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WHY IT IS TIME FOR A "CALFIRE DIVORCE": THE CASE FOR ESTABLISHING AN INDEPENDENT FOREST AND RESOURCE MANAGEMENT AGENCY TO SECURE HEALTHY FORESTS IN CALIFORNIA

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I. INTRODUCTION

Nearly one-third of California is forested, with 33 million acres of private and state forestlands.³ These forests provide critical resources for our state, and most particularly source at least 60% or more of our necessary water supply.⁴ California's forest resources and timberlands "are among the most valuable of the natural resources of the state."⁵ Historically, California's Department of Forestry and Fire Protections ("CalFire") has been charged with protecting these resources, with a two-fold mission: (1) the protection of commercial timber on all nonfederal lands from improper logging activities and (2) the protection of watersheds from wildland fire in lands identified as part of the State Responsibility Area ("SRA").⁶

CalFire is required to protect California's forests and their resources, by governing private-land logging to ensure that forest productivity "is restored, enhanced, and maintained" and to achieve "maximum sustained production of high quality timber products" for this and future generations.⁷ California's Forest Practice Act was created and is intended to ensure healthy forests with protection of their environmental, economic, and community resources. Protection of California's forest natural resources is the only way productivity of high-quality wood products can be achieved. That has not happened. Instead, today many of California's forests are in "an unhealthy condition," with increased forest density containing more small trees, fewer large trees, and more dead trees, creating intensified and devastating wildfire conditions.⁸

CalFire carries an increasingly immense responsibility as a premier fire-fighting agency, top-ranked in the world. Every year, the demand to contain and stop devastating fires throughout our state increases. Fire prevention efforts have driven the agency's financial budget, whereas forest resource management has been captive to politics largely driven by industrial timberland owners. Each year the budget for fire prevention increases exponentially to respond to the expanding demand to fight catastrophic fires during longer designated fire seasons. CalFire's failure to adequately govern private-land logging has created conditions which contribute to increased fire risk, resulting in a growing disparity favoring

³ Mac Taylor, Improving California's Forest and Watershed Management 1 (2018).

⁴ *Id*. at 3.

⁵ Pub. Res. Code § 4512(a).

⁶ Taylor, *supra* note 3, at 8-9.

⁷ Pub. Res. Code §§ 4512, 4513.

⁸ Legislative Analyst's Office, Improving California's Forest and Watershed Management 1 (2019); *see* Taylor, *supra* note 3, at 18-22.

funding for fire suppression rather than resource management governance.

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California now has a damaging gap in the governance of its forests. California's core sustainable forest management program — intended to ensure healthy forests and thus prevent fire prone conditions — has been relegated to ineffectiveness. CalFire's lack of governance has resulted in fire-prone conditions: forests with smaller and smaller trees, increasingly dense stands of trees, and reduced overall health and lack of biodiversity. These conditions have now converged to create disastrous conflagration. Rather than CalFire securing the foundation to govern logging to attain healthy forests, California is now forced to fix damaged forests at significant public cost. The failure to fulfill the promise of California's Forest Practice Act, coupled with insufficient agency resources, defeats California's commitment to ensure healthy forests for this and future generations.⁹

It is time to remove governance of California's core sustainable forest management mandate from CalFire to allow it to focus on its overwhelming fire agency obligations. In the absence of adequate and dedicated funding and resource personnel, CalFire is not satisfying California's forest resource management goals and objectives. After decades of decline, California must renew its fundamental commitment to sustainable forest management. The governance of forest resource management requirements, as set forth in the Z'Berg Nejedly Forest Practice Act of 1973,¹⁰ should be transferred to another agency, the focus of which is resource and land conservation. California needs one dedicated and adequately funded agency with professionally trained staff who understand the complexity and interrelationships within the entire forest system, its productivity, and all of its resources. This different agency would be required and accountable to secure California's commitment in governing forest resource management. An agency like this would be able to ensure that our forests are restored, enhanced, and maintained to protect the environmental, economic, and social resources that healthy forests provide. An independent agency dedicated to governing forest resource management and land conservation is more critical than ever as California faces and attempts to respond to the irrefutable climate crisis. Our forests must be increasingly available to provide enhanced carbon sequestration for the survival of this and future generations. Such a separation enables healthy forests and leaves CalFire to do its excellent firefighting work.

⁹ Pub. Res. Code § 4512 (c).

¹⁰ Pub. Res. Code § 4511.

II. Why Forests Matter Under California's Forest Practice Act

Forests act as the lungs of our planet, providing many functions of life in a highly complex natural system. "A forest is not merely a collection of trees . . . [it is] an ecosystem – the interlocking conditions that at any one time sustain a specific set of biological diversity."¹¹ As an ecosystem, forests provide critical air, wildlife, climate, and recreational benefits, in addition to sourcing the watersheds that serve California's water needs.¹² Healthy forests store carbon, a function which is increasingly critical in our efforts to reduce the catastrophic effects of climate change and greenhouse gases ("GHG").¹³ A productive forest is one which maintains and protects all of these values.

Our current Forest Practice Act, the "Z'Berg Nejedly Forest Practice Act of 1973" ("Forest Practice Act"),¹⁴ was created in the context of conditions at the time. There existed an

increasingly rapid depletion of raw timber volumes on the 8 million or so acres of commercial timberland in the State of California . . . [and] the most serious facts and figures regarding the rapid depletion of our forests in California, [and] the effects this will have on employment, the economy, and the environment . . . The conclusion is obvious that severe economic and employment dislocation are just around the corner for communities dependent upon the lumber industry . . .¹⁵

To remedy this rapid depletion of our forests, the Forest Practice Act was created to ensure that our forests would be "restored, enhanced and maintained."¹⁶

California created the Forest Practice Act in 1973, promising to provide healthy forests "for this and future generations."¹⁷ It governs the forest resource management of nearly 13 million private forestland acres.¹⁸ CalFire is responsible for implementing the Forest Practice Act and providing the required governance.¹⁹ Since 1973, California has ex-

¹¹ Richard R. Terzian et al., Little Hoover Commission, Timber Harvest Plans: A Flawed Effort to Balance Economic & Environmental Needs 126, at 13 (1994).

¹² Taylor, *supra* note 3, at 1.

¹³ Forest Climate Action Team, California Forest Carbon Plan: Managing Our Forest Landscapes in a Changing Climate 112 (2018).

¹⁴ Statutes 1973, c. 880, p. 1614, § 4; Pub. Res. Code § 4511.

¹⁵ Assemblyman Edwin L. Z'Berg, Press Conference Release, Feb. 1, 1973.

¹⁶ Pub. Res. Code § 4513(a).

¹⁷ Pub. Res. Code § 4512(c).

¹⁸ Taylor, *supra* note 3, at 5.

¹⁹ Pub. Res. Code § 4581.

pressly required CalFire to govern sustainable forest practices — to achieve "maximum sustained production of high quality wood products," while protecting a suite of environmental and societal resources, such as water supply and quality, fisheries, wildlife, range and forage, aesthetics, and recreation. Since 1973, California has also identified sequestration of carbon dioxide, regional economic vitality, and employment as resources commanding protection.²⁰

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Growing mature, healthy trees depends on many variables, including natural conditions, productivity of the forest soils, and stressors like elevation, geology, soil types, climate, and weather.²¹ Recognizing this, the Forest Practice Act's requirement to provide "high quality wood products" underscores the imperative to have wood from mature healthy trees. Mature trees are measured by their highest average volume growth rate: when they have reached their "culmination of mean annual increment" ("CMAI"). Mean annual increment ("MAI") "measures the average productivity of a stand over its lifetime; [t]he age at which MAI is max is called the Culmination of MAI ("CMAI") [or] optimal biological rotation age."22 CMAI for redwoods, for example, does not occur until after age 100.23 For wood quality, this means mature trees which produce tight grain lumber, with a much higher density in growth rings per radial inch. This can be seen by looking at the cut end of any 2 x 4, to count the rings per radial inch. Less dense wood from immature trees, with fewer than 7 rings per radial inch, is not as capable to withstand stresses, not just from construction but certainly from events like earthquakes, tornadoes and hurricanes.²⁴ Thus, a main point of the Forest Practice Act is to require the growing of larger and older trees on key parts of the forest, to secure the maximum sustained resource production California has promised.

This consistent supply of high quality wood products also depends on a balanced distribution of trees of different age classes, so that there are always young trees growing to maturity and mature trees are available for harvest.²⁵ In developing the Forest Practice Act, the legislature recognized that "encouraging development of a more normal distribution

²⁰ Pub. Res. Code § 4513(b); 58 Ops. Cal. Atty Gen. 250 (1975).

²¹ Richard Wilson et al., *Putting Forest Health into Context*, whyforestsmatter.org (May 1, 2019), www.whyforestsmatter.org/thought-leadership/2019/5/1/putting-forest-health-into-context.

²² Growth and Yield, WASHINGTON.EDU, https://faculty.washington.edu/toths/ESRM461/Lec tures/Week5_Lecture1.pdf (Apr. 27, 2017).

 $^{^{23}}$ Russell M. Burns, Silvicultural Systems for the Major Forest Types of the United States 39 (1983).

²⁴ Wilson, R., Letter to Dr. J. Keith Gilless, Nov. 6, 2015 (on file with author).

²⁵ Inst. of Ecology Univ. Cal. Davis, Public Policy for California Forest Lands 80 (Apr. 1972) (prepared for the Assembly Committee on Natural Resources and Conservation).

of timber age classes" was key.²⁶ Without this distribution of a trees with different ages classes, "it is practically and theoretically impossible to manage [forests] currently for perpetual sustained yield. ..."²⁷

Jackson Demonstration State Forest ("Jackson"), a publicly owned 50,000-acre forest located in Mendocino County, is one model of a healthy California forest. California has created eight demonstration forests, including Jackson, to restore badly cutover timberland and provide fully productive working forests.²⁸ Cutover timberland exists when logging has removed, most if not all, of the trees, with consequential adverse effects on the overall forest landscape and its resources. Demonstration forests provide working forests which "[r]etain the existing land base of state forests in timber production for research and demonstration purposes."²⁹

California purchased Jackson after it had been logged intensively and was badly cutover. After its creation in 1949, California effectively left the forestland alone for decades with minimal management to encourage the regrowth of the forest. It then began limited logging using management techniques to continue to restore the land to a healthy productive forest, capable of providing high quality wood product and protecting the forest's natural resources. This forest has proven that it can recover to a highly productive state. Over time, Jackson has produced a sustainable harvest of high-quality mature trees and significant revenue for the State.³⁰ Jackson provides a working landscape for jobs and sustainability over time by restoring and maintaining all forest resources and community life. Jackson protects the State's interest by providing a healthy forest ecosystem, which sustainably provides high quality wood product. As a healthy forest, Jackson also supports healthy populations of animal and plant species and can be essential to prevent extinction of endangered and threated species, such as our salmonid fish.

Moreover, this healthy forest has an increased ability to sequester carbon and remove carbon dioxide from the atmosphere. The Forest Practice Act requires that not only must the public's need for carbon sequestration be protected in any given logging plan,³¹ but also, because "[t]here is increasing evidence that climate change has and will continue

²⁶ Id. at 81.

²⁷ Id. at 84.

²⁸ Pub. Res. Code § 4631.

²⁹ Pub. Res. Code § 4631.5(a).

³⁰ For example, in 2019, California noticed a timber sale for 737 acres in Jackson, with an estimated timber value of \$1,632,000; Chamberlain Confluence 2019 Timber Sale.

³¹ Pub. Res. Code § 4512 (c).

to stress forest ecosystems," California forests must be proactively managed to sequester carbon and adapt to the stressors of the climate crisis.³²

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While Jackson stands out as what good management can achieve, it does not represent what exists on private timberlands. Today, CalFire's governance of private forest land has failed to protect these same values as provided by Jackson. Now, primarily because of intense fire prone conditions requiring most of CalFire's budget, CalFire is increasingly unable to do its job.

III. The Status of Calfire's Governance of California's Private Forests Today

Since 1973, California's core promise to attain healthy forests has not been fulfilled. Instead, we have seen a decline in overall forest management, culminating today in a situation much like in 1973 — depletion of forests with high quality wood product, logging of trees with smaller and smaller diameters, reduction in our water supply and fisheries, and the loss of community-based forestry. Repeated and intensive harvesting of private forestlands in California, with shorter and shorter rotations, cutting trees that do not reach CMAI, has reduced their overall productivity. Practices that reduce the rotation time and increase the cutting of trees that have not reached CMAI eliminates California's ability to protect not only the ongoing supply of high quality wood products, but equally all of the resource values dictated under the Forest Practice Act.³³ Much private industrial forest land is now reduced to unhealthy monocultures, which create dense vegetative masses highly vulnerable to fire and less capable of holding water than a multi-stage forest, sequester less carbon, provide little habitat for diverse species, produce inferior wood, and undermine local economies.³⁴ It is widely recognized that our forests are in poor condition, resulting in devastating fire-prone conditions demanding millions of dollars each year in fire suppression as well as expensive forest health initiatives to restore poorly-managed forests.³⁵ As a result, the core governing mandate for sustainable forest management — the governance which exists to provide healthy forests through

³² Pub. Res. Code § 4512.5.

³³ Pub. Res. Code §§ 4512, 4512.5, 4513.

³⁴ Richard Wilson et al., *Program Overview*, WHYFORESTSMATTER.ORG, WWW.whyforestsmatter.org/our-programs-1.

³⁵ Taylor, *supra* note 3, at 1; Loretta Moreno et al., Monitoring and Assessment of California's Timberland Ecosystems Under Assembly Bill 1492 and the Timber Regulation and Forest Restoration Program 5, Cal. Natural Res. Agency (Apr. 2019), https://resources.ca.gov/CNRALe gacyFiles/wp-content/uploads/2019/04/AB-1492-Ecological-Performance-Measures-Methodology-White-Paper-April-2019-Final.pdf.

sound forest practice management — is diluted to a fraction of CalFire's agency focus and funding.

CalFire's lack of governance of private land logging has facilitated poor forest conditions throughout our state, with increasingly smaller trees instead of larger and older trees in a distribution of age classes, which protect soil and water resources. The mandate for sustainable production of high-quality wood products with protection of the environment and local economies has become almost an afterthought. Small timberland owners³⁶ and their communities are directly impacted. They hold at least one half of the privately owned forestland in California.³⁷ Increasingly, they are not able to compete, particularly because local mills have closed, and the transportation and regulatory costs of logging have dramatically increased. Even if they are able to manage for larger and older trees, they are not able to be readily milled for lumber. Most industry sawmills are no longer equipped to handle larger, higher quality logs. Modernized mills generally handle logs from 6 to 16 inches in diameter, well below the average 40-80" log from more mature trees.³⁸ The smaller logs which sawmills are processing are not from older and mature trees capable of providing high quality wood product.

The above conditions have necessarily required California to dedicate immense resources to fight fires, at an enormous risk to communities and costs to the taxpayers. Instead of focusing on fire prevention through effective governance of forest management actions, California is left to spend significantly more money and resources on fire suppression.³⁹ While this fire-fighting effort is now imperative, the lack of adequate funding and commitment for proactive governance to ensure that healthy forests exist and are maintained deepens the continuation of unhealthy forests and increasing wildfire risks and occurrences.

³⁶ While the Forest Practice Act and its regulations reference small land owners in various places, the term "small timberland owner" is given specific definition in only two places: (1) the "Small Timberland Owner Exemption," for ownerships of no more than 60 acres in the Coast District, or 100 acres inland, Pub. Res. Code § 4584 (j)(1)(H), (I); and (2) the "small nonindustrial timberland owner" for the "Program Timberland EIR for Carbon Sequestration and Fuel Reduction Program, for ownerships of 5000 acres or less,. Pub. Res. Code § 4598.3(d). Other categories of small timberland owners may include: (1) a non-industrial timberland owner with less than 2,500 acres, Pub. Res. Code § 4597.1(i); or (3) a qualifying timberland owner under the California Forest Improvement Program with no more than 5,000 acres of forestland in California, www.fire.ca.gov/media/10265/2019-12-05-users-guide.pdf.

³⁷ Taylor, *supra* note 3, at 4-5.

³⁸ Wilson, *supra* note 21.

³⁹ Taylor, *supra* note 3, at 17.

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IV. CALFIRE'S FUNDING STATUS IS FIRE FOCUSED

According to a 2009 Legislative Analyst Office report, it is without question that CalFire's "core mission" is fighting wildland fires, and with the passage of time, the "costs of expanding the mission of CalFire — a phenomenon often referred to as mission creep — are significant."⁴⁰ The cost of this "mission creep" is the deterioration of our private forest lands, due to a lack of governance to ensure compliance with the Forest Practice Act requirements for forest management.

According to the 2018 LAO Report, "fire response spending, which grew from \$650 million in 1998-99 (adjusted for inflation) to more than \$2.3 billion in 2017-18, makes up over 90 percent of the department's annual spending. In contrast, spending on proactive activities like resources management and fire prevention remain relatively flat over the period, averaging \$77 million and 7 percent of the department's total expenditures through 2013-14."⁴¹

The proposed FY 2020-21 budget continues the funding disparity between CalFire's governance of resource management and its fire responsibilities, allocating over 86% (\$2.224 billion) of the CalFire's budget to fire protection, with slightly more than 11% (\$289,222 million) to resource management.⁴² This means nearly a 9% reduction in funding for resource management, down from \$306,381 million in 2019.⁴³ The proposed budget for fire-fighting adds 131 permanent new positions to an existing force of about 6,000 fire fighters, with authority to hire hundreds of temporary people for the season, and 13 more fire engines.⁴⁴ In addition, the budget proposes to hire 677 more firefighters over the next five years, and "sets aside \$120 million more next year and \$150 million per year moving forward to staff engines more robustly and improve readiness in other ways."⁴⁵

⁴⁰ Legislative Analyst's Office, *CalFire General Fund Reductions and Deferrals*, LAO.CA.GOV, https://lao.ca.gov/analysis_2009/resources/res_anl09003005.aspx.

⁴¹ Taylor, *supra* note 3, at 16-17.

⁴² California's 2020-21 Governor's Budget, *3540 Department of Forestry and Fire Protection*, EBUDGET.CA.GOV, http://www.ebudget.ca.gov/budget/2020-21/#/Department/3540 (Jan. 10, 2020).

⁴³ Id.

⁴⁴ Andrew Sheeler, *California Governor's Budget Calls for Hundreds More Firefighters. 'It's About Damn Time,'* Sacramento Bee, Jan. 10, 2020.

⁴⁵ Id.

V. Why California Needs a Separate State Agency to Govern Logging on Private Lands

There are several well-documented management reasons why California today has severely fire prone forests, rather than healthy forests resistant to fire as a result of proper resource governance. The key reasons are: (1) lack of agency resources (as described above), (2) failure to prioritize sustainable healthy forests as the outcome, (3) lack of adequate standards to understand and prevent cumulative impacts, and (4) a lack of training. Read properly, the Forest Practice Act requires an understanding of forests as whole ecosystems, with governance that protects all forest resources, rather than limiting trees as purely economic commodities. CalFire has not satisfied this requirement in its governance of logging plans for the above cited reasons. Documented by historical reports and professional opinion, failure to implement responsive legislation, and CalFire's current day regulatory approach, it clear that CalFire is not capable to provide the governance to ensure healthy forests which provide high quality wood products and protect the environment, particularly in the expanding climate crisis which threatens us all.

A. HISTORICAL REPORTS DOCUMENT CALFIRE'S INADEQUATE GOVERNANCE

In 1994, the Little Hoover Commission identified problems plaguing the forest resource management process,⁴⁶ particularly in relation to the lack of resources,⁴⁷ undue focus on process rather than outcome,⁴⁸ and a piecemeal approach to the evaluation of environmental impacts.⁴⁹ The Commission concluded that the timber harvest plan process "has not proven effective in achieving a sound balance between economic and environmental concerns," and "[r]esources and priorities are devoted to issues of process rather than outcome."⁵⁰

A core complaint at the time was the failure to understand the impact of logging in the larger ecosystem context.⁵¹ Considering only the

⁴⁶ Terzian et al., *supra* note 11.

⁴⁷ Id. at 23.

 $^{^{48}}$ Id. at 49 ("people are more interested in dotting i's and crossing t's than in how effective mitigation measures are.").

⁴⁹ *Id*. at 54.

⁵⁰ Id. at 50.

⁵¹ *Id.* at 54 (A "major environmental complaint about the Timber Harvest Plan process is that the plans are small snapshots of forests at a certain point in time rather than panoramic perspectives that examine entire dynamic ecosystems over a long time span.").

individual logging plan and its area, without evaluating the potential for impacts in a larger area, is both inefficient and ineffective.⁵² Thus,

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the environment is not being effectively protected because the flawed concept that the Timber Harvest Plan process is based on – namely that ecology can be addressed on a parcel-by-parcel basis. In addition, the State's focus is almost entirely on procedural steps rather than on the eventual outcome. As a result, what occurs in the real world may have very little relationship to what is prescribed in a harvest plan, and there is no mechanism for linking demonstrated effectiveness of mitigation measures to future policy directives.⁵³

This failure has persisted. Seven years later, in 2001, the University of California Committee on Cumulative Watershed Effects issued a comprehensive report and recommendations, presenting a scientific basis to compel evaluation of cumulative watershed effects resulting from logging.⁵⁴ Echoing the need to analyze impacts beyond a parcel-by-parcel review, the Dunne Report agreed that Cumulative Watershed Effects ("CWE")⁵⁵ cannot be evaluated through the isolated lens of individual plans, even if well-intentioned.56 Forest watersheds are subject to the water quality impacts of logging. Logging operations can cause combined effects on sediment, water temperature, in-channel volumes of organic debris, chemical contamination, the amount and physical nature of aquatic habitat, and increases in peak discharges during storm run-off.57 Logging-generated sediment moves from the hillslopes to the intermittent draws to the small creeks, and on to the main stem of a river. To assess the potential water quality impact from a given logging plan, one must look at the entire watershed, both upstream and downstream, to understand what is being put into the stream system. And this spatial analysis requires a time dimension to understand legacy conditions of the

⁵² *Id.* at 63 (Logging plans "cannot be fully effective in minimizing damage to the environment unless they address cumulative impacts across a broad area. Assessing those impacts on a planby-plan basis is inefficient, costly and open to questions of credibility.").

⁵³ Id., Transmittal Letter, Chairman Richard R. Terzian, June 8, 1994.

⁵⁴ Thomas Dunne et al., Univ. of Cal. Wildland Res. Ctr. Rep. No. 46, A Scientific Basis for the Prediction of Cumulative Watershed Effects 1 (Richard B. Standiford & Rubyann Arcilla eds., 2001).

⁵⁵ *Id.* at 4-5 ("Cumulative Watershed Effects ("CWEs") are significant, adverse influences on water quality and biological resources that arise from the way watersheds function, and particularly from the ways that disturbances within a watershed can be transmitted and magnified within channels and riparian habitats downstream of disturbed areas.").

 $^{^{56}}$ *Id.* at 3 (CWE "cannot be predicted through the existing parcel-by-parcel analysis for THP applications, even if it were based on the best current understanding.").

⁵⁷ Id. at 13.

stream system, what has been moving through the stream in the past, and what may be move through the system in the future.⁵⁸

The Dunne Report concluded that there is "excessive reliance on rule-making rather than problem solving," with a lack of real methodology, little basis for enforcement, and "no procedures to show that CWEs are an issue."⁵⁹ It found that Registered Professional Foresters ("RPFs") do not have adequate training to analyze CWE,⁶⁰ and CalFire "does not have regulators trained in the interdisciplinary fashion required to review the analysis and prediction of CWEs."⁶¹ The consequence is that "rarely, if ever" in Northern California has a finding been made to limit proposed logging based on CWEs.⁶² Accordingly, the Dunne Report recommended that the responsibility for assessing and predicting CWEs be taken out of the Timber Harvest Plan (and Sustained Yield Plan) Applications and given to a new unit of a State agency."⁶³ Dunne recommended the State recruit and train CWE specialists, develop a specialized certificate training for registered professional foresters, and manage professionals to work with the State for CWE analyses.⁶⁴

B. FAILURE TO IMPLEMENT RESPONSIVE LEGISLATION AND TAKE EFFECTIVE ACTION FURTHER DOCUMENTS CALFIRE'S LACK OF GOVERNANCE

These problems persist today without remedy, despite legislative efforts to require standards and other agency authority. In 2012, California adopted Assembly Bill 1492 ("AB 1492"), to "promote and encourage sustainable forest practices" consistent with the 1973 Forest Practice Act and other laws governing logging.⁶⁵ AB 1492 reiterated the public benefit of California's viable forest lands and their resources and the value of "a thriving in-state forest products sector" as key to maintaining our forest lands.⁶⁶ It authorized a sales tax on lumber products,⁶⁷ as a means to provide funding for effective resource management under the Forest Practice Act and for restoration of timberlands, promoting protection of

⁵⁸ See Wilson, R., Director CDF, CDF Comment, "California Watersheds – Natural Resource and Community Integrators," Aug. 1993.

⁵⁹ Id. at 55.

⁶⁰ Id. at 21.

⁶¹ Id. at 57.

⁶² Id. at 27.

⁶³ Id. at 61.

⁶⁴ *Id.* at 62-63.

⁶⁵ Pub. Res. Code § 4629.2(a).

⁶⁶ Pub. Res. Code § 4629.

⁶⁷ Chapter 289, Pub. Res. Code § 4629.3 (2012).

fisheries, wildlife habitat and water quality improvement.⁶⁸ AB 1492 can be seen as a response, in part, to historical reports identifying the need for adequate funding, outcome rather than process, cumulative impacts standards, necessary training, and delegation of authority to an agency other than CalFire.⁶⁹

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AB 1492 required CalFire's parent agency, the California Natural Resources Agency, as well as the California Environmental Protection Agency to oversee and report on AB 1492 implementation and its Timber Regulation and Forest Restoration Program ("TRFRP").⁷⁰ These agencies have developed the "California Timber Regulation and Environment Evaluation System" ("CalTREES") program for submission and review of proposed timber harvesting plans for CalFire;⁷¹ after a proposed logging plan is submitted, "staff from the [TRFRP] review it for compliance with state regulations designed to ensure sustainable harvesting practices and minimize environmental harms."⁷²

AB 1492 required changes to regulatory programs to include and provide "incentives for best practices," and development of standards or strategies to protect natural resources and large-scale road management and riparian function plans.⁷³ AB 1492 "directs the TRFRP to develop statewide ecological performance measures ("EPM") approach as an accountability measure for the multiple State programs that regulate timber management on nonfederal forestlands."⁷⁴ Development of these measures is key to accomplishing the Legislature's intent to ensure sustainable forest practices,⁷⁵ as the development of the ecological performance measures are to "evaluate the cumulative impacts of management and

⁷¹ California Timber Regulation and Environmental Evaluation System ("CalTREES"), *Information Portal*, FIRE.CA.GOV, https://www.fire.ca.gov/programs/resource-management/forest-practice/caltrees/ ("CalTREES is the online timber harvest permitting system that will streamline the submission and review processes for timber harvesting documents.").

⁷² Taylor, *supra* note 3, at 11; *see* Moreno, 2019, supra note 35, at 60 ("Currently there is only one dedicated staff person from the [TRFRP] . . . assigned to developing the EPM program.").
⁷³ Pub. Res. Code § 4629.2 (H).

⁶⁸ Pub. Res. Code §§ 4692(a)-(c), 4629.6.

⁶⁹ Terzian et al, *supra* note 11, at 23, 49, 50, 54, 63, Transmittal Letter; Dunne et al., *supra* note 54, at 3-5, 13; Wilson, *supra* note 58, at 21, 27, 55, 57, 61.

⁷⁰ California Natural Resources Agency, *Forest Stewardship: The Timber Regulation and Forest Restoration Program*, RESOURCES.CA.GOV, https://resources.ca.gov/Initiatives/Forest-Steward ship ("The major components of the ["TRFRP"] provide a funding stream via a one-percent assessment on lumber and engineered wood products sold at the retail level, seek transparency and efficiency improvements to the State's timber harvest regulation programs, provide for development of ecological performance measures, establish a forest restoration grant program, and require program reporting to the Legislature.").

⁷⁴ Cal. Natural Res. Agency, *AB 1492 Development of Ecological Performance Measures for California's Nonfederal Timberlands*, RESOURCES.CA.GOV, https://resources.ca.gov/Initiatives/For est-Stewardship/epm.

⁷⁵ Pub. Res. Code § 4629.9.

harvesting activities on a larger scale and support more long-term goals for minimizing the environmental impacts of such activities."⁷⁶ In simple terms, AB 1492 reiterates the Forest Practice Act directive to govern our forests as ecosystems.

AB 1492 requires the Secretary of Natural Resources, as of January 10, 2013 and on each January 10 thereafter, to submit a written report to the Legislature which outlines activities by all of the agencies relating to forest and timberland regulation, and which includes, among other things, "a set of measures for, and a plan for collection of data . . . (F) Evaluating ecological performance."⁷⁷

Since the 2012 enactment of AB 1492, these provisions have not been met — required ecological performance measures do not exist and annual reports have not been submitted as required. As of February 5, 2020, the most recent annual report was submitted three years ago, on March 23, 2017.⁷⁸ In that report, the agencies concede the impact of this delay, stating "[d]evelopment and implementation of ecological performance measures is critical to determining the adequacy of the current regulatory programs at protecting the environment; until these are developed, resources, and implemented, the ecological performance of timber review programs cannot be well understood."⁷⁹

The 2017 annual report also disclosed that in FY 2015-2016, there were only 1,098 active THPs covering 593,993 acres, compared to 4,187 exemption operations operating on more than 5.5 million acres.⁸⁰ These millions of acres of exemption operations are not subject to the agency review and oversight, as required for regular logging plans under the Forest Practice Act, resulting in an expansion of a huge governance gap.⁸¹

In the absence of required annual reporting, in 2019 the Resources Agency issued a White Paper presenting its methodology to decide on ecological performance measures.⁸² It accepted the scientific consensus that "extensive areas of California's forested ecosystems are under extreme pressure and stress given current and projected climate conditions, increased impacts associated with agents of forest mortality (pests, dis-

⁷⁶ Taylor, *supra* note 3, at 11.

⁷⁷ Pub. Res. Code § 4629.9(a)(8)(F).

⁷⁸ Cal. Natural. Res. Agency, Assembly Bill 1492 Timber Regulation and Forest Restoration Fund Program Report, RESOURCES.CA.GOV, https://resources.ca.gov/CNRALegacyFiles/wp-content/ uploads/2014/07/AB-1492-2017-Annual-Report-to-Legislature-Final-3-23-2017.pdf (Mar. 23, 2017).

⁷⁹ Id. at 41.

⁸⁰ Id. at 69, Table 27.

⁸¹ E.g., Cal. Code Regs., tit. 14, § 1038.

⁸² Moreno 2019, supra note 35.

ease, fire), coupled with expanding human-caused disturbance and development within and around forested landscapes."⁸³ As in 2017, the agency conceded the need for a long-term forest ecosystem monitoring and assessment program, admitting that there is no approach providing a detailed evaluation of ecological performance of California's forest management regulatory system.⁸⁴ The agency also admitted that without scientific ecological performance measures, "[i]t is unclear how timber and ecosystem management regulations, combined with forest restoration projects, are impacting forest ecosystem function across California's landscapes, and whether existing regulation policies and programs are achieving their intended goals."⁸⁵ The agency promised presentation of "final EPMs" at an October 2019 workshop.⁸⁶ This did not happen — it does not appear the workshop was held or that any final EPMs have been presented.⁸⁷ The ongoing failure to implement AB 1492 underscores the failure to ensure healthy forests as required by the Forest Practice Act.

In addition, CalFire has not complied with recent 2018 legislation, Assembly Bill 2889, intended to provide a more transparent process of review for logging plans.⁸⁸ This legislation requires CalFire to provide clearly written guidance and assistance documents that explain the regulatory process, including (1) a list of all information required in a plan, (2) a checklist that, if properly followed, would show the plan is acceptable for filing, and (3) guidance to responsible agencies that rely on the timber harvesting plan for their analysis under the California Environmental Quality Act.⁸⁹ To date, CalFire has not met these statutory requirements.

C. THE FAILURE TO COMPLY WITH CURRENT DAY REGULATION OR CREATE ADEQUATE REGULATION FURTHER ILLUSTRATES CALFIRE'S LACK OF GOVERNANCE

Compounding a failure to provide critical standards for sustainable forest practices as directed by AB 1492, and guidance for the regulatory process, CalFire and its Board of Forestry and Fire Protection

⁸³ Id. at 3.

⁸⁴ Id. at 5.

⁸⁵ Id. at 8.

⁸⁶ Id. at 61, Table 8.

⁸⁷ Cal. Natural Res. Agency, AB 1492 Development of Ecological Performance Measures for California's Nonfederal Timberlands, resources.ca.gov, https://resources.ca.gov/Initiatives/Forest-Stewardship/epm.

⁸⁸ Pub. Res. Code § 4592.5.

⁸⁹ Pub. Res. Code § 4592(a)(2)-(b).

("Board")⁹⁰ have not taken effective regulatory action to fulfill the Forest Practice Act's promise to restore, enhance and maintain healthy forests. This is illustrated by CalFire's failure to prioritize its duty to ensure sustainable forest practices and evaluation of cumulative impacts, both in terms of following existing Forest Practice Act regulation and in the ongoing failure by CalFire's Board to adopt necessary regulations.⁹¹

<u>First</u>, CalFire is not following its existing regulations. CalFire is required, in evaluating proposed logging plans, to apply the principle that "forest management on a specific ownership shall be the *production or maintenance of forests which are healthy and naturally diverse, with a mixture of trees and under-story plants*, in which *trees are grown primarily for the production of high quality timber products*.⁹² A logging proposal must meet specific objectives, to provide a balance between growth and harvest over time, maintain functional wildlife habitat within the planning watershed, retain or recruit late and diverse seral state habitat components for wildlife concentrated in the watercourse and lake protection zones, and maintain growing stock, genetic diversity, and soil productivity.⁹³ In authorizing logging on private lands, CalFire must find that the proposed logging shall provide "[silvicultural] systems and alternatives which achieve maximum sustained production of high quality wood products."⁹⁴

One is hard-pressed to find real and on-the-ground application of these criteria documented in CalFire's approval of logging plans, or their achievement in post-operations conditions of many industrial logging sites. The poor conditions of our forests, so many of which are dense groupings of trees without varied age classes, illustrate this lack of compliance to achieve healthy and naturally diverse forests, necessary to provide high quality wood products and protection of the environment.⁹⁵

Second, CalFire is not adopting necessary regulation. In the face of the irrefutable need to act now to try and ameliorate catastrophic climate crisis consequences, CalFire, through its Board, has not developed regulatory standards to evaluate the significant and cumulative impacts from logging operations on wildfire threat and contribution of greenhouse gases. CalFire continues to lack standards to analyze the potential for logging to create wildfire conditions and contribute to further greenhouse

 ⁹⁰ Pub. Res. Code § 730(a) (The Board of Forestry and Fire Protection is within CalFire).
⁹¹ Pub. Res. Code § 4551 (The Board is required to adopt the regulations to implement the

Forest Practice Act).

⁹² Cal. Code Regs., tit. 14, § 897(b) (emphasis added).

⁹³ Id.

⁹⁴ Cal. Code Regs., tit. 14, § 913 ("the RPF shall select [silvicultural] systems and alternatives which achieve maximum sustained production of high quality timber products.").

⁹⁵ Taylor, *supra* note 3, at 18-20.

gases into an already toxic climate atmosphere. The Forest Practice Action regulations identify several factors to be considered in any individual proposed logging plan, such as the silvicultural method, harvest practice and erosion control, site preparation, water course and lake protection, hazard reduction, and wildlife protection.⁹⁶ Yet, the regulations do not have separate provision(s) requiring analysis of the potential for the individual logging plan's silvicultural method to create a fire prone landscape,⁹⁷ or to contribute greenhouse gases.

The Forest Practice Act regulations separately require consideration of "cumulative impacts,"⁹⁸ which "refer to two or more individual Effects which, when considered together, are considerable or which compound or increase other environmental Impacts."⁹⁹ These regulations do not mandate use of assessment criteria or compliance with standards; instead they provide guidance factors which "can" be used. The evaluation of cumulative impacts is "based upon the methodology" described in Board Technical Rule Addendum No. 2.¹⁰⁰ That methodology is a "framework for the assessment," presented in an Appendix as "guidelines for evaluating Cumulative Impacts," with "factors, and methods for analysis, that *can be* considered or used "to determine the presence of cumulative impacts.¹⁰¹ This does not compel necessary rigorous analysis or provide critical standards and protection as called for by Dunne and others.

For the GHG impacts analysis, the guidelines identify "*options* [*which*] *can be used*" to assess "how forest management activities may affect GHG sequestration and emission rates of forests through changes to forest inventory, growth, yield, and mortality;" compliance with specific measures or standards is not required.¹⁰² Similarly, for "wildfire risk and hazard," the guidelines identify elements which "*may be consid*-

⁹⁶ Cal. Code Regs., tit. 14, ch. 4, subch. 4, 5 & 6, art. 3-7, 9.

⁹⁷ Cal. Code Regs., tit. 14, §§ 918, 938, 958 provide a few regulations for "fire protection," which concern what happens during a logging operation, such as the need for a burning permit, warming fires, and access during logging operations. They are not about whether a particularly logging operation can create fire-prone conditions into the future.

⁹⁸ Cal. Code Regs., tit. 14, § 898 ("Cumulative Impacts shall be assessed based upon the methodology described in the Board Technical Rule Addendum Number 2, Forest Practice Cumulative Impacts Assessment Process.").

 $^{^{99}}$ Cal. Code Regs., tit. 14, § 912.9, Technical Rule Addendum No. 2 Cumulative Impacts Assessment, "A. Introduction."

¹⁰⁰ Cal. Code Regs., tit. 14, § 898.

¹⁰¹ Cal. Code Regs., tit. 14, § 912.9, Technical Rule Addendum No. 2, Cumulative Impacts Assessment, "A. Introduction"; Appendix Technical Rule Addendum No. 2 Cumulative Impacts Assessment Guidelines (emphasis added).

¹⁰² Cal. Code Regs., tit. 14, § 912.9, Appendix Technical Rule Addendum No. 2 Cumulative Impacts Assessment Guidelines, "G. Greenhouse Gas ("GHG") Impacts." (emphasis added).

ered in the assessment of potential Cumulative Impacts."¹⁰³ Additionally, evaluation of wildfire risk and hazard is limited to the potential for "forest fuel loading in the vicinity of residential dwellings and communities."¹⁰⁴ It does not require analysis of the potential for development of a fire prone landscape as a consequence of the silviculture and harvesting methods, in a given logging plan or across a landscape.

The reasons listed above further illustrate that CalFire's governance of private land logging fails to consider the forest as an ecosystem, ignores the need to protect forest resources from the real impacts of climate change, contributes to the degradation of forest habitat and environmental resources, and increases fire conflagration.

VI. GOVERNANCE OF FOREST RESOURCE MANAGEMENT OPERATIONS BY A DIFFERENT AGENCY WILL RESTORE AND ADVANCE CALIFORNIA'S COMMITMENT TO ACHIEVE HEALTHY FORESTS

The need to have an agency, other than CalFire, dedicated to governance of private land logging under the Forest Practice Act is not a new idea. In 1994, the Little Hoover Commission underscored that CalFire's review and approval process for logging plans was not protecting the environment because it was limiting review to a parcel-by-parcel basis and focusing on process, rather than on effective outcome.¹⁰⁵ In 2001, the Dunne Report recommended removing CalFire from the role of evaluating cumulative watershed effects.¹⁰⁶ In 2012, the Legislature diminished CalFire's role, placing development of the ecological performance measures in California's Natural Resources and Environmental Protection Agencies.¹⁰⁷ In 2016, Kimberly Rodrigues, a departing member of the Board of Forestry and an RPF with extensive skill and expertise in natural resources, recommended that CalFire be relieved of its governance duties.

"[T]he California Natural Resources Agency needs to assume the responsibility of verifying that the Forest Practice Rules are being implemented to protect the public trust resources from negative

¹⁰³ Cal. Code Regs., tit. 14, § 912.9, Appendix Technical Rule Addendum No. 2 Cumulative Impacts Assessment Guidelines, "H. Wildfire Risk and Hazard." (emphasis added).

¹⁰⁴ Id.

¹⁰⁵ Terzian et al., *supra* note 11, at 54.

¹⁰⁶ Dunne et al., *supra* note 55, at 61.

¹⁰⁷ Pub. Res. Code § 4629.9; *see also* Forest Climate Action Team, *supra* note 13, at 45 (CalFire is only one of several agencies handling California's Forest Carbon Plan; it is not a lead, but only a member of the Forest Climate Action Team).

cumulative impacts and that sustain resilient forests. This cannot be accomplished within Cal Fire alone. It is a public trust responsibility requiring interagency expertise and collaboration and the AB 1492 process provides an opportunity and a responsibility to ensure these public trusts are maintained and protected."¹⁰⁸

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And, in 2018, the Legislative Analyst Office stated that CalFire "is not the best entity to oversee proactive forest health efforts," based on two concerns: (1) leaving CalFire in charge interferes with the ability of other agencies which also have a role in regulation forest health, and (2) CalFire's focus on increasingly frequent and extreme fire throughout the state likely prevents it from providing effective resource management governance for logging and proactive forest health efforts.¹⁰⁹ Accordingly, the Legislative Analyst Office recommended that the California Resources Agency, rather than CalFire, be designated "as the lead agency to oversee proactive forest and watershed health."¹¹⁰

The LAO is correct: CalFire cannot be both a resource management agency and a fire agency. Its record of ineffective governance precedes it and CalFire does not have adequate funding for resource management. Governance for healthy forests under the Forest Practice Act must not be forced to compete with fire prevention and suppression. CalFire has made its choice, favoring economic interests over resource management. It chooses to be a well-funded fire department, at the expense of our forests and required governance, resulting in ecologically degraded forests with severe fire conditions.

VII. Options for Dedicating and/or Creating a Different Agency to Govern Forest Resource Management

There are multiple options available to remedy this lack of governance.

Certainly, the Legislature could <u>create a new agency</u>, guaranteeing adequate funding, sufficient staff, and foresters professionally trained in wholistic forestry to govern our forests for resource conservation as directed by California's Forest Practice Act. This would likely be a timeconsuming and potentially expensive option.

As the LAO recommended in 2018, the <u>California Resources</u> Agency could assume direct governance of the Forest Practice Act.

¹⁰⁸ Letter from Kimberly Rodrigues, RPF 2326, State Board of Forestry and Fire Protection ("BOF"), to John Laird, (May 20, 2016) (on file with the Board of Forestry).

¹⁰⁹ Taylor, *supra* note 3, at 28.

¹¹⁰ Id. at 33-34.

However, the agency's failure to proceed in a timely manner with the implementation of AB 1492 calls into question its ability to oversee the Forest Practice Act in a reliable and thorough manner.

In the early years, California's forest resource management existed in the <u>Department of Conservation</u>, as the Division of Forestry. The mission of the Department of Conservation easily encompasses the promise and pursuit of the Forest Practice Act; it "balances today's needs with tomorrow's challenges and fosters intelligent, sustainable, and efficient use of California's energy, land, and mineral resources."¹¹¹ We believe this offers the most direct path forward, as it returns forest stewardship to an agency which embraces conservation. This would go a long way in restoring the Forest Practice Act mandate for healthy forests into the future.

Regardless of what path, replacing CalFire will provide a separate and independent agency with strengthened funding and personnel resources consistent with the 2018 LAO and other recommendations. This will also free CalFire to be an excellent fire agency, without potential for funding competition. Both services are of the utmost urgency.

VIII. CONCLUSION

There is a long record documenting CalFire's inability to adequately govern logging on private lands in California. We live now with the consequences of that inadequate governance as we see our forests depleted, increasingly fire prone, and unable to provide communities with the regional economies they once depended upon.

This is only exacerbated by the full force of climate change and crisis which is upon us. According to David Wallace-Wells, national fellow at the New America foundation and a columnist and deputy editor at *New York* magazine, writing about the climate crisis devastation we have brought upon ourselves and the responsibility to act now, "[i]t is worse, much worse, than you think. . . what happens, from here, will be entirely our own doing."¹¹² The forest and fire prone conditions we face today will only intensify if we do not attend now to the good governance required by the Forest Practice Act. We must not accept or consider the current fire prone conditions as a "new normal." They are not normal and are not what our Forest Practice Act promised: healthy forests, not degraded forests. The climate crisis is anything but normal — it is a

¹¹¹ California Department of Conservation, *Mission and Vision*, CONSERVATION.CA.GOV, https://www.conservation.ca.gov/index/Pages/About-Us/aboutUs_Vision_Mission.aspx.

¹¹² David Wallace-Wells, The Uninhabitable Earth: Life After Warming 1, 33 (2019).

catastrophe facilitated by us, in our time and our world: we must never accept it as normal.

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In the face of the growing body of evidence and this existential crisis, CalFire has not implemented or paid heed to the repeated critiques and recommendations, even though these instruct what is needed to address current forestry challenges.¹¹³ We do not even have the ecological performance measures required by the Legislature in 2012, which are imperative to provide forest resource protection. Instead, as former Board of Forestry member Kimberly Rodrigues reiterates, our forests are captive to the "tensions between forestry as an integrated ecological science and fire prevention and control."¹¹⁴

It is time to remove that tension by removing CalFire from its governing roles of the Forest Practice Act. It is time for this governance change, to restore the Forest Practice Act to its rightful and intended place — securing healthy forests for this and future generations. With ever increasing danger from the lack of good governance, we must restore the Forest Practice Act directives and cultivate a renewed sense of citizenship in the social and natural resources of our forestlands. Placing Forest Practice Act governance in an agency other than CalFire takes one huge step forward in accomplishing this restoration.

¹¹³ E.g., Rodrigues, supra note 108, at 2. ¹¹⁴ Id.