

2021

Report to the Joint Legislative Budget Committee on the Timber Regulation and Forest Restoration Program

Assembly Bill 1492

In Fulfillment of the Annual Reporting Requirement of Public Resources Code Section 4629.9







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EXECUTIVE SUMMARY

The Timber Regulation and Forest Restoration Fund (Fund), established in 2012 under Assembly Bill 1492, places a one percent tax on retail lumber to pay for agency staffing, permits, oversight, and environmental protection of California's timberlands. In FY 2020-2021 the fund supported nearly 224 agency staff at the California Natural Resources Agency, California Department of Forestry and Fire Protection, California Department of Fish and Wildlife, State and Regional Water Boards, and the California Geological Survey.

The 2020 wildfire season was the largest in California's recorded history, burning nearly 4.5 million acres across the state. Like FY 2018-2019 and FY 2019-2020, the state experienced a shift from green tree timber harvest plans to post-fire salvage operations. The number of Emergency Notices increased significantly from about 150 in FY 2019-2020, to over 500 in FY 2020-2021; more than 90%



of which were wildfire related. Consequently, THPs decreased during the same time frame from about 250 per year to just 208 in FY 2020-2021.

Program staff are keenly aware of the effects of wildfire on the timber industry and the associated ecosystems. Considering these challenges staff:

- Shifted focus to post-fire salvage operations, while maintaining consistent THP permitting timelines,
- Made notable contributions to Key Actions outlined in the Wildfire and Forest Resilience Action Plan,
- Contributed to technological advances in statewide forest ecosystem assessment and monitoring,
- Met statutory obligations related to Emergency and Exemption Notice monitoring and reporting, and
- Followed through on grants supported contracts issued for restoration projects in previous years



PROGRAM BACKGROUND

Implementation of the Timber Regulation and Forest Restoration Program (Program), a component of <u>Assembly Bill 1492</u> (AB 1492)(Committee on Budget, Chapter 289, Statutes of 2012), began in January 2013, bringing various State natural resource management agencies together under the Program to efficiently and effectively regulate and permit timber harvesting activities occurring on state/local and private lands, while ensuring the protection of the state's natural resources. Departments under California Natural Resources Agency [CNRA] and the California Environmental Protection Agency [CalEPA] were affected (see list of Core Program Agencies below). A map of productive timberland and other forest lands covered by the Program is presented in Figure 1.

With a **one percent assessment on lumber and engineered wood products sold at the retail level**, AB 1492 created the Timber Fund, a consistent source of revenue to protect forest resources and enable sustainable timber harvest; restore the state's forested lands, including fisheries, wildlife habitat, and water quality; and support core staff work on subjects such as permitting efficiencies, ecological oversight and monitoring, and forest ecosystem restoration.



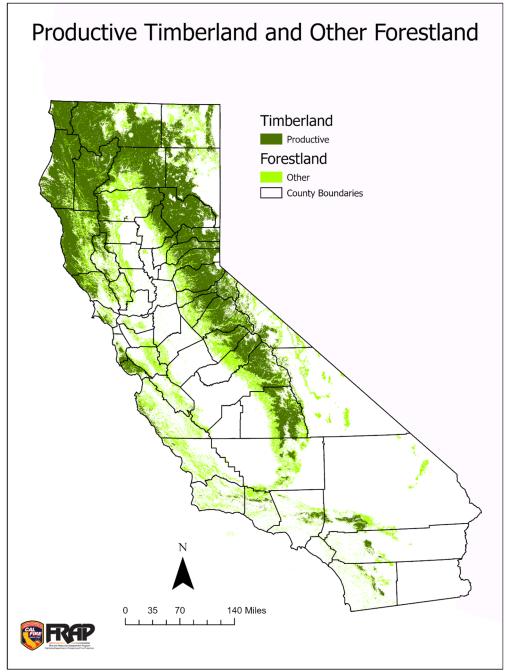


Figure 1. California forest and timberland as defined by CAL FIRE FRAP. 32 million acres of forest land across all ownerships. 16.4 million acres are classified as timberland with an additional 4.2 million acres of productive forest land in reserves. The federal government manages 58% of California's forest lands, with the remaining areas under state and local government (3%) or private management (39%).



AB 1492 requires that Fund monies be expended for purposes relating to:

- 1) the regulatory activities of responsible state and local agencies involved in the management of forest lands;
- 2) the costs of managing forest resource programs in the state;
- 3) certain grants for fire protection and suppression; and
- 4) grants to fund restoration on timberland.

Timber Harvest Review

A major component of the Program is to provide consistent interagency oversight for commercial timber harvest on California's non-federal timberland. Commercial timber operations on non-federal forestlands in California are regulated under the <u>Z'berg-Nejedly Forest Practice Act</u> (Act) and implemented under the California



<u>Forest Practice Rules</u> (FPRs). The Act establishes the goal of ensuring a thriving and sustainable timber industry that supports California's ecological objectives, protection of soils, water quality, and conservation of wildlife habitat.

The FPRs provide explicit instructions for permissible and prohibited actions that govern the conduct of timber operations in the field. The rules cover major categories including silvicultural systems and regeneration methods; harvesting practices and erosion control; site preparation; watercourse protection; sensitive watershed designation; functional wildlife habitat and late successional forest protection; fire protection, hazard reduction, etc. The FPRs define the contents of a variety of permitting and related procedural mechanisms for the conduct of timber harvesting activities, including the Timber Harvesting Plan, which is a formal environmental review document that must be prepared by a Registered Professional Forester. The California Board of Forestry and Fire Protection is the rule-making authority, and the California Department of Forestry and Fire Protection is the lead agency for approving timber plans and enforcement of the Forest Practice Rules. The Forest Practice Act and Rules and the interagency process used to review and approve timber harvesting plans under them constitute a Certified Regulatory Program under the California Environmental Quality Act (CEQA).

The multi-agency "review team" is defined in the Forest Practice Rules and includes CAL FIRE (lead agency), the State Water Resources Control Board and Regional Water Quality Control Boards (together Water Boards), the Department of Fish and Wildlife, and the California Geological Survey. The review team maintains oversight of timber harvesting projects including Timber Harvesting Plans (THPs), Nonindustrial Timber Management Plans (NTMPs), Sustained Yield Plans (SYPs), Program Timberland



Environmental Impact Reports (PTEIRs), Working Forest Management Plans (WFMPs), and Emergency and Exemption Notices.

Starting in 2018 CNRA launched the <u>California Timber Regulation and Environmental</u> <u>Evaluation System</u> (CalTREES) which is an online system that streamlines the submission and review processes for timber harvesting project documents to meet legislative requirements. Commencing in 2020, stakeholders were able to gain access to use CalTREES. Timber industry professionals and landowners can submit, track and update harvesting documents online. CAL FIRE staff and review team agencies use the system to process and review timber harvesting documents. CalTREES increases transparency by allowing the public to search timber harvesting documents, receive updates on harvest activities in an area of interest, and submit public comments online. While CalTREES is functional, the review team has identified several improvements that need to be made to the system to increase its functionality.

The Fund has enabled a transition towards more transparent, coordinated review and permitting related to timber harvesting activities. With a foundation of collaboration, the multi-agency review team provides early and consistent oversight to efficiently process timber harvesting proposals, with no permitting fees. Further, the Fund has expanded measures to deliver program accountability and enhance stakeholder accessibility.

Additional Program Engagement

Beyond oversight of timber harvesting activities, Program staff engage in broader forest health and timber harvest initiatives integral to the Program's scope and operations. These initiatives include wildfire mitigation, public safety, and science and innovation. Review team staff collaborate with partner agencies to ensure complementary and consistent work. Partner agencies include California Office of Emergency Services, CalRecycle, Public Utilities Commission, Caltrans, Coastal Commission, Office of Planning and Research, Air Resources Board, U.S. Forest Service, and Bureau of Land Management.

Collaboration between review team staff and partner agencies was exemplified by the Governor's Forest Management Task Force, initiated in 2018 and the subsequent <u>Wildfire and Forest Resilience Task Force</u>, initiated in 2020. Review team staff interface with other agencies to problem-solve issues related to forest health and management, tree mortality, vulnerable communities, and wildfire. Some of the work resulting from review team staff engagement on this Task Force and in other venues is described below.

When necessary, review team staff carry out enforcement activities including taking action to prevent or address unauthorized conversion of forest, impacts to listed species, or unlawful discharge of pollutants into water bodies. Review team staff continuously work to bolster outreach and educational materials to clarify regulations



(including water quality requirements and species protections) and provide permitting assistance to landowners, Registered Professional Foresters, and Licensed Timber Operators.

The Act and FPRs provide landowners with the option to use Emergency and Exemption Notices (Notices), filed in lieu of traditional Timber Harvesting Plans when certain conditions are met. Review team agency staff conduct cooperative monitoring of timber harvesting activities, including post-fire timber harvesting activities conducted under Notices, to determine if the Forest Practice Rules and operator performance are sufficiently protecting resources and public safety while aiding forest health initiatives. This monitoring campaign shifts annually to a new focus (e.g. forest fire prevention, utility right of way exemptions, etc.) to ensure broader understanding of impacts associated with the use of different Exemption and Emergency Notices. Further, <u>CNRA</u> is leading the development of an integrated statewide forest ecosystem monitoring effort, at a watershed-level resolution, to evaluate the impacts of management (harvest, fuel reduction activities, other land uses) on forest ecosystem conditions, including water quality and supply, carbon, biodiversity, and related natural resource assets. Additional monitoring, funded by the Program under the BOF's Effectiveness Monitoring Committee, enlists the research community to conduct one-time research studies with experiments evaluating specific Forest Practice Rules and related regulations to determine outcomes and effectiveness, informing the BOF's future policy and regulation development.

Background

The Z'Berg-Nejedly Forest Practice Act (FPA) and the California Forest Practice Rules (FPR) establish a process for multi-agency, interdisciplinary review of timber harvesting proposals including timber harvesting plans (THPs), nonindustrial timber management plans (NTMPs), and working forest management plans (WFMPs); or, collectively, "plans" by CAL FIRE, CDFW, CGS and the Water Boards. In 1976, the CNRA Secretary certified that the FPR plan process is the "functional equivalent" of an environmental impact report under CEQA based on the number of FPR sections that require protection of soil, water, plant, fish and wildlife resources.

Beyond participating in the review team process, CDFW also serves as a CEQA Responsible Agency for plans with the issuance of appropriate Lake and Streambed Alteration Agreements (1600 Agreements) and Incidental Take Permits (ITP) for species listed under the California Endangered Species Act. The Water Boards also have a statutory obligation to regulate all nonpoint source water pollution activities on both non-federal and federal lands under Federal and State clean water laws. Coordination among these agencies and departments is critical to meet each agency's respective mandates and reduce duplicative efforts.

Through AB 1492 the legislature intended to accomplish the following (PRC § 4629.2):



- Promote and encourage sustainable forest practices consistent with state environmental laws, including, but not limited to, the Timberland Productivity Act of 1982, the California Environmental Quality Act (CEQA), the Porter-Cologne Water Quality Act, and the Endangered Species Act (Fish and Game Code).
- Ensure continued sustainable funding for the state's forest practice program to protect the state's forest resources.
- Support in-state production of timber within the state's environmental standards and promote and encourage retention of forests and forested landscapes.
- Create a funding source for the restoration of the state's forested lands and promote restoration of fisheries and wildlife habitat and improvement in water quality.
- Promote restoration and management of forested landscapes consistent with the California Global Warming Solutions Act (AB 32).
- Promote transparency in regulatory costs and programs through the creation of performance measures and accountability for the state's forest practice regulatory program and simplify the collection and use of critical data to ensure consistency with other pertinent laws and regulations.
- Identify and implement efficiencies in the regulation of timber harvesting between state agencies.
- Modify current regulatory programs to incorporate, and provide incentives for best practices, and develop standards or strategies, where appropriate, to protect natural resources, including the development of plans that address road management and riparian function on an ownership-wide, watershed-wide or district-wide scale.

AB 1492 provides for a 1% assessment on lumber and other wood products sold in California. Revenues generated from the assessment are deposited into the Timber Regulation and Forest Restoration Fund (TRFRF) also established by the bill. Funds are distributed under the provisions of PRC§ 4629.6(c) to support the costs of the departments charged with the review, inspection, and issuance of permits to conduct timber operations. Funds also may be used, upon appropriation, to support several existing forest restoration grant programs [PRC§ 4629.6(d)-(g)].

Reporting Requirements

AB 1492 established a requirement for the CNRA, in consultation with CalEPA, to submit an annual report to the legislature on the activities of all state departments, agencies, and boards relating to forest and timberland regulation (PRC§ 4629.9). Per the statute, that report shall, at minimum, include all the following:

1) A listing, by organization, of the proposed total costs associated with the review, approval, and inspection of timber harvest plans and associated permits.



- 2) The number of timber harvest plans, and acreage covered by the plans, reviewed that year.
- 3) To the extent feasible, a listing of activities, personnel, and funding, by department, for the forest practice program for the most recent fiscal year and preceding 10 fiscal years.
- 4) The number of staff in each organization dedicated fully or partially to, a) review of timber harvest plans, and b) other forestry-related activities, by geographical location in the state.
- 5) The costs of other forestry-related activities undertaken.
- A summary of any process improvements identified by the administration as part of ongoing review of the timber harvest process, including data and technology improvement needs.
- 7) Workload analysis for the forest practice program in each organization.
- 8) To assess efficiencies in the program and the effectiveness of spending, a set of measures for, and a plan for collection of data on, the program, including but not limited to:
 - a. The number of timber harvest plans reviewed,
 - b. Average time for plan review,
 - c. Number of field inspections per inspector,
 - d. Number of acres under active plans,
 - e. Number of violations,
 - f. Evaluating ecological performance.

Primary objectives of AB 1492 as they relate to the review team agencies are:

- 1. Administrative accountability, efficiency, and transparency (PRC§ 4629.1 & 4629.2(f-g)),
- 2. Timber Harvest document review, inspections, approval, and enforcement (PRC§ 4629.6(c)),
- 3. Monitoring and reporting (PRC§ 4629.2(f) & 4629.9(a)),
- 4. Establishing ecological performance measures ((PRC§ 4629.1, 4629.3(f), 4629.9(a)), and
- 5. Providing forest restoration grants (PRC§ 4629.2 & 4629.6 (d-g)).



A discussion of each is included in the following section.

PROGRAM REPORTING FISCAL YEAR 2020-2021

Administrative Accountability, Efficiency, and Transparency

The following provides information on the Timber Regulation and Forest Restoration Program operations covering Fiscal Year 2020-21 including budget condition, staffing information, and reporting on available and applicable Program activities and trends involving forest management and timber harvesting.

Fund Financial Status Summary: Wood Products Assessment, Revenues and Expenditures

In Fiscal Year 2020-21, the Fund had \$69.3 million in available resources, of which approximately \$46 million came from annual forest product sales assessment revenues. Of the \$69.3 million, \$48.7 million was expended to support Program operations statewide, about a 5 percent decrease from Fiscal Year 2019-20. Expenditures included supporting nearly 224 staff largely in technical and administrative capacities responsible for: 1) conducting timber harvest project review; 2) fulfilling policy and oversight functions including regulation development and enforcement; 3) ensuring transparency and efficiencies through monitoring and online permit innovations; and 4) supporting forest and watercourse restoration. By the end of Fiscal Year 2020-2021, the Fund had a balance of \$ 20.6 million (Figure 2).

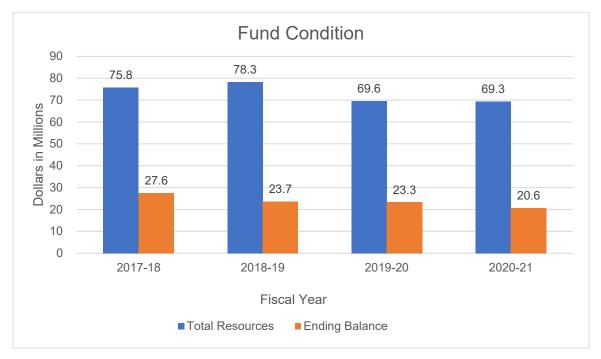


Figure 2. Trends in Fund condition. Total Resources represent the prior year fund balance carry-over plus forest product sales assessment revenue collected for a given Fiscal Year. Ending Balance is the total amount of available



resources remaining at the end of the Fiscal Year. The difference between the Total Resources and Ending Balance represents the total spending in the given Fiscal Year. The difference between a given year's total resources and the prior year's ending balance is the given Fiscal Year's lumber and forest product sales assessment revenue.

Anticipated Shifts in the Fund

During financially lean years, Program activities focus on main functions as directed by legislation, including maintaining core staff for oversight, enforcement, and environmental protection and focusing on the efficiency of timber harvest permits. Given potential downturns in the wood products market, the Fund can scale back funding in forthcoming fiscal years to ensure reserves do not drop below sustainable levels and to ensure long-term Fund stability in uncertain times.

New grant funding was limited for FY 2020-21, due to a 25% decrease in timber sales during 2020. In the later part of FY 20/21, lumber prices increased dramatically and have remained high. There is generally a two year delay for the revenues from the timber sales tax to reach the Timber Fund for expenditure, we anticipate an increase in timber fund revenue sometime in 2023. In the interim, the State's \$1.5B wildfire resilience investment in 2021 included significant grant funding for forest restoration and research.

Staffing Levels

Since 2013, the Fund has provided consistent staffing levels that allow Program review team agencies to engage in the full range of timber harvest review functions and related forest health objectives (refer also to Section 3.2). Program staff also carry out enforcement duties, help develop of and revise regulations, improve project-level and statewide monitoring and provide scientific expertise for forest health and restoration across the State's forested landscapes.

On an ongoing basis, review team agencies evaluate the adequacy of staffing levels to ensure timely plan review and permitting, responsiveness to new legislative mandates, and to meet requirements such as monitoring, oversight, and restoration. Given the scope and scale of forest and timberland management needs across the state, including response to emerging climate change impacts and increasing wildfire risk, new positions have been incrementally added since Program inception (Table 1).

Department	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
CAL FIRE	104	114	114	123	123	123	123
CDFW	39	41	40	41	34.5	47.2	46.7
Water Boards	30.9	34.9	34.9	35.2	35.2	53.2	28.75
DOC	15	19	19	19	19	19	19
CNRA	2	2	2	3	3	3	3



BOF	0	1	1	2	4	4	4
Total	190.9	211.9	210.9	223.2	218.7	249.4	224.45

Table 1. Interagency staff numbers as measured by PY (person years) between FY 2013-14 and 2019-2020. Note: 1) 4.5 of CDFW's PYs are funded through the General Fund; 2) In past years, the Water Boards reported all positions assigned to Forest Activities Program work. This year, the 28.75 positions reported are positions specifically supported through the Timber Fund.

Nearly 224 staff positions (PY: person years) were authorized under the Program in FY 2020-21. The increased review team staffing resources provided by the Timber Fund better enable the review team agencies to engage in the timber harvesting project review and inspection processes, fuel reduction activities (conducted under the FPR) oversight, monitoring, and scientific engagement resulting in a higher level of assurance that forest resource conditions will be maintained or improved.

For more in-depth information on Program position distribution and duties across departments, refer to the Appendix that accompanies this report.

Efficiencies in Environmental Review and Permitting

The Program continuously endeavors to improve processes, including increasing efficiencies in permitting and environmental review. This includes a two-fold goal of: 1) assisting the public in achieving their management objectives in forested landscapes of the State; while 2) ensuring environmental protection and public safety, with sufficient time for all critical Program functions. As noted later in this report, both permitting levels average time to permit THPs have remained relatively consistent in recent years. The <u>Wildfire and Forest Resilience Action Plan</u> identifies three Key Actions (1.35, 1.36, and 1.37) assigned to the AB 1492 Leadership Team that will further improve permitting efficiencies. Below are examples of current activities under the Program to improve processes and increase efficiencies.

California Timber Regulation and Environmental Evaluation System

A significant effort funded by the Program over the past several years has been to develop a single online application to enable more efficient permit submission, agency review, and provide transparency associated with the environmental review and multiple State permits that may be required for timber harvesting from the regulatory agencies. In FY 2015-16, the Natural Resources Agency began developing this system using the Accela permitting software platform.

The resulting online timber harvest permitting system is called the <u>California Timber Regulation and Environmental Evaluation System (CalTREES)</u> and is one of the few online application systems that facilitates a CEQA environmental review process. Once fully implemented, CalTREES will improve efficiencies for the submission, review, and administration of timber harvesting permit applications. It also



will enhance public access to timber harvesting permit information and support analysis by automating the collection of program performance information, such as time to complete reviews of THPs and NTMPs.

Phase 1 of CalTREES was finalized in FY 2019-20, which includes online timber harvest permit submission and review, and online data collection. The review team agencies began using CalTREES internally to test functionality in October 2018, which has helped keep review teams coordinated. Emergency and Exemption Notices became available for online submission in the Fall of 2019. Timber harvesting project data is online within the CalTREES, making it easier to analyze timber harvesting results.

• Program staff continue to work in conjunction with technical staff to improve CalTREES functionality to ensure ease of use.

Phase 2 began in late 2020 and includes linking geospatial data to the platform, updating the user interface to be more intuitive, and integrating permits necessary for timber harvesting activities into the online system. Summary of increased functionality, includes:

- The ability to validate data upon submission, thus helping submitters to immediately identify errors in their documents and correct them more quickly;
- The ability to capture and track submission-specific information;
- An improved public comment process, accessibility, and transparency;
- Improved public access to documents;
- Reminders to registered professional foresters, licensed timber operators, and landowners of regulatory requirements prior to submission;
- A streamlining of the current interagency process for reviewing timber harvesting documents;
- Automated notification of review deadlines to reviewing agencies, departments, and personnel;
- Electronic notification and document distribution to submitters, landowners, timber owners, and interested members of the public;
- Electronic archiving of permit related information such as THPs, public comments, agency inspections, etc.
- Accountability of agency and submitter responsibilities, including process timelines, throughout the review process;
- More efficient tracking of review processes for reporting to the Legislature and control agencies.



The CalTREES team has worked to educate internal and external stakeholders and help them understand the system and its benefits. Staff and the public have access to the CalTREES help desk to support transitioning to the new system and to answer questions. Outreach and training efforts for external stakeholders have included: public workshops, group training sessions, live system demonstrations, and presentations at forest industry conferences.

The CalTREES <u>Timber Harvest Training and Resources</u> website is designed to be a one-stop shop for accessing documents, agency links, and past/current training events related to timber harvesting activities. The website contains a document library, PowerPoint presentations, videos, and related material from a broad range of review team agency resources. When training events/workshops are available, the website is used to enroll for the event. This public website is intended to be an easily accessible portal to the wealth of information and guidance relevant to timber regulation in California.

The launch of CalTREES has proven timely and has become essential during the COVID-19 pandemic, where paperless submissions and remote access to resources are more important to the public and Program staff than ever before. It is expected that the transition to online project submissions by stakeholders who are now more dependent on remote access will increase steadily.

Permit Synchronization

Program staff continue to work to develop tools that will result in improved synchronization of the review and approval processes of the multiple State permits that may be required for timber harvesting which follow CAL FIRE authorizations. This must be done while respecting each agency's regulatory obligations, authority, and processes. Review team agencies have developed a concept for improved integration and synchronization of the issuance of Lake or Streambed Alteration Agreements (LSAAs) and Waste Discharge Requirements (WDRs) with the THP (or equivalent) review process, as applicable. This effort aims to facilitate the current permitting with the goal of issuing Department and Fish and Wildlife and Regional Water Board permit approvals within five working days of CAL FIRE's approval of a THP.

Under the synchronization concept, a THP submitter has the option to include all information needed for the review and issuance of an LSAA and/or WDR, up front, with their THP submission. If all the necessary information has been submitted, the Department of Fish and Wildlife and appropriate Regional Water Board can review the timber harvesting project information and the request for enrollment under their respective permits at the same time. This process may reduce delays resulting from requesting additional information to evaluate projects pursuant to the individual agency's statutory obligations and authorities. New draft CaITREES-consistent forms developed to collect the permittees' information in support of this synchronized or



sequenced review have been developed. Once these are available, RPFs and landowners can begin to use them. As a next step, these information elements will need to be programmed into the online CaITREES system with consideration of necessary linkages to CDFW and Water Board data systems, which will require additional systembuilding contracting by CAL FIRE.

Response to Legislation, Rulemaking, and Permitting Efficiencies

Given the urgent need for fuel reduction and forest restoration to meet the wildfire crisis, the State has taken a new approach to permitting in this space. Using emergency authorities and exemptions provided by the legislature (e.g., <u>SB 901</u>), and establishing new tools, the State is working to reduce the permitting timeline for critical resilience projects to as little as four weeks for some and less than 15 days for others.

A critical new tool established by the Board of Forestry (BOF) is the California Vegetation Treatment Program (CalVTP) – a 20 million acre environmental impact review for forest health and wildfire resilience vegetation projects. This will expedite CEQA review from years to mere months Interagency coordination in FY 20-21 has encompassed direct support to project proponents in development of and comment on specific vegetation management plans including preparation of mitigation measures, as well as follow up on program process and implementation.

Rather than create a new permitting structure for vegetation treatment projects, the State Water Resources Control Board (State Water Board) streamlined water quality permitting by adopting a general order in July 2021 that aligns with the CalVTP. The general order permits vegetation treatment projects that sufficiently mitigate environmental impacts from vegetation treatment projects, including impacts to water quality, as instructed in the CalVTP and find that the project is "within the scope" of the CalVTP PEIR. While the CalVTP does not allow commercial timber harvesting, the State Water Board and BOF are working together to streamline enrollment of vegetation treatment projects in the general order, lessening the regulatory burden on project proponents.

Further, as directed by the Legislature, the BOF has greatly expanded the availability of <u>Emergency and Exemption Notices</u> (e.g., forest fire prevention, drought mortality, postfire recovery, etc.) for eligible commercial timber harvest activities, precluding more time-intensive preparation of a Timber Harvesting Plan. This is meant to provide landowners an expeditious pathway to enact fuel reduction and forest health projects, while observing the operational provisions of the Forest Practice Rules. It should be noted that in FY 2020-2021 more than 3 times the number of acres approved for timber operations under THPs and NTMPs were approved for operations under all types of emergency and exemption notices (i.e., over 3,000,000 acres under EXs/EMs vs. less than 95,000 acres under THPs/NTMPs). Landowners could begin operating on those



EX/EM projects within 15 days of submission. Review team agencies continue to work closely with CAL FIRE to ensure resources are protected through compliance with state and federal laws and regulations, and that public safety is maintained, including providing permitting and technical assistance where necessary, while meeting mandates to build more resilient forests and communities.

Similarly, review team staff regularly provide the Board of Forestry with coordinated interagency comments on rule revisions or new policy and rule development, particularly concerning resource management issues, community fire hazard matters, and emerging industry needs. Further, CDFW staff consult on prospective threatened or endangered <u>species' listings</u> that affect forested areas of the State. Review team staff are continuously involved in complex negotiations with industry, private landowners, federal authorities, and others concerning development of innovative solutions such as species-specific <u>Safe Harbor Agreements and Habitat Conservation Plans</u> designed to enable forest management while safeguarding species of concern.

Timber Harvest Document Review, Inspections, Approval, and Enforcement

Timber Harvest Plans

California currently approves roughly 100,000-150,000 acres/year of Timber Harvesting Plans (THPs). These plans are valid for 5-7 years, where a harvest could take place in any given fiscal year. Nonindustrial Timber Management Plans (NTMPs) represent far less acreage than THPs, accounting for approximately 1,500 acres approved in FY 2020-2021. However, NTMPs do not expire like a THP; therefore, active harvesting under an approved NTMP can be conducted in any fiscal year under a Notice of Timber Operations (NTO). Statewide, landowners submitted notices covering their lands for the opportunity to conduct operations if conditions allow. These notices covered between 2,500 acres and 25,000 acres in any given FY.

The majority of California silviculture is uneven aged management, commonly called selective logging, which amounts to approximately 34% of all harvest plans in the reporting year. Several large landowners employ even-aged management, which includes clearcut silviculture, and amounts to approximately 22% of all harvest plans in the reporting year. As stated earlier, timber operations have started to shift more from THPs to ministerial documents such as exemptions and emergencies, given the significant acres and volumes of timber experiencing mortality due to drought, insects, and fire.

Despite increased complexity involved in THP review and the increased use of Exemption notices, the median time for approval of a THP has remained relatively consistent over the past several years. Accounting for agency review time and time for project proponent response to questions, in 6 of the last 10 years, review times have fallen below the 10-year average of 115 days. It is important to remember here that



THPs and the review team process make up a functional equivalent to an EIR, which typically require significant time. While there are individual outliers that may appear to distort the average, overall, there is a slight, but continued trend toward more efficiency with review and approval of THPs. Also, as noted above, nearly 3,000,000 acres were approved for harvest under exemptions and emergency notices within 15 days or less of filing the notice; significantly reducing the time a landowner must wait to implement timber operations on the vast majority of projects.



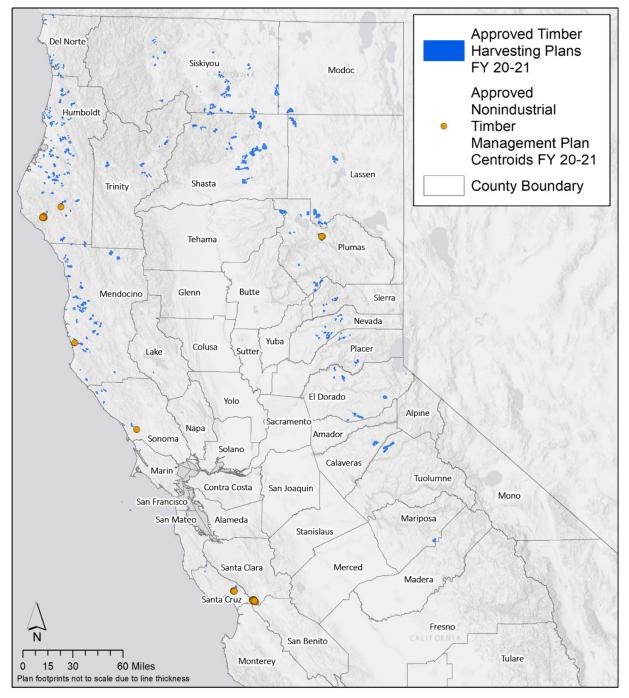


Figure 3: Timber Harvesting Plans and Nonindustrial Timber Management Plans Approved During the 2020-2021 Fiscal Year. Points are centroids of individual approved NTMPs, which vary in size and were too small to visualize as polygons at the map scale. No plans were approved south of Santa Cruz County in the fiscal year. Data sources: THPs & NTMPs (CAL FIRE Forest Practice GIS).



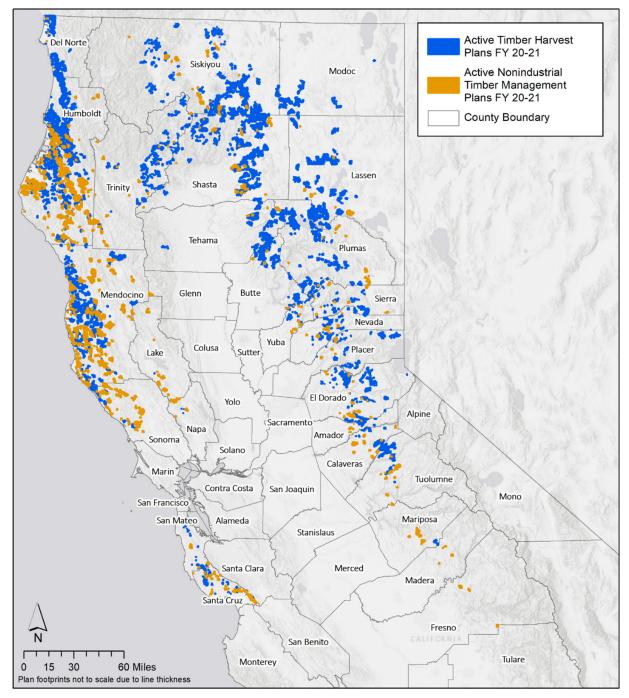


Figure 4: Active Timber Harvesting Plans and Nonindustrial Timber Management Plans During the 2020-2021 Fiscal Year. Data sources: THPs & NTMPs (CAL FIRE Forest Practice GIS) and active status information (CalTREES).



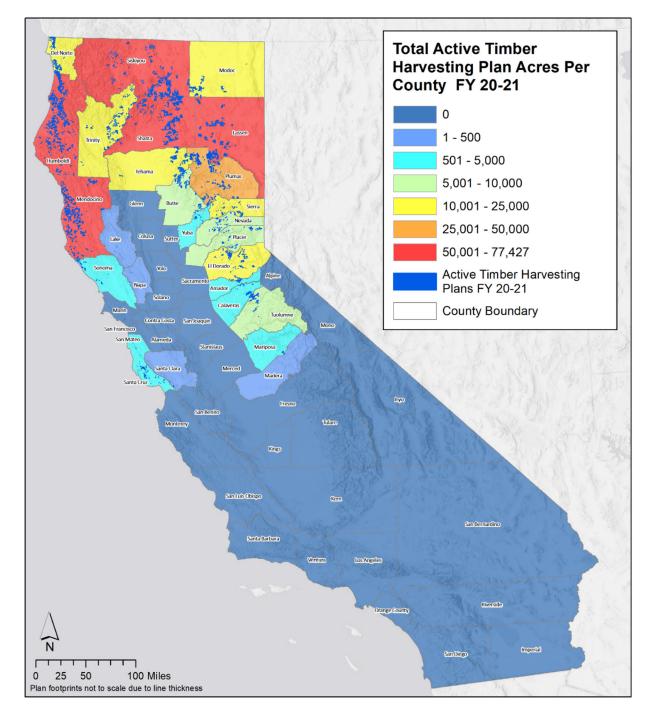


Figure 5: Acreage of Approved Timber Harvesting Plans by County. Humboldt, Mendocino, and Shasta Counties consistently contain the highest acreage of approved timber harvesting plans. Data Source: THPs (CAL FIRE Forest Practice GIS).

There has been a total of 866 NTMPs approved for harvest under a Notice of Timber Operations (NTO) since these permits became available. In the 2020-2021 fiscal year, 105 NTOs were received, comprising a total of 13,702 acres.



Table 2 and Figure 6 below provide comparative statistics for the number and associated acreage of Timber Harvesting Plans (THPs) and Nonindustrial Timber Management Plans (NTMPs) filed as well as length of the review periods (from submission to approval). Statistical outliers were removed to reflect more accurately actual review times. Spanning fiscal years 2012-13 through 2020-2021, average review times appear variable over the period for both THPs and NTMPs, spanning from an average low of 86 days to an average high of 159 days. In 2020-2021, the average review time for THPs was 109 days, or just over three months, slightly longer than the prior Fiscal Year review time, whereas NTMPs were approved slightly faster than the prior Fiscal Year, at 150 days.

Because of the relatively small number of NTMPs reviewed each year, the average review times tend to be more variable than for THPs. An example of an outlier is an NTMP in 2013 that was in review for over 2,000 days because the plan submitter failed to respond. This outlier caused a sharp increase in the average review time for NTMPs in FY 2012-13.

It is important to note that there are many determinants of review times. CAL FIRE indicates that the reasons for this latest increase include:

- Time needed for CAL FIRE to respond to large amounts of comments due to increases in public involvement, which must be addressed in the Official Response.
- Controversial conversion THPs that require Environmental Impact Reports approved by local government.
- Lack of timely response to Review Team questions by project proponents.
- THPs that were filed then delayed by the submitter while they conducted operations on Drought Mortality Exemptions on the plan areas, leading to significant plan revisions.
- Fall-submitted plans that could not be accessed for preharvest inspections until the following spring due to significant snow cover.
- A significant increase in the number of acres proposed for harvest under a single THP (i.e., ≈24%) compared to the average for the last 5 years.
- Commitment of staff to emergency assignments resulting from the significant increase in wildfire activity.



Fiscal Year	Harvest Document Type	Count	Acres	Minimum Days in Review	Maximum Days in Review	Average Days in Review
2012-13	THP	243	107,051	36	1,547	159
2013-14	THP	278	146,384	40	927	124
2014-15	THP	260	128,644	33	1,025	107
2015-16	THP	254	94,650	26	1,281	127
2016-17	THP	220	91,179	37	178	86
2017-18	THP	267	105,523	43	196	92
2018-19	THP	244	100,888	43	211	92
2019-20	THP	234	122,586	40	298	103
2020-21	THP	208	93,466	30	333	109
2012-13	NTMP	12	7,365	81	2,688	493
2013-14	NTMP	10	4,126	85	436	189
2014-15	NTMP	12	3,367	69	546	139
2015-16	NTMP	11	5,572	72	291	135
2016-17	NTMP	14	6,500	73	251	148
2017-18	NTMP	14	4,448	77	193	112
2018-19	NTMP	14	2,410	82	268	135
2019-20	NTMP	13	4,215	67	189	127
2020-21	NTMP	7	1004	67	255	150

Table 2. Approved Plan Review Time Statistics, Fiscal Years 2012-13 to 2020-21.



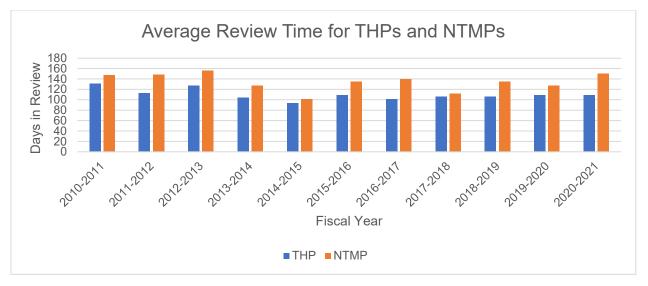


Figure 6: Overview of average review time for THPs and NTPMs spanning FYs 2012-13 through 2020-21.

Several factors have contributed to the variability in the number of THPs and THP acreage seen in recent years. In FY 2015-16, some landowners shifted from "green tree" harvesting under THPs to treating areas impacted by wildfires and by tree mortality under Exemption and Emergency Notices. Large landowners invested in developing long-term planning documents such as Habitat Conservation Plans and Sustained Yield Plans. In FY 2017-18, there was a shift back to a greater number of THPs (a 21.4%) increase from the previous year) and area treated under THPs (a 15.7% increase from the previous year). While the number of acres approved for harvest each fiscal year has been below average since FY 2015-16, there was a return to above average acres in FY 2019-20. However, the number of acres approved for harvest in this reporting period fell well below the average at 93,466 acres for the FY; while the number of THPs in FY 2020-2021 was the lowest in the last ten years at 208 THPs approved. This may reflect the substantial increase in harvesting activity under Exemption and Emergency Notices as the area of commercial forestland burned dramatically increased. It is anticipated that this increase in the number of acres covered under fire emergency notices, post-fire recovery exemptions and right-of-way exemptions will continue in FY 2021-22 due to substantial number of acres of timberland burned during this last fire season (see Figure 7). This is likely to again shift the number of acres harvested under THPs and Exemptions to Emergency Notices in the next reporting period.

Emergencies and Exemptions

In certain specified situations, Exemption and Emergency Notices and conversion exemptions allow landowners to harvest timber without preparing a THP. However, all Emergency and Exemption Notices require compliance with the Forest Practice Rules and regulations governing timber harvest, road construction, reforestation, watercourse protection, environmental protection, and so forth.



As noted earlier in this report, the number of acres harvested under an expanding range of ministerial notices under the Forest Practice Act and Rules this FY increased to its highest level since FY 2012/13, with acreage approved for harvest exceeding 3,000,000 acres. Expansion in the types and terms of these permits (e.g., drought mortality, limits on the diameter of trees harvested, meadow restoration), mostly related to fuels reduction, utility clearing and drought mortality; combined with large wildland fires and extensive areas of tree mortality, have resulted in an increase in the numbers of Notices filed, reflecting the work to assist landowners in recovery and the development of resilient forest conditions. This is in part due to important changes to Exemption Notices from recent legislation including SB 901. During the reporting period, there were significantly more Emergency Notices submitted compared to the average since FY 2012-2013; however, the number of Exemption Notices filed was the lowest in 6 years. This variability can be attributed primarily to wildfire activity.

Exemptions and Emergency Notices allow landowners to recover some of their investments in their timber crop following substantial damage from disturbances such as wildfire, insect and disease, and drought mortality. The ministerial permitting process (5 or 10 days) allows landowners to salvage their dead and damaged trees during the short window of time (up to 24 months) before the trees become unmerchantable due to fungal staining and decay. Exemptions also allow landowners to develop more fire resilient forest stands to reduce damage from wildfires and aid in fire suppression.

Recognizing the need to assist landowners in rebuilding following significant fires in and around communities, the Board passed rules allowing harvest in post-fire areas under an exemption; significantly increasing the number of exemptions filed in this fiscal year and shifting the exemption notices from dead, dying and diseased notices to post-fire recovery notices. With the number of professional foresters, operators and processing facilities remaining relatively fixed, this variability is not unexpected and will likely continue shifting from THPs to Notices and varying amongst Notice types annually. As the number of operations and forest area under Exemptions and Emergency Notices has increased, the focus on monitoring, compliance inspections and enforcement actions on these operations, as well as separate permitting that might be needed under Department of Fish and Wildlife or Water Boards authorities, also increased across the review team agencies.

Given the expedited permit process available under Emergency and Exemption Notices, the Fund supports an extensive review and inspection of harvesting activities conducted under Notices to evaluate effectiveness and environmental impacts potentially resulting from the expedited process. The review found more violations especially around water and soil stability issues than under traditional timber harvest permits. These results indicate that post-fire salvage activities covered by Emergency Notices lead to a higher frequency of unfavorable water quality impacts when compared to previous monitoring studies focused on "green tree" timber harvesting utilizing THPs. The monitoring also



indicated that many small nonindustrial landowners were not fully aware of the legal obligations associated with submitting a Notice of Emergency Timber Operations and did not always have clear understanding of the outcomes of post-fire salvage operations conducted on their timberland.

The review team agencies may need to re-prioritize field staff following extensive wildfires and subsequent emergency notice submittals to ensure the Forest Practice Rules and other natural resource protection statutes and laws, codes, and regulations are properly enforced.

Emergency Notices

Increases and decreases in the number of Emergency Notices submitted and acres treated in any given fiscal year is directly correlated to the number of acres of timberland impacted by wildfire. In the recent fiscal year, 2020-2021, the number of Emergency Notices increased considerably, to a high of over 500 (Figure 8). More than 90% of the FY 2020-21 Emergency Notices were wildfire-related, and such notices are anticipated to continue to increase due to the decimation of timberlands by the extraordinarily catastrophic wildfire seasons in 2020-21. Emergency Notice locations can be viewed in context with industrial timberland owners with large holdings along with catastrophic wildfires (3,000 acres or more; Figure 9).



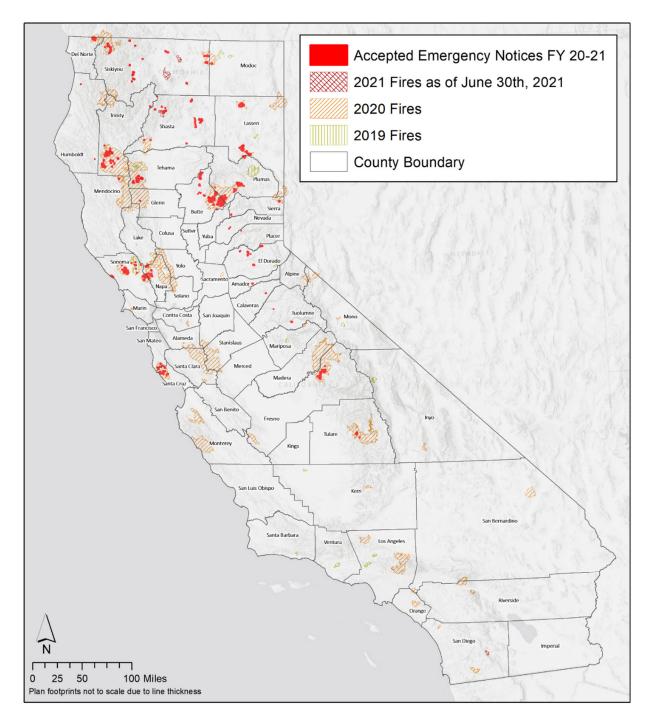


Figure 7: Emergency Notices Approved During the 2020-2021 Fiscal Year, Timber Industry Landowners, and Recent Catastrophic Fires. Catastrophic defined here as fires greater than 3,000 acres. Data sources: Emergency Notices (CAL FIRE Forest Practice GIS), and fire perimeters (CAL FIRE's Fire and Resource Assessment Program).



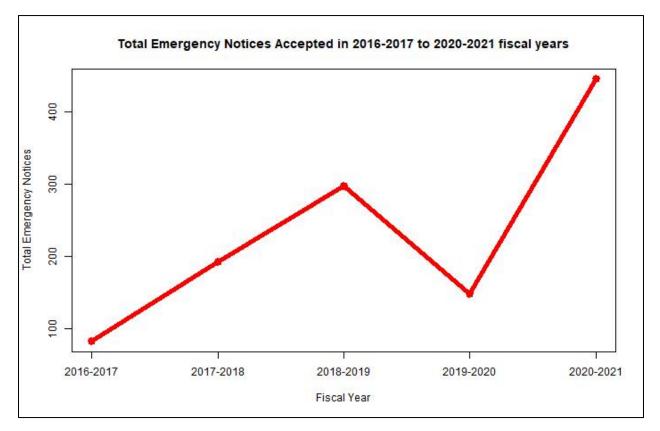


Figure 8: Total Emergency Notices from Fiscal Years 2016-2017 to 2020-2021. Data source is Forest Practice GIS.

Exemption Notices

The general pattern of Exemption Notices is similar from year to year, however conditions in the landscape over the past several years have affected the type and volume of Exemption Notices, covering nearly 3,000,000 acres of the State's timberlands in any given fiscal year (Figure 9). In FY 2020-2021, dead dying and diseased trees, and utility right-of ways made up the bulk of reported acreage under Exemption Notices, at 54% and 22% of all acreage for accepted Exemptions, respectively (Appendix). A significant number of Exemption Notices are held by small landowners performing fuel reduction and fire protection on their properties. During FY 2020-2021, 36% of Exemption Notices were for work in and around communities and on small timberland ownerships.



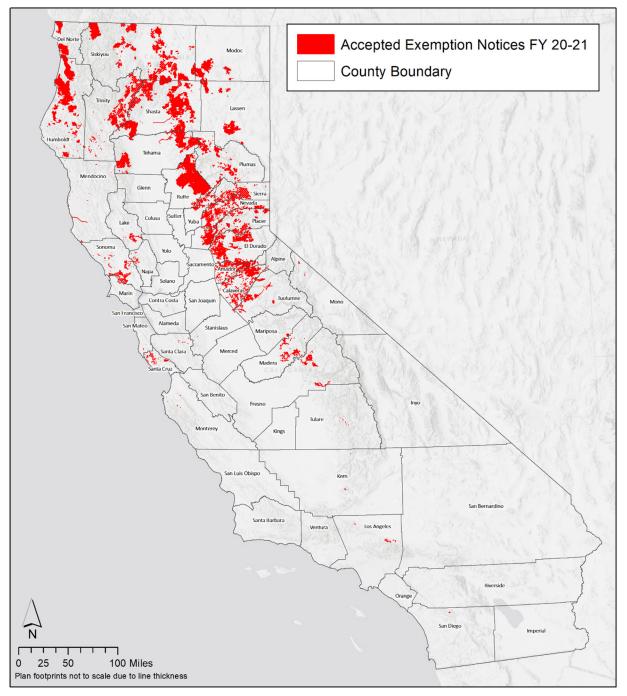


Figure 9: Exemption Notices Approved During the 2020-2021 Fiscal Year



Enforcement

Review team agencies routinely collaborate and address permit violations and unpermitted activities affecting timberland ecosystems. Typical violations involve unlawful discharge of sediment or contaminants impacting water quality and fisheries, or similar impacts associated with unpermitted water diversions, illegal timber conversions, and impacts to wildlife associated with such activities. Close coordination among the review team agencies helps to ensure environmental standards are maintained and restoration of damages occurs in a timely manner.





Figure 10: (Left) In-stream violation involving tree removal and earthwork. (Above) Illegal conversion on timberlands involving tree removal and earthwork.

Issuing Notices of Violation of the Forest Practice Act or Rules is an important part of CAL FIRE's enforcement role for timber operations and for addressing unpermitted conversion of timberland. Table 3 presents the number of violations of the Forest Practice Act or Rules issued by CAL FIRE. A violation may lead to on-the-ground repairs and/or issuance of a criminal citation (misdemeanor) and fine, issuance of an administrative civil penalty, or licensing action (denial, revocation, or suspension) against the responsible Registered Professional Forester or Licensed Timber Operator.

The Department of Fish and Wildlife and the Water Boards also pursue enforcement actions against landowners, Registered Professional Foresters, or Licensed Timber Operators. These enforcement actions are based on laws that these agencies enforce, such as the Fish and Game Code or the Porter-Cologne Water Quality Control Act or



Harvest Document	Number of Violations										
Туре	FY	FY	FY	FY	FY	FY	FY	FY	FY		
	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21		
Timber Harvesting Plans	72	46	45	24	64	73	42	38	57		
Nonindustrial Timber Management Plans	16	15	11	21	28	6	30	16	14		
Emergency Notices	13	6	7	27	23	3	5	17	15		
Exemption Notices	72	61	40	109	98	109	116	84	60		
Violations Not Tied to	141	158	98	180	259	254	96	154	125		
a Harvest Document											
Totals	314	286	201	361	472	445	289	309	271		

permit conditions. Along with permit synchronization efforts, review team agencies will be examining options to improve reporting capabilities related to enforcement actions.

1. A single plan may have multiple violations associated with it.

Monitoring

Interagency staff are working to expand the Program's capabilities in spatial analysis for advancing environmental monitoring and natural resources management. With everincreasing pressure and stress on the State's forested ecosystems, including wildfire, climate change, and a growing human population, monitoring is necessary to detect trends, understand, and respond to ensure sustainable water quality and supply, forest resources, biodiversity, carbon, and other vital State resources. Assembly Bill 1492 directs the Timber Regulation and Forest Restoration Program to develop an ecological performance measures approach as an accountability measure for the multiple State programs that regulate forest and timberland ecosystems. Results of monitoring can be used to inform decision makers in their work to adaptively manage forests and timberlands and to track efficacy of State-led forest management regulations, policies, and programs. This includes the evaluation of State and Federal programs to invest in forest health and resilience such as fuel reduction activities.

Program staff actively lead various levels of monitoring associated with management such as timber harvest and fuel reduction projects, including:

- 1) Ongoing work to track regulatory effectiveness of forest management projects on-the-ground; and
- 2) The establishment of a new monitoring effort to evaluate forested watershed conditions statewide.



Monitoring and Research Related to Emergency and Exemption Ministerial Permits: Timber Harvest

CAL FIRE's Watershed Protection Program, in conjunction with the other review team agencies, actively evaluates outcomes of harvesting operations that fall under Emergency and Exemption ministerial harvesting permits. Regular compliance inspections are undertaken by CAL FIRE foresters, occasionally with participation of other agency staff.

Exemption and Emergency (EX-EM) Notice monitoring has been a priority of CAL FIRE since 2018. While considerable information on compliance with the Forest Practice Rules and effectiveness of their implementation has been collected on conventional Timber Harvesting Plans, State agencies had collected virtually no effectiveness monitoring data for Exemptions and Emergency Notices prior to 2018. Prompted by a reporting requirement imposed by the Legislature in consecutive statute changes enacted by Assembly Bills 1958 and 2029 in 2016, Senate Bill 92 in 2017, and Senate Bill 901 in 2018, CAL FIRE, in cooperation with the State Board of Forestry and Fire Protection (BOF) and the other review team agencies initiated a long-term monitoring program for Exemption and Emergency Notices. As directed by SB 901, annual reporting to the Legislature is due by December 31, annually. The various types of Exemption and Emergency Notices are being monitored over at least the next five years. Work is being phased over time, with each year focusing on one or more EX-EM types for rigorous evaluation with additional agency staffing.

Pursuant to the most recent statute change enacted by Senate Bill 901, the initial and subsequent reports prepared by CAL FIRE and the Board, with participation from the Department of Fish and Wildlife (CDFW), Regional Water Quality Control Boards (RWQCBs), the California Geological Survey (CGS), are focusing on trends in the use of Exemptions and Emergency Notices and the effectiveness of these ministerial permitting options to achieve the results intended by the Legislature. Additionally, the reports to the Legislature are to identify any barriers to use of Exemptions and Emergency Notices by small forest owners, measures to improve accessibility for small forest owners, and recommendations to improve the use of these permitting options.

To date, CAL FIRE, along with the other review team agencies, have or are in the process of rigorously monitoring four types of Exemption and Emergency Notices. These include:

Emergency Notices (14 CCR § 1052) – Completed December 2019:

The monitoring of Emergency Notices was prioritized for 2019. Fifty-four (54) Emergencies were randomly selected from 272 Emergencies accepted in 2018 for tree damage and mortality due to wildfire, insects, or drought. Forty-nine (49) Emergencies were related to wildfires, and five (5) were related to insect or drought damage. Of these 54 Notices, 13% had no activity under the submitted Emergency (e.g., no work started). Considering the 49 enacted Emergency Notices, the majority involved ground based



tractor yarding or a combination of tractor yarding and cable yarding. Harvest intensity on Notices generally followed tree damage and mortality patterns and ranged from low impact to extensive clearcut-equivalent timber harvests. Based on CNDDB queries of the sampled Emergencies, Rare, Threatened, or Endangered species had not been previously reported to CNDDB within many of the Notice boundaries, but Notices were filed within areas of suitable habitat for these species.

Sixty-two percent (62%) of the sampled Emergencies had "Acceptable" composite performance outcomes related to water quality, while 32% of Emergencies had "Acceptable to Unacceptable" mixed performance outcomes, and 6% had entirely "Unacceptable" outcomes. Twenty-six (26%) of Emergencies had an "Unacceptable" outcome relative to either watercourse crossings, road hydrologic disconnection, or watercourse protection. Water quality issues were related to watercourse crossings that were not adequately designed or maintained, ground based tractor yarding, and road drainage onto fire-impacted bare hillslopes in close proximity to watercourses.



Figure 11: Review team inspecting drainage and erosion issues proximate to harvest site.

As a result of this recent EX-EM monitoring study, the BOF and CAL FIRE, in close collaboration with CDFW and Water Boards, have and continue to issue guidance and outreach materials directly to Registered Professional Foresters, Licensed Timber Operators, as well as landowners, to reinforce the critical need to comply with Forest Practice Rules, particularly related to water quality. Due to the report, the BOF is currently making changes to 14 CCR § 1052 to explicitly outline a Registered Professional Forester's responsibilities during Emergency operations to ensure more favorable outcomes.

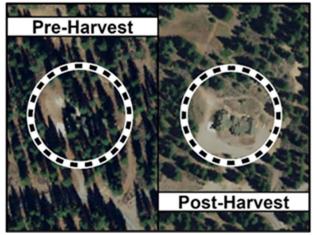
Reduction of Fire Hazard With 150 Feet of Structures (14 CCR § 1038(c)) – Completed July 2021:

CAL FIRE focused on 1038(c)s in 2020, as they are the most numerous Exemption type and allow landowners to offset the costs of implementing the requirements of PRC §§ 4290 and 4291 by permitting the commercialization of timber removed during defensible space-related fire hazard reduction activities. Seventy-five 1038(c) Notices were randomly selected from Notices accepted during the last nine months of 2019. Monitoring objectives were focused on whether Notices achieved the intent of reducing the horizontal and vertical continuity of surface, ladder, and/or crown fuels, especially



within the first 10 or 30 feet of the permitted structure as per 1038(c) and Technical Rule Addendum Number 4 (TRA #4).

Overall, findings suggest (1) 1038(c)s are implemented at a cost to the landowners, although 1038(c)s are not a requirement to implement PRC §§ 4291; (2) water quality is protected during the implementation of 1038(c)s; (3) only 31 percent of Notices met the intent of TRA #4, where only single specimen trees are allowed to be within 30 feet of a structure; (4) while most Notices did not break up horizontal crown continuity as per requirements, surface and ladder fuels were adequately treated; (5) smaller parcels are less likely to



achieve the intent of 1038(c) due to the difficulty and cost of removing trees adjacent to multiple structures; and (6) 1038(c)s are potentially being used for purposes other than fire hazard reduction.

Recommendations include developing landowner/licensed timber operator (LTO) guidance for 1038(c) implementation, potential revision to the Forest Practice Rules and TRA #4 to increase clarity, better guidance to landowners and LTOs on use of Exemptions in general and integrating 1038(c) evaluation with the Office of the State Fire Marshall's Defensible Space inspections. Completed Notices should be rigorously evaluated by Damage Inspection Specialists (DINS) when impacted by wildfire to determine 1038(c) effectiveness.

Reduction of Fire Hazard Within 300 Feet of Structures (14 CCR § 1038(c)(6)) – In Review:

In 2021, CAL FIRE focused on the (0,0) Exemption (hereafter "(c)(6) Notice"), which allows for exempt commercial harvesting of timber within 300 feet of legally permitted and habitable structures. The (c)(6) Notice compliments the 0.00 Notice, by allowing tree removal 150 to 300 feet from these structures. To assess the efficacy of the (c)(6) Notice, thirty-five (c)(6) Notices statewide to achieve results with a 95% confidence level and 8% margin of error. Of the landowners who reported financial estimates from operations, a majority reported either breaking even or a financial gain, with a minority reporting that operations and the treatment of their property resulted in a financial loss.

Watercourse protection was adequate on all (c)(6) Notices where watercourses were present, which occurred on 40% of the sampled Notices. All sampled (c)(6) Notices met the slash treatment requirements, had an average post-harvest slash depth below 18 inches per the FPRs, however there were often isolated individual instances of deeper slash depths. A minority of the sampled (c)(6) Notices did not meet basal area





retention requirements per the FPRs. In general, a minority of the (c)(6) Notices failed to meet the desired intent of the Exemption.

Recommendations include encouraging logging techniques that minimize the accumulation and horizontal continuity of slash, as well as a focus on effectively treating ladder fuels and disrupting the horizontal continuity of crown fuels. A policy focus on providing renewed guidance to landowners, RPFs, and LTOs, as well as alternate regulatory requirements for achieving desired

post-treatment fuel conditions was also recommended.

Research Related to Post-Fire Emergency Notices:

CAL FIRE, in collaboration with the USFS Pacific Southwest Research Station and Oregon State University, utilized Timber Fund resources to conduct extensive research related to the effects of post-fire salvage logging on the Boggs Mountain Demonstration State Forest following the 2015 Valley Fire. Studies included hillslope scale experiments on salvaged logged slopes, coupled with rainfall and runoff simulation experiments. Findings have indicated that salvage logging can be conducted in a manner that can reduce



post-fire erosion relative to unlogged sites. Techniques for reducing logging-related skid trail erosion were also tested. Work has been published as three peer-reviewed articles (Prats et al. 2019; Cole et al. 2020; Prats et al., 2020), and data from the various studies are continuing to be analyzed and written-up over time.

Effectiveness Monitoring Committee

CNRA and CalEPA see important connections between their AB 1492 responsibilities and the Board of Forestry and Fire Protection's <u>Effectiveness Monitoring Committee</u> (EMC). The EMC was formed in 2014 to develop and implement a project-level monitoring program to address both watershed and wildlife concerns and to provide a better active feedback loop to policymakers, managers, agencies, and the public. Effectiveness monitoring is necessary for assessing whether management practices are achieving the various resource goals and objectives set forth in the California Forest Practice Act and Rules and other natural resource protection codes and regulations.



The EMC began public meetings in October 2014. The EMC completed a Strategic Plan to develop a framework for the critical effectiveness evaluation of the California Forest Practice Rules by soliciting, ranking, and funding competitive research proposals. The EMC updates their <u>Strategic Plan</u> every three years with the most recent version produced in 2018 and produces an Annual Report and Work Plan in the interim.

The Board of Forestry and Fire Protection hired a Forester to help support the work of the EMC in the FY 2015-16 budget process. As part of the FY 2016-17 budget process, the Board was authorized contract funding for two years to support research projects that evaluate the effectiveness of the Forest Practice Rules. As a part of the FY 2018-19 budget process, the EMC was granted ongoing funding of \$425,000/year to support effectiveness monitoring research projects.

In FY 2020-21, the EMC financed no new effectiveness monitoring research projects. However, ongoing funding for existing EMC projects were allocated, totaling \$366,081 (Table 4).

Project Number and Title	Summary	EMC Funding	Study Collaborators
FY 2020-21			
EMC-2016-003: Repeat LiDAR Surveys to Detect Landslides	Engineering geologic assistance at State Demonstration Forests, examples of such services in preparation of timber harvesting plans, assistance with landslide and slope stability issues, road- related mitigation design and other environmental mitigations requiring engineering geological input.	\$33,333	Bill Short & Dr. Matt O'Connor (CLOSED)
EMC-2018-003: Alternative Meadow Restoration	Monitoring and assess the effect on water quantity, water quality, and soil disturbance before and after meadow restoration on meadows in the Sierra Nevada and Cascade mountains following the removal of WLPZ vegetation and upslope forest thinning. This project offers an opportunity to reduce the scientific uncertainty of the effectiveness of restoration treatments authorized under the current FPRs.	\$25,077	Christopher Surfleet



Project Number			Study
and Title	Summary	EMC Funding	Collaborators
EMC-2018-006: Effect of FPRS on Restoring Canopy Closure, Water Temperature, & Primary Productivity	The California FPRs specify regulations for operations within WLPZs. Private landowners may also develop tailored riparian prescriptions. These practices are designed so timber operations do not cause adverse impacts to aquatic and terrestrial ecosystem health. This project aims to assess the effectiveness of these regulations in protecting water quality, stream metabolism, and water quantity in areas where operations have occurred.	\$151,006	Kevin Bladon, Catalina Segura, Matthew House, & Drew Coe
EMC-2019-003: Fuel Treatment Effects on Water Yield	To monitor, analyze, and develop statistical and physically-based models to quantify the response of streamflow to cumulative forest treatments in Sierra Nevada watersheds. Results will significantly advance and transform our understanding of the impacts of fuel treatments on short- and long-term water yield in sub-alpine mountain systems and provide critical information for regional forest and water resource managers and planners.	\$156,665	Dr. Terry Hogue and Dr. Alicia Kinoshita

Statewide Forest Ecosystem Monitoring

Statewide Forest Ecosystem Monitoring and Prioritization Planning

Managing California's extensive forests and timberlands requires an enduring monitoring effort to enable the State to adaptively manage and effectively respond to unprecedented pressure and change. This is particularly important given the significant investment State and Federal partners are directing to forest restoration and fuel reduction projects, in addition to ongoing commercial timber harvest. Statewide forest ecosystem monitoring, called for under AB 1492 (see

<u>AB 1492 Ecological Performance Measures White Paper</u>) provides for regular assessment of forest resource conditions to enable more targeted and sustainable management through time. Monitoring forest resource conditions across California



ecoregions can link the outcomes of on-the-ground projects to the efficacy of state funded programs, including those for restoration and regulatory compliance.

There are now several efforts underway to further develop forest ecosystem monitoring including an investment by CNRA in a state-wide forest ecosystem monitoring system, the development of Regional Resource Kits through the Forest and Wildfire Resilience Task Force.

Providing Grants

The State of California is a major purveyor of contract and grant funding to support research, innovation, and on-the-ground management action. As Fund condition allows, the Program, through its various departments, administers restoration grant funding to enable reforestation, water quality improvement and forest management in high-risk forested areas of the State.

When Program funding is available for restoration work, funds are appropriated by the State budget process, AB 1492 (as amended) for grants and programs to: promote forest restoration; mitigate past damage from wildland fire and legacy forest management practices; improve fish habitat and remove fish migration barriers; improve sediment control measures to prevent water quality impairment; and more, described in detail below.

In FY 2020-21, no new Fund appropriations were invested in forest restoration. However existing field staff continue technical and administrative assistance.

Water Boards

Water Board staff continue to oversee and provide technical assistance to several active projects funded with Timber Fund appropriations from previous years (Table 5).

				Start	
Project Title	Grantee	County	Amount	Date	End Date
Elk River Remediation					
Pilot	California Trout	Humboldt	\$638,557	6/1/2016	3/31/2020
Large Wood					
Augmentation in the					
Mendocino Hydrologic					
Unit	Trout Unlimited	Mendocino	\$569,005	6/1/2016	4/30/2019
Ponderosa Way					
Assessment and					
Sediment Reduction	Tehama County				
Plan (Phase I)	RCD	Tehama	\$300,000	6/1/2016	4/30/2019

Table 5: Summary of Active Timber Fund Restoration Grants via the State Water Board



				Start	
Project Title	Grantee	County	Amount	Date	End Date
Mendocino Coast	Granice	County	Amount	Dale	
TMDL Implementation	Mendocino County				
Program	RCD	Mendocino	\$800,000	4/1/2017	3/31/2020
Post-Fire Response to	ROD	Wendoemo	\$000,000	4/1/2017	5/51/2020
Forest Management:	California				
Mitigations for	Department of				
Improved Water	Forestry and Fire				
Quality Performance	Protection	Lake	\$329,519	4/1/2017	4/30/2020
Roadside Fuel	Yuba County Public	Yuba	<i>\\\</i> 020,010		1/00/2020
Reduction	Works	Tubu	\$370,000	5/1/2017	4/30/2020
Ponderosa Way			<i>\\</i> 01.0,000	0/ 1/2011	
Assessment and					
Sediment Reduction	Tehama County				
Plan (Phase 2)	RCD	Tehama	\$500,000	6/1/2017	4/30/2020
	Mendocino County		+)		
Eel River Road	Resource				
Sediment Treatment	Conservation				
and Inventory Project	District	Mendocino	\$693,047	6/1/2018	12/31/2021
Trinity River	Trinity County				
Watershed Roadside	Resource				
Fuel Reduction	Conservation				
Project	District	Trinity	\$250,503	6/1/2018	11/30/2021
Battle Creek	Western Shasta				
Watershed Road	Resource				
Sediment Reduction	Conservation				
Program Phase 1 & 2	District	Tehama	\$406,350	6/1/2018	10/31/2021
	Butte County				
North Butte County	Resource				
Road Inventory and	Conservation	– <i>"</i>			
Improvement Project	District	Butte	\$375,000	6/1/2018	2/28/2021
The American River	A . D.				
Headwaters	American River	Discours	*757 000	0/4/0040	0/04/0000
Restoration Project	Conservancy	Placer	\$757,000	3/1/2019	3/31/2022
Deer Creek North					
Yuba River					
Watershed					
Assessment and					
Sediment Reduction	Amoricon Divoro	Sierra	¢275 100	3/1/2019	2/20/2022
Plan	American Rivers Mendocino County	SIEITA	\$275,100	3/1/2019	2/28/2022
Post Fire Recovery	Resource				
Post-Fire Recovery from The Redwood	Conservation				
Fire	District	Mendocino	\$749,507	4/1/2019	12/31/2022
Large Wood			ψι = 3,301		12/01/2022
Augmentation, Phase					
II, in Sediment					
Impaired Watersheds	Trout Unlimited	Mendocino	\$421,223	5/1/2019	4/30/2022
impaired watersheds	mout ommitted		ψτζ1,ζζΟ	0/1/2013	



				Start	
Project Title	Grantee	County	Amount	Date	End Date
in the North Coast					
Region					
King Fire Significant					
Existing and Potential	American River				
Erosion Sites	Conservancy	El Dorado	\$266,366	3/1/2020	6/3/2023
Upper Bidwell Park					
Road and Trail					
Sediment Source		Butte			
Reduction	City of Chico	County	\$706,352	3/1/2020	6/30/2023

CAL FIRE

California Forest Improvement Program

CAL FIRE has utilized the Fund to offer extensive forest restoration grants through the <u>California Forest Improvement Program</u> (CFIP), including reforestation of timberland significantly impacted by wildland fires and drought mortality.

Private forestland ownerships of 20 acres to 5,000 acres in size are eligible for the Program for a wide range of project types ranging from reforestation, forest health improvement thinning, site preparation, and release of conifer seedlings. One of the most important steps in the program is the preparation of an ownership-wide forest management plan for the grantee. This plan serves to educate the forestland owner about their options for forest management and develops long term goals which establish a set of management actions to meet those goals over time. This management plan is then used to guide the forest restoration projects that can be supported with CFIP grants and other similar Federal grant programs such as the NRCS Environmental Quality Incentives Program (EQIP).

For Fiscal Year 2020/21 CFIP was not allocated any new funding through the Timber Fund because it received nearly \$50 million through the new State-wide wildfire resilience program in 2021. Currently there are five (5) CAL FIRE Foresters, CFIP Forestry Assistance Specialists, funded through the Timber Fund. The funding for these positions expired on June 30, 2021. Further funding for these positions is now being provided through Greenhouse Gas Reduction funds.

CAL FIRE is currently supporting ongoing CFIP grants with California Climate Investment funds from the Greenhouse Gas Reduction Fund and Proposition 68 Forest Health Funding which has been allocated to the Program.

Summary of major activities:

• CFIP has utilized the Fund as the primary funding source for hiring five (5) CAL FIRE Foresters, also known as Forestry Assistance Specialists, who



are located across California's most diverse timberlands. These CAL FIRE Foresters provide valuable technical assistance to private forestland owners and serve as the critical link between landowners and the CFIP program.

- Over the last 5 years of Fund support, the CFIP program has achieved 2,009 acres of reforestation, 3,583 acres of restoration activities, and helped landowners plan-out future actions on 43,304 acres through creation of Management Plans. Additionally, the Fund has been utilized in conjunction with other funding sources such as the High-Speed Rail Authority (HSRA) to reforest 1,180 acres of timberland significantly damaged by wildfires or drought mortality.
 - In Fiscal Year 2019-20 the Program achieved 310 acres of reforestation, 1,012 acres of restoration activities, and helped landowners plan-out future actions on 6,531 acres of forestland through the creation of Management Plans. The final expiration date for all CFIP Grants funded through the Timber Fund is February 28, 2021, and the liquidation date for all funds associated with the Timber Fund is June 30, 2021. As of the end of FY 2020-2021, there are 40 open or active CFIP Grants that utilize the Timber Fund.
 - i. In addition to reforestation, CFIP has utilized the Fund for watercourse restoration projects where roads or erosion sites are impacting important fish bearing streams. To date, 50 road sites have been treated by either replacing or repairing crossings as well as hydrologically disconnecting roads from a watercourse.





Site 1- (Before, left): 2017 Redwood Fire post salvage logging prior to CFIP practices. Mendocino County, California. 17/18 CFIP Funded. **Site 1- (After, above):** 2017 Redwood Fire replanted with Douglas fir seedlings. Mendocino County, California. 17/18 CFIP Funded



Site 1 (Before, left): 2017 Redwood Fire post salvage logging prior to CFIP practices. Mendocino County, California. 17/18 CFIP Funded. **Site 2 (After, right):** 2014 Butte Fire CFIP Reforestation Project, completed planting of pine seedlings. Calaveras County California

Reforestation Seedling Production

As the result of a FY 2017-18 budget change, CAL FIRE resumed reforestation seedling production at the <u>L.A. Moran Reforestation Center</u> (LAMRC) in Davis, CA, in order to meet reforestation needs of landowners throughout the State. CAL FIRE also maintains



and operates the State Seed Bank, which is one of the largest conifer seed banks in California.

This is considered an essential activity to address the dynamic conditions of today's private and public forestlands due to drought, insects and disease, wildland fire, and climate change. Initial funding of \$4.8 million in FY 2017-18 and somewhat lesser amounts in subsequent years is supporting upgrades to the facility, new greenhouses, permanent and temporary staff, re-initiation of production of forest and riparian seedling production, and ongoing reforestation research funding.



(Left) CAL FIRE Seed Bank.

(**Right)** Seedlings for reforestation in new greenhouse.

In late 2017 CAL FIRE began the process of restarting its nursery program. The majority of 2017-18 was spent evaluating the condition of the existing facilities, determining needs, filling vacancies, developing a workflow for sowing, growing and delivering seedlings, and purchasing supplies and equipment. To date, the following has been purchased:

• One 9,200 ft. greenhouse/shade houses equipped with retractable roof and walls and two interior shade curtains.



- Materials necessary to restore two existing greenhouses (i.e. twin wall polycarbonate roof and walls, including venting roof).
- Heating, cooling, irrigation, fertilization, and master control systems for all three greenhouses.
- 40 ft. Conex style refrigeration container.
- Upgrading of seed sowing equipment.
- Packaging and processing equipment.

2018 was the first season of growing seedlings in order to test processes. Seedlings were grown in a facility at UC Davis while greenhouses at LAMRC were being restored.

CAL FIRE completed restoration of the two existing greenhouses in January 2020. With the restoration of these two greenhouses, CAL FIRE sowed, and is in the process of growing, approximately 147,000 seedlings this year. These seedlings will be available for planting in early 2021. Clients for these seedlings include American Forests and Whiskeytown National Recreation Area.



The new 9,200 square foot greenhouse is currently undergoing plan and permit review. It is anticipated the greenhouse will be constructed in fiscal year 2021/2022. Once the new greenhouse is completed, the total capacity for growing seedlings will be approximately 475,000.

One of the biggest successes with the reopening of LAMRC is the upgrades associated with the seedbank. Without a robust supply of seeds, there would be a critical shortage of seedlings. CAL FIRE surveys, collects, processes and stores conifer and other tree seeds from across all 87 seed zones in the State, with collections separated out at 500-foot elevation bands. LAMRC stores and sells seeds to private landowners for reforestation within the State.

In FY 20/21 and 21/22, LAMRC also received \$11m as part of the larger wildfire resilience program.



Cone year 20/21

In cone year 2021, LAMRC brought in the following to the Davis facility:

	Bushels	Potential Trees
2021 Bushels (CAL FIRE)	1,392	9,812,984
2021 Bushels (Private Industry)	735	4,113,210

These totals represent cones collected by CAL FIRE staff and contractors as well as cones collected by our partners and cooperators. CAL FIRE also processes cones into seed for private industry, private landowners and forestry consultants.

The current inventory in the LAMRC seed bank is 22,623.13 pounds of seed, across 56 species. Of this amount, 5,203.80 pounds is considered "declining", i.e. the germination rate for a given species is below acceptable levels for sowing in a production nursery. While focused on rebuilding their nursery facilities, CAL FIRE is also putting focus on the rebuilding of the seed supply to ensure the future availability of a robust stock of seeds.

Seedling year 20/21

2021 Seedling production:

Conifer Seedlings: 225,000

- Coast redwood for areas of the 2020 CZU complex fire (Santa Cruz Co.).
- Douglas Fir and Ponderosa Pine for areas of the 2018 Camp Fire and 2020 North Complex (Butte Co.).
- Ponderosa Pine and Giant Sequoia for 2020 Castle Fire (Tulare Co.).

Oak Seedlings: 1,630

- 448 Live oaks for Carr Fire (Shasta 2018)
- 1,182 Blue oaks for 2020 LNU Complex Fire (Napa Co.)

2022 Anticipated Seedling Production

Currently planning for 134,000 conifer seedlings

• Tamarack Fire (Alpine Co. 2021) & Creek Fire (Fresno Co. 2020)



- Caldor Fire (El Dorado Co. 2021) 40,000 seedlings will be grown on speculation through El Dorado RCD.
- Glass Fire, (Napa Co. 2020) 3000 oaks, big leaf maple, and madrone
- Redwoods & Giant Sequoias: up to 80K additional seedlings

Climate Adaption Efforts

The additional funding for the reforestation center has allowed CAL FIRE to expand its work with UC Davis and the US Forest Service Pacific Southwest Research Station to study and draft scientifically based seed transfer guidelines that will set a new standard for how we address climate related impacts to physiological growing conditions across the State. This will ultimately assist foresters and landowners to properly match the right seed source with their current and future growing conditions based on a changing climate. This climate-based, applied research will help to secure a healthy and resilient forest for California's future. This project will lead to development of a climate adapted seed lot selection tool that will be available on-line and incorporate a mix of climate change forecasting so that seed selection is based on climatic estimates, rather than static map based physiologic growing zones. This Climate Adapted Seed Tool (CAST) is now operable and has been tested and utilized by the LAMRC staff for seedling needs of private landowners. This tool has greatly improved our ability to locate seed sources in areas where the seed stocks are low or nonexistent.

Sierra Nevada Conservancy

In FY 2018-19 the Sierra Nevada Conservancy (SNC; a Conservancy under CNRA) was appropriated a one-time amount of \$1 million from the Fund as part of the Agency's Forest Carbon Plan implementation package. This was part of an overall \$96 million funding package including other funding sources to improve the health of California's forests and strengthen their resiliency to tree mortality and wildfire. With this funding, SNC has provided local assistance grants for workforce development through the Sierra Nevada Alliance's Sierra Corps Pilot program. The fellows associated with the Pilot program have provided valuable services to their host sites and been well received, with two of the four fellows' terms being extended through the end of 2021. One of the fellows will be promoted to a full-time position when he finishes his term at his host site. The funding has also provided local assistance to Calaveras Healthy Impact Product Solutions (CHIPS) Forest Restoration and Prescribed Fire Crew Development to provide training to multiple tribes, as well as certification in a S212 Wildland Fire Chainsaw course. There were representatives from three tribes and 48 non-native people at the training, which was completed in early 2021. Sierra Institute for Community and Environment has used this funding to build capacity for rural development across Sierra communities and has completed self-capacity assessments



of seven communities across the Sierra Nevada that are interested in biomass and wood utilization.

OTHER CLOSELY RELATED WORK/ CONTRIBUTIONS OF PROGRAM STAFF

Wildfire Preparedness and Emergency Response

While other programs, predominately led by CAL FIRE, address wildfire prevention and preparedness, Program staff regularly work with the Office of Energy Infrastructure Safety and other agencies in relation to utility right-of-way vegetation management and wildfire hazard mitigation. Cumulatively, across the state, the power utilities are actively implementing their <u>Wildfire Mitigation Plans</u> to manage vegetation along tens of thousands of miles of utility infrastructure, much of this located in forested areas of the State. The expertise and support of Program staff are needed to develop permits, review Wildfire Mitigation Plans, and conduct field inspections. Program staff are critical to enabling the pace and scale of vegetation management required to mitigate risks to public safety from wildfire hazards associated with utilities, while protecting vital natural resources. In recognition of the long-term and increasingly intensive need for permits associated with utility right-of-way vegetation management, which includes earth disturbance and potential for impacts to waterways, the Water Boards are developing a statewide permit if adopted, utility companies will use to implement wildfire prevention plans.

When major wildfire incidents occur, whether from natural or human-caused starts, CAL FIRE's <u>Watershed Emergency Response Team</u> (WERT) partners with Program staff from the California Geological Survey (CGS) to rapidly evaluate the potential for debris flows and flooding following intense rainfall in an area affected by wildfire. Certain Program staff are deployed immediately after major fire incidents, and work with local authorities to identify communities or infrastructure at risk, and devise mitigation and safety measures where needed. Additionally, review team staff frequently and closely interface, post-fire, to provide regulatory and permitting support for landowners attempting post-fire salvage operations and hazard tree removal work. In FY 2020 CGS staff worked on 21 post-wildfire response incidences through the CAL FIRE WERT process and Cal OES mission tasks.

Governor's Wildfire and Forest Resilience Task Force and Action Plan

The AB 1492 Leadership Team was organized as an interagency coordination group to implement mandates outlined in AB 1492 Forest Resource Management (2012) and to improve efficiencies as they relate to commercial timber harvest. The <u>California Wildfire and Forest Resilience Task Force</u> (Task Force) is implementing the



<u>Wildfire and Forest Resilience Action Plan</u> and is leveraging this group, in part, as the Regulations Working Group to establish permit synchronization for California timber harvest, develop an effective on-line permit process and database, and support ongoing efforts such as making environmental regulatory standards accessible to small landowners and ensuring these standards are accessible. The following Key Actions are aligned with this regulatory improvement effort:

- 1.35, Complete Permit Synchronization Workplan,
- 1.36, Complete Timber Harvesting Plan Guidance Documents,
- 1.37, Improve and expand the Timber Regulation and Forest Restoration database (CalTREES), and
- 1.38, Enhance the California Vegetation Treatment Program (CalVTP) implementation

Further, in other engagement, the Action Plan reenforces the need for Program staff to continue implementation of activities tied to AB 1492 and related legislation (AB 2551), to establish statewide forest ecosystem monitoring and management priority planning, with the twofold objective of: 1) building understanding of forest health treatment and harvest influences on ecosystem conditions and wildfire behavior; and 2) aiding in more strategic forest management planning. Specific Key Actions noted in the Action Plan include:

- 4.4, Establish Ecological Planning Tool
- 4.5, Develop Statewide Forest Ecosystem Monitoring System



APPENDIX

This Appendix is intended to supplement the Report to the Joint Legislative Budget Committee on the Timber Regulation and Forest Restoration Program¹ for FY 2020-2021. The contents herein provide detailed data as required by legislation.

Departmental Staffing and Costs

Natural Resources Agency (CNRA)

CNRA currently has three dedicated staff supporting the timber fund efforts (Table 1): Deputy Secretary for Forest and Wildland Resilience, a Senior Environmental Scientist, and an Executive Assistant. The Deputy Secretary position helped establish the wildfire resilience program in California and ensures the effectiveness of the timber harvest review programs by coordinating activities among departments, interacting with stakeholders, providing leadership for the development of the Program and its role in California forest health and wildfire mitigation efforts. In FY 2017-18, a Senior Environmental Scientist Specialist was added at CNRA to support Program operations and development of statewide forest monitoring and planning initiatives.

Table 1. CNRA Program Expenditures (\$1,000) and Positions (PY), Fiscal Years 2015-16 through 2020-21.

Budget Item	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21
Authorized Expenditures	\$2,596	\$1,234	\$2,211	\$1,762	\$1,523	\$1,523
Actual Expenditures	\$2,595	\$853	\$765	\$1,762*	\$1,523*	\$1,523*
Authorized Positions	2	2	3	3	3	3

*Estimated projection

CAL FIRE and Board of Forestry and Fire Protection

There has been no increase in CAL FIRE Timber Fund staffing since FY 2017/18 and the Board of Forestry and Fire Protection (Board) staffing increase of 2 positions was detailed in the last report. Authorized expenditures for CAL FIRE and the Board were at their lowest level since FY 2014/15, due to projected and realized reductions in revenue into the Timber Fund. Actual expenditures were similarly down due in part to salary savings from a series of Fund position vacancies and staff being funded from the emergency fund when assigned to incidents during a challenging wildfire season.

¹ Referenced alternately as the "Fund" or "Program" throughout document.



Table 2. CAL FIRE and BOF forest practice program expenditures and staff for
FY 2015-16 through 2020-2021.

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Budget Item	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Authorized Expenditures	\$22,456	\$22,623	\$30,016	\$41,935	\$20444	\$18907	
Actual Expenditures	\$18,162	\$19,263	\$23,246	\$19,508	\$16939	\$13414	
Authorized Positions— CAL FIRE	114	114	123	123	123	123	
Authorized Positions— Board	1	1	2	4	4	4	

The BOF received its first Timber Fund position and funding in FY 2015-16 to support the Board's Effectiveness Monitoring Committee and other Board functions. In FY 2016-17, the Board received an appropriation of \$450,000/year for two years to fund forest practice effectiveness monitoring projects under the aegis of the Effectiveness Monitoring Committee. In FY 2018-19, this funding was made permanent and ongoing.

Table 3 provides details on CAL FIRE and BOF forest practice program expenditures and staff for FY 2015-16 through 2020-21.

Table 3. All CAL FIRE and Board of Forestry and Fire Protection Positions (PY) in
Fiscal Years 2020-21.

		CAL FIRE REGIONS/BRANCHES					
CLASSIFICATION	Northern Region	Sacramento	Southern Region	Legal Office	Total		
Assoc. State Archeologist	1				1		
Senior State Archeologist		1	1		2		
Attorney III				1	1		
Executive Secretary I		1			1		
Forestry Assistant II	6	1			7		
Forester I (Nonsupvry)	25	9	3		37		
Forester II (Supvry)	21	5	1		27		
Forester III	3	2			5		
Forestry and Fire Protection Administrator		2			2		
Office Assistant (Typing)	3.5		0.5		4		
Office Tech (Typing)	8	2	0.5		10.5		
Program Tech II	7				7		
Supervising Prog Tech II	1				1		
Research Analyst I (GIS)			0.5		0.5		
Research Analyst II (GIS)	3				3		
Research Program Specialist II (GIS)	1				1		
Research Program Manager III	1				1		



Table 3. All CAL FIRE and Board of Forestry and Fire Protection Positions (PY) in	n
Fiscal Years 2020-21.	

		CAL FIRE REGI	ONS/BRANC	HES	
CLASSIFICATION	Northern Region	Sacramento	Southern Region	Legal Office	Total
Secretary	2				2
Staff Environmental Scientist		1			1
Senior Environmental Scientist (Specialist)		3			3
Assoc. Gov't Program Analyst		2			2
Sr. Accounting Officer		1			1
Senior Programmer Analyst		2			2
Other			1		1
Forestry Assistant II (Board of Forestry and Fire Protection)		1			1
Attorney IV (Board of Forestry and Fire Protection)		.5			.5
AGPA, Board of Forestry		1.5			1.5
Executive Officer, Board of Forestry		.5			.5
Executive Assistant		.5			.5
Total	82.5	36	7.5	1	127

Department of Fish and Wildlife (CDFW)

Tables 4 and 5 provide historic and reporting-year fiscal and staffing information for CDFW's Timberland Conservation Program. As noted above, CDFW staffing and funding have increased markedly since FY 2011-12, allowing the CDFW to increase its timely involvement in harvest plan review and oversight, as well as other work with landowners, such as pre-consultation, training, and participation in research or monitoring projects. The addition of staff and funding provided through the SB 901 budgetary process allows CDFW to engage in expanded responsibilities related to fire resiliency and timber harvest monitoring.



Table 4. CDFW Appropriations and Positions (PY) in Fiscal Years2014-15 through 2020-21.

			FY			
Budget Item	15-16	16-17	17-18	18-19	19-20	20-21
Legislative Appropriation						
Timberland Conservation Program	\$6,321	\$6,123	\$7,437	\$6,791	\$9,163	\$9,625
Restoration Grants	\$3,446	\$2,000	\$3500 ^b	\$2,000	\$1,000	\$0
Watershed Enforcement Team	\$656	\$753	\$230	\$657	\$690	\$718
TOTAL	\$10,424	\$8,876	\$11,167	\$9,448	\$10,853	\$10,343
Expenditures						
Timberland Conservation Program	\$5,954	\$5,609	\$7,597	\$7,157	\$9,613	\$9.088-
Restoration Grants	\$2,000	\$3,500	\$2,000	\$2,000	\$1,000	\$0
Watershed Enforcement Team	\$464	\$411	\$257	\$680	\$0	\$699
TOTAL	\$8,418	\$9,520	\$9,854	\$9,837	\$10,613	\$9,787-
Positions Authorized						
Timberland Conservation Program	37	37	37	37	52	49.2
Watershed Enforcement Team	3	3	3	3	3	0
TOTAL	40	40	40	40	55	49.2
Positions Filled						
Timberland Conservation Program	41	40	41	34.5°	47.2 ^d	46.7 ^d
Watershed Enforcement Team	3	3	3	3	0 ^e	0
TOTAL	44	43	44	37.5	47.2	46.7
Notes:						
 \$ in thousands ^a In FY 14-15, \$2m was appropriated b expended FY14-15 and the legislature ^b Extra \$1.5m for cannabis remediation ^c In FY 18-19, an internal budget levelin ^d 4.5 PYs are funded through the Gene ^e 3 Non-TCP cannabis/watershed clear from TRFRF to the continuous appropr process of backfilling these 3 positions 	appropriated restoration. ng exercise le ral Fund, not nup (not stand iation (started	the remaind to staffing TRFRF. dard CDFW e	er the followin reductions in enforcement)	ng FÝ. CDFW. PYs were re	directed	



Table 5 provides details on the staffing of CDFW's Timberland Conservation Program by detailed position classifications for FY 2020-21.

Table 5. CDFW Timberland Conservation Program Positions (PY) Filled in Fiscal Year 2020-21											
CLASSIFICATION		CDFW REGIONS AND BRANCHES									
	R1	R2	R3	R4	R5	R6	НСРВ	BDB	OGC	Total	
Environmental Program Manager	1						1			2	
Environmental Scientist	10.5	3	2	1	1		2	2		21.5	
Administrative Staff	2	1.7								3.7	
Research Analyst II		1								1	
Senior Environmental Scientist Supervisor	3	1					1			5	
Staff Counsel									0.5	0.5	
Senior Environmental Scientist Specialist	5	3	1	1		1	2			13	
Total	21.5	9.7	3.0	2.0	1.0	1.0	6.0	2.0	0.5	46.7	

HCPBHabitat Conservation Planning BranchBDBBiogeographic Data Branch

OGC Office of General Council

4.5 PYs funded through the General Fund

Water Boards

Table 6 provides historic and reporting-year fiscal and staffing information for the Water Boards' Forest Activities Program (FAP). The Water Boards' staffing and funding increased from 27.8 positions and \$4.7 million in appropriations in FY 2012-13 to 35.2 positions and \$8.7 million in total appropriations (Timber Fund and General Fund) in FY 2017-18. Four additional positions and \$2 million in forest restoration grant funds (per year for two years) were authorized beginning FY 2015-16. In FY 2016-17, five limited-term positions were converted to permanent positions. As detailed below, these funds do not all come from the Timber Fund. Actual total Timber Fund expenditures in FY 2017-18 were \$5.3 million. Positions



(PY), Fiscal Years 2015-16 through 2020-21.*									
Forest Program Budget	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21			
Appropriations	\$8,465	\$9,171	\$8,847	NA*	NA	\$NA			
Actual Expenditures	\$8,094	\$8,602	\$8,722	NA*	\$10,582	\$NA			
Authorized	34.9	36.2	35.2	35.2	53.2	46.6			

Table 6. Water Boards Timber Harvest Program Expenditures (\$1,000) and Positions (PY), Fiscal Years 2015-16 through 2020-21.*

See Table 7 for breakdown of the General Fund and Timber Fund components of these budget numbers. *Due to issues with FI\$CAL, Water Boards are currently processing FY expenditures.

Table 7 provides reporting-year staffing information for the Water Boards' Forest Activities Program (FAP). The Water Boards' staffing increased from 35.2 positions in FY 2018-19 to 53.2 positions in FY 2019-2020. New positions were added to the program to support the workload from increased timber and vegetation management activities by utility companies, landowners, and public agencies in response to Senate Bill 901. The increase in State Water Board staffing is to update existing regulation and develop new regulation in response to the work described in Senate Bill 901. The increase in Regional Water Board staffing is to conduct inspections and process the increase in potential discharges to waters of the state.

Classification	R1		R 3	R5		R6		SB	Total	
	TRFRF	Gen	Gen	TRFRF	Gen	TRFRF	Gen	TRFRF	TRFRF	Gen
Environmental Program Manager I	0.2	0.8							0.2	0.8
Supervising Engineering Geologist	0	0		0.4					0.4	0
Senior Environmental Scientist	0	0		1					1	0
Environmental Scientist	1.6	1.4		3.4	1.6	1	1	4	10	4
Senior Water Resources Engineer	0	0		0.65	0.15	1			1.65	0.15
Water Resources Control Engineer	0.9	0.1					1		0.9	1.1
Senior Engineering Geologist	0.7	1.3			1				0.7	2.3

Table 7. Water Boards Forest Activities Program Positions in FYs 2020-21.



Classification	R1		R3	R5		R6		SB	Tota	al
	TRFRF	Gen	Gen	TRFRF	Gen	TRFRF	Gen	TRFRF	TRFRF	Gen
Engineering Geologist	4.5	4.5	1	5.8	2	1	1		11.3	8.5
Attorney III	0	0						1.7	1.7	0
Analyst/Other	0	0		0.1	1			0.8	0.9	1
Total	7.9	8.1	1	11.35	5.75	3	3	6.5	28.75	17.85

As shown in Table 8, the Water Boards' Forest Activities Program receives funding from both the General Fund (Gen), the Waste Discharge Permit Fund (WDPF) and the Program Fund (TRFRF). The WDPF supports utility specific permit development, implementation, compliance, and enforcement across the state and beyond forested lands. The General Fund is used to support program activities related to noncommercial forestland management, whereas the Program Fund provides for the review and permitting of timber harvesting and related activities on nonfederal forests and federal forests, and for forest restoration grants.

Table 8. Funding Breakdown for the Water Boards' Forest Activities Program (FAP),	
Fiscal Years 2015-16 through 2020-21 (\$1,000).	

Appropriations by Fund	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
General Fund	\$2,835	\$3,376	\$3,293	NA*	\$5,083	\$NA
Timber Fund	\$5,341	\$5,795	\$5,554	NA*	\$5,498	\$4,657
Total	\$8,176	\$9,171	\$8,847	NA*	\$10,58 2	NA

* Due to issues accessing FI\$CAL data Water Boards were unable to track FY 18/19 financial numbers

State law requires each person who discharges waste or proposes to discharge waste that could affect the quality of the waters of the state to file a report of waste discharge with the appropriate Regional Water Board and to pay an annual fee set by the State Water Board, the funds from which are deposited in the Waste Discharge Permit Fund. The enactment of AB 1492 prohibits the Water Board from charging fees for its WDRs for timber operations, and it replaces the lost fee revenue with funding from the Timber Fund.

Regarding water quality monitoring, the Water Boards utilize project-specific monitoring and statewide monitoring programs designed to assess the condition of surface waters and ground waters throughout the state of California. These programs, such as the Surface Water Ambient Monitoring Program, help provide a baseline of existing water quality conditions and assessments of changes in conditions over time. When integrated as part of the regulatory planning process, this information enables the Water Boards to modify regulatory requirements over time, as needed, to ensure the protection of water quality.



Department of Conservation

The California Geological Survey (CGS) is part of the Department of Conservation (DOC) and provides geological technical support for timber harvest, vegetation management, and fuel reduction projects and associated permitting, including evaluating slope stability, erosion control measures, watercourse crossing, road, and skid trail design and maintenance, providing education, and conducting monitoring as well as performing post-disaster risk assessments. Their work is critical in assessing landslide risk after a fire and helping identify where it is safe to do post-fire emergency salvage harvesting. Since 2013, Geological Survey Staff have increased from 13 to 19 people.

Table 9 provides historic and reporting-year fiscal and staffing information for the DOC/CGS's timber harvest programs.

Table 9. Department of Conservation Timber Harvest Program Expenditures
(\$1,000) and Positions, Fiscal Years 2015-16 through 2020-21.

Budget Item	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21			
Authorized Expenditures (CAL FIRE Interagency Agreement)									
Authorized Expenditures (TRFRF)	\$4,171	\$4,134	\$4,242	\$4,428	\$4,630	\$4,382			
Authorized Expenditures (DOC Direct Funding)									
Total Expenditures	\$3,698	\$3,857	\$3,953	\$3,988	\$4,473	\$3,824			
Authorized Positions	19	19	19	19	19	19			

Table 10 provides details on the position classifications for DOC's timber harvest program staff, for FY 2020-21. Fund expenditures are lower than allocated due to significant expenditures for post-wildfire hazard analysis which is funded by CAL FIRE.

Table 10. DOC Authorized Staff (PY), Fiscal Year 2020-21.

	REC	REGIONAL DISTRIBUTION OF STAFF								
CLASSIFICATION	Sacramento	Santa Rosa	Eureka	Podding	Total					
	Sacramento	RUSa	Eureka	Redding	TOLAI					
Sup. Eng. Geologist	1				1					
Sr. Eng. Geologist	2	1	1	1	5					
Eng. Geologist	2	2	2	2	8					
Research Program	1				1					
Specialist II (GIS)	I				1					
Research Analyst II (GIS)	1				1					
Assoc. Gov. Program	1				1					
Analyst	I				I					
Office Technician	1				1					
Graduate Student Assistant	1				1					
Total	10	3	3	3	19					



Workload Analysis

The tables below (Tables 10-12) quantify the workload faced by the review team agencies. Prior to the implementation of AB 1492, information was presented on a calendar year basis; however, AB 1492 instead required that the information be presented on a fiscal year basis (July 1st-June 30th). The tables provide a detailed look at workload for all the Review team agencies for FYs 2020-21. Note that not all agencies face the same tasks. Table 10 captures responsibilities under the Forest Practice Act and Rules. Tables 11 and 12 capture CDFW and Water Boards responsibilities under timber-harvesting-related laws that they administer, such as Fish and Game Code § 1600 Lake and Streambed Alteration Agreements and Waste Discharge Requirements, respectively.

Table 11. Summary of work onder Porest	FY 2020-21								
	CAL FIRE	CDFW	CGS	Water Boards					
Timber Harvesting Plans									
Plans Filed	240								
Plans Reviewed – Includes plans still under review from previous FY	251	251	483	Use CAL Fire #					
Plans Returned	129								
Pre-harvest Inspections Conducted (THP & Substantive Deviation)	215	109	137	105					
Plans Withdrawn	12								
Second Review Participation (THP & Substantive Deviation)	224	197	190	286					
Substantial Deviations Filed	22								
Plans Approved	216								
Timber Harvest Acreage Approved	93,533.1								
Nonindustrial Timber Management Plans									
Plans Filed	11								
Plans Reviewed	12	15	17	16					
Plans Returned	6								
Pre-harvest Inspections Conducted (NTMP & Substantive Deviation)	16	10	9	10					
Plans Withdrawn	12								
Second Review Participation (NTMP & Substantive Deviation)	14	13	8	17					
Substantial Deviations Filed	8								
Notice of Timber Operations	105								
Plans Approved	8								
Nonindustrial Timber Management Plan Acreage Approved	1,542								

Table 11. Summary of Work Under Forest Practice Act and Forest Practice Rules



	FY 2020-21										
	CAL FIRE	CDFW	CGS	Water Boards							
Other Plans, Projects, and Permits											
Sustained Yield Plans Under Review	0	0	0	0							
Sustained Yield Plans Approved	0			0							
Exemption Notices	1,914		760								
Emergency Notices	501		229								
Compliance/Enforcement											
Compliance Inspections (Non-PHI)	2,950	65	11	434							
Violations	271	64		15							
Administrative Civil Penalties Initiated	55			0							
Total Active Administrative Civil Penalties	98			0							

Tasks tracked by the Department of Fish and Wildlife show a consistent level-of-effort from 2015-2016 to 2020-2021. While the overall number of plans submitted to CAL FIRE fluctuates year-to-year, CDFW continues to attend PHIs, process Lake and Streambed Alteration Agreements, and conduct species consultations at a rate similar to past years. In addition to this work, CDFW has increased efforts in landscape planning, such as Habitat Conservation Plans (HCPs) and participating Safe Harbor Agreements (SHAs) and participated in the legislativelymandated Emergency and Exemption Monitoring Project. A summary of Department of Fish and Wildlife work products during FY 2020-2021 is included in Table 11

Action		-			
Department of Fish and Wildlife Region	R1	R2	R3	R4	Total
§ 1600 Lake and Streambed Alteration Agreements Issued	177	15	13	5	210
§ 1600 Amendments Issued	22	2	3	0	27
§ 1600 Inspections Conducted	20	5	0	0	25
Exemptions Reviewed for Sensitive Resources	85	235	0	43	363
Master Agreements for Timber Operation Under Review	1	1	0	0	2
Habitat Conservation Plans/NCCPs/Safe Harbor Agreements Under Review	14	0	1	0	15
Species Consultations Conducted	228	13	8	20	269
CA Endangered Species Act Status Reviews Conducted	4	0	0	0	4
FLAR and Other Grant Proposals Reviewed	27	0	0	5	32
Forest Conservation Easements Reviewed	20	0	0	0	20
EM/EX Monitoring Visits Conducted	18	7	0	2	27



Action					
Department of Fish and Wildlife Region	R1	R2	R3	R4	Total

Table 13. Water Boards Forestry Program Activities, 2020-21 by Region.

Activity	R-1	R-5	R-6	Total
Waivers or WDR's Under Development or Renewal	2	1	0	3
Plans Enrolled in Waste Discharge Requirements OR Waivers of Waste Discharge Requirements (THPs, NTMPs, WFMPs)	134	56	3	193
Emergency Notices and Exemptions enrolled in Waivers OR WDRs	625	147	22	794
Federal Timber Projects Reviewed	10	32	15	57
Federal Timber Projects Enrolled	6	20	5	31

Over the last decade, the total number of staff supported through the Fund has increased significantly, while the number of Timber Harvesting Plans (i.e., THPs and NTMPs) has remained fairly stable, ranging between 229 and 297, with an average of 255 plans requiring full discretionary review each year. This relative stability in the number of plans has contributed somewhat to a steady increase in timber harvest review efficiency as evidenced by a long-term trend toward relatively shorter and consistent periods of time required to approve a plan. While there have been marked gains in the process, it is critical to understand the other dynamics at play. While the number of Timber Harvesting Plans has stabilized, the average number of acres potentially impacted by harvesting operations remains variable (i.e., 355 ac, to 587 ac. per plan). Changes in regulation add to the complexity of plan review, including the development of complex Working Forest Management Plans (WFMPs) or the changes to exemptions and emergencies. This last fiscal year was dominated by the significant drawdown on staff due to catastrophic increases in wildland fire activity and the closure of review team offices due to the COVID-19 pandemic.

It is also important to understand that not all CAL FIRE staff hired through the Program are dedicated to the review of Timber Harvesting Plans. Others fulfill the administrative support and the broader ecological monitoring goals of the program. Similarly, the other agencies utilize staff to address other responsibilities such as preventing impacts to water quality on federal lands, developing and reviewing long-term documents such as Habitat Conservation Plans, and participating in legislatively mandated monitoring. While the total number of review staff have increased; oversight, monitoring and planning staff also increased. CAL FIRE is the lead agency under the Forest Practices Act and CEQA, so the largest suite of responsibilities in timber harvest regulation on nonfederal lands falls to them. To provide information on the scale of these responsibilities over time, Table 13 provides the details of CAL FIRE's tasks for the period of calendar year 2007 through fiscal year 2020-21.



Table 14. CAL FIR	E Workloa	ad Histor	y, Calen	dar Yea	r 2007 thr	ough Fisc	cal Year 2	2020-21.						
Workload Measure	2007	2008	2009	2010	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
THPs Filed	435	344	240	244	257	229	297	282	240	234	262	284	228	240
THPs Returned ¹	115	59	42	52	36	50	110	124	129	73	79	84	88	129
THPs Resubmitted ¹						50	93	107	79	70	73	79	97	79
THPs Recirculated ²						48	20	22	2	3	3	1	3	2
THP PHIs Conducted ²	425	334	241	209	254	216	290	272	206	223	253	234	239	206
THPs Approved ²	403	355	254	204	285	243	278	260	216	220	267	244	234	216
Acreage in Approved THPs ³	133,876	139,365	92,763	88,700	150,919	107,051	146,384	128,644	93,533	91,179	105,523	100,888	122,586	93,533
NTMPs Filed	28	27	20	24	15	8	14	10	11	16	15	15	11	11
NTMPs Returned	10	9	6	8	3	5	4	5	6	7	8	4	11	6
NTMPs Resubmitted						5		5	4	7	8	4	13	4
NTMPs Recirculated ²						4	2	0	0	0	2	0	0	0
NTMP PHIs Conducted ²	24	23	16	24	14	8	13	9	11	13	14	11	13	11
NTMPs Approved ²	28	25	16	17	17	12	10	12	8	14	14	14	13	8
Acreage in Approved NTMPs ³	7,050	8,635	2,471	4,071	3,716	7,365	4,126	3,367	1542	6,500	4,448	2,410	4,215	1542
NTMP Notice of Timber Operations Received	163	92	37	118	109	102	123	132	105	139	174	109	84	105
SYPs Received				2		1 ⁴		0	0	0	0	0	0	0
SYPs Approved ⁴					2			0	0	0	0	0	0	0
Acreage in Approved SYPs					271,555			0	0	0	0	0	0	0
Exemption Notices	2,504	2,149	1,362	1,794	2,475	2,544	2,007	1,785	1914	2,510	2,021	2,028	2,292	1914
Emergency Notices	91	324	97	85	88	262	126	270	501	83	194	292	158	501



Table 14. CAL FIRE	Figure 14. CAL FIRE Workload History, Calendar Year 2007 through Fiscal Year 2020-21.													
Workload Measure	2007	2008	2009	2010	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Minor Deviations Accepted ⁵	4,276	3,664	2,094	3,003	2,878	2,815	2,902	2,437	2633	2,729	4,149	3,001	2,801	2633
THP and NTMP Substantial Deviations Received ¹	81	65	38	30	30	80	142 ⁶	93	30	72	93	41	47	30
THP Substantial Deviations Received						63	114 ⁶	68	22	57	72	38	37	22
THP Substantial Deviations PHIs						14	21	12	9	14	26	10	17	9
THP Substantial Deviations Second Review Participation	Data not collected prior to FY 2013-14						45	17	19	19	45	57	31	21
NTMP Substantial Deviations Received						17	28 ⁶	25	8	15	21	3	10	8
NTMP Substantial Deviation PHIs						6	5	7	5	5	7	1	5	5
NTMP Substantial Deviations Second Review Participation	Data not collected prior to FY 2013-14						14	12	4	8		3	5	5
Inspections ⁸	5,167	4,856	3,445	4,182	4,372	4,281	3,617	3,325	2950	3,967	3,473	2,705	3,090	2950
Violations	452	270	331	384	364	314 ⁸	286 ⁹	201	271	472	445	289	309	271
Administrative Civil Penalties Initiated	16	15	15	35	19	29	15	13		65	82	29	43	55



Table 14. CAL FIRE	Table 14. CAL FIRE Workload History, Calendar Year 2007 through Fiscal Year 2020-21.													
Workload Measure	2007	2008	2009	2010	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total Active														98
Administrative Civil Penalties								45		79	99	89	85	

Note: The table in Appendix 2 describes the different types of harvesting documents.

¹Includes plans that may have been returned or resubmitted more than once.

²May include plans submitted in the prior fiscal year.

³Represents plans approved within the calendar or fiscal year (which may have been submitted prior to approval year). Reported acres are from documentation of record; actual acres harvested may not correspond precisely.

⁴Full SYP 10-year update document has not yet been submitted, but agencies have begun pre-consultation with the submitter.

⁵Includes all harvest document types. Corrections in previous years' totals are a result of ongoing QA/QC of the Forest Practice System. FY 13/14 was corrected to reflect actual number of minor amendments submitted rather than a count of plans with minor amendments.

⁶Totals have been amended to reflect actual count of deviations received not the count of deviations accepted for filing.

⁸Inspections other than preharvest inspections.

⁹Totals have been amended to reflect actual count of Violations rather than a count of harvest documents with violations



Detail on Timber Harvest Activity in FY 2020-2021

Below are tables and brief summaries presenting timber harvesting statistics using CaITREES online permitting system.

Number and Acreage Extent of Timber Harvesting Documents Processed

Table 14 shows the number of timber harvest documents received and reviewed, and the acreage covered by them for FYs 2020-2021. For similar data over multiple years, see Table 15, above. Note that Table 14 does not capture forest management activities that CAL FIRE may be involved with in some way, but which do not include commercial timber harvesting. Some examples of forest management activities that may be noncommercial include fuel reduction projects under CAL FIRE's Vegetation Management Program and forest improvement activities under the California Forest Improvement Program (e.g., tree planting, thinning small trees, insect and disease control, addressing sediment sources), and research and demonstration projects on the Demonstration State Forests. For these forest management activities, environmental review is conducted using standard CEQA approaches, such as negative declarations, mitigated negative declarations, or program environmental impact reports.

In the 2020-21 Fiscal Year.												
Harvest Document Type	Count	Acres	Notes									
Timber Harvesting Plans Received	320	140,762	This is a count of new plans along with plans resubmitted, including those initially submitted in the previous FY.									
Timber Harvesting Plans Reviewed	251	140,762	This includes resubmissions and plans submitted in the previous fiscal year. (Note: some plans are resubmitted multiple times.)									
Nonindustrial Timber Management Plans (NTMPs) Received	15	2,453	This is a count of new plans along with plans resubmitted, including those initially submitted in the previous FY.									
NTMPs Reviewed	12	2015	Includes plans submitted in previous fiscal years with ongoing review, along with resubmittals.									
NTMP Notice of Timber Operations Received	105	13,702										
Sustained Yield Plans	0	0										
Emergency Notices Received	501	92,147										
Exemption Notices Received	1914	2,947,558	Includes property-wide filings.									

 Table 15. Number of Timber Harvest Documents, and Acreage Covered, Received and Reviewed in the 2020-21 Fiscal Year.

Number of Timber Harvest Documents Reviewed

Table 15 shows the numbers of the various harvesting document types reviewed or received each fiscal year and the acres covered. The numbers of Emergencies and Exemptions have been relatively volatile, in some cases more than double or halving in number, from year to year. As discussed earlier, and highlighted again by the numbers in this table, a share of the timber operations activity has shifted from THPs and NTMPs



to Exemptions in particular, given the significant acres and volumes of timber experiencing mortality due to drought, insects, and fire.

Table 16. Number of Timber Harvest Documents, and Acreage Covered, Received
and Reviewed in the Fiscal Years 2017-2021.

Harvest	2017-18		20)18-19	20	19-20	2020-21		
Document Type	#	Acres	#	Acres	#	Acres	#	Acres	
Timber Harvesting Plans Reviewed ²	384	124,803	258	113,558	298	119,348	251	140,762	
Nonindustrial Timber Management Plans Reviewed ²	30	6,553	16	3,800	16	4,593	12	2,015	
NTMP Notice of Timber Operations Received	174	23,203	109	2,670	84	7,318	105	13,702	
Sustained Yield Plans	0	0	0	0	0	0	0	0	
Emergency Notices Received	194	14,416	305	45,423	158	16.056	501	92,147	
Exemption Notices Received	2,021	3,459,861	2,028	2,834,450	2,292	2,706,977	1,914	2,947,558	
Totals	2,803	3,628,836	2,716	2,999,901	2,852	2,846,974	2,783	3,196,184	

Average Time for Plan Review

For context and understanding of the trends that the plan review time data show, it is important to emphasize that many factors determine how long it takes to review a THP or NTMP, from the time of submission to approval. These factors include²:

- Availability of review team staff;
- Time of year the plan is submitted, with associated weather and potential wildfire constraints (e.g., CAL FIRE Forest Practice staff are out of the office responding to wildland fires; winter weather conditions prohibit access for field review);
- Quality and completeness of the information originally submitted;
- Number of questions generated by review team agency staff on the plan submitted, and/or the number of changes required of the RPF;
- Promptness of the submitter's response to questions or requests for changes;
- Size and complexity of the plan;
- Wildlife, water, traffic safety, and other issues raised by the public.

Some factors are under the control of the review team agencies, some in control of the submitter, and some are subject to the vagaries and seasonality of California's weather. Another major factor that can delay plan reviews is when a new wildlife species comes

² For a more detailed discussion of these factors, see the Redding Pilot Project June 2014 Supplemental Report

⁽http://resources.ca.gov/docs/forestry/Redding Pilot Project Draft Supplemental Report 8-7-14.pdf)



under candidacy or listing under the State or federal endangered species acts after a plan is already under review.

Review of Timber Harvest Permits for Filing

The first step in CAL FIRE review of a THP (see Section 2) is screening it for completeness of specified required elements or precursor steps, such as notifying adjacent property owners. If these elements or steps have not been addressed, the plan is returned to the submitter for correction. Concerns have arisen at times that the rate of plan returns at this stage has been increasing. CaITREES is being designed to check for common THP filing errors and alert the submitter while they are entering their THP information into the system, thus reducing the likelihood of CAL FIRE having to reject a THP during review for filing. This error-checking can help to speed the overall process for the THP submitter.

A previous version of this Report to the Legislature looked in detail at the reasons THPs were returned during filing during 2013-2016. The primary reason for THP returns throughout the State in this period was a failure to meet the noticing requirements, which included the Notice of Intent (14 CCR § 1032.7), the request for information on domestic water supplies (14 CCR § 1032.10), and archaeology issues including the notification to Native Americans (14 CCR § 929.1, 949.1, and 969.1). These return issues are considered "fatal errors" when CAL FIRE reviews a THP for proper public notification.

When CalTREES is under full implementation, another analysis of the reasons that THPs are rejected for filing will be conducted. This analysis may help to show whether the error-checking tools built into CalTREES help to reduce the proportion of Plans returned during filing review.

THP Review Times

Table 16 provides THP and NTMP approval numbers, area in acres, and review times for FY 2020-2021. To provide more meaningful performance tracking, the data are broken out by the three regional CAL FIRE review team offices where plans are filed, based on the location of each plan. Each CAL FIRE office conducts separate administrative review processes for the plans it receives. Note, per the Forest Practice Act and Rules, the expected review period for THPs requiring a field inspection as part of the review process is 71 calendar days, without allowable extensions. The times provided in Table 16 include delays that are beyond the review team's control, such as those due to weather (e.g. snow prohibits access for inspection purposes), delays in RPF response to questions from the review team, delays due to public comment, and delays due to sensitive species evaluations, etc. With some exceptions, the regulatory timelines provide for extensions to allow for additional review necessary due to extended field evaluation, the submission of additional information or a substantial amount of public comments.

To better allow visualization of the review time trends by CAL FIRE office, Figure 1 presents the average review times for THPs and NTMPs in bar graph form.



Table 17. Approved Plan Review Time Statistics, by Review Team Office, FY	
2020-21.	

Review Team Office	Plan Type	Number of Plans	Acres in Plans	Minimum Days in Review	Maximum Days in Review	Average Days in Review	Median Days in Review
Santa	THP	123	31,754	30	333	106	99
Rosa	NTMP	6	852	89	255	164	120
Dedding	THP	72	54,826	36	280	109	188
Redding	NTMP	1	152	67	67	67	128
Freene	THP	13	6,886	42	272	137	112
Fresno	NTMP	0	n/a	n/a	n/a	n/a	n/a

Note: The times provided in Table x include delays that are beyond the review team's control, such as those due to weather (e.g. snow prohibits access), delays in RPF response to questions from the review team, delays due to public comment, and delays due to sensitive species evaluations, etc. Outliers have been removed to represent more accurate timeframes.

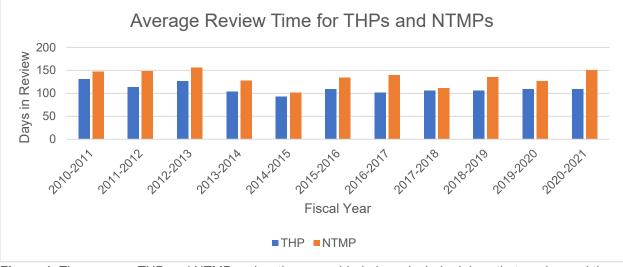


Figure 1. The average THP and NTMP review times provided above include delays that are beyond the review team's control, such as those due to weather (e.g., snow prohibits access), delays in RPF response to questions from the review team, delays due to public comment, and delays due to sensitive species evaluations, etc. The last four fiscal years have had statistical outliers removed.

CAL FIRE has provided the following explanation regarding THP average review times:

CAL FIRE and the other Review Team agencies faced continuing significant challenges during FY 2020-21; some of which have continued into the current fiscal year. CAL FIRE review team offices faced closures due to the COVID-19 pandemic, resulting in a shift to remote harvest document processing. This was facilitated by the ability to process documents through the CaITREES system. Additionally, all offices faced a significant staffing 'draw-down' as staff were assigned to the multiple significant wildland fires across that State; including fireline assignments, GIS specialist assignments and Watershed Emergency Response Teams (WERTs). Again, our success in meeting statutory and regulatory timeframes can be attributed in part to our ability to shift plan review workloads through the CaITREES system.



In addition to these significant new challenges, CAL FIRE review team offices continue to respond to previously identified challenges to enhance efficiencies such as changes in regulation affecting plan review and shifting workloads across the various new harvest documents available, weather delays affecting field review, complex evaluations of species protection, the unpredictable workload increases resulting from the public's important role in plan review, delays in RPF response to questions from the review team and often related plan recirculation to address these complex issues, and conversion THPs that are dependent on local agency's processing of the necessary EIR. Despite new and recurring challenges, the review teams continue to show a steady long-term trend toward efficient plan review.

NTMP Review Times

Figure 1 shows the average review time for NTMPs. The times are longer and more variable than THP review times for a number of reasons. NTMPs are non-expiring plans, often addressing an entire forest ownership of up to 2,500 acres. They are typically much larger and can be more complex than standard Timber Harvesting Plans, and hence take longer to review. Because of these characteristics, NTMPs have a longer regulatory review time than THPs. Also, there are far fewer NTMPs submitted each year than THPs. Given this complexity and the small numbers of plans, it is not surprising that there is greater variability of review times for NTMPs as compared to THPs. This variability is borne out by the pattern of bars in Figure 1.

As the Program develops better administrative performance monitoring tools, the Program will be able to provide better insights on why harvesting permit review times vary from year to year. Again, CaITREES in particular is intended to address this need.

Number of Field Inspections per CAL FIRE Inspector

Table 18 provides information on the types and number of field inspections made by CAL FIRE, including the number of each inspection type made per inspector on an average basis. While the numbers correlate well with the numbers of harvest documents submitted by type (e.g., THPs, NTMPs, exemptions) the numbers here are further reflective of the discussion above regarding shifts in THP activity and the variability of use of Exemptions and Emergencies as new regulations are implemented and conditions change in the forested areas of the State (e.g., drought, wildfire, recovery).



Table 18. Number of Field	Inspection	s made by	CAL FIRE	, FY 2011-′	12 through	2020-21.				
				Number/	Average N	lumber per	⁻ Inspector			
Harvest Document Type	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Timber Harvesting Plans	2,533/44	2,315/41	1,969/36	1,590/22	1,522/21	1,384/22	1,489/25	1,186/24	1,535/24	1128/20
Nonindustrial Timber Management Plans	358/6	318/6	331/6	340/5	381/5	370/6	325/5	293/7	232/7	188/5
Working Forest Management Plans	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6/1	0/0
Emergency Notices	138/2	332/6	329/6	359/5	519/7	417/6.6	371/6	387/14	435/20	390/13
Exemption Notices	1,307/23	1,508/26	1,238/23	1,274/17	1,938/26	1,951/31	1,497/25	1,056/22	1,237/23	1170/29
Illegal Non-Permitted Activities	86/2	63/1	79/2	62/1	93/1	100/2	91/2	39/3	84/3	74/3
Totals	4,422/77	4,536/80	3,946/73	3,625/50	4,453/69	4,222/67	3,773/63	2,961/70	3,529/78	2950/69



The average number of inspections over the period reflected in Table 17 is approximately 3,800 total inspections over all harvest document types. As demonstrated in the table, there has been significant variability in the numbers and types of inspections conducted. CAL FIRE has suggested the variability in the number of inspections conducted may be due to periods of increased drought and fire activity due to the requirement for CAL FIRE inspectors to support fire control emergency response efforts. Also, despite staffing increases, new inspectors were required to complete extensive mandatory training requirements. Table 17 does indicate a general decline in the total number of inspections and the average number of inspections per inspector, which correlates well with the significant increases in fire activity across the State. The number of inspections this FY was the lowest in the last decade.

Number of Active Plans and Acres under Active Plans

Table 19 shows statistics on "active plans," which includes the universe of all approved plans that are available for operation in a given year. Plans that are available to be operated on are considered "active" regardless of whether any harvest activity actually occurs. Because AB 1492 increased the lifespan of THPs, this number may trend upward due to the fact that any given plan now can be operated over a longer period (up to 7 years instead of 5). Recent legislation has again increased the effective period 2 years for plans that could not be operated on due to the extent of fire-damaged timberlands across the State. This will affect future reports and make it difficult to draw a comparison to previous years.

The number of acres under Exemption Notices (maximum of one-year operating life) is particularly large because landowners can place their entire property under an Exemption for removal of relatively small volumes (less than 10% of the average volume per acre) of dead and dying trees [14 CCR § 1038(b)] when compared to a THP or NTMP. This is compounded by overlapping fiscal years when reporting "active" plans.



Harvest	FY 2	2013-14	FY 2	2014-15	FY 2	2015-16	FY 2	2016-17	FY 2	2017-18	FY 2	2018-19	FY 2	2019-20	FY 2020-21	
Docume nt Type	No.	Acres	No.	Acres												
Timber Harvestin g Plans	1,11 2	579,33 0	1,0 84	596,23 7	1,0 98	593,99 3	1,1 31	597,45 1	1,2 22	626,70 2	1,3 59	663,23 3	1,3 81	690,16 6	1,1 18	519,74 1
Nonindust rial Timber Managem ent Plans ³	771	318,96 3	772	319,26 4	781	323,44 4	794	328,40 6	808	332,65 6	820	333,47 1	827	333,58 4	796	315,12 0
NTMP Notice of Timber Operation s ^{3, 4}	203	33,663	225	30,205	225	31,674	238	40,255	288	44,364	119	2,449	140	9,801	108	13,280
Emergenc y Notices ⁴	380	83,524	382	98,085	456	91,638	302	42,455	268	29,414	492	57,788	441	62,085	432	83,465
Exemptio n Notices⁴	4,4 92	5,434,5 91	3,7 23	5,663,9 76	4,1 87	5,640,8 94	4,8 70	5,629,6 89	4,4 39	6,369,6 52	3,9 58	6,370,8 09	4,1 48	5,456,9 65	3,7 24	5,648,9 89
Totals	6,9 58	6,450,0 71	6,1 86	6,707,7 67	6,7 47	6,681,6 43	7,3 35	6,638,2 56	7,0 25	6,702,3 08	6,7 48	7,427,7 50	6,9 37	6,552,6 01	6,1 78	6,5805 95

Table 19. Number of Active¹ Plans and Acres² Covered by Plans, FY 2013-14 to 2020-2021.

¹An Active Plan is an approved plan that does not have an approved Final Completion Report or has not reached the statutory expiration date.

²Acres reported in documentation of record.

³NTMPs are not operational, but reflect potential operations. NTMP notices of operation (NTOs) better reflect operational activity on NTMPs; however, NTO acres may reflect total acres under an NTMP that is being operated on, not necessarily the *actual* number of acres operated.

⁴Valid for up to one year.

Note: The CAL FIRE Region offices have been entering the Expired date differently for several years. The implication is that a plan may have appeared to be active longer in the Redding and Fresno Office than in the Santa Rosa office.



Overall Accounting of Timber Fund Personnel Activities

CAL FIRE tracks the activity of all Timber Fund-funded staff using a Personnel Activity Report, or PAR, form. Staff complete and file the PAR form monthly. The top three activity areas for CAL FIRE involved reviewing and processing of THPs, conducting forest practice inspections, and mandatory training.

Table 20. CAL FIRE Timber Fund Staff Activity Account	nting, FY 20	016-17 to F	Y 2020-21		
		Percent	of Total S	taff Time	
	FY	FY	FY	FY	FY
Activity	2016-17	2017-18	2018-19	2019-20	2020-21
Review and Processing of THPs	21.0	21.3	21.6	22.5	18.9
Conducting Forest Practice Inspections	22.6	19.5	21.3	26.1	19.9
Emergency Response	10.3	8.7	8.9	3.8	14.6
Participating in Mandated Training	7.8	11.0	10.7	7.5	8
Other Duties as Required	6.6	9.2	6.0	7	6
Supervising and Managing the Forest Practice Program	8.6	8.6	8.9	7.3	6.5
Processing and Managing Data Related to THPs	9.7	8.9	8.7	8.9	9
Other Forestry-Related Duties	8.4	7.5	7.8	11	11.8
Forest Practice Law Enforcement	2.4	2.8	2.9	3.4	2.9
Official Response/Public Records Act Requests	0.9	0.8	0.3	0.3	0.2
Program or Project Monitoring	0.8	1.0	1.2	1.3	0.9
Board of Forestry and Fire Protection Related	0.3	0.2	0.6	0.2	0.4
Ecological Performance	0.4	0.4	1.0	0.5	0.4
Litigation	0.2	0.1	0.2	0.2	0.5
Total	100	100	100	100	100



SILVICULTURAL SYSTEM DATA

The data source for the following tables is the CAL FIRE Forest Practice GIS database, unless otherwise noted below (portions of table A-2). Acreage of plans or notices does not necessarily represent actual on-the-ground harvests. Acreage is calculated in GIS and does vary from the acreage reported in the document of record at times. The GIS source data can be downloaded from the CAL FIRE Forest Practice GIS Hub (https://forest-practice-calfire-forestry.hub.arcgis.com/).

Disclaimer: The State of California and the Department of Forestry & Fire Protection (CAL FIRE) make no representations or warranties regarding the accuracy of this data. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of or arising from the use of data.

Appendix Contents:

- 1. Table A-1A. Description of Silvicultural Categories.
- 2. Table A-1B. Active Timber Harvesting Plan Acres by Silvicultural Treatment Area as a Percent of Total Acres under Plans, FY 2020-21.
- 3. Table A-2. Acreage of Approved Timber Harvest Plans, FY 2020-21.
- 4. Table A-3. Number and Acreage of Accepted Exemption Notices, by County and Notice Type, FY 2020-21.
- 5. Table A-4. Number and Acreage of Accepted Emergency Notices, by County and Notice Type, FY 2020-21.
- 6. Table A-5. Acreage of Approved Nonindustrial Timber Management Plans (NTMPs), FY 2015-16 to FY 2020-21.

Silvicultural Category	Silvicultural Method
Clearcut	Clearcut
Intermediate Treatments	Commercial Thinning, Sanitation-Salvage
Special Prescriptions and Other Management	Special Treatment Areas, Rehabilitation of Understocked Areas, Fuelbreak/Defensible Space, Variable Retention, Aspen/Meadow/Wet Area Restoration
Uneven-aged Management	Selection, Group Selection, Transition
Even-aged Management (no Clearcut)	Multi-staged management over time, including: Seed Tree Seed Step, Seed Tree Removal Step, Shelterwood Preparatory Step, Shelterwood Seed Step, Shelterwood Removal Step
Timberland Conversion	Conversion to non-timberland (does not include less-than-three-acre conversions covered by exemptions)

Table A-1A. Description of Silvicultural Categories.

Note: Alternative Prescriptions are categorized with the closest appropriate silviculture as stated in the plan of record.



Table A-1B. Active Timber Harvest Plan Acres Silvicultural Treatment Areas as a Percent of Total Acres under Plans, FY 2020-21 (acres calculated in GIS and may vary from acres reported in the document of record).

County	No Harvest Area	Unevenaged Management	Clearcut	Intermediate Treatments	Evenaged Management (No Clearcut)	Special Prescriptions & Other	Road Right-of- Way	Timberland Conversion	Total
Amador	2.30%	14.70%	14.7%	8.50%	7.70%	52.10%	0.00%	0.00%	100.00%
Butte	0.60%	18.20%	48.9%	16.60%	7.40%	8.10%	0.20%	0.00%	100.00%
Calaveras	24.80%	11.10%	36.1%	6.60%	2.60%	18.70%	0.10%	0.00%	100.00%
Del Norte	9.40%	26.10%	47.4%	15.20%	1.40%	0.10%	0.50%	0.00%	100.00%
El Dorado	6.20%	15.50%	29.9%	9.10%	3.50%	35.30%	0.20%	0.20%	100.00%
Humboldt	8.70%	44.30%	28.2%	12.00%	0.70%	5.80%	0.30%	0.00%	100.00%
Lake	0.00%	50.80%	0.0%	0.00%	0.00%	0.00%	0.00%	49.20%	100.00%
Lassen	3.00%	71.20%	14.6%	3.70%	3.70%	3.50%	0.30%	0.00%	100.00%
Madera	0.00%	93.70%	0.0%	0.00%	0.00%	6.30%	0.00%	0.00%	100.00%
Mariposa	7.30%	92.70%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Mendocino	1.40%	76.10%	1.2%	3.20%	5.30%	12.60%	0.10%	0.00%	100.00%
Modoc	2.10%	65.60%	28.7%	0.00%	0.90%	2.70%	0.10%	0.00%	100.00%
Napa	14.30%	0.00%	0.0%	0.00%	0.00%	0.00%	0.00%	85.70%	100.00%
Nevada	7.80%	24.70%	18.4%	29.30%	10.10%	7.60%	0.30%	1.80%	100.00%
Placer	2.00%	40.20%	19.0%	28.20%	1.50%	9.10%	0.10%	0.00%	100.00%
Plumas	0.90%	67.80%	13.0%	7.70%	5.10%	5.30%	0.20%	0.00%	100.00%
San Mateo	3.50%	90.20%	0.5%	0.00%	0.00%	2.40%	0.10%	3.30%	100.00%
Santa Clara	0.00%	100.00%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Santa Cruz	0.30%	99.60%	0.0%	0.00%	0.00%	0.00%	0.00%	0.10%	100.00%
Shasta	3.10%	55.40%	27.0%	8.80%	1.80%	3.70%	0.20%	0.00%	100.00%
Sierra	3.40%	38.50%	8.6%	37.90%	4.10%	7.50%	0.00%	0.00%	100.00%
Siskiyou	3.80%	32.00%	34.2%	14.00%	13.50%	1.80%	0.20%	0.50%	100.00%
Sonoma	2.10%	84.00%	9.0%	0.00%	1.40%		0.00%	0.00%	100.00%
Tehama	2.40%	54.70%	35.1%	2.10%	0.90%	4.60%	0.20%	0.00%	100.00%
Trinity	1.00%	30.90%	47.6%	9.60%	5.30%	5.30%	0.30%	0.00%	100.00%
Tuolumne	25.70%	7.40%	46.0%	2.40%	6.00%	12.40%	0.10%	0.00%	100.00%
Yuba	0.40%	37.40%	31.5%	22.70%	4.90%		0.00%	0.50%	100.00%
Statewide	4%	53%	23%	9%	4%	7%	0%	0%	100%

Note: Counties which had zero Timber Harvest Plan acreage in the 20-21 FY include silvicultural categories during the FY and are not represented in the table include: Alameda, Alpine, Colusa, Contra Costa, Fresno, Glenn, Imperial, Inyo, Kern, Kings, Los Angeles, Marin, Merced, Mono, Monterey, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, Santa Barbara, Solano, Stanislaus, Sutter, Tulare, Ventura, and Yolo Counties.

Table A-2. Acreage of Approved Timber Harvest Plans Submitted to the Department of Forestry and Fire Protection since July 1st, 2016, by County and Silviculture.

County/Silvicultural Treatment	-						Non-	Total Area	% Of County in	% Of Non- Federal Timberland
	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	5-Year Total	Federal Timberland (acres)	of County (acres)	Non- Federal Timberland	Harvested 7/2016 through 6/2021
Amador	0	0	204	994	0	1,198	90,509	387,010	23.40%	1.32%
Clearcut	0	0	204	221	0	424	-	-	-	0.47%
Intermediate Treatments	0	0	0	128	0	128	-	-	-	0.14%
Special Prescriptions & Other Management	0	0	0	628	0	628	-	-	-	0.69%
Uneven-aged Management	0	0	0	17	0	17	-	-	-	0.02%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Butte	3,178	2,041	842	157	0	6,218	239,642	1,073,340	22.30%	2.59%
Clearcut	1,259	1,036	347	151	0	2,792	-	-	-	1.17%
Intermediate Treatments	178	169	278	7	0	632	-	-	-	0.26%
Special Prescriptions & Other Management	510	176	12	0	0	698	-	-	-	0.29%
Uneven-aged Management	605	67	119	0	0	792	-	-	-	0.33%
Even-aged Management (No Clearcut)	626	592	86	0	0	1,305	-	-	-	0.54%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Calaveras	0	569	655	988	682	2,895	148,321	663,550	22.40%	1.95%
Clearcut	0	251	376	238	465	1,331	-	-	-	0.90%
Intermediate Treatments	0	45	50	22	44	162	-	-	-	0.11%
Special Prescriptions & Other Management	0	128	51	461	143	783	-	-	-	0.53%
Uneven-aged Management	0	18	87	267	30	401	-	-	-	0.27%
Even-aged Management (No Clearcut)	0	127	92	0	0	219	-	-	-	0.15%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Del Norte	4,375	1,402	3,861	3,069	1,179	13,886	140,045	787,010	17.80%	9.92%
Clearcut	1,745	731	2,545	1,724	732	7,476	-	-	-	5.34%
Even-aged Management (No Clearcut)	44	293	116	6	33	491	-	-	-	0.35%



County/Silvicultural Treatment							Non-	Total Area	% Of	% Of Non- Federal Timborland
	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	5-Year Total	Federal Timberland (acres)	of County (acres)	County in Non- Federal Timberland	Timberland Harvested 7/2016 through 6/2021
Intermediate Treatments	1,182	378	295	700	99	2,654	-	-	-	1.89%
Uneven-aged Management	1,404	0	906	10	315	2,635	-	-	-	1.88%
Special Prescriptions & Other	0	0	0	630	0	630	-	-	-	0.45%
Management Timberland Conversion	0	0	0	0	0	0	-			0.00%
El Dorado	459	4,820	2,894	5,309	3,021	16,503	217,788	1,144,320	19.00%	7.58%
Clearcut	31	1,724	567	1,407	1,127	4,857	-	-	-	2.23%
Even-aged Management (No Clearcut)	85	559	296	44	22	1,006	-	-	-	0.46%
Intermediate Treatments	9	767	168	510	24	1,478	-	-	-	0.68%
Special Prescriptions & Other	101	754	1,543	2,020	1,419	5,837	_	_	_	2.68%
Management Timberland Conversion	233	1,017	320	35	2	1,606				0.74%
Uneven-aged Management	0	0	020	1,293	426	0	_	-	_	0.00%
Humboldt	14,623	12,532	12,710	13,281	11,636	64,782	1,087,509	2,593,410	41.90%	5.96%
Clearcut	4,618	5,008	3,482	3,428	3,986	20,523	-	-	-	1.89%
Intermediate Treatments	34	4	21	7	1,490	1,556	-	-	-	0.14%
Special Prescriptions & Other	2,298	1,911	686	2,229	297	7,421	-	-	-	0.68%
Management Uneven-aged Management	1,356	1,205	457	817	5,863	9,699	-	-	-	0.89%
Even-aged Management (No	6,318	4,403	14	6,799	0	17,534	_			1.61%
Clearcut) Timberland Conversion	0,010	ч, ч 03 0	8,050	0,733	0	0				0.00%
	0	223	8,050 18	0	40	281	- 52,940	850,880	6.20%	0.00%
Timberland Conversion	0	223	18	0	40	281	-	-	-	0.53%
Clearcut	0	0	0	0	0	0	-	-	-	0.00%
Intermediate Treatments	0	0	0	0	0	0	-	-	-	0.00%
Special Prescriptions & Other	0	0	0	0	0	0	_	_	_	0.00%
Management Uneven-aged Management	0	0	0	0	0	0	-	_		0.00%
Even-aged Management (No						-				
Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Lassen	4,068	10,384	6,913	26,449	9,625	57,439	350,194	3,021,050	11.60%	16.40%
Clearcut Even-aged Management (No	719	2,748	1,143	2,662	932	8,205	-	-	-	2.34%
Clearcut)	12	657	217	1,390	141	2,416	-	-	-	0.69%
Special Prescriptions & Other Management	3,338	934	266	1,058	477	6,073	-	-	-	1.73%
Uneven-aged Management	0	186	5,286	773	8,076	14,320	-	-	-	4.09%
Intermediate Treatments	0	5,859	0	20,566	0	26,425	-	-	-	7.55%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Madera	0	0	315	0	0	315	12,773	1,378,180	0.90%	2.47%
Clearcut	0	0	20	0	0	20	-	-	-	0.16%
Intermediate Treatments Special Prescriptions & Other	0	0	295	0	0	295	-	-	-	2.31%
Management	0	0	0	0	0	0	-	-	-	0.00%
Uneven-aged Management	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Mariposa	41	15	0	0	851	907	59,217	936,190	6.30%	1.53%
Uneven-aged Management	17	15	0	0	851	883	-	-	-	1.49%
Clearcut	24	0	0	0	0	24	-	-	-	0.04%
Intermediate Treatments Special Prescriptions & Other	0	0	0	0	0	0	-	-	-	0.00%
Management	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	_	-	-	0.00%
Mendocino	16,237	15,418	11,470	15,176	11,924	70,224	1,107,838	2,482,050	44.60%	6.34%
Clearcut	477	353	167	108	182	1,287	-	-	-	0.12%
Even-aged Management (No Clearcut)	1,243	923	19	223	867	3,273	-	-	-	0.30%
Intermediate Treatments	21	343	37	1,800	1,494	3,695	-	-	-	0.33%
Special Prescriptions & Other	1,691	1,234	1,684	13,044	1,480	19,135				1.73%
Management						-				
Uneven-aged Management Timberland Conversion	12,806 0	12,564 0	9,563 0	0	7,901 0	42,834 0	-	-	-	3.87% 0.00%
	483	1,222	6,813	1,782	3,352	13,652	- 265,413	2,690,170	- 9.90%	0.00% 5.14%
Modoc	+00	,222	5,015	1,702	0,002	-	200,410	2,000,170	5.50 /0	
Modoc Uneven-aged Management	<u></u>	18/	1 302	1 664	3 352	7 075	-	-	_	267%
Modoc Uneven-aged Management Clearcut	483 0	184 1,038	1,392 130	1,664 118	3,352 0	7,075 1,287	-	-	-	2.67% 0.48%
Uneven-aged Management		184 1,038 0				7,075 1,287 96				



County/Silvicultural Treatment							N		% Of	% Of Non- Federal
	FY	FY	FY	FY	FY	5-Year	Non- Federal Timberland (acres)	Total Area of County (acres)	County in Non- Federal	Timberland Harvested 7/2016
	2016/17	2017/18	2018/19	2019/20	2020/21	Total	()		Timberland	through 6/2021
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Napa	0	16	9	0	5	30	62,739	504,450	12.40%	0.05%
Timberland Conversion	0	16	9	0	5	30	-	-	-	0.05%
Clearcut	0	0	0	0	0	0	-	-	-	0.00%
Intermediate Treatments Special Prescriptions & Other	0	0	0	0	0	0	-	-	-	0.00%
Management	0	0	0	0	0	0	-	-	-	0.00%
Uneven-aged Management	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Nevada	239	640	2,700	1,118	1,997	6,693	176,119	623,680	28.20%	3.80%
Clearcut	64	128	202	246	728	1,368	-	-	-	0.78%
Even-aged Management (No Clearcut)	8	37	266	339	62	712	-	-	-	0.40%
Intermediate Treatments	98	293	945	177	659	2,172	-	-	-	1.23%
Special Prescriptions & Other Management	5	2	136	185	217	545	-	-	-	0.31%
Timberland Conversion	64	64	17	5	11	161	-	-	-	0.09%
Uneven-aged Management	0	116	1,134	166	319	0	-	-	-	0.00%
Placer	4,449	64	2,815	1,507	702	9,536	146,102	961,800	15.20%	6.53%
Clearcut	270	32	911	79	575	1,866	-	-	-	1.28%
Intermediate Treatments Special Prescriptions & Other	38	12	28	64	73	215	-	-	-	0.15%
Management	1,321	19	1,179	141	38	2,698	-	-	-	1.85%
Uneven-aged Management	77	0	395	363	16	852	-	-	-	0.58%
Even-aged Management (No Clearcut)	60	0	301	860	0	1,221	-	-	-	0.84%
Timberland Conversion	2,683	0	0	0	0	0	-	-	-	0.00%
Plumas	10,723	9,096	11,701	4,132	7,361	43,014	362,611	1,672,640	21.70%	11.86%
Clearcut	1,124	2,086	719	1,365	183	5,477	-	-	-	1.51%
Even-aged Management (No Clearcut)	270	2	176	48	287	782	-	-	-	0.22%
Intermediate Treatments	446	1,828	726	397	529	3,927	-	-	-	1.08%
Special Prescriptions & Other Management	201	922	81	2,322	242	3,768	-	-	-	1.04%
Uneven-aged Management	8,682	4,259	9,998	0	6,120	29,060	-	-	-	8.01%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
San Mateo	286	46	421	17	43	813	45,134	474,240	9.50%	1.80%
Uneven-aged Management	2	46	421	17	43	529	-	-	-	1.17%
Clearcut	106	0	0	0	0	106	-	-	-	0.24%
Intermediate Treatments Special Prescriptions & Other	178	0	0	0	0	178	-	-	-	0.39%
Management	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Santa Clara	0	0	0	402	0	402	10,073	834,560	1.20%	3.99%
Clearcut	0	0	0	402	0	402	-	-	-	3.99%
Intermediate Treatments	0	0	0	0	0	0	-	-	-	0.00%
Special Prescriptions & Other Management	0	0	0	0	0	0	-	-	-	0.00%
Uneven-aged Management	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Santa Cruz	64	711	903	1,424	322	3,423	144,737	388,550	37.30%	2.37%
Uneven-aged Management	2	711	903	1	322	1,939	-	-	-	1.34%
Clearcut	62	0	0	1,423	0	1,485	-	-	-	1.03%
Intermediate Treatments	0	0	0	0	0	0	-	-	-	0.00%
Special Prescriptions & Other Management	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut)	0	0	0	0	0	0	-	-	-	0.00%
Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Shasta	9,802	13,464	11,855	20,769	13,683	69,572	707,865	2,462,340	28.70%	9.83%
Clearcut	3,779	4,109	3,741	1,988	4,071	17,688	-	-	-	2.50%
Even-aged Management (No Clearcut)	12	575	119	142	241	1,088	-	-	_	0.15%
	+				0.450	-	-	_	-	0.97%
Intermediate Treatments	120	1,927	1,870	521	2,450	6,887	-	-	-	0.51 /0
Intermediate Treatments Special Prescriptions & Other Management	120 5,891	1,927 177	1,870 103	521 18,117	2,450 1,247	25,535	-	-	-	3.61%



ProProProProProduct Product Marcel <th>County/Silvicultural Treatment</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Non-</th> <th>Total Area</th> <th>% Of County in</th> <th>% Of Non- Federal Timberland</th>	County/Silvicultural Treatment							Non-	Total Area	% Of County in	% Of Non- Federal Timberland
Sierra 3,314 2,489 1,900 1,215 2,71 4,15 2,241 - - - 2,240 Interrectioner Restruction 300 61 307 28 1,165 99 - - - 2,20 Unever-segot Management 320 61 108 99 - - - 2,00 Unever-segot Management 322 1,140 108 615 24 2,407 - - - 20.0 Unever-segot Management 2,301 1,042 0 3,86 9,622 1,838 53.5 - - 0 0.0 0								Timberland	of County	Non- Federal	Harvested 7/2016 through 6/2021
Clearout 15 64 1.775 371 4.15 2.24 - - - 2.2 Islammadia Prescription & A.Dim 338 61 397 70 1185 999 - - - 1.1 Spond Prescription & A.Dim 337 75 0 3 19 355 - - - 4.0 Even-aged Management (No Clearch) 2.01 1.042 0.0 0 0 - - - 4.0 Sikkyou 6.669 9.622 16.77 1.341 8.262 69.099 - - - 2.2 Even-aged Management (No Clearch) 1.439 1.300 642 1.346 1.848 6.477 - - - 1.0 1.0 0.0	Timberland Conversion	0	0	0	0	0	0	-	-	-	0.00%
Intermediate Treatments 328 61 397 20 115 499 - - - 11 Special Precorpoints & One- Management 342 1.14 168 151 24 2.47 - - 2.0 Unever-aged Management (No Colescit) 2.301 1.042 0 364 0 3,766 - - 0.0 Sitkiyou 0.869 9.62 10.572 15.721 15.72	Sierra	3,314	2,589	1,940	1,281	643	9,768	84,682	615,680	13.80%	11.53%
Specta Prescriptions & Other Management (%) Clearadi 342 1.410 166 515 24 2.467 .	Clearcut	15	64	1,375	371	415	2,241	-	-	-	2.65%
International system 342 (1) 10 0 2 2 0 1 2 0 1 0 <td>Intermediate Treatments</td> <td>328</td> <td>61</td> <td>397</td> <td>28</td> <td>185</td> <td>999</td> <td>-</td> <td>-</td> <td>-</td> <td>1.18%</td>	Intermediate Treatments	328	61	397	28	185	999	-	-	-	1.18%
Unexen aged Management Clear aged Management (Mo 337 5 0 3 4 555		342	1,418	168	515	24	2,467	-	-	-	2.91%
Even age: Management (No 2.301 1.942 0 3.64 0 3.766 4.3 Timberland Convention 0 0 0 0 0 0 0 0 Stekyou 3.689 9.682 9.092 16.891 8.381 8.226 69.69.60 4.062.40 7.72 7.5 Clearcul 3.149 3.161 3.281 2.034 7.76 0.0 0.1 Special Prescriptions A Other Management 807 1.33 1.31 3.24 2.58 1.164 0 0.0 0.0 Uneven-aged Management 0 0.433 6.78 1.716 0 0.0 0.0 0.0 0 <td></td> <td>327</td> <td>5</td> <td>0</td> <td>3</td> <td>19</td> <td>355</td> <td>-</td> <td>-</td> <td>-</td> <td>0.42%</td>		327	5	0	3	19	355	-	-	-	0.42%
Lateracity Implefand Convenion 0	Even-aged Management (No	2,301	1.042	0	364	0	3,706	_	_	_	4.38%
Siskiyou 5.569 9.682 16,372 15,721 6.214 52,226 699,892 4.062,400 17,20% 7.5 Clearcut 3,140 3,818 4,780 4,004 2,657 16,869 - - - 2 2 Unargenerit (No 1,439 1,300 5/2 1,342 2,034 7,788 - - - - 0	1		-								0.00%
Clearul 3,149 3,818 4,780 4,004 2,867 18,899 - - - 2,8 Even-aged Management (No 1,430 1,437 253 3,142 2,034 7,66 - - - 0,0 Intervendate Treatments 002 1,437 253 3,142 2,034 7,66 - - - 0,0 Special Prescriptors & Other Management 0 0 4,855 6,766 1,71 0 - - 0,0 Uneven-aged Management 846 487 915 228 1,230 3,252 2.80,05 1,31,850 25.30% 1,10 Special Prescriptors & Other Management 86 243 40 76 137 582 - - - 0,0 0			-		-	_	-				0.00% 7.56%
Even-oped Management (b) 1.430 1.346 1.346 1.488 6.075 . <td>•</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>4,062,400</td> <td>17.20%</td> <td>2.67%</td>	•				-				4,062,400	17.20%	2.67%
Clearcult 1.380			-					-	-	-	
Special Prescription & Other Management 67 13 13 324 368 916 . . . 0.1 Timborland Conversion 2.922 2.994 148 19 100 6.262 . <td< td=""><td></td><td>1,439</td><td>1,300</td><td>542</td><td>1,346</td><td>1,848</td><td>6,475</td><td>-</td><td>-</td><td>-</td><td>0.93%</td></td<>		1,439	1,300	542	1,346	1,848	6,475	-	-	-	0.93%
Management 60 1.33 1.33 2.42 3.35 1.35 2.45 3.35 1.71 0. 1. 1. 1. 1. 1.5 <t< td=""><td></td><td>902</td><td>1,437</td><td>253</td><td>3,142</td><td>2,034</td><td>7,768</td><td>-</td><td>-</td><td>-</td><td>1.11%</td></t<>		902	1,437	253	3,142	2,034	7,768	-	-	-	1.11%
Timberiand Conversion 2,992 2,994 149 190 6,262 0.0 Buneven-aged Management 96 477 957 228 1,280 3,282 226,000 1,131,500 25.30% 1,33 Special Prescriptors & Other Management 868 243 400 767 152 1,113 3.067 0.0 Uneven-aged Management 868 767 675 152 1,113 3.067 0.0 0.0 Charand 0		87	133	13	324	358	916	-	-	-	0.13%
Soroma 946 487 915 228 1,250 3,262 286,850 1,131,850 25.30% 1.13 Special Prescriptions & Other Management 860 6.77 875 152 1.11 3,067 .		2,992	2,994	148	19	109	6,262	-	-	-	0.89%
Special Prescriptions & Other Uneven-aged Management 86 243 40 76 137 582 .	Uneven-aged Management	0	0	4,835	6,796	1,174	0	-	-	-	0.00%
Management 60 243 60 70 70 700<	Sonoma	946	487	915	228	1,250	3,826	286,050	1,131,650	25.30%	1.34%
Uneven-aged Management 860 57 875 152 1.113 3,057 - - - - 1.10 Clearcut 0 187 0 0 0 187 - - 0.0 0.0 Intermediate Treatments 0 0 0 0 0 0 - - - 0.0 Timberland Conversion 0 0 0 0 0 21,818 216,888 1,985,870 11.40% 10.0 Timberland Conversion 1,508 2,800 1,153 0 4,961 - - 0 3.0 5.76 Special Prescriptions & Other Management 2,479 20 2,425 37 0 4,961 - - 0 0.5 2.2 3.0 0.0 2,876 - - - 1.3 3.0 - 1.4 0.0 2.2 2.2 1.4 1.666 377,388 2,052,800 1.8 2.2 2.2 <td></td> <td>86</td> <td>243</td> <td>40</td> <td>76</td> <td>137</td> <td>582</td> <td>-</td> <td>-</td> <td>-</td> <td>0.20%</td>		86	243	40	76	137	582	-	-	-	0.20%
Clearcut 0 187 0 0 187 - - 0 0 Intermediate Treatments 0	× ·	860	57	875	152	1,113	3.057	-	_	_	1.07%
Intermediate Treatments 0									_	_	0.07%
Even-aged Management (No Entropy) 0	Intermediate Treatments					0		_	_	_	0.00%
Litatical operation 0	Even-aged Management (No	_			-						0.00%
Tohama 4,013 7,678 5,567 4,560 0 21,818 216,458 1,839,870 11.40% 10.0 Clearcut 1,330 1,506 2,800 1,153 0 6,790 - - - 3.1 Intermediate Treatments 204 384 342 193 0 1,122 - - - 3.0 Special Prescriptions & Other Management 0 5,768 0 2.99 0 6,667 - - - 2.22 Uneven-aged Management 0 5,768 0 2.878 0 2.878 - - - 1.3.3 Timberland Conversion 0 0 0 0 0 0 0 - - - 2.28 Clearout 1,636 3,088 533 1,908 961 8,127 - - - 0.0 Learout 1,636 3,084 421 19 44 16 8	,				_			-	_	-	
Clearcut 1,330 1,506 2,800 1,153 0 6,790 - - . 3.1 Intermediate Treatments 204 384 342 193 0 1,122 - - - 0.5 Special Prescriptions & Other Management 0 5,768 0 299 0 6,067 - - - 2.2 Uneven-aged Management (No Clearcut) 0 0 0 2,878 0 2,878 - - - 1.3 Timberland Conversion 0 0 0 0 0 0 - - - 1.4 Clearcut 1,636 3,088 533 1,908 961 8,127 - - - 0.2 Intermediate Treatments 67 310 656 307 189 1,530 - - - 0.2 Intermediate Treatments 67 310 656 307 189 1,530 -					, v	-	-	-	-	-	0.00%
Intermediate Treatments 204 384 342 193 0 1,122 - - - 0.5 Special Prescriptions & Other Management 2,479 20 2,425 37 0 4,961 - - 2.2 Uneven-aged Management 0 5,768 0 2.99 0 6,067 - - 2.8 Even-aged Management (No Clearcut 0 0 0 0 0 0 0 - - - 1.3 Timberland Conversion 0 0 0 0 0 0 0 - - - 0.0 Clearcut 1,686 3.088 533 1,908 961 8,127 - - 0.4 4.42 Even-aged Management (No Clearcut) 364 421 19 44 16 854 - - 0.0 0.2 Intermediate Treatments 67 310 656 307 184 4,775				-	-	-	-		1,895,870	11.40%	10.08%
Special Prescriptions & Other Management 2,479 20 2,425 37 0 4,961 - - 2.2 Uneven-aged Management (No Clearcut) 0 5,768 0 2.979 0 6,067 - - 1.2 2.878 Timberland Conversion 0 0 0 0 0 0 0 0 0 0 0 1.33 Timberland Conversion 0 0 0 0 0 0 0 0 0 0 0.0 0 0 0 0 0 0 0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 0 0 0 0 0 0 0 0 0.0 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>3.14%</td></t<>						-	-		-	-	3.14%
Management 2.47 2.0 2.42 3.7 0 4.81 1 1 1 1 1 2.42 Uneven-aged Management (No Clearcut) 0 0.0 2.87 0.0 2.878 0.0 2.878 0.0								-	-	-	0.52%
Even-aged Management (No Clearcut) 0 0 0 2.878 0 2.878 1.3 Timberland Conversion 0 0 0 0 0 0 0 0.0 Trinity 2.164 7.483 1.674 2.924 1.812 16.056 377.398 2.052.800 18.40% 4.22 Clearcut 1.636 3.088 5.33 1.908 961 8.127 0.2 Intermediate Treatments 67 310 665 307 189 1,530 0.2 Intermediate Treatments 67 310 656 307 189 1,530 0.2 Uneven-aged Management 0 3,474 454 441 405 4,775 1.20 Timberland Conversion 0 0 0 0 0 0 - <t< td=""><td></td><td>2,479</td><td>20</td><td>2,425</td><td>37</td><td>0</td><td>4,961</td><td>-</td><td>-</td><td>-</td><td>2.29%</td></t<>		2,479	20	2,425	37	0	4,961	-	-	-	2.29%
Clearcuit) ID ID <thid< th=""> ID ID</thid<>		0	5,768	0	299	0	6,067	-	-	-	2.80%
Timberland Conversion 0		0	0	0	2,878	0	2,878	-	-	-	1.33%
Clearcut 1,636 3,088 533 1,908 961 8,127 - - - 2.1 Even-aged Management (No Clearcut) 354 421 19 44 16 854 - - 0.2 Intermediate Treatments 67 310 656 307 189 1,530 - - 0.2 Special Prescriptions & Other Management 106 189 12 223 241 771 - - 0.2 Uneven-aged Management 0 3.474 454 441 405 4,775 - - - 0.2 Timberland Conversion 0 0 0 0 0 0 - - - 0.0 Tuolumne 254 993 399 1,708 1,374 4,728 106,256 1,455,560 7.30% 4.4 Clearcut 219 755 206 1,043 923 3,146 - - 0.2	1	0	0	0	0	0	0	-	-	-	0.00%
Even-aged Management (No Clearcut) 354 421 19 44 16 854 - - - 0.2 Intermediate Treatments 67 310 656 307 189 1,530 - - 0.4 Special Prescriptions & Other Management 106 189 12 223 241 771 - - 0.2 Uneven-aged Management 0 3,474 454 441 405 4,775 - - 1.0 0.2 Timberland Conversion 0 0 0 0 0 0 0 0 - - 1.02 Timberland Conversion 0 0 0 0 0 0 0 - - - 2.9 Intermediate Treatments 4 34 28 104 80 250 - - 0.2 Special Prescriptions & Other Management 31 42 79 31 203 386 - <td< td=""><td>Trinity</td><td>2,164</td><td>7,483</td><td>1,674</td><td>2,924</td><td>1,812</td><td>16,056</td><td>377,398</td><td>2,052,800</td><td>18.40%</td><td>4.25%</td></td<>	Trinity	2,164	7,483	1,674	2,924	1,812	16,056	377,398	2,052,800	18.40%	4.25%
Clearcut) 334 421 19 44 10 634 - - - - 0.2 Intermediate Treatments 67 310 656 307 189 1,50 - - - 0.2 Special Prescriptions & Other Management 106 189 12 223 241 771 - - 0.2 0.2 Uneven-aged Management 0 3,474 454 441 405 4,775 - - 0.2 0.2 Uneven-aged Management 0 0 0 0 0 0 0 - - - 0.2 Timberland Conversion 0 0 0 0 0 0 0 0 - - - 0.0 Tuolumne 254 993 399 1,708 1,374 4,728 106,256 1,455,560 7.30% 4,44 Other mainterments 4 34 28 104	Clearcut	1,636	3,088	533	1,908	961	8,127	-	-	-	2.15%
Intermediate Treatments 67 310 665 307 189 1,530 - Image of the second of the sec		354	421	19	44	16	854	-	-	-	0.23%
Special Prescriptions & Other Management 106 189 12 223 241 771 - - - 0.2 Uneven-aged Management 0 3.474 454 441 405 4,75 - - - 1.2 Timberland Conversion 0 0 0 0 0 0 0 - - 0.0 Tuolumne 254 993 399 1,708 1,374 4,728 106,256 1,455,560 7.30% 4.44 Clearcut 219 755 206 1,043 923 3,146 - - - 0.2 Intermediate Treatments 4 34 28 104 80 250 - - 0.2 Special Prescriptions & Other Management 31 42 79 31 203 386 - - - 0.2 Uneven-aged Management (No Clearcut) 0 67 0 121 0 189 -											0.41%
Management 100 100 100 100 12 123 124 1771 1 <th1< th=""> <th1< td="" th<=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td><td></td></th1<></th1<>								-	-	-	
Timberland Conversion 0	Management				223			-	-	-	0.20%
Tuolumne 254 993 399 1,708 1,374 4,728 106,256 1,455,560 7.30% 4.4 Clearcut 219 755 206 1,043 923 3,146 - - - 2.9 Intermediate Treatments 4 34 28 104 80 250 - - 0.2 0.2 Special Prescriptions & Other Management 31 42 79 31 203 386 - - 0.3 Uneven-aged Management 0 96 86 408 168 757 - - 0.7 Even-aged Management (No Clearcut) 0 677 0 121 0 189 - - 0.1 Timberland Conversion 0 0 0 0 0 0 - - 0.1 Yuba 612 196 1,385 22 0 622 57,713 411,970 14.00% 3.8 <	Uneven-aged Management	0	3,474	454	441	405	4,775	-	-	-	1.27%
Clearcut 219 755 206 1,043 923 3,146 - - - 2.9 Intermediate Treatments 4 34 28 104 80 250 - - - 0.2 Special Prescriptions & Other Management 31 42 79 31 203 386 - - - 0.3 Uneven-aged Management 0 96 86 408 168 757 - - 0.7 0.7 Even-aged Management (No Clearcut) 0 67 0 121 0 189 - - 0.1 0.1 Timberland Conversion 0 0 0 0 0 0 0 - - 0.1 Yuba 612 196 1,385 22 0 2,215 57,713 411,970 14.00% 3.8 Clearcut 169 97 404 22 0 692 - - - <td></td> <td></td> <td></td> <td></td> <td>÷</td> <td>÷</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>0.00%</td>					÷	÷	-	-	-	-	0.00%
Intermediate Treatments 4 34 28 104 80 250 0.2 Special Prescriptions & Other Management 31 42 79 31 203 386 0.3 Uneven-aged Management 0 96 86 408 168 757 - - 0.3 Uneven-aged Management (No Clearcut) 0 667 0 121 0 189 - - 0.0 0.7 Timberland Conversion 0 0 0 0 0 0 0 - - 0.0 Yuba 612 196 1,385 22 0 2,215 57,713 411,970 14.00% 3.8 Clearcut 169 97 404 22 0 692 - - - 1.2 Intermediate Treatments 21 37 29 0 0 88 - - - 0.1						-	-	106,256	1,455,560	7.30%	4.45%
Special Prescriptions & Other Management 31 42 79 31 203 386 - - - 0.3 Uneven-aged Management 0 96 86 408 168 757 - - 0.7 0.7 Even-aged Management (No Clearcut) 0 67 0 121 0 189 - - 0.7 0.7 Timberland Conversion 0 0 0 0 0 0 0 - - 0.7 0.7 Yuba 612 196 1,385 22 0 2,215 57,713 411,970 14.00% 3.8 Clearcut 169 97 404 22 0 692 - - - 1.2 Intermediate Treatments 21 37 29 0 0 886 - - - 0.1 Special Prescriptions & Other Management 422 37 353 0 0 881 -								-	-	-	2.96%
Management 31 42 79 31 203 366 - - - 0.3 Uneven-aged Management 0 96 86 408 168 757 - - - 0.7 Even-aged Management (No Clearcut) 0 667 0 121 00 189 - - - 0.7 Timberland Conversion 0 0 0 0 0 0 0 - - - 0.0 Yuba 612 196 1,385 222 00 2,215 57,713 411,970 14.00% 3.8 Clearcut 169 97 404 22 0 692 - - - 1.2 Intermediate Treatments 21 37 29 0 0 886 - - - 0.1 Special Prescriptions & Other Management 422 37 353 0 0 881 - -		4	34	28	104	80	250	-	-	-	0.24%
Uneven-aged Management 0 96 86 408 168 757 - - - 0.7 Even-aged Management (No Clearcut) 0 67 0 121 0 189 - - - 0.7 Timberland Conversion 0 0 0 0 0 0 0 - - - 0.0 Yuba 612 196 1,385 222 00 2,215 57,713 411,970 14.00% 3.8 Clearcut 169 97 404 22 0 692 - - - 0.0 1.2 Intermediate Treatments 21 37 29 0 0 86 - - - 0.1 2.2 Special Prescriptions & Other Management 422 37 353 0 0 881 - - - 0.1 Uneven-aged Management (No Clearcut) 0 2557 0 0 68		31	42	79	31	203	386		-	-	0.36%
Clearcut) 0 67 0 121 0 189 - - - 0 0.1 Timberland Conversion 0	Uneven-aged Management	0	96	86	408	168	757	-	-	-	0.71%
Timberland Conversion 0	č	0	67	0	121	0	189	-	-	-	0.18%
Yuba 612 196 1,385 22 0 2,215 57,713 411,970 14.00% 3.8 Clearcut 169 97 404 22 0 692 - - 1.2 Intermediate Treatments 21 37 29 0 0 866 - - - 0.1 Special Prescriptions & Other Management 422 37 353 0 0 861 - - - 0.1 Uneven-aged Management 0 25 43 0 0 688 - - - 0.1 Even-aged Management (No Clearcut) 0 25 43 0 0 688 - - - 0.1 0.1 Even-aged Management (No Clearcut) 0 557 0 0 688 - - - 0.1 Timberland Conversion 0 0 557 0 0 557 - - - <	1	0	0	0	0	0	0	-	_	-	0.00%
Clearcut 169 97 404 22 0 692 - - - 1.2 Intermediate Treatments 21 37 29 0 0 86 - - - 0.1 Special Prescriptions & Other Management 422 37 353 0 0 811 - - - 1.4 Uneven-aged Management 0 25 43 0 0 688 - - 0.1 Even-aged Management (No Clearcut) 0 0 557 0 0 557 - - 0.9 Timberland Conversion 0 0 0 0 0 0 0 0 0 0.0				-	-		-	57,713	411.970	14.00%	3.84%
Intermediate Treatments 21 37 29 0 0 86 - - - 0.1 Special Prescriptions & Other Management 422 37 353 0 0 811 - - - 1.4 Uneven-aged Management 0 25 43 0 0 68 - - - 0.1 Even-aged Management (No Clearcut) 0 0 557 0 0 557 - - - 0.9 Timberland Conversion 0 0 0 0 0 0 0 - - 0.0								-		-	1.20%
Special Prescriptions & Other Management 422 37 353 0 0 811 - - - 1.4 Uneven-aged Management 0 25 43 0 0 68 - - 0.1 0.1 Even-aged Management (No Clearcut) 0 0 557 0 0 557 - - 0.9 Timberland Conversion 0 0 0 0 0 0 0 - - 0.0				ł		_		-	-	-	0.15%
Management Image of the state					n	n		<u> </u>		_	1.41%
Even-aged Management (No Clearcut) 0 0 557 0 0 557 - - - 0.9 Timberland Conversion 0						-				_	
Clearcut) 0 0 557 0 0 557 - - - 0 0.9 Timberland Conversion 0	č				-			-	-	-	0.12%
	Clearcut)	0	0	557	0	0	557	-	-	-	0.97%
Statewide 88,898 101,771 99,552 123,017 79.883 493,120 7,398,771 68,377,870 10,80% 6.6	Timberland Conversion	0	0	0	÷	0		-	-	-	0.00%
Note: Data sources are the CAL FIRE Forest Practice GIS database (silvicultural acres) USDA Forest Service Forest Inventory		88,898	101,771	99,552		79,883	493,120	7,398,771	68,377,870	10.80%	6.66%

Note: Data sources are the CAL FIRE Forest Practice GIS database (silvicultural acres), USDA Forest Service Forest Inventory and Analysis Program 2013 database (nonfederal timberland acreage), and the California Statistical Abstract (county acres). Silvicultures that are not reported on include: no harvest areas (21,170 acres in 5-year period) and Road Right-of-Way areas (1,007 acres in 5-year period).

Counties with zero acres of approved timber harvest plans in last 5 fiscal years and not represented in table include: Alameda, Alpine, Colusa, Contra Costa, Fresno, Glenn, Imperial, Inyo, Kern, Kings, Los Angeles, Marin, Merced, Mono, Monterey, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, Santa Barbara, Solano, Stanislaus, Sutter, Tulare, Ventura, and Yolo counties.



Table A-3. Number and Acreage of Accepted Exemption Notices, by County and Notice Type, FY 2020-21.

2 undu	Christma 1038(a Fuelwood Products §	i) & d, Split 1038(b)	Dead D Diseased §	1038(b)	Drought §103	38(k)	Fire Ha 150FT §1	1038(c)	Fire Hazard - 300FT §1038(c)	Forest Fire Prevention §1038(i)	Conv	n 3-Acre ersion	Mana §10	oodlands gement 138(1)	Recc §103	Fire overy 8(m)	Slash Removal §1038(g)	Small Timberland Owner §1038(f)	Dam d Timbe §103	antially aged erland 38(d)	Utility Right- Public Ag §1038	ency .2	Total Sum Exemption N FY 20-2	Notices 21
County Alpine	Acres	Count	Acres	Count	Acres	Count	Acres	Count	Acres Count	Acres Count	Acres	Count	Acres	Count	Acres	Count	Acres Count	Acres Count	Acres	Count	Acres	Count	Acres	Count
Amador	4,346	0	50,481	0	576	0	0	0	0 0			1	L L		0 0	0				0 0	23,966	7	79,374	2
Butte	4,346	0	104.582	1	3/6	2	135	1	0 0	0 (4	3			324	76	0 (0 (0	0	307.266	/	413.317	124
Calaveras	2,903	8	52.032	20	1.527	0	135	8	2 1) 5	10	0		324	/6			0 0	2	307,266	/	90,065	38
Del Norte	2,903	0	157,820	1	1,327	2	16	0	0 0	22	0 12	10			0 0	1	0 (0	33,391	9	157,883	30
El Dorado	54,996	10	137,820	1	584	1	67	16	2 1	104 22		0			3		0 (0	59,938	24	137,003	21
Fresno	54,996	12	18,159	0	584	1	6/	16	1 1	104 2	2 4	4	0	0	51	12	25		0 0	0 0	59,938	24	24,533	24
	12.973	2	221,583	12	0	0	139	57	91 25	1.377 24	0 0 4 56	23	153	0	51	12	25 4	39	1 0	0	6,254	3	24,533	186
Humboldt	12,973	22	221,583	13	336	41	139	5/	91 25	1,3// 24	4 56	23	153	9	0	0		39		0 0	3,837			186
Kem Lake	25	1	38	0	336	41	0	0	0 0	0 (0 0	0	L C		0 0	0	0 0		0 0	0 0	5,654	0	341 5.723	42
Lake		4	38 100.767	61	0	0	0	0	0 0	101	6	2	L L	0 0	0 0	0	0 0		0 0	0 0	5,654	1	5,723	8
	465	6	100,767	61	0	0	6	3	0 0	101		1	0	0	0	0	0 0		0 0	0	1.324	2	101,485	/4
Los Angeles	518	0	0	0	0	0	33	0	0 0	0 (0 0	0	U C	0	0	0	0 0		0 0	0	1,324		1,324	17
Madera		4	54	0	23	0	33	1	0 0	0 (0 0	0	L C		0 0	0	0 0		0 42	8	15,568	4		1/
Mariposa	3,217	2		2	23	1	4	1	0 0	0 (4 17	3	L L	0 0	0 0	0	0 0		0 0	0 0	1.086	0	3,300	9
Mendocino		2	86	2	0	0	24	14	24 6	202 4	4 1/	10	0	0	0 0	0	0 0		0 0	0 0	.,	11	2,119	49
Modoc	3,383	5	109,984	2	0	0	0	0	0 0	0 0	0 0	0	0	0	0 0	0	0 0	0 0	0 0	0 0	24	2	113,391	9
Mono	0	0	241		0	0	0	0	0 0	23 1	0 0	0	0	0	0 0	0	0 0		0 0	0 0	206		447	2
Monterey	1	1	0	0	0	0	14	0	0 0	23	0	0	0	0 0	137	0	0 0		0 0	0 0	790	4		6
Napa	0	0	0	0	0	0			14	0 (0 0	0	0	0 0	13/	3	0 0	5 0 0	0 0	0 0		21	954	12
Nevada	41,065	29	45,740	18	117	4	204	119	4	387 4	4 128	66	C	0	0 0	0	0 0	0 0	0 0	0 0	49,229	21	136,874	262
Placer	57,692	/	53,053	2	400	2	20	19	3 1	0 () 13	/	C	0	0 0	0	0 0	0 0	0 0	0 0	39,420	31	150,602	69
Plumas	7,414	/	90,438	8	0	0	67	39	2 1	390 6	5 45	56	C	0	0 0	0	0 0	0 0	0 0	0 0	2,277	4	100,633	121
San Diego	0	0	0	0	0	0	0	0	0 0	267	0	0	C	0 0	0 0	0	0 0	0 0	0 0	0 0	0	0	267	
San Mateo	0	0	0	0	0	0	1	2	0 0	0 0	0 0	0	C	0 0	6	3	0 0	0 0	0 0	0 0	10		17	6
Santa Clara	0	0	0	0	0	0	0	0	0 0	0 (0 0	0	0	0	0	0	0 (0 0	U 0	0	2	1	2	1
Santa Cruz	2,819	6	0	0	0	0	39	32	3 2	6	6	6	0	0	87	31	0 (0 0	0 0	0	1,297	14	4,256	92
Shasta	154,081	26	380,279	13	0	0	29	19	15 7	244 3	3 8	4	C	0 0	87	1	215	0	0 1,212	1	56,729	7	592,900	82
Sierra	51,665	6	52,514	10		2	5	3	0 0	0 0) 5	2	C	0 0	0 0	0	0 (0 0	0 0	0 0	3,632	2	108,320	25
Siskiyou	138,027	38	185,527	6	3,020	6	34	9	1 1	1,444 14	4 11	10	C	0 0	0 0	0	0 (D 18	2 0	0 0	81,236	4	409,319	90
Solano	0	0	0	0	0	0	1	2	0 0	0 0	0 0	0	C	0) 1	1	0 (0 0	0 0	0 0	0	0	2	3
Sonoma	1,036	4	168	1	0	0	10	1	15 1	0 0) 7	3	C	0	10	3	0 (0 0	0 0	0	19,452	11	20,698	24
Stanislaus	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0	C	0 0	0 0	0	0 (0 0	0 0	0 0	9	1	9	1
Tehama	65,115	2	113,254	6	0	0	0	0	0 0	0 0	0 0	0	C	0 0	0 0	0	0 (0 0	0 0	0 0	7,106	1	185,476	9
Trinity	125,431	11	53,667	4	0	0	10	3	0 0	271 3	3 34	25	0	0	0 0	0	0 (0 0	0 0	0	3,209	4	182,622	50
Tulare	170	1	0	0	5	1	0	0	0 0	0 0	0 0	0	0	0	0 0	0	0 (0 0	0 0	0	180	1	355	3
Tuolumne	8,498	13	0	0	55	3	32	20	5 1	0 0) 3	3	C	0 0	0 0	0	0 (0 0	0 0	0 0	18,536	8	27,129	48
Yuba	15,733	6	17,196	3	19	1	4	1	7 1	536 2	2 5	2	C	0 0	0 0	0	0 0	0 0	0 0	0 0	10,378	1	43,877	17
Statewide	753,242	242	1,807,665	177	7,165	67	899	387	189 51	5,374 67	7 384	253	153	9	706	131	239	5 57	3 1,322	11	752,383	207	3,329,778	1,610

Note: Section (§) numbers in the column headings refer to the Forest Practice Rule. Counties which had zero timber harvest-related exemption notices in FY 20-21 are not represented in table and include: Alameda, Colusa, Contra Costa, Glenn, Imperial, Inyo, Kings, Los Angeles, Marin, Merced, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Francisco, San Joaquin, San Luis Obispo, Santa Barbara, Sutter, Ventura, and Yolo counties.



County	Drought §1052.1 (effective 2015)		Fire §1052.1		Fuel Hazard Reduction §1052.4		Insect §1052.3		Road Construction and Repair		Wind		Other Emergency Notices		All Emergency Notices Accepted by the Department	
	Acres	Count	Acres	Count	Acres	Count	Acres	Count	Acres	Count	Acres	Count	Acres	Count	Acres	Count
Amador	0	0	0	0	115	1	6	3	0	0	0	0	0	0	121	4
Butte	0	0	18,029	91	275	3	0	0	193	1	0	0	0	0	18,497	95
Calaveras	73	1	0	0	0	0	0	0	0	0	0	0	0	0	73	1
Del Norte	0	0	2,050	11	0	0	0	0	0	0	0	0	0	0	2,050	11
El Dorado	0	0	455	1	242	2	7	3	0	0	281	1	0	0	985	7
Fresno	0	0	5,124	25	0	0	0	0	0	0	0	0	0	0	5,124	25
Glenn	0	0	447	2	0	0	0	0	0	0	0	0	0	0	447	2
Humboldt	0	0	23	2	0	0	0	0	0	0	0	0	0	0	23	2
Lassen	0	0	9,001	13	0	0	0	0	0	0	0	0	0	0	9,001	13
Mendocino	0	0	396	2	0	0	0	0	0	0	0	0	0	0	396	2
Modoc	0	0	549	1	0	0	0	0	0	0	0	0	0	0	549	1
Napa	0	0	1,629	23	0	0	0	0	0	0	0	0	0	0	1,629	23
Nevada	0	0	0	0	4	2	0	0	0	0	0	0	0	0	4	2
Placer	0	0	0	0	11	1	0	0	0	0	0	0	0	0	11	1
Plumas	0	0	11,989	24	0	0	0	0	0	0	0	0	0	0	11,989	24
San Mateo	0	0	763	4	0	0	0	0	0	0	0	0	0	0	763	4
Santa Cruz	0	0	1,670	17	0	0	0	0	0	0	0	0	0	0	1,670	17
Shasta	0	0	2,875	13	307	1	59	1	0	0	0	0	876	1	4,117	16
Sierra	0	0	324	1	0	0	0	0	0	0	170	1	0	0	494	2
Siskiyou	848	5	2,940	45	787	4	468	2	0	0	0	0	0	0	5,043	56
Sonoma	0	0	7,263	49	0	0	0	0	0	0	0	0	0	0	7,263	49
Tehama	0	0	7,095	11	0	0	0	0	0	0	0	0	0	0	7,095	11
Trinity	0	0	7,643	71	0	0	40	1	0	0	0	0	0	0	7,683	72
Tulare	0	0	589	3	0	0	0	0	0	0	0	0	0	0	589	3
Tuolumne	191	1	0	0	0	0	0	0	0	0	3	1	0	0	193	2
Statewide	1,111	7	80,853	409	1,740	14	580	10	193	1	454	3	876	1	85,808	445

Notes: Section (§) numbers in the column headings refer to the Forest Practice Rule. Counties which had zero timber harvest-related emergency notices in FY 20-21 are not represented in table include: Alameda, Alpine, Colusa, Contra Costa, Imperial, Inyo, Kern, Kings, Lake, Los Angeles, Madera, Marin, Mariposa, Merced, Mono, Monterey, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Solano, Stanislaus, Sutter, Ventura, and Yolo counties.



Table A-5. Acreage of Approved Non-Industrial Timber Management Plans (NTMPs), FY 2016-17 to FY 2020-21.

County/Silvicultural System	FY	FY	FY	FY	FY	5-Fiscal Year Total
	2016/17	2017/18	2018/19	2019/20	2020/21	
Del Norte	0	0	41	0	0	41
Unevenaged Management	0	0	41	0	0	41
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	0	0	0
Humboldt	2,765	442	555	816	635	5,213
Unevenaged Management	2,674	442	489	816	635	5,057
Special Prescriptions & Other Management	91	0	65	0	0	157
Intermediate Treatments	0	0	0	0	0	0
Lake	318	0	0	0	0	318
Unevenaged Management	318	0	0	0	0	318
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	-	0	0
Mendocino	165	900	543	1,395	42	3,045
Unevenaged Management	165	807	543	1,299	42	2,856
Special Prescriptions & Other Management	0	92	0	96	0	188
Intermediate Treatments	0	0	0	0	0	0
Nevada	0	81	0	346	0	427
Unevenaged Management	0	81	0	346	0	427
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	0	0	0
Placer	0	0	0	519	0	519
Unevenaged Management	0	0	0	461	0	461
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	57	0	57
Plumas	0	0	0	0	155	155
Unevenaged Management	0	0	0	0	146	146
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	0	9	9
Santa Clara	0	0	0	0		339
Unevenaged Management	0	0	0	0	339	339
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	0	0	0
Santa Cruz	164	0	0	123	139	427
Unevenaged Management	164	0	0	123	139	427
Special Prescriptions & Other Management	0	0	0	0	0	0
Intermediate Treatments	0	0	0	0	0	0
Shasta	863	54	0	0	-	918
Unevenaged Management	863	54	0	0	-	918
Special Prescriptions & Other Management	0	0	0	0	-	0
Intermediate Treatments	0	0	0	0	-	0
Siskiyou	0	2,138	0	618		2,756
Unevenaged Management	0	1,716	0	446	0	2,162
Special Prescriptions & Other Management	0	0	0	90	0	90
Intermediate Treatments	0		0	83	Ű	504
Sonoma	0	195	0		16	450
Unevenaged Management	0	195	0		14	449
Special Prescriptions & Other Management	0	0	0			1
Intermediate Treatments	0	0	0	0	0	0
Trinity	0	0	686	0	-	686
Unevenaged Management	0	0	686	0		686
Special Prescriptions & Other Management	0	0	0	0		0
Intermediate Treatments	0	0	0	0	-	0
Tuolumne	0	0	443	0		443
Unevenaged Management	0	0	443	0	-	443
Special Prescriptions & Other Management	0	0	0	0		0
Intermediate Treatments	0	0	0	0	0	0

Note: NTMP acreage classified as no harvest areas (12,876 acres) or classified as road right-ofway (6 acres) are not included. Counties which had no NTMPs in the included silvicultural categories and not represented in the table include: Alameda, Alpine, Amador, Butte,



Calaveras, Colusa ,Contra Costa, El Dorado ,Fresno, Glenn, Imperial, Inyo, Kern, Kings, Lassen, Los Angeles, Madera, Marin, Mariposa, Merced, Modoc, Mono, Monterey, Napa, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Sierra, Solano, Stanislaus, Sutter, Tehama, Tulare, Ventura, Yolo, and Yuba Counties.