Licensing News Office of Professional Foresters Registration



Mossbrae Falls near Mt. Shasta

WINTER 2022 VOLUME 34 - ISSUE 2

CURRENT PROFESSIONAL FORESTERS EXAMINING COMMITTEE COMPOSITION

Professional Foresters Registration shall protect the public interest through the regulation of those individuals who are licensed to practice the profession of forestry, and whose activities have an impact upon the ecology of forested landscapes and the quality of the forest environment, within the State of California.

Mr. Frank Mulhair, Chair – RPF (Industry Member)

Mr. William Snyder, Vice Chair – RPF (Government Member, Retired)

Mr. Christian Eggleton - RPF (Consultant member)

Mr. Larry Forero – CRM (Certified Specialty)

Mr. James Hawkins – RPF (Industry Member)

Ms. Danielle Lindler – RPF (Industry Member)

Mr. Jason Poburko – RPF (Government member)

Mr. Dan Sendek – RPF (Public Member, Retired)

Ms. Yana Valachovic – RPF (Government Member)

VACANT – (Public Member, Board of Forestry)

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CURRENT BOARD OF FORESTRY & FIRE PROTECTION COMPOSITION

The Board's mission is to lead California in developing policies and programs that serve the public interest in environmentally, economically, and socially sustainable management of forest and rangelands, and a fire protection system that protects and serves the people of the state.

Dr. J. Keith Gilless, Chair (Public Representative)

Mr. Christopher Chase (Industry Representative)

Ms. Katie Delbar (Range/Livestock Representative)

Ms. Elizabeth Forsburg (Public Representative)

Mr. Mike Jani (Industry Representative)

Mr. J Lopez (Public Representative)

Mr. Richard Wade (Industry Representative)

Ms. Dawn Blake (Public Representative)

Mr. Jerimiah Hallisey (Public Representative)

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Board Departures

Eric Hedge, Regulations Program Manager, has departed his position at the Board to accept a position with CAL FIRE as the Forester III in charge of Timber Harvest Plan



review in Santa Rosa. Eric was phenomenal in his position at the Board, keeping regulatory development on track often by working late into the night before Board meetings to ensure needed changes were made prior to Board action the next day. He had a good rapport with the Board, Board staff, and stakeholders and articulated complicated information with relative ease. The Board and Board staff wish Eric well in his

future endeavors. The Regulations Program Manager position will be posted in early 2023; please email edith.hannigan@bof.ca.gov to be notified when the job application is available.

Curtis Yee, Curtis was CAL FIRE's IT and Audio-Visual expert and thankfully the Board was able to utilize his services and expertise. Curtis kept the Board and Staff "live"



during the COVID shutdowns and was never too busy to help out with technical issues. Curtis was always good natured and had a clever sense of humor that made travel to remote Board meetings a joy. Truly, he is one-of-a-kind and we will miss him. The Board and Board staff wish him well on his much-deserved retirement.

Laura Alarcon-Stalians, Laura has been with CAL FIRE and the Board staff for over 25 years. She has managed all things Board related and everyone knows if you want to



get something done, talk to Laura. She was a veritable Radar O'Reilly of MASH fame when it came to getting things accomplished because she knew all the processes and people to contact. She was also always good natured and friendly to anyone who had the privilege to work with her. She will be sorely missed not only by the Board and Board staff, but by CAL FIRE administrators as well. Have a great retirement Laura! The Administrative Unit Manager position will be posted in early 2023; please email edith.hannigan@bof.ca.gov to be notified when the

job application is available.

The View from the 10th Floor

by Dan Stapleton, Asst. Executive Officer

As we approach the end of 2022 I am happy to report that the fire season by all comparisons was much less destructive this year with only 362,455 acres and 876 structures burned over 7,490 incidents. Unfortunately, there were 9 civilian lives lost, 4 of these in the McKinney fire in Northern California. The largest of the fires were the Mosquito fire at 76,788 acres and the McKinney fire at 60,138 acres. CAL FIRE credits



the relatively low acreages in part to the dispatch of helicopters earlier in incidents to help ground crews contain fires when they are smaller.

I think we can all agree early air attack can be a game changer and CAL FIRE has invested heavily in these resources. CAL FIRE Deputy Director Chris Anthony updated the Board on some of the more recent investments of firefighting helicopters at the November Board meeting.

Currently, CAL FIRE has 10 Sikorsky s-70i Firehawks and will have two more arriving by the 2nd quarter of 2023. These new generation helicopters will replace CAL FIRE's aging fleet of 12 Super Huey Helicopters.

The Firehawk can transport up to 11 wildland firefighting personnel with their gear and can siphon and carry 1,000 gallons of water that can be dropped accurately to dampen flames and allow firefighters to advance. The Firehawk can be quickly transitioned to search and rescue missions, carry cargo to remote locations and provide first responder patient care with a medically equipped cabin. It should be noted that the Firehawk is a variant of the military's Black Hawk helicopter and is designed to withstand significant physical stresses.

This year, I had the opportunity to re-visit a 2012 Emergency Notice for Fuel Hazard Reduction (E. Notice) that I prepared and administered for a former employer. This emergency was intended to act as a fuel break along a major ridge system that ended up being located in the heart of the Caldor fire. Below is a side-by-side view from the same general area just west of the E. Notice in 2019 and 2022 post fire.





This was very sad for me to see, having worked in this watershed for over 14 years as a THP writer and regeneration forester, but it did provide a great opportunity to see how the E. Notice functioned in what was clearly a stand replacing wildfire event. The results were mixed. One thing I have observed having been on many fires and in fire salvage operations is that wildfires sometimes burn in a wavy, bacon rind fashion leaving islands of green intermixed with moderate and severe areas of burning. This may be for a number of reasons, but I surmise that it is driven by waves of intense heat that are pulsed by variable winds. Such is the case on this E. Notice which had the narrower, terminal ends of the project blasted through with almost every tree charred black. However, the wider middle portion of the E. Notice survived very well, with minimal scorching of canopy and reduced burn heights around the stump. This E. notice when harvested removed approximately 3,000 board feet per acre by thinning from below and using mechanical whole tree harvesting, except for trees over 24 inches which were hand felled. (See the results on the next page)



Following timber harvest, house sized landing piles were burned during the first snow. At a later date, the operable ground had the residual logging slash piled utilizing D6 cats with brush rakes at a cost of approximately \$300-350 per acre. Later these machine piles were burned along with a small portion of steeper east facing ground that was broadcast burned.

Firefighting personnel did not utilize this fuel reduction project as a line of defense and only one third of the project area survived the Caldor fire. Yet, after close inspection post fire, it was obvious that this type of fuel reduction and thinning applied over the landscape created defensible areas where trees were saved and seed sources protected, while creating jobs along with important wood products that helped pay for the treatments. The key to success for linear projects like this appears to be the width of treated acres and likely the presence of fire crews to be on site to put out any spot fires once the fire front is out of the trees and on the ground. From what I recall, this project probably made positive cash flow if not just breaking even. With some enhanced planning with the USFS and CAL FIRE, these type of fuel treatments can be implemented across the landscape over multiple ownerships and used in coordinated defense to help reduce the impacts to the environment from these mega fires. It is the best tool that we have that can be applied nearly year-round to help get ahead of the fuel reduction "curve".

Forest Fire *Prevention*, or Forest *Resiliency*?

Will Olsen - Senior Environmental Scientist, Forest Practice Monitoring Specialist, CAL FIRE

Drew Coe - RPF 2981; Watershed Protection Program Manager, CAL FIRE

CAL FIRE undertakes ongoing monitoring of timber harvests that are exempt from the traditional Timber Harvesting Plan ("THP") process ("Exemptions" and "Emergencies" or "Notice of Emergency Timber Operations"). CAL FIRE's fourth report focuses on the §1038.3 "Forest Fire Prevention" Exemption ("FFP Notice"), which is oriented towards forest thinning operations for wildfire resiliency.

The FFP Notice serves as a rapid permitting tool for exempt commercial and non-commercial timber harvesting, with the goal of improving forest fire resiliency via "thinning from below", or removing the smallest and most flammable trees, eliminating surface-to-tree crown fuel continuity, and reducing the risk of catastrophic wildfire (Figure 1).





Figure 1: Forest Fire Prevention before (left) and after (right) photos from Nevada County, courtesy of the Nevada Irrigation District and used with permission. The red circles highlight the same hardwood trees in each photo.

The FFP Notice has increased in popularity in recent years across the state (Figure 2). Following its introduction in 2005 (then under §1038(i)), FFP numbers were initially variable. However, in 2015 after regulatory changes were made to the allowable slash depth and maximum diameter limit on trees to be harvested, the number of FFP Notices has continued to increase each year or hold steady, while the *reported* acres treated under FFP Notices has continued to increase. Overall, large Industrially owned timberland account for the majority of reported acres treated under the FFP Notice statewide using mostly larger-sized FFP Notices, but small Non-Industrial timberlands account for the majority of FFP Notices accepted by CAL FIRE; many Non-Industrial FFP Notices are small in reported size, although recent years have seen some exceptions to this fact. However, the overwhelming majority of FFP Notices are still less than 100 acres in reported size, despite the 300-acre size limit.

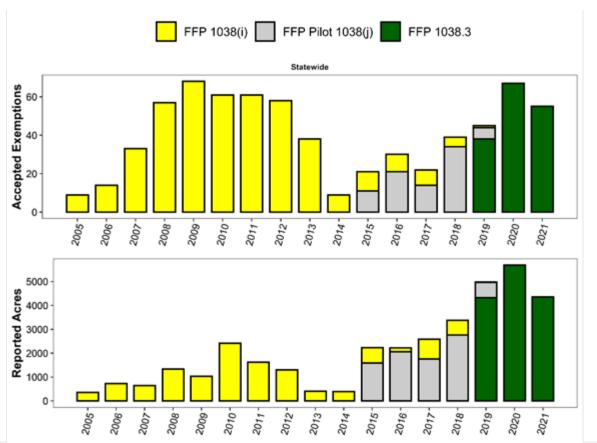


Figure 2: Yearly Forest Fire Prevention Exemption acceptance numbers and reported acres, statewide, with colors indicating the version accepted by CAL FIRE, 2005-2021. Note the two different y-axis scales.

Our monitoring randomly selected 44 FFP Notices across the state from 78 Notices that were accepted by CAL FIRE between March 1, 2019 and July 31, 2020, in order to achieve an outcome with a 95% confidence level and 10% margin of error in results. The sample contained 41% Industrial timberland FFPs, and 59% small, Non-Industrial timberland FFPs. The majority of sampled FFPs were in the interior of California, either in the Cascade or Sierra Forest Practice Areas. Finally, as monitoring is required to be an inter-agency endeavor, the California Department of Fish and Wildlife attended 80% of monitoring visits, Regional Water Quality Control Boards attended 50% of the sample, and the California Geological Survey (who are not required to be part of monitoring, but participate in Forest Practice Review) attended 70% of the sample.

Monitoring was rapid and objective, with quantitative, binned quantitative, and qualitative measurements, across objectively located plots and locations on each FFP Notice, with sampling intensity based on the size of the FFP. Almost all FFP Notices reported harvest and removal of substantial volumes of timber (> 25 thousand board feet). FFP Notices rarely requested exceptions to remove timber within a watercourse lake protection zone on a Class I or II fish bearing stream ("WLPZ"). A total of 48% of the sample reported being adjacent to a "Community at Risk" or permitted structures (i.e., residences), with 62% Non-Industrial FFP Notices being adjacent to these

communities and structures, compared to only 28% of Industrial FFP Notices. However, only 23% of FFP Notices occurred in areas with housing density fitting the requirement of WUI and/or Intermix.

Water quality related outcomes on FFP Notices were generally positive for roads, road-watercourse crossings, and watercourse protection. Of the 66 road segments assessed in monitoring, 6% had a sediment discharge, found on four (4) or 9% of sampled FFP Notices. Sediment discharges were generally associated with lower standard roads that were poorly maintained, and all roads with a discharge had native surfacing. On Non-Industrial FFPs, 28% of assessed roads also doubled as residential access roads (i.e., driveways) as well. Additionally, temporary road construction or re-construction on FFP Notices was found on 18% of the sample, similar to an internal review of 101 FFP Notices from a 22-month period where 18% of all FFP Notices planned temporary road work. None of the sampled temporary roads violated associated regulations, and none resulted in a sediment discharge.

Watercourse crossings were found on 64% of the sample. Generally, the majority of crossings had stabilized fills, indicating less potential for erosion. The potential for diversion, or for a channel to divert onto a road prism and run downslope, before realigning with the original channel (and risking significant water quality impacts), was found on 30% of sampled crossings, with most of these occurring on Non-Industrial lands. Additionally, 62% of the crossings with diversion potential were also unable to freely pass water and debris, or in need of immediate maintenance. Overall, 56% of the watercourse crossings had some level of sediment discharge present, found on 61% of the FFPs that had crossings. Of the discharges, 79% were less than one cubic yard, indicative of likely low-magnitude sediment delivery. Where more substantial sediment discharges were observed on crossings, observations indicated causal factors were related to initial improper road and crossing design, a lack of or minimal maintenance, and a failure to utilize appropriate best management practices ("BMPs") relative to site specific conditions. Where sediment discharges occurred, they were related to road drainage (i.e., lack of hydrologic disconnection), and typically found on pre-existing, non-upgraded crossings.

Classified watercourses were found on 66% of the FFP sample, for a total of 44 assessed watercourses. Sediment discharges to watercourses on FFPs in our monitoring were very limited in occurrence; four (4) sediment discharges were observed, occurring

on two (2) FFPs. Of note is that one of these discharges was a minor less than one cubic yard discharge, on a Class III tractor crossing, while the remaining discharges were more significant in estimated volume. These occurrences were related to tractor operations (i.e., log skidding) within equipment limitation zones, on watercourse segments with substantial equipment encroachment. Harvesting within Class I or II WLPZ areas, or in Class III or IV overhead canopy, was either absent entirely, or

extremely limited in extent. Temporary Class III tractor crossings were found on 20% of the FFP sample, the majority of which (77%) were appropriately removed and treated after operations.

Average post-harvest slash depth across the sample was 2 inches, with the highest slash depths (5 inches) occurring in coastal redwood and Douglas fir forests (Figure 3). Fixed plots and fuels transects generally showed that slash wasn't horizontally continuous, with the exception of some sites within the higher biomass (e.g., redwood and Douglas fir forest types) Coast Forest Practice Area. However, sixty-one percent of Notices had instances where slash exceeded the maximum requirement of 18 inches. Generally, the slash was one inch or less in size (i.e., 1- to 10-hour fuels).

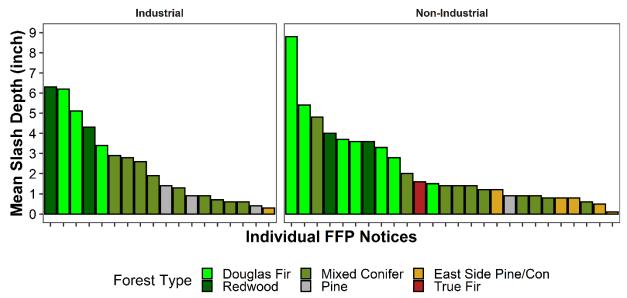
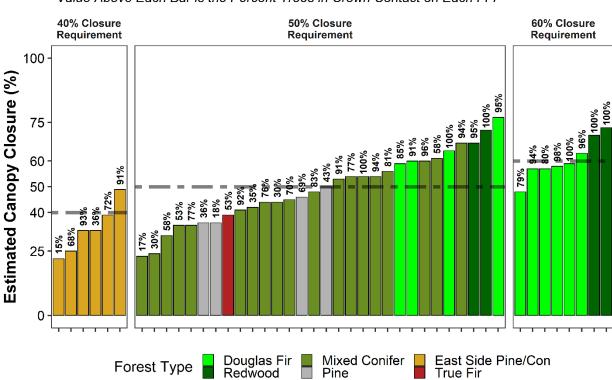


Figure 3: Average slash depth on individual FFP Notices, by timberland ownership type. Bar colors indicate the reported forest type.

The canopy closure requirements for FFP vary by forest type and proximity to structures (see $\S1052.4(d)(3)(B)(1)$), and rapid monitoring methods were not accurate enough to definitively determine compliance with these requirements. However, monitoring suggested that 39% of Notices may have not met canopy closure requirements, with the majority of departures occurring in drier mixed conifer and east side pine forest types in the Cascade (39% met requirement) and Sierra (33% met requirement) Forest Practice Areas (FPAs) (Figure 4). Overall, the Notices that did not meet the requirement averaged a 13% departure from the required canopy closure metric. Canopy closure was best explained by the percent of trees in crown contact (positive correlation; R^2 =0.55), indicating that the maintenance of canopy closure comes at the expense of breaking up horizontal crown continuity.

Fixed plots were assessed for the proportion of space occupied by ladder fuels, and 71% of the plots had one-third or less of the plot area occupied by ladders fuels, and only 5% of plots had ladder fuels occupying two-thirds or greater of the plot area. The plots with lowest spatial coverage of ladder fuels generally had ladder fuels less than 2 feet in height, whereas the plots with largest spatial coverage of ladder fuels generally had ladder fuels in excess of 5 feet in height. Mastication greatly decreased the horizontal and vertical continuity of ladder fuels. When comparing the height of ladder fuels to the crown base height of residual trees, FFPs averaged 22% of the residual trees with vertical continuity from surface fuels to crown fuels. Stands composed predominantly of 10-15 diameter classes had preferentially high vertical fuel continuity, indicating the difficulty of effectively treating smaller diameter "plantation" type stands



*Value Above Each Bar is the Percent Trees in Crown Contact on Each FFP

Figure 4: Estimated mean canopy closure values, after the lowest value in each plot was removed, for the entire sample of FFP Notices. Panels indicate the regulatory minimum canopy closure value, bar colors indicate the reported forest type of the FFP Notice, and the number above each bar indicates the percentage of trees in crown contact on the FFP. In each panel, bars are sorted from left to right by increasing canopy closure values.

(Figure 5).

Across the entire sample, average distance between trees increased an average of 66% between pre-treatment (geometric mean distance of 6.6 feet) and post-treatment conditions (geometric mean distance of 11 feet). Industrial timberland had a significantly higher pre-treatment and post-treatment tree spacing than non-industrial

timberland, although the change in tree spacing did not significantly differ between ownership types. In general, the smaller diameter size classes (e.g., 10-15 inch) had larger post-harvest increases in spacing than higher diameter size classes.

The quadratic mean diameter (QMD) of conifer species eight inches or greater was increased on all but one FFP Notice, and the single instance of a decrease was 0.1 inches. In general, there were larger QMD increases on non-industrial timberland vs. industrial timberlands, but these increases were not statistically significant. Although intuitive, the largest QMD increases occurred in largest diameter stands. Out of 1,457 sampled trees, only eight stumps (0.5%) were measured as 30 inches or larger eight inches above the ground. This indicates that the 30-inch maximum diameter limit stated in the California Forest Practice Rules (FPRs) was seldomly exceeded, and is consistent with the relatively low frequency of violations issued for this particular FPR requirement.

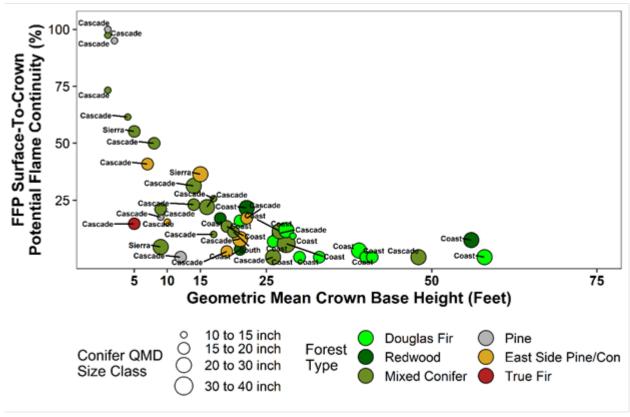


Figure 5: Geometric mean crown base height and the percentage of each sampled FFPs post-harvest stand at risk for surface-to-crown fuel continuity. Point color indicates the sampled forest stand type, while point size indicates the QMD size class of residual conifers.

In terms of generalized forest structure change, QMD size class and Wildlife-Habitat Relationship (WHR) classes either remained static or increased, 39% of the sample increased in QMD size class, while 17% increased in WHR class. Over 75% of the harvested conifer trees were 20 inches or lower in diameter, with conifers exceeding 15 inches in diameter representing 53% of the residual trees. Across industrial and non-

industrial landowners, the overwhelming focus was on removing smaller diameter trees (< 10-inches), while maintaining larger diameter trees (>20-inches) (Figure 6).

Basal area was generally higher on non-industrial ownerships, both before and after harvest, when compared to industrial ownerships. When evaluating FFP Notices for the ability to meet basal area and trees per acre requirements, 30% of the sample failed to meet at least one of these requirements. Despite this, these Notices showed no decrease in QMD, and in some cases an increase in QMD. Also, distance between trees increased an average of six feet on these FFPs.

As expected, tree density decreased following treatment. Trees per acre pre- and post-treatment were higher on non-industrial timberlands, and had significantly more hardwood trees per acre. Stand density index (SDI) for conifers was reduced by 35%, and SDI for both conifer and hardwoods was reduced by 36%. SDI was lower pre- and post-harvest on industrial ownerships, although non-industrial ownerships had the largest changes in SDI following harvest. Coastal forests had the highest SDI following harvest. On average, over one-third (38%) of the harvested trees across the sample population were targeted towards shade tolerant species, which serve as potential ladder fuels in interior forest types.

While the ability to meet the varying regulatory requirements of the §1038.3 was mixed, the sampled Notices generally followed the basic principles of fuels reduction outlined by Agee and Skinner (2005)¹ of: 1) reducing surface fuels; 2) increasing the height to the live crown base; 3) lowering the density of trees; and 4) retaining the largest and most fire-resistant trees. These principles were successfully implemented on Notices within the interior and east side forests. In wetter, coastal forests, tree density and ladder fuels were decreased, but often at the expense of increased surface fuels. Overall, these treatments targeted the smallest diameter classes, thereby removing the most fire susceptible trees.

Despite the increasing use of FFP Notices, less than one-quarter of them are located in areas fitting the definition of WUI and/or intermix. There is great promise for strategically co-locating FFPs with structure-centric exemptions such as the 0-150 (§1038(c)) and 150-300 foot (§1038(c)(6)) fuel hazard reduction exemptions, with FFP treatments constituting the matrix between structure-specific treatments. Advocating for the strategic use of the FFP exemption, alongside other exemptions, has the potential for facilitating the use of pyrosilviculture, as well as increasing the resiliency of communities to wildfire, and increasing overall watershed resiliency. The numeric FFP requirements related to canopy and stocking might be too constraining, especially when treating younger, even-aged stands where breaking up horizontal crown fuel continuity is critical for increasing resiliency to wildfire. As such, there is opportunity to simplify

FFP, so that emphasis is placed on the basic principles of fuels reductions. However, guidance is necessary to help achieve this outcome. Monitoring suggested slightly lower levels of performance on watercourse crossings, and there is also opportunity to increase the performance of roads and watercourse crossings associated with FFP activities so that these roads can be more readily used during fire suppression activities.

Initial recommendations from this report include:

- 1. Incorporation of strategic planning into the implementation of Forest Fire Prevention Exemptions.
- 2. The development of maintenance plans for treated FFPs to maintain these areas in a fire resilient state.
- 3. Consider the introduction of prescribed fire for select FFPs to increase the pace and scale of pyrosilviculture.
- 4. Seek funding for non-industrial landowners to upgrade native surface roads and watercourse crossings associated with FFP Notices.
- 5. Improve guidance on surface and ladder fuel treatments, particularly in the higher biomass areas of Coast District.
- 6. Revisit canopy closure metrics, and determine if more appropriate regulatory limits exist based on stand conditions.
- 7. Revisit stocking standards using the best available research in relation to potential fire behavior and forest resiliency, while explicitly considering the role of hardwoods in forest stands.

Recommendations six and seven will require potential revision of statute (Public Resources Code, Section 4584).

¹ Agee, J. K., & Skinner, C. N. (2005). Basic principles of forest fuel reduction treatments. Forest ecology and management, 211(1-2), 83-96.

Governor Gavin Newsom Appoints New Board of Forestry Members. Governor Gavin Newsom announced on October 25, 2022 the following appointments to the California Board of Forestry and Fire Protection:



Dawn Blake, 50, of Hoopa, has been appointed to the State Board of Forestry and Fire Protection. Blake has been Forestry Director for the Yurok Tribe since 2021. She was a Wildlife Biologist for the Hoopa Valley Tribe from 2006 to 2021, and she was a Wildlife Bio-Technician from 2003 to 2006. Blake is a member of the Hoopa Tribal Education Association Board of Directors, the Intertribal Timber Council and the Wildlife Society. She earned a Master of Science degree in Natural Resources from Humboldt State University.

Jeremiah Hallisey, 83, of Alamo, has been appointed to the State Board of Forestry and Fire Protection. Hallisey has been President at Hallisey and Johnson since 1971. He



is a member of the San Francisco Bar Association, the Energy Bar Association and the California Construction Industry Labor Management Cooperation Trust, Board of Trustees. Hallisey earned a Juris Doctor degree from the University of California, Berkeley School of Law and a Master of Arts degree in Industrial and Labor Relations from Cornell University.

Fresno County Tree Mortality Task Force and Long-Time Fire Fighter Receive Awards for Outstanding Contributions to California Forestry

By Katie Harrell, Board Staff

The Fresno County Tree Mortality Task Force (TMTF) and Darin Quigley are corecipients of this year's prestigious "Francis H. Raymond Award for Outstanding Contributions to California Forestry." The California Board of Forestry and Fire Protection (Board) acknowledged the TMTF for its leadership role in helping to safeguard Fresno County through collaborative wildfire prevention and protection work. Darin Quigley is being recognized for 39 years of exceptional service as a firefighter and fire coordinator.



The Fresno County Tree Mortality Task Force and the California Board of Forestry. At center, holding the award are Fresno County Supervisor Nathan Magsig and Southern Cal Edison Forester Ryan Stewart.

"The Board is very pleased to honor the Fresno County Tree Mortality Task Force and Darin Quigly this year for their work in helping to make California a safer place in the face of climate change and wildfire threats to lives, communities, and critical infrastructure. As California faces longer fire seasons and drier conditions, putting communities at increased risk, these recipients serve as models for others looking to move the needle on wildfire issues in meaningful ways," said Board Chair Keith Gilless.

The TMTF was established in 2015 in response to widespread bark beetle-related tree mortality throughout the county. It was comprised of a core group of agencies and cooperators who were committed to ensuring public safety and community protection, ingress and egress routes for threatened communities, and protection of critical infrastructure (e.g., power, water, schools, fire stations) if a wildfire was to occur given the heightened tree mortality levels. With priorities in place, dead and dying trees within 200 ft of county highways, community public and private roads, and evacuation routes were removed. Community-wide fuel breaks were put in place that tied into cleared access roads, and tree removal work along threatened powerlines was coordinated with fuel break and road work. Meetings were also held to inform the public on the status of the tree mortality as well as to provide education on fire prevention, evacuation procedures, powerline safety, fuels reduction programs, and grant opportunities.

The proactive work of the TMTF and its collaborators was challenged with the 2020 Creek Fire. Thanks to the preventative measures and education and outreach conducted, impacts from the fire were less than they otherwise would have been. Ingress and egress routes remained open for evacuation and responders, power outages were minimal, fire suppression and structure protection were enhanced, fire progress was limited in treated areas, and emergency response efforts were bolstered.

The TMTF recently transitioned to the Fresno County Forest Health Task Force (FHTF). The FHTF will carry forth the cooperative working relationships of the TMTF and will continue to ensure public and community safety as well as promote long-term actions that will improve forest health, public outreach and education, and cooperative planning.



From left to right: Board members, J Lopez, Elizabeth Forsburg, Rich Wade, Board Chair Keith Gilless, FHR Award recipient Darin Quigley, Board members Mike Jani, Jerimiah Hallisey, and Dawn Blake

Darin Quigley has been a firefighter for 39 years. Over the course of his career, he has worked for Cal Fire, the US Forest Service (USFS), local government, and College of the Siskiyous. In his current positions, Darin is the Fire Coordinator for the Northern California Fire Co-op and works as a Wildfire Mitigation Specialist, developing wildfire mitigation plans for private property owners in Northern California. Darin works collaboratively with forest owner representatives and agencies to protect millions of acres in Northern California.

Previously Darin was a Fire Chief, Battalion Chief, Fire Captain, Fire Apparatus Engineer, and firefighter. He also started the Fire Academy at the College of the Siskiyous and served as their Fire Coordinator for nearly 20 years. He is a qualified Type 1 Operations

Section Chief and served on Cal Fire and USFS Incident Management Teams for 20 years as a Safety Officer, Division Supervisor, Branch Director, and Operation Section Chief. Darin was recognized by Cal Fire as the "2014 Firefighter of the Year." More recently, Darin worked on the 2021 Dixie Fire, helping to steer the fire away from the town of Chester. Darin's experience, relatability, compassion, and driven nature help to make him an effective firefighter, leader, and collaborator.

The "Francis H. Raymond Award for Outstanding Contributions to California Forestry" is named for Francis H. Raymond, Director of Cal Fire from 1953 to 1970. Mr. Raymond was one of the primary advocates for the passage of the Professional Foresters Law in 1973. Since 1987 the award has been given to groups or individuals who have achieved excellence in forestry in California.

YTD Wildfire Statistics (CAL FIRE & Federal)

Updated as of **December 5**. 2022

Interval	Fires	Acres
2022 Combined, YTD (CALFIRE & USFS)	7,490	362,455
2021 Combined, Year End Total	8,835	2,568,948
2020 Combined, Year End Total	8,648	4,304,379

Meetings of Interest and Special Announcements

Board of Forestry and Fire Protection Meeting Dates.

The Board's next meeting is scheduled for January 18, 2023. Board meeting schedule dates can be found at this <u>link</u>. The public may sign up for webinars at the Board of Forestry website <u>homepage</u> at https://bof.fire.ca.gov. You can use this link to also view agendas and other information for the Board and for the advisory

committees listed below. Agendas can be found 10 days prior to the meeting date at the homepage link under <u>Business</u>.

Professional Foresters Examining Committee (PFEC)

The next PFEC meeting is planned for Friday, January 13, 2023.

Current PFEC priorities include:

- 1) <u>Apprentice Registered Forester</u> The PFEC will continue discussions about an alternate pathway towards qualify for licensing utilizing core competency training modules and certification as an Apprentice Registered Forester (APF). The proposal would allow for tiered examination allowing the APF applicant to take a core competency examination equivalent to Part 1 of the current RPF exam by registering in the program having completed a minimum of four years of qualifying forestry work experience and/or education. The APF registrant would then achieve full licensing as an RPF by passing Part II of the RPF examination having completed of all the requirements in PRC 769.
- 2) <u>RPF/CRM examinations on computers</u> The PFEC will continue looking at providing RPF CRM examinations on computers to allow keyboarding of answers to reduce examinee fatigue and provide improved readability for graders. The key to this is the funding which would be approximately \$30,000 in cost for the purchase of forty computers. This is approximately 13% of the professional forester fund budget.

More information about this advisory committee to the Board can be found **HERE**.

Range Management Advisory Committee (RMAC)

The first 2023 meeting of the RMAC is planned for **Thursday**, **February 23**, **2023**. This will be a hybrid meeting, with an in-person option to be held at the Robert Cabral Agricultural Center, at 2101 E. Earhart Ave in Stockton, and participants may register for in-person or virtual attendance <u>HERE</u>. There is ample free parking, and nearby hotels and dining options for folks that want to stay and join the following day, **Friday**, **February 24**, **2023**, for a joint presentation of the RMAC-CRCC.

On February 24, RMAC members will join with the California Range Conservation Coalition (CRCC) for the *Joint Rangeland Management Conference*. This will be a two-part workshop and summit held at the Stockton Agricultural Center (address above). Doors open at 8 AM for check-in, coffee, and snacks. A fantastic lunch will be catered by the MidValley Cowbelles and is included with the Summit registration fees. Speakers will include representatives from U.C. Cooperative Extension (UCCE), Koopmann Consulting, and TN Cattle. Registration coming soon! Contact kristina.wolf@bof.ca.gov to be added to the interest list.

- 1) <u>Navigating the Application and Permitting Process for Wildfire Fuels</u> <u>Treatment Using Targeted Grazing</u>, 9:00–11:30 AM: This is a **no-cost** workshop, with option to attend in person or virtually.
- **2)** <u>California Rangeland Conservation Coalition Summit: Working Rangelands:</u> <u>Graze to Reduce the Blaze</u>, 12:45–3:30 PM. Lunch included with registration fee, and you may attend in person or virtually.

In addition, several upcoming webinars, in-person field days, and meetings will continue on the subject of using prescribed grazing for fine fuels management through early 2023:

- 1) Save the Date for January 18, 2023: <u>Applying for a Wildfire Prevention</u>
 <u>Grant Workshop</u>, with a focus on prescribed grazing projects. The grant application is tentatively planned to open in mid-December. See the <u>Wildfire Prevention Grants Program webpage</u> for more information. Representatives from UCCE and CAL FIRE will provide this virtual workshop. Registration coming soon! Contact <u>Kristina.wolf@bof.ca.gov</u> to be added to the interest list.
- 2) <u>Annual Educational Series on Prescribed Grazing</u>: In collaboration with Cal Poly San Luis Obispo, Swanton Pacific Ranch, the Board of Forestry and Fire Protection, and the California Fire Science Consortium, the RMAC is planning this upcoming educational series focusing on the process of funding, planning, and implementing grazing agreements, with a focus on fuel reduction. Three virtual learning sessions and four field days are being planned for early 2023:
 - <u>Navigating the Grazing License</u> (webinar) Slated speakers include representatives from UCCE, California Department of Fish & Wildlife (CDFW), and CalTrans. Date TBD.
 - <u>Developing a Grazing Management Plan</u> (webinar) Planned speakers include representatives from Vollmar Natural Lands Consulting, the Natural Resources Conservation Service, U.C. Cooperative Extension, and the Butte Fire Safe Council. Date TBD.
 - Navigating the Application and Permitting Process for Wildfire Fuels
 <u>Treatment Using Targeted Grazing</u> (webinar and in-person, more
 information above) Feb 24, 2023
 - Ojai Valley Field Day Planned speakers include representatives from Shepherdess Land & Livestock, Ventura Brush Goats, U.C. Cooperative Extension, Ojai Valley Fire Safe Council, and the Ojai Land Conservancy. Date TBD.
 - <u>San Diego Field Day</u> Planned speakers include representatives from U.C. Berkeley, LD Ford Rangeland Consulting, CDFW, UCCE, the Ojai Valley Fire Safe Council, and the Ojai Land Conservancy. Date TBD.

- <u>East Bay Regional Park Field Day</u> March 16, 2023: Slated speakers include representatives from the East Bay Regional Parks District and Star Creek Land Stewards.
- <u>Paso Robles Field Day</u> Planned speakers include representatives from Cal Poly San Luis Obispo, the Goat Girls, the Paso Robles Fire Department, Althouse & Meade, and the San Luis Obispo Fire Safe Council, Date TBD.

For more information, visit the <u>RMAC webpage</u> for meeting and event information, and visit the <u>Swanton Pacific Ranch educational series webpage</u> for continued updates on these workshops! Speakers and dates subject to change. Contact <u>kristina.wolf@bof.ca.gov</u> to be added to the interest list and for updates on this series; include the event(s) you are interested in attending in your email.

Several range-related presentations were given at open, public RMAC meetings throughout the year. Topics included workforce development, community-supported grazing efforts, training opportunities and events, legislative and budget updates, prescribed grazing and fuels reduction treatments, water quality concerns, post-fire grazing and resource management, and collaborations with advised agencies (i.e., Environmental Protection Agency, Natural Resources Agency, and Department of Food & Agriculture). Please see the meeting materials section on the RMAC webpage for links to presentations. Contact kristina.wolf@bof.ca.gov for copies of meeting materials, for information about other RMAC activities, or for links to the RMAC meeting video recordings.

CURRENT CERTIFIED RANGE MANAGER EXAMINATION PANEL MEMBERS

The CRM license is required for professional practice of rangeland management on non-federal forested landscapes as a specialty authorized under a modification of the Professional Foresters Licensing Act (AB1903) that requires the Registered Professional Forester license for the practice of forestry. The CRM license recognizes expertise that is desirable, and recommended for all rangeland management activities, but it is not legally required unless the activity occurs on forested landscapes.

Ms. Denise Defreese, Chair – CRM (EB Parks, Retired)

Mr. James W. Bartolome, Ph.D. – CRM (UC Berkeley, Retired)

Mr. Larry Ford, Ph.D. – CRM (Industry Member)

Mr. Larry Forero, Ph.D. – CRM (UC ANR)

Mr. John M. Harper, MS. – CRM (UC ANR)

Mr. Marc R. Horney, Ph.D. – CRM (Cal Poly San Luis Obispo)

Ms. Stephanie Larson, Ph.D. – CRM (UC ANR)

Mr. Garry Mahrt – CRM (Industry Member)

Ms. Susan Marshall, Ph.D. – (CRM, Cal Poly Humboldt, Retired)

Effectiveness Monitoring Committee (EMC)

The first meeting of the EMC is planned for Thursday, February 16, 2023. You can register for this virtual meeting <u>HERE</u>. Several action items are planned for this meeting, including voting on the revised set of Research Themes and Critical Monitoring Questions, which are an important component for guiding prioritization of EMC-funding.

In 2022, the EMC developed a new <u>Strategic Plan</u>, which is now available <u>online</u>. The EMC also welcomed three new members, and is seeking additional members to fill open or upcoming open seats:

• New Members:

- o Co-chair Dr. Elizabeth "Liz" Forsburg-Pardi began working with the EMC in early January along with with co-chair Loretta Moreno to lead the EMC. Dr. Forsburg-Pardi received her PhD from University of California, Berkeley in Forest Policy and Economics, and is the Associate Director for The Nature Conservancy.
- Dr. Michael Jones joined the EMC's Monitoring Community in August. Dr. Jones is the Forest Advisor for Mendocino, Lake, and Sonoma Counties, U.C. Cooperative Extension. Dr. Jones is the Forest Advisor for Mendocino, Lake, and Sonoma Counties (U.C. Cooperative Extension), and has a background in Forest Health and Disturbance Ecology.
- Matthew Nannizzi joined the EMC's Monitoring Community in November. Mr. Nannizzi is an aquatic biologist with the Green Diamond Resource Company.
- The EMC is seeking to fill three open seats, and up to three additional seats that will open in the future:
 - Monitoring Community one open seat
 - US Fish and Wildlife Service (USFWS) one open agency representative seat.
 - Central Valley Regional Water Quality Control Board (CVRWQCB) one open agency representative seat
 - State Water Resources Quality Control Board (SWRQWB) one agency representative seat to open in February.
 - Department of Forestry and Fire Protection (CAL FIRE) one agency representative seat to open (date TBD).
 - US Forest Service (USFS) one agency representative seat to open (date TBD).

Applications are accepted year-round. See the most recent <u>Call for Applications</u> for more information.

In the current Fiscal Year 2022/23, the EMC awarded three Full Project Proposals for a total of \$384,153 toward research investigating the California through Fiscal Year 2024/25. Proposed projects selected for funding support were as follows:

- 1. EMC-2022-003: Santa Cruz Mountains Post-Fire Redwood Defect Study
- 2. <u>EMC-2022-004</u>: A critical evaluation of Forest Practice Regulation's capacity to accommodate forest restoration and resilience targets
- 3. <u>EMC-2022-005</u>: <u>Decay rate and fire behavior of post-harvest slash in coastal</u> redwood forests

More information about grant awards and project ranking results will be posted on the <u>EMC webpage</u> in the coming weeks.

Several presentations were given by research teams at open, public EMC meetings throughout the year. Please see the meeting materials section on the EMC webpage for links to presentations. Contact kristina.wolf@bof.ca.gov for copies of meeting materials, for questions related to the EMC's support of these research projects or other EMC actions, or for links to the EMC meeting video recordings. Additional project deliverables may be found on the EMC's webpage, along with details regarding funding amounts, research topics, principal investigators and affiliations, and more.

Joint Institute of Wood Products Innovation

The <u>Joint Institute for Wood Products Innovation</u> (Institute) researches near-term wood product concepts to promote highest end uses for California forest wood and biomass. By identifying new wood and biomass products and supporting existing related markets in the state, California can more effectively increase the pace and scale of forest restoration activities, sequester carbon in long-lived wood products, and support rural economies.

Four research projects are currently underway with the Institute.

- Oregon State University is leading two projects (1) 'Cellulose Nanocrystals (CNCs) as a Value-Based Additive for Low Carbon Footprint Concrete with Limestone' and (2) 'Assessing the Use of CNCs to Improve the Service Life of Concrete by Increasing the Time to Corrosion.' The first project is focused on utilizing CNCs from sustainably sourced wood fiber to aid in mixture modifications that reduce concrete's carbon footprint. The second project assesses the benefits of CNCs as they relate to helping to extend the onset of reinforced steel corrosion in concrete.
- Clere Inc and the Spatial Informatics Group are working on a 'Forest Biomass Pile
 Data Collection' project for the Institute. This research is quantifying the number of
 forest biomass piles in the state that have accumulated from 2018 2021, including
 the area treated to create a given pile; composition, volume, and locations of the
 piles; and the planned vs actual fate of each pile. An inventory of forest biomass pile

material potentially available for wood and biomass utilization is also being produced.

 'Mixed-Species Cross-Laminated Timber (CLT) Layup Tests Using Western Wood Products Association White fir Species Group' is the fourth Institute project underway. Led by the TallWood Design Institute at Oregon State University, this project builds upon their 2020-21 'CLT Layup Tests Using Western Wood Products Association White Fir Species Group' Institute work. This research is intended to help inform industry as to how mixed species CLT (that include white fir) will fare as a mass timber commodity.

The Institute is also the Sustainable Wood Products Work Group Lead for the Wildfire and Forest Resilience Task Force.

Recently Approved Regulations

Cutover Land, and Meadows and Wet Areas

Due to various amendments the Board maintained separate but identical definitions for "Meadows and Wet Areas" for the Northern and Southern Forest Districts, with no definition for the Coast Forest District, resulting in a lack of clarity for Alternative Prescriptions in that district for the restoration of Meadows and Wet Areas. These terms were made consistent across all forest districts. The term "Cutover Land" had no basis in statue or regulation and so was eliminated from the rules. This regulation will become effective January 1, 2023.

Class II-L Determination Amendments

The current regulatory methods for determining Class II-L watercourse status were set to expire on January 23, 2023. This expiration date was put in place to allow further evaluation of the efficacy of Class II WLPZ widths and operational requirements in relationship to Watercourse characteristics and achievement of the goals specified in 14 CCR §§ 916.9, 936.9, and 956.9 subsection (a). The Effectiveness Monitoring Committee proposal EMC-2015-001 investigated the variability of the relationship between drainage area, active channel width, and perennial flow extent across the Anadromous Salmonid Protection (ASP) area and compared the relationships derived in (a) to the rule criteria for Class II-L identification. In general, the study identified that drainage area was a much better predictor of certain watercourse values promoted by the Board's Class II-Large designation than average active channel width. Additionally, the proposal revealed that average active channel width was, in fact, a poor predictor of certain watercourse values promoted by the Class II-L designation. The proposed rule package eliminated the regulatory method of Class II-L determination based on average active channel width. The proposed action also eliminated the regulatory sunset period for methods to determine Class II watercourse type in order to avoid future issues of regulatory clarity or inconsistency. This regulation will become effective January 1, 2023.

Spotted Owl Resource Plan Amendments

The definition of "Spotted Owl Resource Plan" did not include timberlands covered by an NTMP or WFMP. The definition was be amended to reflect that this resource plan is open to all timberland landowners. This regulation will become effective January 1, 2023.

Notice of Intent Amendments

The Board amended the paragraph "A Notice of Intent shall include the following information: The acres proposed to be harvested. The regeneration methods and intermediate treatments to be used." to include all acres where timber operations will occur, not just the area where timber will be harvested. In doing so, the Board should consider the current definition of logging area and the lack of a definition of plan area. This regulation will become effective January 1, 2023.

Substantially Damaged Consistency Amendments

There was an issue of clarity between 14 CCR §§ 895.1 and 913.8 regarding what stocking requirements apply on Substantially Damaged Timberlands within the Southern Subdistrict of the Coast Forest District. The list of stocking requirements in Special Harvesting Methods in the Southern Subdistrict now includes the definition for and provisions of Substantially Damaged Timberland to allow for stocking standards which are not included within the exclusive list in 14 CCR § 913.8. This regulation will become effective January 1, 2023.

Santa Cruz and San Mateo Weekend Emergency

The Board responded to requests from these stakeholders to provide temporary regulatory relief to facilitate fire cleanup efforts through the footprint of the CZU Lightning Complex Fire to extend allowable periods of timber operations in Santa Cruz and San Mateo to include Saturdays and Sundays. The emergency regulations expired on September 22, 2022.

Emergency Notice RPF Amendments:

The Board adopted emergency regulations titled "Emergency RPF responsibilities" to modify existing Emergency Notice processes to address the current needs for improved compliance with the Rules in all Emergency Notice timber harvests. The rulemaking requires the Timber Owner or operator retain an RPF to provide professional advice and that the RPF be present on site at a sufficient frequency to know the progress of operations and advise the Timber Owner or LTO. The increased presence of the RPF and subsequent increase in compliance and implementation of the Rules was intended to avoid impacts to water quality resulting from non-compliance. The rulemaking additionally addressed potential inadequacies of fuel treatment timelines and wildfire risks in the Emergency Notice for Fuel Hazard

Reduction. The emergency regulations were adopted by the Board in 2021. Permanent regulations will become effective January 1, 2023.

Forest Resiliency Amendments

Group selection harvesting regulations limited the portion of a THP area which may be harvested through the creation of group openings in a pattern which encourages, at a minimum, 5 distinct age classes, which is unlikely to achieve the level of resilience that is provided by historic forest conditions. The existing regulations contain rigid prescriptive requirements for stocking conditions which do not provide adequate flexibility for forest resiliency to address the changing climate.

The proposed action provides a modification to the Group Selection Method, allowing for more openings which encourage shade intolerant species regeneration and allow for the generation of fewer, more resilient age-classes. It also clarifies retention standards, and provides more flexibility in the management of uneven aged forests through the elimination or simplification of prescriptive standards which may not be suitable for the establishment of resilient forests. This regulation will become effective January 1, 2023.

Northern Spotted Owl Take Avoidance Pathways and Habitat Definition Updates

Objectives: Several of the habitat definitions related to Northern Spotted Owl are derived from the USFWS 1992 "Protocol For Surveying Proposed Management Activities That May Impact Northern Spotted Owls" and are not present in the 2012 "Protocol For Surveying Proposed Management Activities That May Impact Northern Spotted Owls". In addition, some mechanisms for take avoidance as described in §§ 919.9 and 939.9 are no longer in effect. The definitions and take avoidance pathways should be updated to reflect current regulatory requirements from the Department and listing agencies. The Board anticipates effective regulations by January 2024.

Most current and approved regulation files are now available at the Board website <u>HERE</u>. If you require archived material, please email <u>Jane Van Susteren</u>, Regulations Coordinator.

CalVTP Update

The California Vegetation Treatment Program (CalVTP), developed by the Board of Forestry and Fire Protection, is a critical component of the state's multi-faceted strategy to address California's wildfire crisis. The CalVTP includes the use of prescribed burning, mechanical treatments, manual treatments, herbicides, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the Wildland-Urban Interface (WUI), to construct fuel breaks, and to restore healthy ecological fire regimes. The CalVTP Programmatic Environmental Impact Report (Programmatic EIR) provides a

powerful tool to expedite the implementation of vegetation treatments to reduce wildfire risk while conserving natural resources. For more information about the CalVTP, please visit the websites linked below:

- Visit the Programmatic EIR webpage (https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-programmatic-eir/) to view the Final CalVTP Programmatic EIR.
- Visit the CalVTP Database webpage (https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-database/) for data related to proposed, approved, and completed projects under the CalVTP.
- Visit the Approved Projects Environmental Documentation webpage (https://bof.fire.ca.gov/projects-and-programs/calvtp/environmentaldocumentation-for-approved-projects/) to view the environmental documentation (e.g., Project Specific Analysis, Mitigation Monitoring and Reporting Program) for individual CalVTP projects.

As of December 2022, a total of 73 CalVTP projects had been proposed. Of these, 33 have been approved for vegetation treatments encompassing a gross area of 281,530 acres. An additional 35 projects are pending approval totaling 458,178 gross acres of project treatment area. Prior reported totals in the summer issue of Licensing News were overstated in error and have been corrected above. Please email calvtp@bof.ca.gov with questions about the CalVTP.

You can find more information on CalVTP <u>HERE</u>.

RPF and CRM Examination Announcements

The April 2023 RPF/CRM Exam Notice has been posted online and has been scheduled for Friday April 7, 2022. The deadline for NEW applications for that exam is February 3, 2023. The October 2023 RPF/CRM Exam Notice has been posted as well and is scheduled for Friday October 6, 2023.

The Exam Notices and information on RPF and CRM exams can be found <u>HERE</u>. Please be advised on the exam notices, the Professional Foresters Examining Committee has determined that applicant review must follow regulations. <u>All new applicants must qualify by the exam application deadline</u> to be considered eligible to sit for the exam. No exceptions will be allowed for those who do not qualify by the application deadline even if they qualify by the examination date.

For those who are **retaking** the exam, you will need to submit an updated application consisting of your personal information including updated contact information through the preferred examination location on page one. Include any updates if you have changed

jobs since the last exam application. Then sign and date the last page of the application and email as instructed below. Retake exam applications are due one month prior to the exam date.

You can scan and email these documents to my assistant Deniele Casarubbia at deniele.casarubbia@bof.ca.gov. Those interested in taking the RPF or CRM examinations are encouraged to contact Dan Stapleton with any questions about qualifications prior to applying and mailing the exam fee. Dan may be reached at 916-653-8031 or by email at dan.stapleton@bof.ca.gov.

Outreach for Future RPFs by Dan Stapleton

The Board of Forestry and Fire Protection's Contracted Licensing Outreach Specialist traveled both out of state and in-state conducting presentations to students attending SAF accredited universities and community colleges. This Fiscal Year, from June 30, 2022, to December 15, 2022, Forestry Educators



Incorporated (FEI) gave multiple in-person presentations to students at the University of British Columbia, Cal Poly Humboldt, Cal Poly SLO, and Shasta College. In September, FEI also attended the Society of American Foresters annual meeting in Baltimore. FEI made contact with several college students attending forestry programs in Maine, South Carolina, Arizona, Michigan, Idaho, Pennsylvania, Oregon and Texas.

Within California, please help me pass the word about careers in forestry and send me any suggestions you may have about groups who may be interested in

hearing about career development and opportunities in the forestry field. Call the Office of Professional Foresters Registration 916-653-8031 or email me at dan.stapleton@fire.ca.gov.

Forestry Career Information

Board of Forestry, Regulations Program Manager

The Board of Forestry and Fire Protection will be advertising in the coming months for a Regulations Program Manager to oversee the Board's regulatory development program. The position will be a Civil Service, Forester III ranking and requires an RPF license. If you are interested in learning more about this upcoming advertisement, please email Executive Officer Edith Hannigan edith.hannigan@bof.ca.gov.

CAL FIRE Forest Practice Review Team Positions:

CAL FIRE recently implemented Recruitment and Retention pay differentials for Forester II (Supervisory) and Forester III classifications, significantly increasing monetary compensation in those classifications. Additionally, Santa Rosa review team has 2 open Forester II (Supervisory) positions, the advertisements for which are currently posted below. If you are interested in a fulfilling career in forest practice review, now is the time to apply! Please contact Eric Hedge, Forest Practice Manager-Coast District (eric.hedge@fire.ca.gov, 707.576.2953) with any questions.

https://www.calcareers.ca.gov/CalHrPublic/Jobs/JobPosting.aspx?JobControlId=339442 https://www.calcareers.ca.gov/CalHrPublic/Jobs/JobPosting.aspx?JobControlId=302399

California Licensed Forester Association Employment Announcements https://www.clfa.org/employment-announcements

Society of American Foresters Career Page http://careercenter.eforester.org/home/index.cfm?site_id=8482

REGISTERED PROFESSIONAL FORESTERS & CERTIFIED

RANGELAND MANAGERS The table below indicates the known status of all current and former registrants by license type as of December 5, 2022. Expired licensees subsequently revoked by the Board for non-payment have one year to pay all fees to reinstate.

STATUS	RPF's	CRM's
Valid	1,111	80
Withdrawn	112	7
About to Expire	0	0
Revoked (non-payment or disciplinary action)	830	21
Voluntarily Relinquished	773	13
Suspended	0	0
Deceased	349	6
TOTAL	3,175	127

Disciplinary Actions Report

Since the last issue of the Licensing News, no new complaints have been received by the Executive Officer, Foresters Licensing.

Snapshot in History



Former State Foresters at the National Association of State Foresters (NASF) Golden Anniversary Meeting, September 27 - October 1, 1970. La Fonda Hotel, Santa Fe, New Mexico. Bottom Row, Left to Right: Alden Cottrell, New Jersey; O.A. Alderman, Ohio; W.S. Taber, Delaware; A.D. Folweiler, Texas; Francis Raymond, California. Standing. Left to Right: Joe Kaylor, Maryland; R.C. Wible, Pennsylvania; Al Woodford, NEW York; Irving Dickman, Ohio.

SELECT READINGS

<u>Mega-disturbances cause rapid decline of mature conifer forest habitat in California</u>

Zachary L. Steel, Gavin M. Jones, Brandon M. Collins, Rebecca Green, Alexander Koltunov, Kathryn L. Purcell, Sarah C. Sawyer, Michèle R. Slaton, Scott L. Stephens, Peter Stine, Craig Thompson

https://esajournals.onlinelibrary.wiley.com

Abstract

Mature forests provide important wildlife habitat and support critical ecosystem functions globally. Within the dry conifer forests of the western United States, past

management and fire exclusion have contributed to forest conditions susceptible to increasingly severe wildfire and drought. We evaluated declines in conifer forest cover in the southern Sierra Nevada of California during a decade of record disturbance by using spatially comprehensive forest structure estimates, wildfire perimeter data, and the eDaRT forest disturbance tracking algorithm. Primarily due to the combination of wildfires, drought, and drought-associated beetle epidemics, 30% of the region's conifer forest extent transitioned to non-forest vegetation during 2011-2020. Fifty percent of mature forest habitat and 85% of high density mature forests either transitioned to lower density forest or non-forest vegetation types. California spotted owl Protected Activity Centers (PAC) experienced greater canopy cover decline (49% of 2011 cover) than non-PAC areas (42% decline). Areas with high initial canopy cover and without tall trees were most vulnerable to canopy cover declines, likely explaining the disproportionate declines of mature forest habitat and within PACs. Drought and beetle attack caused greater cumulative declines than areas where drought and wildfire mortality overlapped, and both types of natural disturbance far outpaced declines attributable to mechanical activities. Drought mortality that disproportionately affects large conifers is particularly problematic to mature forest specialist species reliant on large trees. However, patches of degraded forests within wildfire perimeters were larger with greater core area than those outside burned areas, and remnant forest habitats were more fragmented within burned perimeters than those affected by drought and beetle mortality alone. The percent of mature forest that survived and potentially benefited from lower severity wildfire increased over time as the total extent of mature forest declined. These areas provide some opportunity for improved resilience to future disturbances, but strategic management interventions are likely also necessary to mitigate worsening mega-disturbances. Remaining dry mature forest habitat in California may be susceptible to complete loss in the coming decades without a rapid transition from a conservation paradigm that attempts to maintain static conditions to one that manages for sustainable disturbance dynamics.

<u>August Complex -A Wildfire Resilience Success Story: Forest Health treatments yield important management insights</u>

CAL FIRE - Forest Health Program - August 23, 2022

https://storymaps.arcgis.com/stories

Up in smoke: California's greenhouse gas reductions could be wiped out by 2020 wildfires

Michael Jerrett, Amir S.Jina, Miriam E. Marlier

https://www.sciencedirect.com/science.

Abstract

In this short communication, we estimate that California's wildfire carbon dioxide equivalent (CO₂e) emissions from 2020 are approximately two times higher than

California's total greenhouse gas (GHG) emission reductions since 2003. Without considering future vegetation regrowth, CO₂e emissions from the 2020 wildfires could be the second most important source in the state above either industry or electrical power generation. Regrowth may partly of fully occur over a long period, but due to exigencies of the climate crisis most of the regrowth will not occur quickly enough to avert greater than 1.5 degrees of warming. Global monetized damages caused by CO₂e from in 2020 wildfire emissions amount to some \$7.1 billion USD. Our analysis suggests that significant societal benefits could accrue from larger investments in improved forest management and stricter controls on new development in fire-prone areas at the wildland-urban interface.

<u>Does Environmental Review Worsen the Wildfire Crisis? How</u> <u>environmental analysis delays fuel treatment project - Property</u> <u>and Environment Research Center (PERC)</u>

by Eric Edwards and Sara Sutherland

https://www.perc.org

Highlights

Fuel treatment projects designed to reduce wildfire risks, including mechanical treatments and prescribed burns, often take longer to implement than other U.S. Forest Service projects because they are more likely to require rigorous environmental review or be litigated.

Once the Forest Service initiates the environmental review process, it takes an average of 3.6 years to begin a mechanical treatment and 4.7 years to begin a prescribed burn.

For projects that require environmental impact statements—the most rigorous form of review—the time from initiation to implementation averages 5.3 years for mechanical treatments and 7.2 years for prescribed burns.

Given the time it takes to conduct environmental reviews and implement fuel treatments, it is unlikely that the Forest Service will be able to achieve its goal of treating an additional 20 million acres over the next 10 years.

<u>Logjam: The Supply Chain Problem That's Keeping California From Preventing Catastrophic Wildfires on Private Land</u>

by Jane Braxton Little - Bay Nature magazine, Fall 2022

https://baynature.org

Private landowners in California hold a huge amount of forest that's primed to burn—and they need foresters, loggers, and mills to reduce that risk.

Timber Tax Update

The following are introductory notes from Mike Doyich, RPF #2129, Senior Forest Property Appraiser for the California Department of Tax and Fee Administration at the Timber Tax Advisory Committee Meeting (TAC) November 17, 2022.

This year with a fairly moderate fire season, at least as compared to the 5 prior years.

Cal Fire wildfire statistics as of yesterday, November 21st, 2022, show that on both private and federal lands combined, there were approximately 7400 wildfires in California that burned 362,436 acres. Compare that to the 6,821 wildfires in 2021 that burned nearly 2.6 million acres. There were roughly 580 more fires this year as compared to last year, but the number of acres burned is down significantly by a little over 2.2 million acres.

The 2022 wildfire statistics are also significantly below the 5-year average for California: We average 7645 wildfires as compared to 7400 this year, and 2,159,685 acres burned vs. only 362,436 acres burned this year.

The lower number of acres burned are attributed to a number of factors including quicker response times, more available resources, more aggressive fire-fighting techniques, and better weather with fewer *Red Flag Warning Days*.

Hopefully this less sever fire season will help the state catchup on the huge backlog of fire salvage from the previous several years, and maybe things can start to get back to normal with primarily green timber harvests.

I am happy to tell you about a new sawmill that will be opening next year, which is something rare these days. The name of the company is Tahoe Forest Products, and it is actually located in Nevada, just south of Reno. It will be a relatively small to medium size production facility, as compared to others in California. It will probably handle somewhere in the neighborhood of 20 to 30 MMBF per year. The company doesn't own any of its own timberlands, so they plan on supplying the mill with logs from the various counties in TVAs 7 & 8, the Lake Tahoe Basin, and probably supplemented with some Forest Service timber. It will be nice to reintroduce some competition back into this part of the state that is becoming so monopolistic with very few companies vying for outside log sources.

Construction on the mill site began this past summer, and they hope to be open for business sometime after the first of the year. Some of the 120 employees that lost their jobs when the Ampine particleboard facility in Martell burned down this past July, will be working in this new facility. They have been decking logs since July, so they already have inventory on hand for when they are ready to begin operations next year. Over 10 MMBF have already been brought in from the *Sierra At Tahoe Ski Park* in El

Dorado County, that burned in last year's Caldor Fire. The majority of the area was tractor logged, but a portion of the very steep and rough terrain areas had to be helicopter logged. It is really nice to be able to see that area being cleaned up and reforested.

This has also been a year where we have seen unbridled inflation in excess of 8 percent, the highest in over 40 years, and soring energy and fuel costs. The global pandemic, supply chain issues, the war in Ukraine, Russia cutting off oil transmission to Western Europe, and the Saudis cutting back on oil production are all cited as contributing factors.

We saw diesel prices early in the year around \$4.50/gallon, climbing to \$6 and \$7 dollars/gallon by June and July. Prices fluctuated all summer and fall, and we are now finally starting to see prices fall to more in the \$5 range.

All of this had a negative influence on timber harvesting in California, especially in the hauling costs. We saw hourly truck rates this spring start out at around \$120/hour, and by the peak of the season rates climbed to as high as \$150 and in some cases \$160/hour. The higher Logging & Hauling costs often resulted in a lower return to stumpage, especially for the smaller landowners. Due to the shortage of trucks hauling logs in California, trucks went to the highest bidder or the landowners with the most clout, leaving many landowners without a way to get their logs to market. Meanwhile, the dwindling shelf life of salvage timber continues to tick downward.

According to the *Western Wood Products Association Lumber Price Index*, although first quarter saw some healthy price increases, the price of finished lumber has consistently been significantly down, month after month since early second quarter.

Log prices on the coast have followed this pattern, while Inland log prices have reacted in reverse, either down or flat early in the year, and on the rise as the year has progressed.



Former Board Executive and Assistant Executive Officers with retiring Board Administrative Manager Laura Alarcon-Stalians. Left to Right: Eric Huff CAL FIRE, Matt Dias CFA, Laura Alarcon-Stalians BOF, Dan Stapleton BOF, Edith Hannigan BOF, YG Gentry CFA.

Happy Holidays