

**BOF Effectiveness Monitoring Committee Meeting Notes
December 5, 2019**

**Willow County Water Agency Office
Ukiah, California**

1. Participants (19): Members--Sue Husari (Co-chair), Loretta Moreno (Co-chair), Sal Chinnici, Dr. Matt O'Connor, Justin LaNier, Cliff Harvey, Clarence Hostler, Dr. Stacy Drury, Elliot Chasin, Dr. Leander Anderegg, Dr. Peter Freer-Smith, Jim Burke, Bill Short, Drew Coe, and Dr. Sarah Bisbing (remote) Staff—Brandi Goss, David Ludwig, Dave Fowler, and Pete Cafferata

2. Report by the Co-Chairs

Co-chair Husari requested that the new EMC members provide a rapid summary of their backgrounds and that they should request a 2019 Forest Practice Rule book if desired from Board staff.

Monitoring announcements:

- Co-chair Moreno summarized the status of AB 1492 ecological performance monitoring (EPM). A final version of the EPM white paper was posted on the CNRA website in April (<http://resources.ca.gov/wp-content/uploads/2019/04/AB-1492-Ecological-Performance-Measures-Methodology-White-Paper-April-2019-Final.pdf>) and two public workshops were held to determine stakeholder critical management questions. The goal is to track timber ecosystem health statewide at a regional scale. Current work includes searching for ways to expand existing resources, including a possible MOU with UC Irvine and UC Merced, who received \$4.6 million from California's Strategic Growth Council to develop new tools and methods for better managing the state's forests and wildlands (<https://news.uci.edu/2019/02/06/improved-land-management-project-co-led-by-uci-gets-4-6-million-in-state-funding/>). The plan is to move forward in January 2020 on finalizing key management questions, indicators, and protocols.
- Drew Coe summarized the draft Exemption and Emergency Notice report prepared by CAL FIRE for the Legislature (https://bof.fire.ca.gov/media/9396/joint-1-draft-emergency-monitoring-exemption-report-dec_2_2019_ada.pdf). A total of 54 Emergency Notices were randomly selected, with 49 impacted by wildfire; 47 of the 54 Notices that had been harvested were evaluated in the field in the spring, summer, and fall of 2019. Overall, 62% of the randomly sampled Notices were found to have entirely acceptable performances, 32% had a mixture of acceptable and unacceptable performances, and 6% had entirely unacceptable performances, based on a composite water quality performance scoring method. Past THP monitoring has shown higher effectiveness ratings for crossings, roads, and WLPZs, and the Emergency Notices sampled had poorer outcomes than the 1038(k) Drought Mortality Exemption Notices monitored in 2018. Key recommendations include (1) having RPFs and LTOs provide better administration and ensuring improved implementation of the operational FPRs, and (2) having the Review Team agencies prioritize inspections of Emergency Notices. EX-EM Notice monitoring in 2020 will include field evaluations of <3 acre Conversion Exemptions and 150-300 Structure Protection Exemptions. Drew also briefly summarized the randomized block design skid trail BMP runoff and erosion study conducted on Boggs Mountain Demonstration State Forest in late summer. Water travel times were greatly reduced with the slash packing BMP on the study area skid trails.

3. Consideration of Full EMC Project Proposals for Fiscal Year 2019/2020

The EMC allocated approximately 20 minutes for discussion and review of the five full project proposals submitted for funding requests using fiscal year 2019/2020 EMC funds. Letters were sent to the PIs by BOF staff after the September EMC meeting asking for clarifications based on content in the brief project proposals. Co-chair Husari briefly summarized the ranking criteria specified in Appendix F of the EMC Strategic Plan. Instruction was given to rank projects more highly when they specifically proposed testing one or more FPRs. Key discussion points are listed below each project.

EMC-2019-001: Assessing vital rates and population connectivity of Black-Backed Woodpeckers in green and burned forest within a managed, fire-prone landscape (PIs Dr. James Rivers, OSU, and Dr. Jake Verschuyf, NCASI)

- Greater information is needed on the extent of black-backed woodpecker use of green trees.
- The study is addressing whether the existing FPRs are providing sufficient habitat for black-backed woodpecker nesting and survivability. Currently the FPRs for snags are vague, only requiring that a sufficient number of snags be left for wildlife.
- This project proposal only addresses one wildlife species (single species specific study).
- The project proposal is well written and documented, supporting a PhD student.
- The funding request is large, making it very difficult to fund the entire project.

EMC-2019-002: Evaluating treatment longevity and maintenance needs for fuel reduction projects implemented in the wildland urban interface of Plumas County, CA (PIs Dr. David Saah, SIG, and Jason Moghaddas, SIG)

- There is considerable uncertainty on how to quantify fuels across landscapes.
- This study will take methodology developed for a study conducted in the Lake Tahoe Basin and expand the study scope to Plumas County.
- Data from ground monitored plots will confirm how well drone LiDAR can assess surface fuel loading, potentially providing very valuable information.
- Fuel treatment maintenance and longevity are significant issues, and are concerns in the VTP EIR.
- It is unclear how the results would be used to modify existing FPRs (closer ties are needed).
- The current rules require post-treatment slash to be ≤ 18 inches high, but it is not specified if this is an average depth, and how to measure it for rule compliance. This study could provide a new tool.
- The study is most applicable to the Sierra Nevada mixed conifer region.

EMC-2019-003: Fuel treatments and hydrologic implications in the Sierra Nevada (PIs Dr. Terri Hogue, CO School of Mines, and Dr. Alicia Kinoshita, SDSU)

- The high elevation, wet meadow environment and snow dominated hydrology of the Sagehen Creek watershed are more characteristic of USDA Forest Service terrain than non-federal timberlands in California.
- It is not clear how well these treatments and the modeling effort would transfer to other Sierra Nevada watersheds on the west side of the range.
- The SPLAT treatments being used in the Sagehen Creek watershed may not be applicable to most common treatments being used on private timberlands in California.

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- The study results may not apply at the landscape level, but the harvest methods are ones that are used (i.e., data collected may be useful within the SPLATs, but not at the landscape scale).
- The study focus is overly ambitious and could use greater focus on areas directly applicable to the FPRs. Currently no specific FPRs are being tested in this Tahoe National Forest watershed.

EMC 2019-004: Drafting bypass flows and their effects on native fish: linking forest practice rules to fish and game code (PIs Dr. Robert Lusardi, Dr. Andrew Rypel, and Dr. Nann Fanguie, UC Davis)

- Greater fish mortality will likely occur from e-fishing than from the reduced streamflows associated with water drafting levels (i.e., 2 cfs). The study would attempt to measure stress levels associated with low streamflows, but e-fishing impacts would confound the study methodology.
- The study focuses on the 2 cfs FPR, but the rule also states that you can't remove greater than 10 percent of the flow. This project does, however, specifically test an existing FPR.
- It is not clear that the study results could be transferred to other parts of the state.
- This study would not test impacts on a population, only on individual fish.
- Key parameters for juvenile coho salmon survival should be considered (see Dr. Ross Vander Vorste's PPT at: https://caseagrants.ucsd.edu/sites/default/files/Grantham_RussianRiverWCB.pdf)

EMC 2019-005: Sediment monitoring and fish habitat—San Vicente accelerated wood recruitment (PIs Cheryl Hayhurst, Michael Fuller, and Peter Roffers, CGS)

- This study provides a good opportunity to monitor a large wood project submitted under 14 CCR § 916.9(v).
- There are weaker ties to the more general WLPZ FPRs cited in the proposal.
- Accelerated wood recruitment has been used extensively in coastal streams, and has been actively encouraged as part of THPs by the Wood for Salmon Working Group.
- Not many large wood projects are monitored at this level. Drone LiDAR monitoring provides an innovative 3D approach to document both wood and sediment.
- Past EMC monitoring projects have not occurred in the Santa Cruz Mountains.
- A relatively low funding request has been made for this project.

Scoring Matrix for the Full Project Proposals

EMC Project Number	Brief Project Name	EMC Average Score
EMC 2019-001	Black-Backed Woodpecker Study in Green and Burned Forest	19.5
EMC 2019-002	Treatment Longevity for Fuel Reduction Projects	17.5
EMC 2019-003	Fuel treatments and Hydrologic Implications in the Sierra Nevada	15.1
EMC 2019-004	Drafting Bypass Flows and their Effects on Native Fish	15.4
EMC 2019-005	Sediment Monitoring and Fish Habitat--with Accelerated Wood Recruitment	19.8

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Funding Discussion for EMC Projects

The EMC currently receives \$425,000 per fiscal year from the AB 1492 TRFR Fund for funding monitoring projects. Due to allocations made in FY 2018 for the Class II Large Effectiveness Study, the following funding is available for the next four fiscal years:

FY 2019/2020	\$222,000
FY 2020/2021	\$215,000
FY 2021/2022	\$270,000
FY 2022/2023	\$425,000

Co-chair Husari stated that it is important for the EMC to have funding available for each fiscal year, and not to commit the entire funding amount for multiple years to one large project. After considerable discussion, Co-chair Husari made the following motion, which was seconded by Member LaNier:

Fully fund EMC 2019-002 (*Treatment Longevity for Fuel Reduction Projects*) and EMC 2019-005 (*Sediment Monitoring and Fish Habitat-- with Accelerated Wood Recruitment*) in FY 2019/2020; fund the first year of EMC 2019-003 (*Fuel treatments and Hydrologic Implications in the Sierra Nevada*) and partially fund the second year if modification of the Scope of Work (SOW) takes place to better address the FPRs.¹

The motion passed unanimously, with one abstention (Member Short recused himself due to a conflict of interest for EMC 2019-005).

Co-chair Husari made a second motion, which was seconded by Co-chair Moreno:

If the second part of the first motion fails (i.e., Members Coe and O'Connor are not able to successfully modify EMC 2019-003 [*Fuel treatments and Hydrologic Implications in the Sierra Nevada*]), partially fund EMC-2019-004 (*Drafting Bypass Flows and their Effects on Native Fish*).

The motion passed with the following vote:

Husari	Aye
Moreno	Aye
Chinnici	Nay
O'Connor	Aye
Anderegg	Aye
Freer-Smith	Aye
LaNier	Aye
Harvey	Aye
Hostler	Aye
Drury	Aye
Chasin	Aye
Burke	Aye
Short	Abstain
Coe	Aye

¹ Drew Coe, Dr. Matt O'Connor, and Pete Cafferata will contact Drs. Hogue and Kinoshita to discuss needed SOW modifications.

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Two projects (EMC 2019-003 and EMC 2019-004) are proposed for partial funding in the above motions. The balance of requested funding will come out of next fiscal year's allocation. The amount will depend on which project is selected. The decision will be made by December 31, 2019.

4. Discussion of the EMC Charter and Annual Report

Due to the length of the discussion on the five full project proposals and funding decisions, no discussion occurred regarding either the updated EMC Charter or Annual Report. Bill Short and Pete Cafferata provided edits to the Annual Report to Brandi Goss. **Additional edits by EMC members for both the Annual Report and the EMC Charter are to be provided to Ms. Goss by December 31st. She will produce new versions of these documents and distribute them to the EMC prior to the March meeting.**

5. Public Forum—None

6. Future Meeting Locations and Dates

The next EMC meeting will be in March 2020 in Redding. Brandi Goss will send out a Doodle poll to determine an acceptable date. Agenda items will include a presentation on the OSU Class II-Large study (Adam Pate's MS thesis), and discussion of a short summary report by CAL FIRE staff to transfer the results to the Board.

7. Announcements

The CNRA, the University of Oklahoma, and British Columbia's Ministry of Forests, Lands, Natural Resource Operations and Rural Development are convening an AGU session on forest ecosystem health and climate change at the Fall Meeting, December 10, 2019, in San Francisco. See: <https://agu.confex.com/agu/fm19/meetingapp.cgi/Session/87537>. Additionally, there is separate session being held Wednesday, December 11th, 5:30 p.m. to 8:00 p.m. addressing how to make science more accessible to polity makers (RSVP only to Loretta Moreno).

The George Wright Society is organizing Fire Management 24/7/365, a collaborative workshop to help managers, practitioners, and researchers work together to reduce wildfire threat and restore mixed conifer ecosystems in California. The training workshop will be held April 20-23, 2020 in Fresno. For more information, see: <https://www.georgewright society.org/fire>

The Winter Meeting of the California Society of American Foresters (SAF) titled "Pace and Scale: How do we Meet the Challenges" will be held at Folsom on February 21-22, 2020. For more information, see: <http://californiasaf.org/>