2022/23 FY RFP, but will be reviewed prior to the following year's RFP. **A public comment period will also be posted, and information about that will be forthcoming from Dr. Wolf.**

Once revised, the Strategic Plan draft will then be sent to the EMC members, at which key revisions and comments should be returned to Dr. Wolf. Dr. Wolf will address the submissions and edit the draft. The goal for the next committee meeting is to incorporate and address suggested revisions and comments with all tracked changes, and present to the EMC for review and comment, including any public or agency comment. The final draft would then be presented at the next EMC meeting, and if approved (with or without additional changes), will then sent to the Board for their review and approval.

Note: This item was combined and discussed within agenda item#5.

3. Project Updates – Project Liaisons and staff: Follow-up discussion

a) New Project Proposal Contract Development – Dr. Wolf

- EMC-2021-001, Aquatic Toxicity and Cumulative Watershed Effects of Pesticide Discharge Related to Post-Fire Reforestation: The Water Boards project proposal was withdrawn due to issues of meeting the indirect cap cost of 15%.
- EMC-2021-003, Evaluating the Response of Native Pollinators to Fuel-Reduction Treatments in Managed Conifer Forests: Oregon State University's project proposal was submitted to the State Department of General Services (DGS) and the Business Services Office (BSO) in mid-January before all other Board contracts. However, the Oregon State University contracting office requested some changes to the language, and as DGS reviews these requests, the process has been delayed for funding and likely to not receive before mid-June.

b) Contract Changes – Dr. Wolf

- **EMC-2019-003, Fuel Treatments and Hydrologic Implications in the Sierra Nevada:** one year time extension is in process with State DGS.
 - **EMC-2018-003, Alternative Meadow Restoration:** one-year time extension due to the Dixie Fire is in process with State DGS. There was also a minor budget change made by reallocating funds from the wages budget to equipment to replace damaged probes.
 - Member Coe: gave an update regarding emergency exemption reports, none of which have yet made it to the legislative office. Member Coe stated that the reports should make it to the legislature for necessary statutory changes. **Co-chair Moreno will follow-up with member Coe to get additional details on the development.** This update is not related to an EMC-funded project, but EX-EM Monitoring is related to the needs and goals of the EMC.
- EMC-2017-007, The Life Cycle of Dead Trees and Implications for Management:** Co-chair Moreno (liaison) reported that **this project needs additional support from EMC members in the form of two members partnering to prepare the Completed Research Assessment (CRA)**, which will need to be completed for this project, and presented to the EMC and the Board.
- EMC-2019-002, Evaluating Fuel Treatment Longevity and Maintenance Needs for Fuel Reduction Projects Implemented in the Wildland Urban Interface in Plumas County, California:** Member Drury (liaison) stated that **a final presentation will likely be given at the summer EMC meeting.**
- EMC-2018-003, Alternative Meadow Restoration:** In lieu of Member O'Connor (liaison) providing the project update, he emailed it to Dr. Wolf, who shared the written progress report and reported on a summary of actions requiring completion, including: 1) hydrological meadow measurement (summer 2022); 2) soil disturbance surveys (May or June 2022); 3) final report drafted with two Masters' thesis (end of summer 2022); and 4) **final report presentation to EMC and Board of Forestry (end of summer 2022)**. This project will be posted online and details distributed via e-mail.
- **EMC-2018-006, Effectiveness of Class II Watercourse and Lake Protection Zone (WLPZ) Forest Practice Rules (FPRs) and Aquatic Habitat Conservation Plan (AHCP) Riparian Prescriptions at Maintaining or Restoring Canopy Closure, Stream Water Temperature, and Primary Productivity:** Member House stated that the research team is still processing data collection on treatments, which will continue until fall of 2022.

4. Discussion of Recruitment for Member Vacancies – Co-Chairs Moreno and Forsburg Pardi, and Dr. Wolf

Two academic EMC seats are open: Greg Giusti, Forester RPF 2079; and Dr. Sarah Bisbing, Forestry Ecology and Forestry.

In addition, Member Drury will be resigning this year, but will be working on finding a replacement with expertise in silviculture and forestry, potentially from the Pacific Southwest Region's research arm. It was also suggested that the EMC could reach out to the U.S. Forest Service (USFS) for suggestions, and **Members Waitman and Moreno indicated they would reach out to the USFS. Member Coe indicated that he could reach out to other potential nominees as well. Dr. Wolf will draft an email with language summarizing the duties of EMC members, and will send that out to the EMC for distribution.**

All nominations should be sent to Dr. Wolf via email (Kristina.wolf@bof.ca.gov) and once an individual is nominated then the EMC will review the application to make selection of qualified candidates.

5. Discussion of Priority Themes for Research Proposals – Co-Chairs Moreno and Forsburg Pardi

This item was combined and discussed within agenda item#2c.

6. Final Project Presentation on EMC-2017-008: California Forest Practice Rules and relation to fir mortality: Effectiveness monitoring and evaluation: Do rules minimize fir mortality from root disease and bark beetle interactions – Dr. Richard Cobb, California Polytechnic State University, San Luis Obispo

Dr. Cobb provided a PowerPoint presentation titled "Do forest practice rules minimize fir mortality from root disease and bark beetle interactions? (see <https://bof.fire.ca.gov/media/dcehpbjc/emc-final-report-april-2022.pdf>). This project seeks to evaluate several sections of the Forest Practice Rules for their effectiveness in controlling fuels accumulation in the face of devastating bark beetle outbreaks in true fir stands. The study focuses on beetle outbreak in true fir forests because these stands have yet to reach crisis mortality levels when viewed at the state scale, but the frequency of Heterobasidion infections, and the distribution of both biological agents of mortality across the Sierra Nevada, suggests the potential for a highly damaging outbreak.

7. Update on Grant Program Rollout and Timeline – Dr. Kristina Wolf

Dr. Wolf gave an update on the grant program rollout timeline. From mid-2021, and into the fall, there were discussions about the EMC research projects funding being converted from contracts to grants. Dr. Wolf provided an explanation on how contracts are offered up to three (3) years of funding, but usually can't start their work until almost a year after the RFP comes out due to the long process of going through EMC review, the late release of the RFP, and the drawn-out process of winding through the Business Services Office (BSO) and DGS during which funds are at risk of not being encumbered in time before the close of the FY, and funding being lost. In comparison, grants take about one (1) month to encumber funds, once a scope of work is produced.

Dr. Wolf provided comparisons of contracts versus grants and the pros and cons of each, and proposed 1) moving from contracts to grants for appropriating funds; 2) releasing the RFP prior to June of each year to allow for more lead time for the EMC to assess proposals; and 3) increase the amount of information requested in the Initial Concept Proposal to facilitate more informed assessments.

8. Research Presentation: Management-related and Long-term Erosion Rates in Two Intensively-managed Forested Watersheds in Northwestern California – Dr. Lee MacDonald, Colorado State University

Dr. MacDonald provided a PowerPoint presentation titled "Erosion Rates and Processed over Different Time Scales in Northwestern California: How Important is Logging?" (see https://bof.fire.ca.gov/media/ccsfjcmh/8-final-presentation-little-river-report-l-macdonald_ada.pdf).

The objectives of this study were to estimate and compare the relative magnitudes of legacy, current, and background sediment inputs for two 15 km² watersheds dominated by coast redwoods within the Little River watershed north of Eureka, California. Both watersheds are only used for timber production, and they are very similar, other than that the Lower South Fork (LSF) is long and narrow and the adjacent Upper South Fork (USF) is dendritic. Ninety-two percent of the old growth was harvested in each watershed from 1910–1929 using railroads and steam donkeys, and in the mid-1970s tractors and a rapidly-expanding road network were utilized in harvesting the second-growth timber.

The primary goal of this study was to compare long-term denudation rates derived from beryllium-10 concentrations to erosion and sediment yields from historic logging and current forest management activities.

9. Project Presentation on EMC-2017-007: The Life Cycle of Dead Trees and Implications for Management – Dr. John Battles, University of California, Berkeley

Dr. Battles remotely gave a PowerPoint presentation titled “The Life Cycle of Dead Trees and Implications for Management” (see https://bof.fire.ca.gov/media/iqkjg0j1/9-battles-emc-2017-007-presentation_ada.pdf). The primary goal of this project is to provide the necessary scientific basis to develop snag retention guidelines, with an emphasis to quantify the life cycle of standing dead trees in order to inform forest management and policy development. However, there are multiple exceptions to the retention stipulation and there is no established practice for managing snag density.

A long-term snag inventory and monitoring study was conducted at Blodgett Forest Research Station. In 1983, all the snags (≥ 5 " diameter at breast height, [DBH]) in a 59-acre (ac) stand (Compartment 160) were evaluated and tagged. The evaluation included several measures of decay (e.g., wood strength, presence of bark) as well as a detailed assessment of habitat elements (e.g., woodpecker holes, cavities). The inventory has been repeated at irregular intervals: 1989, 1994/95, 2005, and 2012. There are currently 1,163 snags being tracked and the study has recorded 680 tree falls. This study has proven valuable for estimating fall rates and for quantifying wildlife habitat value.

While current carbon impact assessments of timber harvest plans may account for carbon in snags as best they can, better information on carbon dynamics in snags can make these assessments more accurate. Thus, the secondary goal of this proposal is to improve our understanding of the contribution of snags to carbon storage in the Sierran mixed conifer forest.

10. Public Forum

None verbal. One public comment was submitted during the meeting, but was not addressed due to time constraints:

From Larry Hanson

"Here is my request: This issue I am requesting for the committee to take up is likely the most critical one to address in our times and should align with your objective to evaluate and monitor.

I think it is imperative for this committee, and any other relevant committees, to evaluate logging methods' role in promoting wind-blown high intensity wildfires and what appropriate monitoring should be implemented. The assumption made by Cal Fire is that the cause for the recent years' catastrophic wildfires is vegetative (fuel) buildup along with increased air temperatures due to Climate Change. I would think it is incumbent on this committee to evaluate the variable, logging and logging methods, that have not heretofore been properly evaluated. If it has taken up, please send me the analysis that was made.

To remind the committee that this variable is a significant one to consider, here are basic facts supporting this:

1. Even-aged logging creates an ideal environment for wind-blown high intensity wildfires due to logging mixed age class forests with upper shaded canopies and resultant moist forest floors to even-aged stands (tree farms) having smaller, more burnable trees with the creation of flammable brush usually treated with herbicide if and when treated at all. These stands are sun baked without a closed upper canopy taking decades to develop.
2. Even-aged logging is not isolated or marginally practiced but occurs over a broad scale of landscapes.
3. When overlaying wildfire maps over logging maps, this shows strong correlations between even-aged logging and recent catastrophic wildfires.

When this committee takes up critical monitoring, what could be more critical than evaluating the issue that has been ignored by Cal Fire to do oversight by monitoring and why, I assume, your committee exists. Monitoring is defined as an entity that observes a process or activity to check that it is carried out fairly or correctly, especially in an official capacity. Critical is defined as: involving the objective analysis and evaluation of an issue in order to form a judgement.

While this committee takes up issues that have incremental value, and it should, the larger impacts to wildfire threat to all the people of California stands in the balance. This includes lives lost while in burning homes or while trying to escape from them, the destruction of whole towns, loss of individual homes, not to mention the impacts of evacuations that occur all over the state.

How we impact the forest by logging and logging methods is a variable where we can make needed adjustments to decrease the threats of catastrophic wildfires. While mitigating climate impacts could take decades, changing how we log, if determined to be a significant factor, can be changed much sooner. When forests are cleared, there is absolutely no carbon sequestration for a period of time, and then planting from scratch takes decades with unwanted natural growth treated with herbicide spraying that takes sequestration for it to zero again. The benefits for allowing more uneven-aged and intact forests to grow is more resiliency for catastrophic wildfires, increased watershed potential in time of drought, as well as more sequestered carbon to better mitigate Climate Change impacts.

This is an issue of our times and I am hoping you will not pass up an opportunity to assess it.

Thank you.

Larry Hanson, Board President
Forest Unlimited"

11. Future Meeting Locations, Dates, and Agenda Items

Dr. Wolf will send out a poll for a future meeting and asked members to email her with proposed agenda items for a summer meeting.

12. Announcements: Scientific Conferences, Symposiums, and Workshops

- Co-chair Moreno announced a workshop on Thursday April 21st from 3:30-5:30p, from the Forest Management Task Force. The discussion will involve inquiring feedback on the statewide inter-agency forest treatment tracking system and the activities under the state of California goal of 1 million acres treated per year.
- Member Chinnici has a couple of wildlife meetings later this year, that he'll email to Dr. Wolf to send out to the committee. Dr. Wolf will send those out the EMC member and stakeholder email listservs.

13. Adjourn