THE BOARD OF FORESTRY AND FIRE PROTECTION



**ANNUAL REPORT *2022***

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***California State Board of Forestry and Fire Protection Mission***

*The mission of the Board 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*.

# Board Background and Organization

The California State Board of Forestry and Fire Protection (Board) is a Governor-appointed body within the California Department of Forestry and Fire Protection (CAL FIRE). Members are appointed on the basis of their professional and educational qualification and their general knowledge or interest in problems that relate to watershed management, forest management, wildland fire management, fish and wildlife, range improvement, forest economics, or land use policy. Of its nine members, five are chosen from the public, three from the forest products industry, and one from the range-livestock industry.

The Board is responsible for developing the general forest policy for the State, determining the guidance policies of CAL FIRE, and representing the State's interests in federal land located within California. Together, the Board and CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the State's unique forest and wildland resources.

#### Committees of the Board

#### Committees Required by Statute

Range Management Advisory Committee

Professional Foresters Examining Committee

Soquel Advisory Committee

#### Internal Standing Committees

1. Forest Practice: The mission of the Forest Practice Committee is to evaluate and promote an effective regulatory system which ensures the continuous growth and harvest of commercial forests and protects soil, air, fish, wildlands, and water resources.
2. Resource Protection: The mission of the Resource Protection Committee is to develop and promote a policy and regulatory program that implements fire safe land use planning and effective vegetation management, pursues a fire prevention program in alignment with the State Fire Plan, and improves forest and rangeland health in California.
3. Management: The mission of the Management Committee is to evaluate and promote long-term, landscape-level planning approaches to support natural resource management on California’s non-federal forests and rangelands and to evaluate State Forest management plans.

#### External Advisory Committees

1. Effectiveness Monitoring Committee
2. California Forest Pest Council and the California Oak Mortality Task Force
3. Jackson Advisory Group
4. Joint Institute for Wood Products Innovation

#### Committee Updates

#### Range Management Advisory Committee

The Range Management Advisory Committee (RMAC) is an advisory body to the Board of Forestry & Fire Protection, statutorily authorized by Public Resources Code (PRC) § 741. The RMAC primarily conducted business virtually in 2022 due to the COVID-19 pandemic, with several in-person events planned for the coming year. The following is a more detailed summary of RMAC activities in 2022:

* The RMAC hosted six open, virtual or hybrid public meetings to conduct committee business, and a quorum was reached at five of these meetings. Meeting activities included approval of meeting minutes; membership updates, recruitment, and seat appointments; legislative and partner organization updates; public education and outreach presentations by rangeland and natural resource representatives, professionals, and practitioners.
* Chair Marc Horney and Vice-Chair Rich Ross were reappointed for an additional one-year term through January 2023. In January 2022, Member Lance Criley was reappointed for a four-year term to his seat representing the U.S. Forest Service. Four new members were appointed to the RMAC for four-year terms, also beginning in January 2022:
  + Dr. Stephanie Larson, Director of U.C. Cooperative Extension (UCCE)in Sonoma County, joined the RMAC as a member of an organization that represents rangeland owners;
  + Cole Bush, member of the California Wool Growers Association (CWGA) and owner-operator of Shepherdess Land & Livestock, also joined the RMAC as a member of an organization that represents rangeland owners;
  + Dr. Paul Starrs, professor emeritus of Geography at University of Nevada, Reno, joined the RMAC as a representative of the Public; and,
  + Joel Kramer, Regional Agricultural Specialist for the Resource Conservation District (RCD) of Greater San Diego County, joined the RMAC as a representative of California RCDs.
* The **State Lands Grazing License and Land Management (SLGLLM) subcommittee** met for the first time in January 2022 and began developing templates for grazing agreements.
  + Members of the SLGLLM subcommittee are as follows:
    - Lance Criley: Rangeland Management Specialist, U.S. Department of Agriculture (USDA) United States Forest Service (USFS), RMAC representative
    - Jeanette Griffin: Environmental Scientist, California Department of Fish & Wildlife (CDFW)
    - Richard M. Ross: Attorney, Ross Ranch, RMAC representative
    - Kevin Conway: State Forest Program Manager, Jackson State Demonstration Forest
    - Tony Psihopaidas: Assistant Chief, State Owned Leasing and Development, State Department of General Services (DGS) (through June 2022)
    - Lawrence Ford: Certified Range Manager, owner-operator LD Ford Rangeland Conservation Science
    - Bart Cremers: California Farm Bureau Federation
    - Tracy Kay Schohr: Livestock and Natural Resources Advisor, Plumas, Sierra, and Butte counties, UCCE
    - Katie Delbar: County Executive Director, USDA Farm Service Agency
  + A public comment period was opened from July 22 through August 26, 2022 to solicit additional public and stakeholder comment on the draft grazing license, land/grazing management plan, and guidance booklet developed by the subcommittee.
  + The original timeline tentatively estimated draft deliverables to be produced by June 2022, but the retirement of the DGS representative and related product interdependencies resulted in a delay, and DGS representative replacements were confirmed in November 2022. The deliverable timeline will therefore be revised at the first meeting of 2023.
* The Department of Forestry & Fire Protection (CAL FIRE) and the Wildfire Prevention Grants Program partnered with RMAC to plan a January 18, 2023 workshop, **Applying for a Wildfire Prevention Grant**, with a focus on prescribed grazing projects. The grant application opened December 14th, 2022, and representatives from UCCE and CAL FIRE will speak at this virtual workshop to assist grazers interested in applying for this grant funding to support grazing projects for fuel reduction.
* An **Educational Workshop Series Action Team** was formed at the July RMAC meeting and began planning for a winter-spring (2023) annual RMAC Workshop Series on grazing agreements with a focus on prescribed grazing, vegetation management, and fuels reduction.
  + Partnered with California Polytechnic State University, San Luis Obispo (CPSLO), Swanton Pacific Ranch (SPR), and the California Fire Science Consortium (CAFSC) to cosponsor, fund, and implement three virtual learning sessions and four in-person field days planned tentatively from January through March 2023 across California (East Bay Regional Parks, Paso Robles, Ojai Valley, and San Diego). Funding from other partners, including a SPR grant for public education on fuels reduction, resources of the California Rangeland Conservation Coalition (CRCC), was leveraged to support this effort.
  + Partnered with the CRCC to provide a co-sponsored Joint Rangeland Management Conference planned for February 2023, with the option to attend in person or virtually. This will be a two-part workshop and summit held at the Stockton Agricultural Center: Part 1) Navigating the Application and Permitting Process for Wildfire Fuels Treatment Using Targeted Grazing, RMAC’s no-cost workshop, and Part 2) CRCC Summit: Working Rangelands: Graze to Reduce the Blaze.
  + Slated speakers at workshops or field days include representatives from:
    - University of California Cooperative Extension Service (UC ANR)
    - California Department of Fish & Wildlife (CDFW)
    - California Department of Transportation (Caltrans)
    - Vollmar Natural Lands Consulting
    - Natural Resources Conservation Service (NRCS)
    - Butte Fire Safe Council
    - Shepherdess Land & Livestock
    - Ventura Brush Goats
    - Ojai Valley Fire Safe Council
    - Ojai Land Conservancy
    - U.C. Berkeley
    - LD Ford Rangeland Consulting
    - East Bay Regional Parks District
    - Star Creek Land Stewards
    - Cal Poly San Luis Obispo
    - The Goat Girls
    - Paso Robles Fire Department
    - Althouse & Meade Inc., Biological and Environmental Services
    - The Fire Safe Council of San Luis Obispo
  + For more information, visit the RMAC webpage <https://bof.fire.ca.gov/board-committees/range-management-advisory-committee/> for meeting and event information, and Cal Poly’s Swanton Pacific Ranch Fuels Management Training Homepage webpage (https://spranch.calpoly.edu/fuels).
* The process of revising the 2022 and 2023 Annual Priorities, Goals, and Objectives began in 2022.
  + In compliance with Public Resources Code (PRC) § 741, the RMAC formally solicited agency priorities from the Board, California Natural Resources Agency (CNRA), the California Environmental Protection Agency (CalEPA), and the California Department of Food and Agriculture (CDFA) for review and integration into the priorities and goals of the RMAC. Board staff Dr. Wolf worked to incorporate these advised agencies’ annual priorities into the development of RMAC’s current (2022) and 2023 Annual Priorities.
  + Chair Horney and Board Staff Dr. Wolf met throughout the year with Deputy Secretaries and staff of the CDFA, CNRA, CalEPA, Board, Water Quality Control Boards, and Air Resources Board to establish lines of communication & coordination between RMAC and these state agencies.
* Appointed members and support staff to teams working under advised agencies and other organizations with synergistic goals:
  + Member Kramer and Member Bush were appointed as RMAC representatives to the **Healthy Soils Initiative** under the CDFA.
  + As a member of the CWGA and the **CWGA’s Targeted Grazing Committee**, Member Bush will liaise with that committee to develop two work products: 1) an educational pamphlet for Prescribed Fire to be shared with **CAL FIRE**, and potentially addended to the current 2021 CAL FIRE Fuels Reduction Guidance (CAL FIRE 2021) or incorporated into future versions of this guidance, and 2) a white paper literature review describing the science behind prescribed grazing, and technical guidance for incorporating prescribed grazing alone or in combination with other vegetation management efforts and/or fuels reduction treatments.
  + Board staff Dr. Wolf joined the **Natural Working Lands Science Team** under the CNRA to work with and provide input to the team for integration of range-related resource issues into climate-smart strategies. Members of this team work to inform and review modeling and analyses for natural and working lands, advise state agencies on implementation strategies and standardized accounting, and provide recommendations on addressing barriers to efficient implementation of climate action in natural and working lands.
* Several speakers provided **presentations to the RMAC** audience at public meetings to provide information on and discuss potential needs and solutions for rangeland issues in California. Speakers and topics included:
  + Pelayo Alvarez, California Program Director for Audubon, led a discussion of **AB-252**, and the Department of Conservation’s **Multi-benefit Land Repurposing Program**.
  + Roger Ingram of the **CWGA Wildfire and Grazing Committee** presented survey results of targeted grazing providers in California.
  + Jennifer Norris, Deputy Secretary for Biodiversity and Habitat at the CNRA, introduced and led a discussion on **Pathways to 30x30: Accelerating Conservation of California’s Nature**.
  + Kristan Norman, Area 2 Rangeland Specialist, and Chris Zimny, State Forester—both of NRCS—gave an informational presentation on the **Environmental Quality Incentives Program** (EQIP) for rangeland managers.
  + Brian Shobe, Associate Policy Director at **California Climate and Agriculture Network** (CalCAN), spoke about the organization’s advocacy efforts for state investments in research and assistance for farmers and ranchers in California to become more climate resilient.
  + Dean Kelch, who leads the Permits and Regulations Program at the CDFA, provided a presentation on **CDFA Programs** and opportunities for synergistic collaborations with the RMAC.
  + Dr. Susan Marshall, professor of Rangeland Resources and Soils at California Polytechnic State University, Humboldt, presented on the current state of **Certified Rangeland Managers (CRM) in California** and constraints and challenges in workforce development efforts, and provided information on a grant proposal submitted to support educational programs for comprehensive and collaborative CRM training, more clear and accessible program requirements, and greater access to training and testing for individuals wanting to take the CRM exam. 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 (AB 1903) that requires the Registered Professional Forester license for the practice of forestry.
  + Cole Bush, owner-operator of Shepherdess Land & Livestock (and member of the CWGA) updated the RMAC on the **Community Supported Grazing Summit**, a workshop by the Ojai Valley Fire Safe Council and Community Environmental Council of Santa Barbara and announced the launching of a new **Bilingual Grazing Manager Training**.
  + Bre Owens, Stewardship Coordinator at the **Western Landowners Alliance** (WLA), provided background information on efforts for the WLA to apply for a **Grazing Lands Coalition Initiative Grant**, and worked to garner RMAC support for hat effort and the potential for joint WLA-RMAC collaborations for future adult education efforts in range resources and management in California.
  + Stacey Sargent Frederick, Coordinator for the CAFSC, and Maurica Fitzgibbons, Fuels and Vegetation Management Training Coordinator for CPSLO and SPR, spoke to the RMAC about educational webinar and workshop efforts.

#### Professional Foresters Examining Committee

In 2022, the Professional Foresters Examining Committee (PFEC) deliberated on priorities intended to improve examination outcomes through updating of the examination process. The PFEC also approved thirty-three new applications for the RPF exam. In April and October 2022, Registered Professional Forester (RPF) and Certified Rangeland Manager (CRM) examinations were carried out at three different locations. In total, sixty-nine RPF applicants and one CRM applicant sat for these exams. For the April 2022 exam, fifty-seven percent passed the RPF exam. For the October 2022 exam, completion of grading and presentation of exam results will occur in January 2023.

* The Board of Forestry’s Office of Professional Foresters Registration continues to perform outreach to increase awareness of careers in forestry in California and the licensing requirements for foresters. A three-year outreach contract was awarded to Forestry Educators Incorporated (FEI) in 2021 to provide our licensing message to multiple Society of American Forester (SAF) accredited forestry programs in the western US and Canada as well as the annual SAF convention. This last year, outreach was conducted as virtual or in-person presentations to the following institutions:

1. UC Berkeley, in-person
2. Cal Poly San Luis Obispo, in-person
3. Cal Poly Humboldt, in-person
4. University of Nevada Reno, in-person
5. Oregon State University, in-person
6. Central Oregon State University, in-person
7. University of Montana, virtual remote
8. University of British Columbia, in-person
9. Society of American Foresters National Meeting Baltimore, MD, in-person

* FEI has plans to visit the following colleges in the coming months.

1. Utah State University, in-person
2. Northern Arizona State University, in-person
3. New Mexico Highlands University, in person

* Other items for PFEC consideration in 2022 include PFEC priorities:

1. Consideration of Board certification of an Apprentice Professional Forester (APF) educational program to assist in exam preparedness and performance.
2. Consideration to provide RPF and CRM examinations utilizing computerized testing.

**Effectiveness Monitoring Committee**

The Board formed the Effectiveness Monitoring Committee (EMC) in 2014 to develop and implement a monitoring program to address both watershed and wildlife concerns and to provide a more effective feedback loop to policymakers, managers, agencies, and the public. Effectiveness monitoring is necessary to assess whether management practices are achieving the resource goals and objectives set forth in the California Forest Practice Rules (FPRs) and other natural resource protection statutes and regulations. This kind of monitoring is a key component of adaptive management. Effectiveness monitoring is also a crucial component for complying with the “ecological performance” reporting requirements outlined in AB 1492 (2012). The EMC and the Board developed a suite of critical monitoring questions based on input from a variety of stakeholders and organized them into 11 themes. The EMC uses these themes and critical questions as guidance to solicit and evaluate research monitoring projects with the goal of developing a process-based understanding of the effectiveness of the FPRs and associated regulations in maintaining and enhancing water quality and aquatic and wildlife habitats. The themes and questions revisited annually and are revised as needed.

The following is a summary of EMC activities in 2022:

* The EMC met four times virtually in open, webcast meetings to conduct business.
* The EMC continued development of a new communication system that was established in 2020, in which individual committee members were assigned as project liaisons to provide check-ins with EMC-funded Principal Investigators to ensure project progress and deliverables are on track for BOF acceptance. Project liaisons provide project updates, as appropriate, at regularly scheduled EMC meetings, and work with Board staff to facilitate communications and plan receipt of deliverables to the EMC. A new Project Liaison Guide is in development for distribution to new members and project liaisons to provide clarity around the responsibilities of project liaisons and is expected to be published for EMC use in spring 2022.
* Three members were welcomed to the EMC, and the updated Membership Roster is available online at EMC Members and Term Expirations (EMC 2022c):
  + Co-chair Dr. Elizabeth “Liz” Forsburg-Pardi took the seat of former co-chair Sue Husari in early January and will be working 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 when the Board approved the EMC’s recommendation at the August 17 meeting. 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.
  + Matthew Nannizzi took Matthew House’s seat on the EMC’s Monitoring Community when the Board approved the EMC’s recommendation at the November 2 meeting. Mr. Nannizzi is an aquatic biologist with the Green Diamond Resource Company, for which Member House was also an employee.
* The Research Themes and Critical Monitoring Questions are in the process of being revised based on the current state of the science, data gaps, and information needs in the science supporting the effectiveness of the FPRs. The EMC made initial revisions based on comments received during an official public comment period in July. Additional comments and input received during public meetings informed further revisions and included comments from the public, along with stakeholders from Water Quality Control Boards, the California Department of Forestry and Fire Protection (CAL FIRE), the Board, California Natural Resources Agency, the Nature Conservancy, and the University of California, Berkley and Davis. Revisions will continue through the end of 2022, with a vote expected on a final version in February 2023.
* The top five critical monitoring questions prioritized for funding in the 2021/22 FY remained the same in the 2022/23 Request for Proposals (RFP), based on the conclusion by the EMC that these questions remained relevant and continued to represent the EMC priorities in assessing the effectiveness of the FPRs. As in previous years, these questions were prioritized for research funding, but not to the exclusion of projects focusing on the remaining critical monitoring questions or other research needs related to the FPRs and associated regulations.
* The EMC received an ongoing allocation of $425,000 from the Timber Regulation and Forest Restoration Fund, of which $294,909 was allocated to previously awarded projects.
* A new grant program was developed for the EMC and utilized for the first time during the July 15th release of the RFP. After consideration of previously allocated funds, funding available for newly proposed projects totaled $931,216 over three FYs, comprising $130,091 in FY 2022/23; $376,125 in FY 2023/24; and $425,000 in FY 2024/25.
* The EMC reviewed five Initial Concept Proposals (ICPs) and requested Full Project Proposals (FPPs) from all five research teams. Ultimately, one proposal was withdrawn and four FPPs were considered for funding. Upon review and discussion, the committee voted to recommend funding for three proposals, with a request to the Principal Investigators (PIs) to reallocate funding of up to $47,588 to the FY 2022/23 as feasible, although funding would not be denied if the request could not be accommodated. If any funding can be reallocated to FY 2022/23, this will be accommodated up to a total of $47,588 across the three newly funded projects, and subsequent years’ budgets would be adjusted accordingly. As written in the FPPs, newly requested funding totaled $82,503 in FY 2022/23, $164,379 in FY 2023/24, and $137,271 in FY 2024/25, for a total of $384,153 over the three FYs. This would leave an anticipated $499,475 remaining for newly proposed projects solicited during the annual RFP over the next three years, or for other research endeavors. The proposed projects selected for EMC-funding support were as follows:
  + [EMC-2022-003: Santa Cruz Mountains Post-Fire Redwood Defect Study](https://bof.fire.ca.gov/media/wblj0qws/5d-i-emc-2022-003-full-project-proposal-redacted.pdf)[[1]](#footnote-2)
  + [EMC-2022-004: A critical evaluation of Forest Practice Regulation's capacity to accommodate forest restoration and resilience targets](https://bof.fire.ca.gov/media/smvji2em/5e-emc-2022-004-full-project-proposal-redacted.pdf)[[2]](#footnote-3)

* + [EMC-2022-005: Decay rate and fire behavior of post-harvest slash in coastal redwood forests](https://bof.fire.ca.gov/media/kvcdm2ou/5f-emc-2022-005-full-project-proposal-redacted.pdf)[[3]](#footnote-4)
* The EMC continued to utilize a new framework for processing completed EMC-funded projects—established and utilized for the first time in 2021—to better facilitate EMC reporting to the Board. This “Completed Research Assessment” (previously known as “Science to Policy Framework”) (EMC 2021) provides a step-by-step approach to guide EMC members in verifying scientific integrity and validity of the research and interprets the results of the scientific research as to the implications for management and policy. Two EMC members volunteer to work with the Principal Investigator(s) of each project to complete this document, which is then presented to the EMC and amended as necessary prior to presentation to the Board. This provides an easily understood narrative and synthesis for Board members to give context to study results and inform policy changes, if justified.
* Presentations were provided at public EMC meetings by members of research teams for the following projects:
  + EMC-2016-003: Repeat LiDAR Surveys to Detect Landslides – Project progress report (Short et al. 2022)
  + EMC-2017-001: Effects of Forest Stand Density Reduction on Nutrient Cycling and Nutrient Transport at the Caspar Creek Experimental Watershed – Final project presentation (Dahlke et al. 2022)
  + EMC-2017-007: The Life Cycle of Dead Trees and Implications for Management – Final project presentation (Battles et al. 2022)
  + 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 – Final project presentation (Cobb et al. 2022) and presentation of the draft (Waitman and Leonard 2022a) and revised draft of the Completed Research Assessment (Waitman and Leonard 2022b)
  + EMC-2017-012: Assessment of Night-Flying Forest Pest Predator Communities on Demonstration State Forests - with Monitoring across Seral Stages and Silvicultural Prescriptions – Project progress report (Baker 2022)
  + EMC-2019-002: Evaluating Fuel Treatment Longevity and Maintenance Needs for Fuel Reduction Projects Implemented in the Wildland Urban Interface in Plumas County, California – Final project presentation (Moghaddas 2022)
  + EMC-2019-003: Fuel Treatments and Hydrologic Implications in the Sierra Nevada – Project progress report (Boden et al. 2022)
* One or more brief project updates were provided by Board staff, Principal Investigators and/or Project Liaisons at EMC meetings for the following projects:
  + EMC-2015-001 (Class II-Large Monitoring from Caspar Creek and LaTour Demonstration State Forest)
  + EMC-2016-003 (Repeat LiDAR Surveys to Detect Landslides/Road Rule Effectiveness at Reducing Mass Wasting with LiDAR assessment)
  + EMC-2017-001 (Effects of Forest Stand Density Reduction on Nutrient Cycling and Nutrient Transport at the Caspar Creek Experimental Watershed)
  + EMC-2017-006 (Tradeoffs among riparian buffer zones)
  + EMC-2017-007 (The Life Cycle of Dead Trees and Implications for Management)
  + EMC-2017-008 (Forest Practice Rules and Fir Mortality)
  + EMC-2017-002 (Boggs Mountain Demonstration State Forest (BMDSF) Post-Fire Automated Bird Recorders Study)
  + EMC-2018-003 (Alternative Meadow Restoration)
  + EMC-2018-006 (Effectiveness of Class II Watercourse and Lake Protection Zone (WLPZ) FPRs and Aquatic Habitat Conservation Plan (AHCP) Riparian Prescriptions at Maintaining or Restoring Canopy Closure, Stream Water Temperature, and Primary Productivity)
  + EMC-2019-002 (Evaluating Treatment Longevity and Maintenance Needs for Fuel Reduction Projects Implemented in the Wildland Urban Interface in Plumas County, California)
  + EMC-2019-003 (Fuel Treatments and Hydrologic Implications in the Sierra Nevada)
  + EMC-2019-005 (San Vicente Accelerated Wood Recruitment/Large Woody Debris Impact on Salmonid Habitat)
  + EMC-2021-003 (Evaluating Response of Native Pollinators)
* A Completed Research Assessment was prepared in 2021 for project EMC-2015-001: Class II Large Watercourse Study: Multiscale Investigation of Perennial Flow and Thermal Influence of Headwater Streams into Fish Bearing Systems. The results and implications of this project were presented to the EMC and then forwarded to the Board for consideration by the Forest Practice Committee. Results from EMC-2015-001 were utilized to craft a draft rule revision related to the Anadromous Salmonid Protection Rules. The draft plea was passed, resulting in a simplification of the rule language used to identify Class II Large (II-L) watercourses (i.e., 14 CCR § 916.9 [936.9, 956.9] (g)(1)(A)( 2) was removed], as well as a removal of the sunset language in 14 CCR § 916.9 [936.9, 956.9] (g)(1)(C)] which mandated an assessment of the effectiveness of the various Class II-L identification methods.

Annual priorities are developed by the EMC, but as an advisory body to the Board, the Board can also request prioritization of items by the EMC. The 2022 EMC priorities were as follows:

* Support projects related to the EMC Themes and Critical Questions.
* Monitor progress on EMC-funded or EMC-supported monitoring projects.
* Revise the EMC’s 2018 Strategic Plan to meet the 3-year revision cycle identify in the EMC Charter.
* Separate the Research Themes and Critical Monitoring Questions from the Strategic Plan to accommodate differing revision cycles and begin revision process on this new standalone guiding document.
* Meet in the field at least once per year to observe active or proposed monitoring projects (this was not achieved from 2020–2022 due to the COVID-19 pandemic, although several comprehensive virtual presentations were given during public meetings).

In 2023, the EMC priorities are as follows:

* Support projects related to the EMC Themes and Critical Questions.
* Monitor progress on EMC-funded or EMC-supported monitoring projects.
* Meet in the field at least once in 2023 to observe active or proposed monitoring projects.
* Identify and begin process to secure funding sources to support EMC member travel to public meetings.
* Finalize and adopt 2023 Research Themes and Critical Monitoring Questions and identify up to five CMQs for priority research funding in the 2023/24 RFP.
* Finalize and adopt new Project Liaison Guidance.
* Revisit the EMC’s 2014 Charter to assess need for changes, and begin process of revision, if needed.
* Fill currently open and pending open EMC seats, as well as any seats for which terms expire in 2023, filling gaps in expertise and agency representation as needed.

#### Joint Institute for Wood Products Innovation

The Joint Institute for Wood Products Innovation (Institute) is an advisory committee to the California Board of Forestry and Fire Protection. The Institute is committed to supporting sustainable forestry and forest restoration and funds forest wood and biomass research to help retain and establish related industries in the state.

The Institute finalized and published its [‘Opportunities for Low-Carbon and Carbon-Negative Fuels from Non-Merchantable Forest Biomass in California’](https://bof.fire.ca.gov/media/mn5gzmxv/joint-institute-forest-biofuels_final_2022_ada.pdf) report online in February 2022. Led by UC Berkeley, the report assessed the attitudes of low-carbon fuel producers towards use of forest biomass, identified perceived benefits and barriers to adopting forest biomass, and developed solutions to barriers.

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 final report is anticipated in March 2023. The second project assesses the benefits of CNCs as they relate to helping to extend the onset of reinforced steel corrosion in concrete. The final report is due March 2024.

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. The final report is due by March 2024.

‘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**, t**his 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 final report is expected in spring 2024.

In addition to research, the Institute is also the Sustainable Wood Products Work Group Lead for the Wildfire and Forest Resilience Task Force.

# Chaptered Legislation with Future Regulatory Action by the Board

**AB 203 (Committee on Budget) Public resources**

Existing law requires the Department of Forestry and Fire Protection to annually provide a report to the Legislature detailing the department’s fire prevention activities, as provided. Existing law, for purposes of the report, defines “fire prevention activities” to include fire prevention education and hazardous fuel reduction and vegetation management.

This bill would revise the definition of “fire prevention activities” by specifying that “hazardous fuel reduction and vegetation management” includes fuel breaks, forest thinning, prescribed fire, reforestation, fuel treatments in the wildland-urban interface, dead fuel removal, roadside fuel reduction activities, and other activities that reasonably could be considered vegetation management. The bill would require the department, on or before December 31, 2023, to post on its internet website certain information regarding hazardous fuel reduction and vegetation management projects funded or conducted by the department for the preceding fiscal year, beginning with funding included in the 2022–23 fiscal year.

The bill would require the department, on or before December 31, 2022, to develop a standardized protocol for monitoring implementation and evaluating the positive and negative ecological and fire behavior impacts from vegetation management projects undertaken by the state, as provided. The bill would expand the requirement to post certain information and the monitoring protocol to other state agencies undertaking or funding hazardous fuel reduction and vegetation management projects by December 31, 2024.

**AB 522 Forestry: Forest Fire Prevention Exemption**

The Z’berg-Nejedly Forest Practice Act of 1973 prohibits a person from conducting timber operations, as defined, unless a timber harvesting plan prepared by a registered professional forester has been submitted to the Department of Forestry and Fire Protection. The act authorizes the State Board of Forestry and Fire Protection to exempt from some or all of those provisions of the act a person engaging in specified forest management activities, as prescribed, including the harvesting of trees for the purpose of reducing the rate of fire spread, duration and intensity, fuel ignitability, or ignition of tree crowns, as provided, known as the Forest Fire Prevention Exemption. The act provides that the Forest Fire Prevention Exemption is operative for a period of 5 years after the effective date of emergency regulations adopted by the board to implement the exemption and is inoperative after that 5-year period. Existing regulations implementing that exemption specify that it becomes inoperative 5 years after February 19, 2019.

This bill would make the operation of the Forest Fire Prevention Exemption inoperative on January 1, 2026.

**AB 2251 Urban forestry: statewide strategic plan**

Existing law, the California Urban Forestry Act of 1978, among other things, promotes the use of urban forest resources for the purposes of increasing integrated projects with multiple benefits in urban communities and promotes policies and incentives that advance improved maintenance of urban forest canopy to optimize multiple benefits.

This bill would require the Department of Forestry and Fire Protection to complete a statewide strategic plan, as specified, to achieve a 10% increase of tree canopy cover in urban areas by 2035. The bill would require the department to submit the plan to the Legislature on or before June 30, 2025.

**SB 896 Wildfires: defensible space: grant programs: local governments**

Existing law requires a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, shrub-covered lands, grass-covered lands, or land that is covered with flammable material to maintain defensible space of 100 feet from each side. Existing law requires the Director of Forestry and Fire Protection to establish a statewide program to allow qualified entities, including counties and other political subdivisions of the state, to support and augment the Department of Forestry and Fire Protection in its defensible space and home hardening assessment and education efforts. Existing law requires the director to establish a common reporting platform that allows defensible space and home hardening assessment data, collected by the qualified entities, to be reported to the department.

This bill would require any local governmental entity that is qualified to conduct these defensible space assessments in very high and high fire hazard severity zones, as specified, and that reports that information to the department, to report that information using the common reporting platform. The bill would require the department, on December 31, 2023, and annually thereafter, to report to the Legislature all defensible space data collected through the common reporting platform, as provided.

**SB 926 Prescribed Fire Liability Pilot Program: Prescribed Fire Claims Fund**

Existing law authorizes a person, firm, or corporation, or a group or combination of persons, firms, corporations, or groups, that owns or controls brush-covered land, forest lands, woodland, grassland, shrubland, or any combination thereof within a state responsibility area to apply to the Department of Forestry and Fire Protection (CalFire) for permission to utilize prescribed burning for specified public purposes. Existing law requires, on or before January 1, 2020, the Forest Management Task Force, or its successor entity, in coordination with the Department of Insurance, to develop recommendations for the implementation of an insurance pool or other mechanism for prescribed burn managers that reduces the cost of conducting prescribed fire while maintaining adequate liability protection for lives and property when conducting prescribed burns.

This bill would delete the provision requiring the task force to develop recommendations for the implementation of an insurance pool or other mechanisms for prescribed burn managers. The bill would establish, until January 1, 2028, the Prescribed Fire Liability Pilot Program, to be administered by CalFire, to increase the pace and scale of the use of prescribed fire and cultural burning, as defined, and to reduce barriers for conducting prescribed fires and cultural burning.

**SB 1203 Net-zero emissions of greenhouse gases: state agency operations**

This bill would declare the intent of the Legislature that state agencies aim to achieve net-zero emissions of greenhouse gases resulting from their operations no later than January 1, 2035, or as soon as feasible thereafter. The bill would require the Department of General Services, in consultation with the state board, and to the extent feasible, to publish, on its internet website or other publicly available location, an inventory of the greenhouse gas emissions of state agencies for the prior calendar year, on or before July 1, 2024, and annually thereafter until the goal has been achieved. The bill would require the department to develop and publish a plan, on or before January 1, 2026, that describes required actions and investments for achieving net-zero emissions of greenhouse gases and an estimate of the costs associated with the planned actions, and ensure that the required actions and investments are incorporated into the sustainability roadmaps of all state agencies.

## Forest Health Trends

## Monitoring Efforts

Monitoring of the Forest Practice Rules (FPRs) on private and public forestlands has shown generally high compliance with water-quality related rules, and that those rules are generally effective in preventing erosion and sedimentation when properly implemented (FORPRIEM, 2014). Additionally, since the passage of SB 901 in 2018, CAL FIRE has been engaged in the monitoring and reporting-on of ministerial Exemptions and Emergency Notices. Reporting from 2018 was published on May 7, 2019 ([**Olsen et al., 2019**](https://www.researchgate.net/publication/335149799_Exemption_and_Emergency_Notice_Monitoring_Pilot_Project_Report)), and the results from 2019 were approved by the Board on December 30, 2019, however impacts related to COVID-19 and the fire-siege of 2020 delayed such efforts for the 2020 calendar year.

**Pest Conditions**

The following is a summary of notable insect, disease, and forest health issues that continue to threaten and alter urban and wildland forests in California in 2022. Forest pest conditions can change dramatically from year to year. For a summary of forest pests and diseases, see the [2021 California Forest Pest Conditions Report](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd1008290.pdf). The 2022 California Forest Pest Conditions Report will be available on the [California Forest Pest Council website](http://caforestpestcouncil.org/) in early 2023.

**Invasive Shot Hole Borer (ISHB)**

Polyphagous shot hole borer (PSHB; *Euwallacea formicatus*) is established in Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Kuroshio shot hole borer (KSHB; *E. kuroshio*) is established in Los Angeles, Orange, Santa Barbara, San Diego, and Riverside Counties. KSHB was found in a San Luis Obispo County trap once in 2020. While no infestations have been found in the landscape there to date, trapping and surveying continues in high-risk locations throughout the county. PSHB and KSHB, together known as ISHB, are associated with several fungi, including species of *Fusarium*, which are known plant pathogens. Major reproductive hosts include species of willow, oak, maple, sycamore, cottonwood, and numerous other hardwoods. Extensive damage continues to occur in parks, urban trees, and riparian areas. No new sites have been found outside of the eight-county ISHB Zone of Infestation (ZOI), although there has been intensification throughout the range. Ten million dollars has been spent since 2020 on education, outreach, tree removal, trapping, and proper disposal of infested materials. Funding through CAL FIRE for tree removal and proper disposal of amplifier trees (trees producing large quantities of beetles) will end in March 2023.

**Goldspotted Oak Borer (GSOB)**

GSOB (*Agrilus auroguttatus*) continues to spread in southern California through localized beetle flight as well as firewood movement. It is now found in extensive areas of San Diego, Los Angeles, Orange, Riverside, and San Bernardino Counties, with new spot outbreaks found outside of previous infestation locations. GSOB attacks and can kill California black oak, coast live oak, and, to a lesser extent, canyon live oak, preferring larger diameter and older trees. No new sites have been detected outside of the five-county area. Surveys, monitoring, and research are ongoing.

**Bark Beetles**

Conifer-killing bark and engraver beetle populations are increasing throughout northern and central California, related to the ongoing drought conditions. Most infestations are in the central and northern Sierra Nevada, parts of the Coast Range, and counties around Clear Lake, where both Napa and Lake Counties declared tree mortality emergencies in 2022. Continuing drought conditions are exacerbating the outbreaks of western pine bark beetle (*Dendroctonus brevicomis*) in ponderosa pine and Ips engraver beetles (*Ips* spp.) in all pine species. Fir engraver beetles (*Scolytus ventralis*) are causing extensive top kill and mortality in true firs throughout the upper reaches of the Sierra Nevada. Although Douglas-fir beetle (*Dendroctonus pseudotsugae*) caused a small outbreak of Douglas-fir trees primarily in Jackson Demonstration State Forest, the main cause of Douglas-fir die-off is the flatheaded fir borer *(Phaenops drummondi*), which is causing a significant increase in the number and size of mortality patches throughout the northern half of the state. In hardwoods, the western oak bark beetle (*Pseudopityophthorus pubipennis*) is infesting true oaks around the Central Valley and Coast Range. Associated foamy bark canker outbreaks have been detected statewide, but are particularly bad in the foothills around the Central Valley.

**Mediterranean Oak Borer (MOB)**

MOB (*Xyleborus monographus*) and its associated fungi continue to kill valley and blue oaks throughout Napa, Sonoma, and Lake Counties as well as in Citrus Heights, Sacramento County. Splat verbenone appears to have moderate repellency against this pest for 4 – 6 weeks after application. Chipping, solarization, and steam treatment tests to eliminate the beetle from cut wood were conducted in November 2021; steam treatment is considered cost prohibitive and future trials will be focused on chipping and solarization. Long-term plots have been established to track decline in valley, blue, and Oregon oak in Napa and Sonoma Counties in burned and unburned plots. After 1 year, burned plots appear to be slightly more susceptible to attack and valley oaks in dry and disturbed areas show the greatest levels of decline due to MOB. No new infestations have been found outside of the known impacted counties; however, in Oregon, 21 beetles were found in traps in four counties showing the potential for further spread.

**Sudden Oak Death (SOD)**

Based on sampling by citizen scientists, the UC Berkeley-led ‘SOD Blitz 2022’ determined that new *Phytophthora ramorum* (the plant pathogen known to cause SOD) infections statewide appeared to be at lower levels than previous years, likely due to dry winter and spring conditions. In late 2021 and early 2022, CAL FIRE and UC Cooperative Extension Humboldt-Del Norte detected a satellite EU1 infestation near the original EU1 management site. These detections were later confirmed by UC Berkeley as part of the SOD Blitz. Further surveys and planning for treating this infestation are underway, as is discussion of the optimal size and location for a requested expansion of the SOD ZOI in Del Norte County.

The recent appearance of the NA2 *P. ramorum* strain (previously only detected in nurseries) near Port Orford, Oregon, coupled with the 2022 detection of the pathogen on swordfern (*Polystichum munitum*, a previously unknown host) at a botanical garden near Lincoln City, underscores the unpredictable nature of this pathogen. Work to monitor pathogen movement and characterize its ecological impacts across the wider California landscape is ongoing by collaborators throughout its known distribution.

**Incense-Cedar Dieback**

High levels of incense-cedar mortality are occurring statewide. In Calaveras Big Trees State Park, cedars are heavily infested with cedar bark beetles (*Phloeosinus* spp.). High rates of twig feeding are causing large amounts of flagging on trees in all size classes. Low rates of *Phloeosinus* infestation are occurring throughout the northern Sierras. Several canker-causing pathogens have been associated with incense-cedar damage. The pathogens are mostly known to be stress-related, opportunistic, or secondary, likely indicating that drought and heat stress are foundational causes.

**Pitch Canker Disease**

Pitch Canker (*Fusarium circinatum*) has spread into Sonoma and Mendocino Counties and is causing significant mortality in Monterey, bishop, and shore pine. Mortality is occurring from Salt Point north, through Pt. Arena and Manchester. This northern distribution is much further than was originally predicted.

**Climate-Driven Tree Die-Off and Decline in Northern California**

Die-off and decline of numerous hardwood and conifer species were reported throughout much of the San Francisco Bay Area beginning in October 2020 with more reports in 2021 and 2022. This collapse or degradation of tree health is associated with low precipitation and high evaporative demand in the region that is “reeling from intense drought” (as described by the NOAA/National Integrated Drought Information System for California-Nevada) as well as increased temperatures. Each of the affected tree and shrub species display different patterns of decline due to their physiological response to drought and heat as well as associated biological agents (fungi or insects triggered by stress). Notably affected species include acacia, eucalyptus, Monterey pine, knobcone pine, coast redwood, bay laurel, and manzanita. Additionally, oak decline and mortality not attributable to SOD has been recorded throughout much of the state.

Many of the diseases currently being identified appear to be latent, opportunistic infections living within the host trees that become disease agents during periods of extreme stress. These latent pathogens live as endophytes within the host and have become pathogenic due to the prolonged drought. Extreme heat events may also cause the endophytes to become disease agents.

In some cases, human management activities are contributing to insect and pathogen attacks, such as the extensive knobcone pine mortality on the southwest side of Mount Diablo. In this location, extensive power line clearing activities 4-5 years earlier produced large amounts of pine slash, which provided breeding material that amplified populations of *Ips* beetles which are now killing the pines in large numbers.

|  |  |  |
| --- | --- | --- |
| Tree/shrub species affected | Detected pathogen | Detected insect pest |
| Acacia | Dothiorella viticola, Diaporthe foeniculina, Dothiorella moneti |  |
| Eucalyptus | Pseudosydowia eucalypti |  |
| Monterey pine | Diplodia scrobiculata, Fusarium circinatum (pitch canker), Cronartium harknessii (western gall rust) | Dendroctonus valens (red turpentine beetle), Pseudips mexicanus (Monterey pine Ips) |
| Knobcone pine |  | Ips paraconfusus (California 5-spined Ips) |
| Coast redwood | Botryosphaeria dothidea, Neofusicoccum parvum, Neofusicoccum nonquaesitum, Diplodia mutila |  |
| CA bay laurel | Kabatiella sp. |  |
| Oaks and tanoaks | Tubakia californica, Diplodia corticola, Biscogniauxia mediterranea,  Geosmithia pallida (foamy bark canker) | Asterodiaspis spp., Parthenolecanium spp. (oak pit scales and oak Lecanium scales), Pseudopityophthorus pubipennus (western oak bark beetle) |
| Manzanita spp. | Neofusicoccum australe |  |

# Timber Harvest Permitting

The following timber harvesting permits are shown in the below tables. The use of exemptions, as allowed for under PRC § 4584 and 14 CCR § 1038, increased in acreage, but decreased in number of notifications (Figure1). Emergency Notices provided for under 14 CCR § 1052.1 decreased in number of notifications and increased in acreage (Figure 2). Individual Timber Harvesting Plans (THPs) decreased slightly in number and decreased in acreage in Fiscal Year 2021-2022 (Figure 3). The number and acreage of Non-Industrial Timber Management Plans (NTMPs) almost half of previous year (Figure 4). A Program Timberland Environmental Impact Report was approved in 2020. (Figure 5).

#### F**igure 1. Exemption Statistics for Fiscal Years 14/15-21/22**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fiscal Year** | **Harvest Document Type** | **Number of Notifications** | **Acres** | **Total Acres** |
| **2014/15** | 1038(b) Exemptions | 781 | 2,884,982 |  |
|  | All other Exemptions | 1,009 | 41,563 |  |
|  | Total Exemptions | 1,790 |  | 2,926,545 |
| **2015/16** | 1038(b) Exemptions | 697 | 2,589,358 |  |
|  | 1038(k) Exemptions | 776 | 110,224 |  |
|  | All other Exemptions | 1,003 | 27,433 |  |
|  | Total Exemptions | 2,476 |  | 2,721,015 |
| **2016/17** | 1038(b) Exemptions | 522 | 2,592,252 |  |
|  | 1038(k) Exemptions | 956 | 10,358 |  |
|  | All other Exemptions | 1,032 | 208,111 |  |
|  | Total Exemptions | 2,510 |  | 2,910,721 |
| **2017/18** | 1038(b) Exemptions | 554 | 2,933,286 |  |
|  | 1038(k) Exemptions | 414 | 44,357 |  |
|  | All other Exemptions | 1,042 | 482,206 |  |
|  | Total Exemptions | 2,010 |  | 3,459,849 |
| **2018/19** | 1038(a) & 1038(b) Exemptions (prior to 3/1/19) | 320 | 1,310,933 |  |
|  | 1038(b) Exemptions (after 3/1/19) | 131 | 999,762 |  |
|  | 1038(f) Exemptions (after 3/1/19) | 3 | 112 |  |
|  | 1038(k) Exemptions | 94 | 7,464 |  |
| **2018/19 (continued)** | 1038.3 Exemptions (after 3/1/19) | 15 | 1,892 |  |
|  | All other Exemptions | 1,605 | 454,582 |  |
|  | Total Exemptions | 2,168 |  | 2,774,745 |
| **2019/20** | 1038.3 | 48 | 5,447 |  |
|  | 1038(b) | 463 | 2,281,985 |  |
|  | 1038(f) | 8 | 165 |  |
|  | 1038(g) | 0 | 0 |  |
|  | All other Exemptions | 2,246 | 733,933 |  |
|  | Total Exemptions | 2,765 |  | 2,706,977 |
| **2020/21** | 1038.3 | 66 | 5,039 |  |
|  | 1038 (b) | 384 | 2,023,689 |  |
|  | 1038 (f) | 3 | 55 |  |
|  | 1038 (g) | 126 | 602 |  |
|  | All other Exemptions | 1020 | 879,956 |  |
|  | Total Exemptions | 1,599 |  | 2,909,341 |
| **2021/22** | 1038.3 | 70 | 6,065 |  |
|  | 1038 (b) | 289 | 1,408,843 |  |
|  | 1038 (f) | 2 | 69 |  |
|  | 1038 (g) | 0 | 0 |  |
|  | All other Exemptions | 809 | 1,410,076 |  |
|  | Total Exemptions | 1,170 |  | 2,825,053 |

#### Figure 2. Emergency Notice Statistics for Fiscal Years 14/15-21/22.

|  |  |  |  |
| --- | --- | --- | --- |
| **Fiscal Year** | **Harvest Document Type** | **Number of Notifications** | **Total Acres** |
| **2014/15** | Emergency Notice | 266 | 66,735 |
| **2015/16** | Emergency Notice | 231 | 28,921 |
| **2016/17** | Emergency Notice | 81 | 15,123 |
| **2017/18** | Emergency Notice | 189 | 14,133 |
| **2018/19** | Emergency Notice | 289 | 42,247 |
| **2019/20** | Emergency Notice | 158 | 16,056 |
| **2020/21** | Emergency Notice | 452 | 86,616 |
| **2021/22** | Emergency Notice | 289 | 94,552 |

Note: Calculated as Emergency Notices validated by CAL FIRE review team between July 1 and June 30 of each FY.

#### Figure 3. THP Statistics for Fiscal Years 11/12-21/22

| **Fiscal Year** | **Harvest Document Type** | **Number of Plans** | **Acres** |
| --- | --- | --- | --- |
| **2011-12** | THP | 270 | 139,553 |
| **2012-13** | THP | 243 | 107,051 |
| **2013-14** | THP | 278 | 146,384 |
| **2014-15** | THP | 260 | 128,644 |
| **2015-16** | THP | 249 | 99,271 |
| **2016-17** | THP | 219 | 91,067 |
| **2017-18** | THP | 266 | 105,433 |
| **2018-19** | THP | 244 | 100,888 |
| **2019-20** | THP | 234 | 122,586 |
| **2020-21** | THP | 207 | 92,917 |
| **2021-22** | THP | 194 | 64,272 |

Note: Calculated as Timber Harvest Plans validated by CAL FIRE review team between July 1 and June 30 of each FY.

#### Figure 4. NTMP Statistics for Fiscal Years 11/12-21/22

| **Fiscal Year** | **Harvest Document Type** | **Number of Plans** | **Acres** |
| --- | --- | --- | --- |
| **2011-12** | NTMP | 14 | 10,932 |
| **2012-13** | NTMP | 12 | 7,365 |
| **2013-14** | NTMP | 10 | 4,126 |
| **2014-15** | NTMP | 12 | 3,367 |
| **2015-16** | NTMP | 17 | 8,100 |
| **2016-17** | NTMP | 23 | 5,105 |
| **2017-18** | NTMP | 14 | 4,448 |
| **2018-19** | NTMP | 14 | 2,410 |
| **2019-20** | NTMP | 13 | 4,215 |
| **2020-21** | NTMP | 8 | 1,542 |
| **2021-22** | NTMP | 5 | 2,413 |

Note: Calculated as Nonindustrial Timber Management Plans validated by CAL FIRE review team between July 1 and June 30 of each FY.

#### Figure 5. PTEIR Statistics for Fiscal Year 20/21

| **Fiscal Year** | **Harvest Document Type** | **Number of Plans** | **Acres** |
| --- | --- | --- | --- |
| **2020-21** | PTEIR | 1 | 17,480 |

## Timber Harvesting Volumes

## The following timber harvesting volumes are shown in the below table. The statewide estimate for timber harvesting data from California state forests and other public lands for Calendar Year 2021. Information presented in this table is generated through a statewide census of California’s database of forest inventory.

#### Figure 6. Timber Harvesting Volumes (January through September 2021).

| **Private and Tribal** | **State** | **BLM and other Public** | **Forest Service** |
| --- | --- | --- | --- |
| 1,586,774 MBF | 14,038 MBF | 1,069 MBF | 183,068 MBF \* |

# \*Partial harvest volumes only

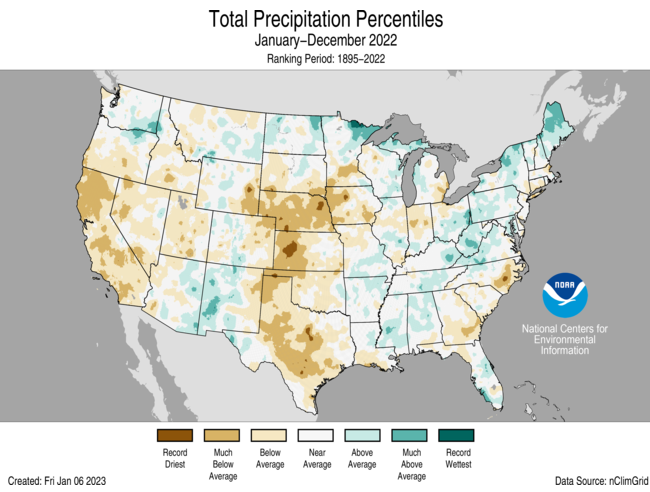
# Fire Protection Trends

## Weather Patterns

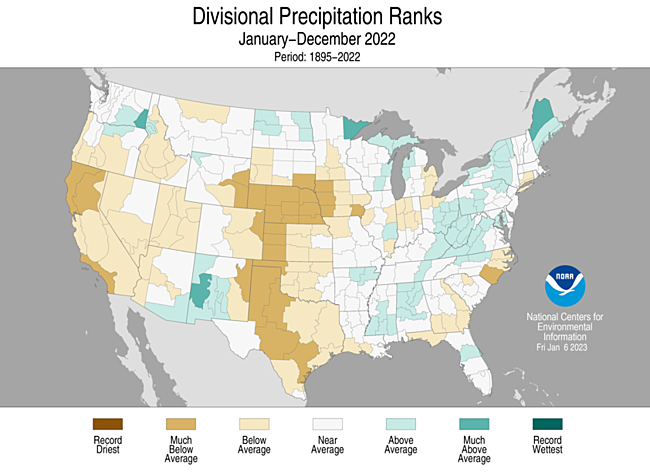
Much of California was ranging from near average to much below average precipitation for calendar year 2022, especially near the northern Sacramento Valley area ([NOAA, 2022](https://www.ncei.noaa.gov/access/monitoring/us-maps/)). Precipitation was also significantly below average for the water year (Figure 6), possibly reflecting a slightly shorter or later than average start to winter precipitation in 2021 ([NOAA, 2022](https://www.ncei.noaa.gov/access/monitoring/us-maps/)). Temperatures have generally been much above average for majority of the state (Figure 8) ([NOAA, 2022)](https://www.ncei.noaa.gov/access/monitoring/us-maps/).

The California Department of Water Resources recorded three straight months of record dry conditions, the manual survey recorded just 2.5 inches of snow depth and a snow water equivalent of one inch, which is four percent of average for this location for April 1. Statewide, the snowpack is just 38 percent of average for this date.

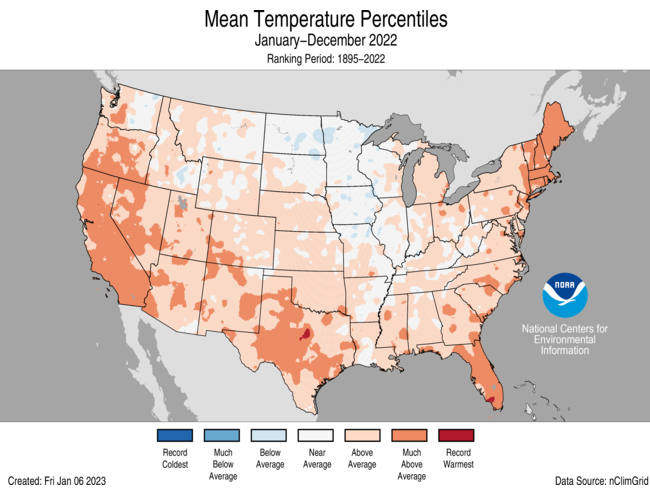
#### Figure 7. Precipitation Rankings for January-December 2022 When Compared with Local Averages from 1895-2022. NOAA National Centers for Environmental Information.



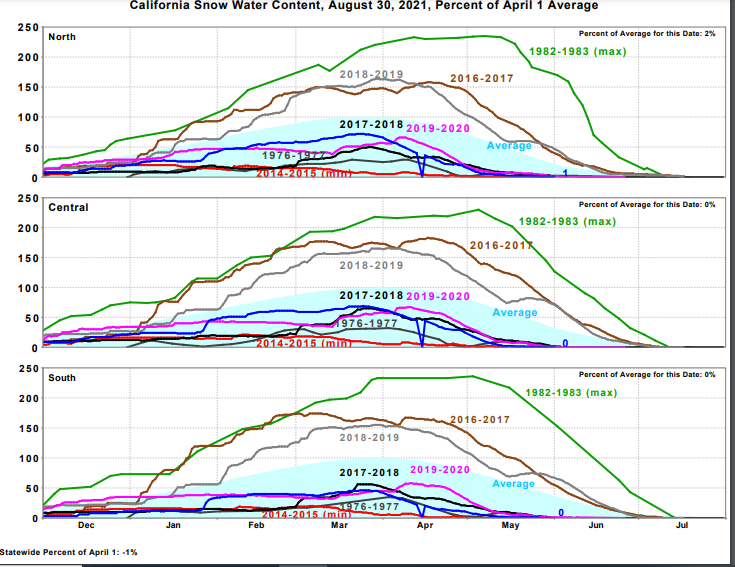
#### Figure 8. Precipitation Rankings for January - December 2022 When Compared with Local Averages from 1895-2022. NOAA National Centers for Environmental Information.*[[4]](#footnote-5)*



#### Figure 9. Temperature Rankings for January-December 2022 When Compared with Local Averages from 1895-2022. NOAA National Centers for Environmental Information.



#### Figure 10. California Snow Water Content,*[[5]](#footnote-6)* August 30, 2021, Percent of April 1 Average. California Department of Water Resources.



## Prescribed Fire and Fuel Reduction Efforts

As fire size and severity have worsened over the past decade, mandates to focus on fuels reduction treatments have arisen. In 2018, Executive Order B-52-18 from then-governor Brown ordered the doubling of forest acres treated per year from 250,000 to 500,000 statewide within five years. The expanded use of fuels treatments to prevent catastrophic wildfire continues to be a high priority for the Board and CAL FIRE. Fuel treatments are intended to reduce the amount of surface and ladder fuels and thereby reduce the risk of catastrophic fires that burn longer, further, and hotter. The modification of fire behavior because of fuel reduction efforts may prevent loss of life, reduce fire suppression costs, reduce property losses, and protect natural resources. Fuel treatments utilized by CAL FIRE include, but are not limited to, prescribed fire, mechanical clearing, cooperative fuel reduction grants, and encouraging stand management by timber owners through application of the FPRs. EO B-52-18 also encouraged the use of prescribed fire as a management tool.

CAL FIRE’s Vegetation Management Program (VMP) is a cost-sharing program that encourages fuel reduction in state responsibility area lands (SRA) and focuses on prescribed fire. The use of fire mimics natural processes, enables fuel reduction, and restores fire to its historic role in wildland ecosystems, which may improve native communities. The VMP can be utilized by private landowners to accomplish fuel reduction goals on their property using prescribed fire and other fuel management techniques. Figures 12 and 13 below illustrate the acreage goals and number of acres treated in the three most recent fiscal years.

#### Figure 11. Broadcast/Prescribed Burn Targets and Acres Completed.

**\*FY 2021/22 is through June 30, 2021**

| **Fiscal Year** | **Target** | **Completed** | **% Completed** |
| --- | --- | --- | --- |
| **2017/2018** | 20,000 | 19,413 | 97.07% |
| **2018/2019** | 25,000 | 31,305 | 125.22% |
| **2019/2020\*** | 25,000 | 13,450 | 53.80% |
| **2020/2021** | 25,000 | 27,143 | 108.57% |
| **2021/2022** | 30,000 | 32,226 | 107.42% |

#### Figure 12. All Other Fuel Reduction Method Targets and Acres Completed.

**\*FY 2020/21 is through December 31, 2020**

| **Fiscal Year** | **Target** | **Completed** | **% Completed** |
| --- | --- | --- | --- |
| **2017/2018** | 20,000 | 13,344 | 66.70% |
| **2018/2019** | 20,000 | 15,331 | 76.66% |
| **2019/2020\*** | 20,000 | 13,730 | 68.65% |
| **2020/2021** | 20,000 | 28,033 | 140.17% |
| **2021/2022** | 20,000 | 12,795 | 63.98% |

Defensible space is managed space around a structure or other site of importance designed to reduce the risk of a fire spreading into adjoining wildland, and vice versa. Reduced natural fuel loads, decreased continuity of fuels, the removal of flammable materials from near structures, and the use of fire-resistant materials in landscaping and home construction are just some of the techniques that contribute to defensible space. These techniques reduce the chances of a structure igniting during a wildfire and increase firefighter safety during structure defense operations. Defensible space and the management of fuels, particularly around homes and public buildings, have become increasingly important as the Wildland-Urban Interface (WUI) continues to expand and more severe fires threaten WUI areas. CAL FIRE recently updated the Defensible Space Collector App to make inspections more efficient and accurate. Figure 14 illustrates the goals for defensible space inspections and how many were accomplished within the three most recent fiscal years.

#### Figure 13. Defensible Space Inspections Completed.

| **Fiscal Year** | **Target** | **Completed** | **% Completed** |
| --- | --- | --- | --- |
| **2017/2018** | 250,000 | 217,666 | 87.07% |
| **2018/2019** | 250,000 | 204,341 | 81.74% |
| **2019/2020** | 250,000 | 222,040 | 88.82% |
| **2020/2021\*** | 250,000 | 150,056 | 60.02% |

CAL FIRE also sponsors several grant opportunities which focus on fuels reduction and forest health. The California Forest Improvement Program (CFIP) can be used by small landowners for reimbursement of forestry practices that improve the health and resilience of their lands. These activities may include fuels reduction practices. Additionally, CAL FIRE sponsors the Forest Health, Urban and Community Forestry, and Fire Prevention grants, which are funded through the Greenhouse Gas Reduction Fund. Part of their overarching goal is improving carbon sequestration by reducing the risk of intense wildfires and improving general forest health.

Finally, CAL FIRE has developed designated fuels reduction crews. Previously, fuels reduction was often completed by local CAL FIRE teams when they were not fighting fire. The development of designated crews for fuels reduction is anticipated to increase prescribed fire and manual fuels treatment numbers in the coming years. Five crews are headquartered in the Northern Region and five in the Southern Region. CAL FIRE approved 318 applicants to take the most recent Forestry Technician exam. The new members of these crews are currently rotating between their required trainings and working in the field.

## California Vegetation Treatment Program (CalVTP)

On December 30, 2019, the Board certified a Program Environmental Impact Report (PEIR) and approved the California Vegetation Treatment Program (CalVTP), a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting program. This CalVTP and PEIR will streamline California Environmental Quality Act (CEQA) compliance for CAL FIRE and other state and local public agencies’ vegetation management projects. The CalVTP PEIR is intended for vegetation management activities that lower the risk of catastrophic wildfires on non-federal lands by managing vegetation to modify or reduce hazardous fuels. There are currently 13 proposed projects and 5 which have been certified for implementation (see Figure 15 below).

In collaboration with Ascent Environmental, Inc, in the spring of 2021 the Board conducted two training sessions for potential lead agencies. The trainings covered the practicalities of using the CalVTP for CEQA streamlining and are available for viewing on the Board’s website.

In 2021, the Board was allocated two million dollars to provide technical assistance to lead agencies for preparing Project-Specific Analyses (PSAs). Again, in collaboration with Ascent Environmental, Board staff are in the process of identifying projects that would be an appropriate use of this funding.

#### Figure 14. Vegetation Treatment Projects Certified under the CalVTP.

| **Project ID** | **Acres Treated** | **Treatment Type** |
| --- | --- | --- |
| **2020-9** | 398 | Broadcast burning; pile burning |
| **2020-12** | 100 | Manual treatment; pile burning |
| **2020-13** | 1,630 | Broadcast burning; pile burning; Manual treatment; Mechanical treatment; Herbicide Application |
| **2020-10** | 90 | Broadcast burning; Pile burning; Mechanical treatment |
| **2020-1** | 1,012 | Broadcast burning |
| **Sum** | 3,230 |  |

***Wildfire Activity***

The 2022 wildfire season in California experienced an unusually early start amid an ongoing drought and historically low rainfall and reservoir levels. Drastic climatic and ecological conditions led to the anticipation of a potentially above-average wildfire season on the heels of two previous such seasons in 2020 and 2021. However, while the number of fires in 2022 was only slightly below the 5-year average, the total acreage burned was well below the 5-year average; 363,917 acres burned in 2022 versus 2,322,496 acres burned on average in the past five years. Despite the 'quiet' year as measured in acreage, several significant wildfires burned in California in 2022; these include the Oak Fire in Mariposa County, which burned over 180 structures, the McKinney Fire in Siskiyou County, which caused 4 fatalities, and the Mosquito Fire in Placer and El Dorado counties, which was California's largest wildfire of the year.

***Top 2022 Largest Fires***

|  |  |  |  |
| --- | --- | --- | --- |
| ***FIRE NAME*** | ***DATE*** | ***COUNTY*** | ***ACRES BURNED*** |
| **Mosquito** | September 2022 | El Dorado and Placer | 76,788 |
| **McKinney Fire** | July 2022 | Siskiyou | 60,138 |
| **Mountain Fire** | September 2022 | Siskiyou | 13,440 |
| **Lost Lake Fire** | May 2022 | Riverside | 5,856 |

\*These are the Top 20 regardless of state, federal, or local responsibility.

***Note: Unless noted otherwise, these values tabulate wildfires responded to by CAL FIRE in SRA and LRA regions under contract with CAL FIRE.***

# Accomplishments 2022 – Regulatory

**Class II-L Determination Amendments**

The regulatory methods for determining Class II-L watercourse status were set to expire on January 1, 2023, which would have resulted in significant issues of clarity and consistency within the Rules. 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 terms of both drainage area and average active channel width to determine if these criteria were effective in identifying perennial Class II-L watercourses in different lithologies, or if rule modifications were needed. These studies and analysis, completed and presented to the Board in 2021, identified that drainage area is a much better predictor of certain watercourse values promoted by the Board’s Class II-Large designation than average active channel width. Additionally, the studies and analysis revealed that average active channel width was, in fact, a poor predictor of certain watercourse values promoted by the Class II-L designation. The completed rule package eliminates the regulatory method of Class II-L determination based on average active channel width. The action also eliminates the regulatory sunset period for methods to determine Class II watercourse type in order to avoid future issues of regulatory clarity or inconsistency.

**Spotted Owl Resource Plan Amendments**

As written, the definition of “Spotted Owl Resource Plan” in 14 CCR § 895.1 did not include timberlands such as those covered by an NTMP or WFMP. The objective was to amend this definition to reflect that this resource plan is open to all timberland landowners.

**Notice of Intent Amendments**

The Board considered amending 14 CCR § 1032.7(d) that read in part: *“A Notice of Intent shall include the following information: The acres proposed to be harvested. The regeneration methods and intermediate treatments to be used.”* The objective was to include all acres where timber operations will occur, not just the area where timber will be harvested. In doing so, the Board considered the current definition of Logging Area and the lack of a definition of “plan area”.

Additionally, the rule section did not capture all possible treatments that were permitted to occur, e.g., special prescriptions and other types of associated timber harvesting, such as road right-of-way or timberland conversion.

**Substantially Damaged Consistency Amendments**

Between the two provisions 14 CCR §§ 895.1 and 913.8, there existed an issue of clarity and consistency regarding what stocking requirements apply on Substantially Damaged Timberlands within the Southern Subdistrict of the Coast Forest District. Special Harvesting Methods in the Southern Subdistrict includes an exclusive list of stocking requirements; however, the definition for and provisions of Substantially Damaged Timberland allow for stocking standards which are not included within the exclusive list in 14 CCR § 913.8.

**Santa Cruz and San Mateo Weekend Emergency**

To extend the allowed days of operation of chainsaws and other power-driven equipment within, and the hauling of forest products from, Timberland affected by the CZU Lightning Complex Fire of 2020 in Santa Cruz and San Mateo Counties in response to requests from those counties, as well as timber operators in those counties.

**Emergency Notice RPF Amendments:**

The December 23, 2019 “Report On Emergency Notice Of Timber Operations Monitoring Results And Exemption Notice Use” identified sites of surface erosion and sediment delivery which resulted from Emergency Notice Timber Operations. The report indicated that Forest Practice Rule non-compliance and the lack of RPF involvement in those operations may have been contributing factors to those sites. The Committee reviewed these findings and associated regulations for opportunities to improve operational outcomes and overall compliance in Emergency Notice Timber Operations.

**Local Government**

**General Plan Safety Elements**

Under Government Code § 65302.5, the Board is required to review the General Plan Safety Elements for jurisdictions with SRA or very high fire hazard severity zones (VHFHSZ). Utilizing staff from CAL FIRE’s Land Use Planning team, the Board established a standardized method to review the safety element of general plans. The methodology includes:

1. Reviewing the safety element for the requirements in Government Code §65302, subdivision (g)(3)(A),
2. Examining the safety element for goals, policies, objectives, and implementation measures that mitigate the wildfire risk in the planning area (Gov. Code, § 65302, subd. (g)(3)(B) & (C)), and
3. Making recommendations for methods and strategies that would reduce the risk of wildfires (Gov. Code, § 65302.5, subd. (b)(3)(B)).

Once completed, the Safety Element Assessment should provide clear guidance to a city or county regarding any areas of deficiency in the safety element as well as specific goals, policies, objectives, and implementation measures the Board recommends adopting to mitigate or reduce the wildfire threat in the planning area. The Board does not have the authority to approve safety elements, but rather offers recommendations to improve fire hazard planning in the planning area. If jurisdictions choose not to implement the Board’s recommendations, they must respond in writing to the Board discussing the reasons why not. If a local jurisdiction chooses not to adopt the Board’s recommendations, the Board may request a consultation which must occur before the local jurisdiction proceeds with adopting its draft safety element. The Board has reviewed 121 safety elements since the requirement took effect in 2013, 22 of which occurred in 2022.

**Figure 17. General Plan Safety Elements Reviewed by the Board January 2022 – November 2022**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Region** | **Type** | **Jurisdiction** | **Received** | **Reviewer** | **Board Review** |
| **CSR** | City | Santa Clarita | 12/22/21 | Shelley Redden | 1/18/2022 |
| **CSR** | City | Agoura Hills | 1/7/22 | Shelley Redden | 1/18/2022 |
| **CSR** | County | Los Angeles | 1/5/22 | Shelley Redden | 1/18/2022 |
| **CSR** | City | Lake Forest | 2/16/22 | Shelley Redden | 3/1/22 |
| **CSR** | City | Beverly Hills | 2/15/22 | Shelley Redden | 3/1/22 |
| **CNR** | City | Shasta Lake | 2/21/22 | Shane Vargas | 3/1/22 |
| **CNR** | City | Pacifica | 4/26/22 | Anthony Massucco | No VHFSZ, informal review only |
| **CSR** | City | Canyon Lake | 5/11/22 | Shelley Redden | 6/7/2022 |
| **CSR** | City | Jurupa Valley | 5/25/22 | Shelley Redden | 6/7/2022 |
| **CSR** | City | Palmdale | 8/16/22 | Kevin Merkh | 8/16/2022 |
| **CNR** | County | Marin | 9/19/22 | Shane Galvez | 9/22/2022 |
| **CSR** | City | Anaheim | 9/14/22 | Shelley Redden | 9/22/2022 |
| **CSR** | City | Burbank | 9/21/22 | Kevin Merkh | 9/22/2022 |
| **CNR** | City | San Carlos | 10/11/22 | Shane Vargas | 11/1/2022 |
| **CNR** | City | Redwood City | 10/5/22 | Anthony Massucco | 11/1/2022 |
| **CNR** | City | Truckee | 10/17/22 | Shane Vargas | 11/1/2022 |
| **CSR** | City | San Jacinto | 10/28/22 | Shelley Redden | 11/1/2022 |

**Subdivision Review Program**

Public Resources Code §4290.1 requires the Board, in consultation with the State Fire Marshal, to “survey local governments, including counties, cities, and fire districts, to identify existing subdivisions located in a state responsibility area or a very high fire hazard severity zone [SRA or LRA VHFHSZ], identified pursuant to Section 51178 of the Government Code, without a secondary egress route that are at significant fire risk” on or before July 1, 2022.

The Board is additionally required to develop recommendations to improve fire safety in the identified subdivisions, in consultation with the State Fire Marshal and the local government that identified the subdivision. Subdivision Review Program staff at the Office of the State Fire Marshal conduct an on-the-ground fire safety survey of each identified subdivision. Program staff then develop survey reports, which include fire safety recommendations, for review by the Board’s Resource Protection Committee. The Board does not vote to approve or deny reports and recommendations; its role is to review and provide input before reports are sent back to local jurisdictions on the Board’s behalf. The Resource Protection Committee began reviewing these reports on a county-by-county basis at its November 2021 meeting. The recommendations included in these reports are non-binding, and the Board does not have legal authority to require their implementation.

Of the state’s 56 counties which contain SRA or LRA VHFHSZ, 45 contain subdivisions which meet the criteria to be surveyed. Approximately 1,800 subdivisions have been identified for survey. Surveys have been completed for approximately 1,200 of those, or 56%%. The Board has reviewed approximately 1,100 of the resulting reports as of November 2022.

**Figure 18. Jurisdictions for which all Fire Safety Survey Reports have been completed and reviewed by the Board, Jan 2022 - November 2022**

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Jurisdiction** | | **Board Review** |
| **CNR** | | Napa | 3/1/2022 |
| **CNR** | | Yolo | 3/1/2022 |
| **CNR** | | Solano | 3/1/2022 |
| **CNR** | | Colusa | 3/1/2022 |
| **CNR** | | Tehama | 3/1/2022 |
| **CSR** | | Ventura County | 3/1/2022 |
| **CSR** | | Ventura City | 3/1/2022 |
| **CNR** | | City of Auburn | 4/5/2022 |
| **CSR** | | Tulare County | 4/5/2022 |
| **CSR** | | Kern County | 4/5/2022 |
| **CNR** | | City of Diamond Springs | 5/3/2022 |
| **CSR** | | City of El Cajon | 6/7/2022 |
| **CSR** | | City of Alpine | 6/7/2022 |
| **CSR** | | City of San Marcos | 6/7/2022 |
| **CSR** | | City of Lakeside | 6/7/2022 |
| **CSR** | | Bonita Fire Protection District | 8/16/2022 |
| **CSR** | | Chula Vista Fire Department | 8/16/2022 |
| **CSR** | | City of Santee | 8/16/2022 |
| **CSR** | | Encinitas Fire Department | 8/16/2022 |
| **CSR** | | Escondido City Fire Department | 8/16/2022 |
| **CSR** | | Lakeside Fire Protection District | 8/16/2022 |
| **CSR** | | North County Fire Department (F | 8/16/2022 |
| **CSR** | | Oceanside Fire Department | 8/16/2022 |
| **CSR** | | Rancho Santa Fe Fire Department | 8/16/2022 |
| **CSR** | | San Diego City Fire and Rescue | 8/16/2022 |
| **CSR** | | San Diego County Fire Department | 8/16/2022 |
| **CSR** | | Riverside County | 9/22/2022 |
| **CSR** | | City of Anaheim | 9/22/2022 |
| **CSR** | | City of Escondido | 9/22/2022 |
| **CSR** | | Los Angeles County | 11/1/2022 |
| **CNR** | | Sonoma County | 11/1/2022 |

**State Forests**

The Board has changed the review periods for Initial State Forest Management Plans from five to ten years. This change was made following concerns expressed by forest managers, citing limited staffing and increasing workload. The longer period will allow the plans to be broader, encompass longer-term changes and trends, and reduce pressures on staff. Figure 20 (below) outlines the proposed schedule for management plan updates. The Department committed to an early review of the Jackson Forest Management Plan in 2022 as part of government-to-government discussions with a local tribe. This is expected to be brought to the Board in late 2023 or early 2024.

|  |  |  |
| --- | --- | --- |
| **Figure 20. Proposed Management Plan Update Schedule Demonstration State Forest** | **Management Plan Update (Year)** | **Management Plan Status** |
| LaTour | 2022 | Approved 2013 |
| Soquel | 2024 | Approved 2014 |
| Jackson | 2026 | Approved 2016 |
| Boggs Mountain | 2028 | Approved 2018 |
| Mountain Home | 2030 | Approved 2020 |

**Stewardship Lands**

The Department acquired five of Stewardship Land parcels in 2022 which finalize six of the seven total transactions. The final transaction, Pit River and Tunnel Reservoir, has been signed by the Department, PG&E, and Shasta land Trust, and submitted to the Public Works Board for consideration at their February meeting. Escrow would be expected to close within 2-weeks of Public Works Board approval based on past transactions. An overview of all the transactions is below.

* [North Fork Mokelumne](http://www.stewardshipcouncil.org/land_conservation/planning_units/north-fork-mokelumne.htm) Planning Unit (Amador County; 1,052 acres)
  + 12/23/2019: Escrow closed.
  + Conservation easement held by the Mother Lode Land Trust.
* [Cow Creek](http://www.stewardshipcouncil.org/land_conservation/planning_units/cow-creek.htm) Planning Unit (Shasta County; 2,246 acres)
  + 6/24/2022: Escrow closed.
  + Conservation Easement held by Shasta Land Trust
* [Bear River](http://www.stewardshipcouncil.org/land_conservation/planning_units/bear-river.htm) (BYLT) Planning Unit (Nevada and Placer County; 267 acres)
  + 7/1/2022: Escrow closed.
  + Conservation Easement held by Bear Yuba Land trust
* [Lake Spaulding](http://www.stewardshipcouncil.org/land_conservation/planning_units/lake-spaulding.htm) Planning Unit (Placer and Nevada County; 1,151 acres)
  + 9/21/2022: Escrow closed.
  + Conservation Easement held by Placer Land Trust.
* [Battle Creek](https://www.stewardshipcouncil.online/battlecreek) Planning Unit (Shasta County; 2,050 acres)
  + 12/7/2022: Escrow closed.
  + Conservation easement held by Western Shasta resource Conservation District.
* [Bear River](http://www.stewardshipcouncil.org/land_conservation/planning_units/bear-river.htm) (PLT) Planning Unit (Placer County; 1,200 acres)
  + 12/8/2022: Escrow closed.
  + Conservation Easement held by Placer Land Trust.
* [Pit](http://www.stewardshipcouncil.org/land_conservation/planning_units/pit-river.htm) & [Tunnel](http://www.stewardshipcouncil.org/land_conservation/planning_units/tunnel-reservoir.htm) Reservoir Planning units (Shasta County; 6,982 acres)
  + 12/20/2022: Final documents submitted to the Public Works Board for their February 10, 2023, hearing. If approved, close of escrow is anticipated the week of February 20, 2023.
  + Conservation Easement held by Shasta Land Trust.

The Conservation Easements require forest management activities to conform to a forest management plan approved by the Board. The Department will work with the Board to develop these plans and work them into the review schedule outlined in Figure 20.

# Professional Licensing and Forest Practice Enforcement

Pursuant to California Public Resources Code (PRC) § 750 *et seq.,* the Board is authorized to grant licenses to Registered Professional Foresters (RPFs) and specialty certificates for Certified Rangeland Managers (CRMs). Earning either license is contingent upon meeting educational and work experience standards and ultimately passing an examination specific to the license or specialty.

The term “Professional Forester” is defined in PRC § 752 and refers to a person who, by reason of his or her knowledge of the natural sciences, mathematics, and the principles of forestry, acquired by forestry education and experience, performs services, including, but not limited to, consultation, investigation, evaluation, planning, or responsible supervision of forestry activities when those professional services require the application of forestry principles and techniques. The CRM certification is the only “Certified Specialist” credential bestowed and recognized by the Board. A CRM is defined in 14 CCR § 1651 as “… a person who provides services pursuant to 14 California Code of Regulations (CCR) 1602, at the request of the landowner or hiring agent, relating to the application of scientific principles to the art and science of managing rangelands and range.”

*Figure 22. Board Licensed Professionals and Certified Specialists*

|  |  |  |
| --- | --- | --- |
| **Year** | **RPFs** | **CRMs** |
| **2017** | 1161 | 84 |
| **2018** | 1132 | 88 |
| **2019** | 1126 | 89 |
| **2020** | 1105 | 86 |
| **2021** | 1108 | 81 |
| **2022** | 1110 | 80 |

**Professional Discipline**

#### Professional disciplinary matters are confidential. They are handled administratively and generally do not culminate in a hearing before an Administrative Law Judge and/or the Board. In 2022, the PFEC received three RPF complaints. For all three cases, the allegations of failure of professional responsibility were not sustained and the cases were closed.

#### Enforcement

PRC § 4601 *et seq.* authorizes the Board to investigate and discipline, “Any person who willfully violates any provision of this chapter or rule or regulation of the Board….” These civil penalties are identified, investigated, and pursued by CAL FIRE, with final adjudicative authority on these matters residing with the Board. During the 2020 calendar year, the Board deliberated and acted on seven civil penalties for non-compliance with the Forest Practice Act and/or the Forest Practice Rules.

# Acronyms:

The following acronyms and abbreviations are used in this document:

APA: Administrative Procedure Act

Board: California State Board of Forestry and Fire Protection

CalEPA: California Environmental Protection Agency

CAL FIRE: California Department of Forestry and Fire Protection

CalVTP: California Vegetation Treatment Program

CDTFA: California Department of Tax and Fee Administration

CEQA: California Environmental Quality Act

CFIP: California Forest Improvement Program

CLFA: California Licensed Foresters Association

CRM: Certified Rangeland Manager

DWR: California Department of Water Resources

EMC: Effectiveness Monitoring Committee

FCAT: Forest Climate Action Team

FPA: Z’berg-Nejedly Forest Practice Act of 1973

FPRs: Forest Practice Rules

FRAP: Fire and Resource Assessment Program

FRID: Fire Return Interval Departure

LRA: Local Responsibility Area

NTMP: Nonindustrial Timber Management Plan

OAL: Office of Administrative Law

PG&E: Pacific Gas & Electric

PEIR: Program Environmental Impact Report

PFEC: Professional Foresters Examining Committee

RMAC: Range Management Advisory Committee

RPF: Registered Professional Forester

SRA: State Responsibility Area

SYP: Sustained Yield Plan

UCANR: University of California Agriculture and Natural Resources

USDM: United States Drought Monitor

USFS: United States Forest Service

VHFHSZ: Very High Fire Hazard Severity Zone

WFMP: Working Forest Management Plan

WUI: Wildland-Urban Interface

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1. <https://bof.fire.ca.gov/media/wblj0qws/5d-i-emc-2022-003-full-project-proposal-redacted.pdf> [↑](#footnote-ref-2)
2. <https://bof.fire.ca.gov/media/smvji2em/5e-emc-2022-004-full-project-proposal-redacted.pdf> [↑](#footnote-ref-3)
3. <https://bof.fire.ca.gov/media/kvcdm2ou/5f-emc-2022-005-full-project-proposal-redacted.pdf> [↑](#footnote-ref-4)
4. Note: Data for this period were not found presented at the same fine scale used for the annual data, Figures 9 and 11. [↑](#footnote-ref-5)
5. The Y-axis of the figure is percent of April 1st average Snow Water Content, which refers to the depth of liquid that would result over the same land area if the entire snowpack were to be melted instantaneously. [↑](#footnote-ref-6)