CALIFORNIA CHAPARRAL INSTITUTE
...the voice of the chaparral

Battle Creek Alliance
Protecting Forests, Water, Wildlife

February 25, 2026

California Board of Forestry and Fire Protection
Attn: Tony Andersen
PO Box 944246
Sacramento, CA 94244-2460
Email: CalVTP@fire.ca.gov

Re: Notice of Preparation SPEIR for the CalVTP Update

Dear Board Members,

By targeting more than a third of California, the Cal Vegetation Treatment Program update will impact nearly every wild landscape remaining in California under state jurisdiction. And through partnership agreements, it will also influence how wildlands under federal and tribal jurisdiction will be managed.

Consequently, the CalVTP update has the potential of having the greatest negative environmental impact on protected wildlands, state parks, local preserves, and wild open space of any state policy or project on record.

These impacts will be generated by the clearing of existing habitats in an effort to change fire regimes across the landscape. The methods employed to do so are, by definition, biocidal: logging, mastication, crushing, grazing, burning, and herbicide use. All of these can lead to the elimination of native plant communities (especially those that are adapted to high-severity fire), long-term loss of biodiversity, and increased flammability (Halsey and Syphard 2024, Lindenmayer et al. 2026, Fusco et al. 2019).

Therefore, it is essential that the Board requires:

1. A careful examination of all potential environmental impacts through different lenses, not just through the lens of a fire manager.
2. Recommendations and conclusions based on a full, objective review of verifiable science, avoiding confirmation bias and anecdotal information.
3. Objectives and terms (e.g. type conversion, fire resilience, ecological health, etc.) be defined in scientifically measurable ways.

Contrary to the prevailing paradigm, open forests and mosaic-like clumps of chaparral are not the typical, natural condition in California. Dense habitat, plant litter, and dying trees and shrubs are essential components of the state's diverse, ecologically rich terrestrial ecosystems. Plant growth and death are natural processes. Hundreds of acres of contiguous, impenetrable chaparral, and forests with rich, dense understories are natural formations.

No region in California has a high enough lightning frequency, as found in dry ponderosa forests in the Southwest to cause the frequent, low-intensity fire regimes required to create the open, less biodiverse landscapes the 2019 CalVTP envisioned (Keeley 1982).

Attempting to create and maintain such landscapes requires constant artificial disturbance. In doing so, negative environmental impacts are inevitable. And ironically, such activity can defeat the very purpose of the CalVTP – to reduce fire risk. Opening habitats through clearance projects not only can increase the flammability of the landscape through invasive weed spread, it can also multiply the generation and flow of embers, accelerate a wildfire's rate of spread, and reduce the hydration of whatever shrubs and trees remain after the project is complete, making for a more flammable environment (Koo et al. 2012, Lesmeister et al. 2021)

This fuel-centric approach has led to a disturbing fact that has been frequently pointed out by USGS fire scientist Jon Keeley:

> *"Every decade we increase funding for fuel modifications and other vegetation management; every decade has been followed by a decade of even worse fire impacts."*

One of the goals of the CalVTP update is to double down on "fuel" modifications across the landscape, ignoring the fact that such an approach has been failing us for decades.

We urge the Board to listen to the fire scientists who have been studying the wildfire problem over their lifetimes.

> *"Wildfires, and thus extreme wildfires, are inevitable. Does that mean wildland-urban (WU) fire disasters are inevitable as well? Absolutely not! WU fire research has shown that homeowners can create ignition resistant homes to prevent community wildfire disasters."*
> *- Jack Cohen (2020)*

> *"Although fuel manipulations of ponderosa pine ecosystems may effectively reduce fire hazard on those landscapes, they are decidedly less effective on chaparral landscapes, and ultimately fire hazard reduction is likely to be achieved by directing fuel modifications away from wildland areas and more toward the wildland-urban interface."*
> *- Keeley et al. (2009)*

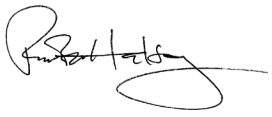
> *Focusing primarily on a narrow issue, such as fuel reduction in forests or evacuation in built environments, will only ignore the broader context and ensure future disasters. More holistic solutions are needed. In spatial terms, most losses of lives and homes tend to occur at the wildland–urban interface (WUI), where human communities are located within or adjacent to flammable landscape.*
> *- Mortiz et al. (2022)*

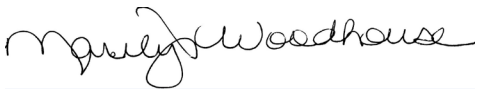
In light of the continued focus on "fuel" management, despite its failure, the Board needs to investigate Catastrophic Risk Management (CRM) in order to reevaluate the state's response to wildfire hazard. CRM is successful because it helps managers in high-risk organizations like Cal Fire to make better decisions by reducing their tendency to "normalize deviance," a behavior that focuses on positive data about operations while ignoring contrary data or small signs of trouble that can lead to disasters.

Airlines use CRM to objectively analyze plane crashes, thereby creating safer planes. Without CRM, small deviations from standard operating procedures are often tolerated until disasters, such as the Deepwater Horizon offshore oil platform blow out, the Challenger Space Shuttle explosion, or the 2025 wildfires in Los Angeles expose an organization's failures. Importantly, the CRM process would involve scholars outside of the fire profession, scientific or otherwise, who are not limited by assumed constraints and prevailing paradigms. Such an environment encourages individuals to speak freely, enabling them to offer creative solutions. The Center for Catastrophic Risk Management is based at UC Berkeley (ccrm.berkeley.edu).

We are eager to assist the Board in creating an updated CalVTP that can avoid negative environmental impacts and achieve the attainable goal of eliminating catastrophic losses in our communities by focusing on reducing community flammability, rather than attempting to alter the forces of nature across more than 35 million acres.

Sincerely,





Richard Halsey
California Chaparral Institute

Marily Woodhouse
Battle Creek Alliance

Recommendations for Updating the CalVTP

Recommendation 1: Require a science-based analysis

First and foremost, the CalVTP update must be based on verifiable science. Merely creating a legally adequate document will not protect Californians or the environment if the answers are wrong.

Although the experience of fire professionals and tribal groups can provide valuable, anecdotal insights, they are subject to bias as well as the fallacy of the single cause.

The observations that a firebreak was successful in stopping a fire, or that a shrub next to a home ignited during a wildfire, do not constitute science. Observations can certainly suggest testable hypotheses, but they need to be subjected to adequate sample sizes and variable control. Such an analysis of fire breaks has been done by Syphard et al. (2011) and Zong et al. (2026), both of which found that fuel breaks are relatively ineffective when it matters most – during wind-driven wildfires. So, it makes both logical and financial sense to require a cost/benefit analysis, based on science, of where and how large fuel breaks should be, or if they should be created in the first place.

The CalVTP's update to "integrate tribal ecological knowledge" in relation to "ecological restoration" poses unique challenges. Despite claims by some professional organizations, such as the Association for Fire Ecology, that tribal ecological knowledge (TEK) is science, it fails to meet the most basic principles of objective analysis.

Science is one of the few tools we have to eliminate bias, self-interest, and embellishment, behaviors *all humans* exhibit. No matter what an idea is, or where it came from, it must be subject to the same objective analysis as any other idea. It must be able to be challenged. Unfortunately, tribal ecological knowledge in relation to fire use has become unquestionable dogma. It has also been subsumed by identity politics. The professional and personal costs of challenging this dogma can be significant.

Unquestionable dogma is not science.

When the TEK dogma is challenged, it becomes quickly apparent that it fails to account for many variables that did not exist centuries ago: the invasion of flammable, non-native weeds, climate change, increased ignition sources, and an increasing human population. Failure to acknowledge that frequent fire in native shrublands has eliminated, and continues to eliminate, habitat and biodiversity, is another blind spot; a vulnerability that can have serious consequences if it influences land management practices within the CalVTP. This is especially true for native shrublands and understory habitat in forests.

There is no scientific support for the notion that Indigenous Peoples carefully used fire to ecologically manage habitat across the broad landscape. And what is claimed to be known about Indigenous fire use centuries ago is problematic – direct knowledge of fire use by tribal groups today is often separated by many generations, making it subject to exaggeration and personal bias.

What the evidence does show is that fire was used by Indigenous Peoples in California as it was by other humans across the world – to modify the landscape to suit their survival needs. In fact, there is strong evidence that many shrubland plant communities were eliminated through excessive Indigenous fire use as we discuss in Recommendation #5 on geography and chaparral.

Bendix (2002) summarized the situation well for chaparral plant communities:

> *"It would be reasonable to summarize the impact of native Californian fire in the following terms: a variety of Native cultures made sophisticated use of fire, both to favor edible species and to facilitate (directly or indirectly) hunting. The scale of fire use was so limited, however, that the bulk of the chaparral as we know it evolved under a natural, lightning-dependent fire regime. Undoubtedly, anthropogenic fire did have some ecological impacts, but those impacts were spatially limited to the immediate surroundings of population centers and to the preexisting (i.e., quasinatural) ecotones. Because of the limited spatial extent of anthropogenic burning, the overall chaparral environment was unchanged by the cessation of native burning, as evidenced by the static nature of the stratigraphic record."*

If ecological restoration of plant communities is the goal, it needs to be based on a solid scientific understanding of those communities, not on what people believe or how humans might prefer those communities to appear.

Recommendation 2: Require citation integrity

The misrepresentation of citations to support practices favored in the 2019 CalVTP was a significant problem, one that we pointed out in our public comment letter of 10/19/2019.

The fire suppression paradigm is especially prone to citation misrepresentation because there is a tendency to ignore exceptions. For example, in a comprehensive review paper, Ecological Foundations for Fire Management in North American Forest and Shrubland Ecosystems (Keeley et al. 2009), the authors wrote,

> *"Where fire exclusion has led to fuel loads in excess of the HRV (box 1), as in some dry forests in western North America, the severity and extent of wildfires has been increasing and fuel reduction may be essential to ecological restoration. Other systems, such as California chaparral, where the balance of ignitions and suppression has led to minimal alteration of fuel loads and fire regimes, may not be good candidates for fuel treatments. In ecosystems where grazing and invasive grasses have altered fire regimes, it may be more appropriate to focus restoration efforts on reducing invasive species."*

In a paraphrased citation of this paper, the word forest could be removed, and the chaparral exception ignored to support the general notion that "fuel" reduction may be essential to ecological restoration. This then would lend support to a one-size-fits-all-approach to all habitat types using the dry-ponderosa pine forest fire suppression model (i.e. all habitats suffer from fire exclusion).

We suggest Keeley and Fotheringham (2006) for additional clarification on the misapplication of the one-size-fits-all concept. We also suggest the Board examine how

the fire suppression paradigm has been used to justify the clearance of habitat regardless of its relevance in Halsey (2023).

The Board should ensure the accuracy and relevance of cited studies. The authors of the CalVTP update must properly attribute the research, reflect what that research concludes, and not engage in cherry picking information to support favored approaches.

Recommendation 3: Properly use plant community keys

The 2019 CalVTP grossly misinterpreted the plant community key in the California Native Plant Society's (CNPS) Manual of California Vegetation. This needs to be corrected in the update, especially for native shrublands.

Plant keys are designed to allow an individual to identify a particular species or community by asking self-eliminating questions through a dichotomous key. The first step is to decide if a plant community is a forest, shrubland, or herbaceous/grassland. According to CNPS,

> "*When total vegetation cover is over ca. 20 percent, the tree layer, if present, generally less than 10 percent cover in stand; herbaceous species may total higher cover than shrubs. Shrubs are always at least 10 percent cover.*"

If that description fits, the shrubland key continues to allow for the identification of the specific shrubland (e.g., big berry manzanita chaparral, chamise chaparral, white sage shrubland, etc.). Nearly all descriptions of chaparral-type shrublands in California indicate that a continuous cover is a common characteristic. *Arctostaphylos glandulosa* shrublands can even be two-tiered.

However, the 2019 CalVTP ignored the details. It chose to use the key's initial 10% canopy cover as the definition for all shrublands, for which it was never intended. Misrepresenting the 10% figure, the State argued in its 11/15/2024 reply brief to the Court that a project could clear up to 65% of any intact chaparral habitat because it would still meet the criteria of being a shrubland. This is analogous to claiming a man could remove 65% of his facial hair and still have a full beard. Or, more absurd, 10% cover is still a beard. Except in the shrubland case, there is substantial evidence that when a majority of the canopy cover in a chaparral-type shrubland is removed, the system is compromised and type conversion is often the result.

In effect, the 2019 CalVTP claimed a project would be mitigating the environmental impact of type conversion by clearing *only* 65% rather than the 90% that would still leave behind a "shrubland."

Recommendation 4: Define type conversion

The key frustration expressed by the Appellate Court during the 2025 hearing for *California Chaparral Institute et al. vs. California Board of Forestry* was the State's use of circular logic when asked by the Court how the 2019 CalVTP would prevent type conversion of native shrublands. The State responded by referring to undefined habitat function criteria from a theoretical paper (deGroot 2002), never answering the Court's inquiry directly. The avoidance of addressing the environmental impact of type conversion was also raised during the public comment period.

We urge the Board to ensure the CalVTP update applies the accepted definitions of type conversion so the impact can be accurately analyzed. A definition now in California statute (SB 653) would be a good place to start:

> *For purposes of this section, "type conversion" means the process of dominant native plant species, including, but not limited to, native shrubs, being significantly reduced or extirpated and nonnative species colonizing an area due to disturbance events, including, but not limited to, wildfire incidents.*

The new CalVTP also needs to incorporate PRC § 4483 so that the Board does not end up with a program that is in direct violation of State law:

> *(b)(1) It is the intent of the Legislature that additional consideration be provided for chaparral and coastal sage scrub plant communities that are being increasingly threatened by fire frequency in excess of their natural fire return patterns due to climate change and human-caused fires.*
>
> *(2) Prescribed burning, mastication, herbicide application, mechanical thinning, or other vegetative treatments of chaparral or sage scrub shall occur only if the department finds that the activity will not cause "type conversion" away from the chaparral and coastal sage scrub currently on site.*

The CalVTP faces a dilemma by that fact that mastication, grazing (and soil disturbance caused by such activities), and cool season prescribed fires in chaparral have all been shown to cause type conversion. While it is not inevitable that type conversion will occur, habitat clearance/disturbance is how type conversion can occur. And as the Appellate Court ruled, attempting to resolve the environmental impact through redefinition is not the answer. Part of that answer can be found in limiting disturbance of chaparral and sage scrub to wildland/urban interface (WUI) projects which have been shown to be the most effective in protecting human lives and property.

Recommendation 5: Avoid making erroneous conclusions concerning geography and chaparral fire ecology

Chaparral plant communities have similar responses to fire and disturbance regardless of where they are in the state. To claim otherwise creates a false dichotomy between northern and southern California native shrublands.

The fire response of obligate seeding bigberry manzanita (*Arctostphylos glauca* - California's new Official State Shrub) and facultative seeding chamise do not change when the plants grow in northern California. This concept is especially important to realize when it comes to type conversion caused by too frequent fire/disturbance.

Yes, the threat of type conversion has been studied predominantly in the southern part of the state. However, it is not logical conclude that this focus supports the conclusion that type conversion is not a problem in the north. It is equally erroneous to claim that because fire suppression has been more successful in the north and that some chaparral communities are positively departed from historical fire patterns, type conversion is not an issue in northern California.

The frequency and size of fires in northern California are increasing. The climate is drying, leading to increased landscape flammability as Westerling et al. (2006) and others have concluded. Southern California Santa Ana-like wind-driven fire storms are occurring with greater frequency in northern California (e.g., 2017 Tubbs Fire, 2018 Camp Fire, etc.).

Therefore, the predictive future of fire frequency needs to be considered in the type conversion equation. Thus, it is imperative that the CalVTP update, being a forward-thinking document, address this increasing risk. Past fire return intervals and old climate data are not particularly relevant to whether or not a CalVTP project will cause chaparral type conversion in northern California in the future.

The process of type conversion in chaparral and other communities is, by definition, related to plant characteristics**.** It is not limited by geography.

In fact, it has been a long-recognized fact that chaparral is subject to type conversion throughout the state. In 1922, Cooper described numerous examples from his field research:

> *"The most convincing proofs of former control of present-day grassland by chaparral are the frequent remnants that painstaking search brings about."*

Cooper continues by citing locations in the Santa Clara Valley east of Palo Alto, Colusa County in the Sacramento Valley, and the western Sierra Nevada foothills. He lists various causes for chaparral loss, such as clearing for firewood, sheep and cattle ranching, agriculture, and most notably, fire.

> *"It is also true that fire, if it occurs with great frequency, favors grassland at the expense of chaparral."*

Cooper also provides historical evidence that recent disturbances, *"are small importance compared with the effects produced by the aboriginal population."* Recent studies support Cooper's conclusion. After examining of the question for the coastal mountains of California, Keeley (2002a) concluded that,

> *"It is very likely that through the use of fire, Native Californians markedly altered vegetation patterns over much of the region."*

Therefore, the elimination of native plant communities by Indigenous fire use needs to be taken in consideration when tribal ecological knowledge is utilized to inform land management policy for the entire state.

Cooper applies the loss of chaparral via disturbance, statewide. He does not restrict it to southern California. As can be seen by even a cursory tour of northern California, vast stretches of landscape are now dominated by non-native grasses, most of which is the direct result of anthropogenic disturbance.

A recent paper examining type conversion in the Interior Coast Range of northern California, Grupenhoff and Safford (2024) confirms Cooper's conclusions. The author's wrote,

> *"Our study confirms that increased fire frequency in chaparral facilitates a reduction in the proportion of native species cover, species richness, and Shannon diversity. Consequently, plots with higher fire recurrence exhibit a more homogeneous landscape, dominated by a smaller set of non-native species. This result corroborates research from southern California, showing that high fire frequency and subsequent short-fire intervals promote non-native invasion" (Keeley, 2006; Syphard et al., 2019).*

Adding to the Grupenhoff and Safford paper, a new study currently in review presents more significant data indicating that not only is type conversion occurring in northern California, but the foothills of the Sierra Nevada are seeing nearly a 50% greater expansion of grass cover than the south coast of California (change in mean cover – 2024 vs 1986) (A. Syphard pers. comm.).

Particularly important to the protection of communities from wildfire, the researchers also found that the variable of most importance in home loss in California and North-southwestern Australia was the presence of grass (compared to 24 other variables including slope, shrub cover, temperature, etc.).

The presence of grass is also one of the lead common dominators in wildland firefighter fatalities (as emphasized in federal Firefighter Training S-130).

Recommendation 6: Define ecological restoration

The mere fact that the average, historical fire return interval for chaparral is between 30 to 150 years or more does not support the notion that humans need to "ecologically restore" a mature stand of chaparral that has thrived for more than 30 years, or for that matter an old-growth stand that has survived for more than a century.

Without any scientific evidence, the 2019 CalVTP designated any chaparral community older than its average fire return interval as a target for "treatment." This is not a science-based approach, but rather one based on assumptions that have nothing to do with the ecological dynamics of chaparral communities. This approach is also missing important context.

Rather than being considered a natural fire regime, the current 30 – 150-year interval may be better described as the Indigenous fire regime. While the Indigenous fire regime appears to have resulted in ecosystem stability over long temporal scales in areas beyond population centers, it does not represent the natural fire regime under which chaparral developed prior to human arrival in North America.

Without anthropogenic ignitions, fire would have been rarer across much of the chaparral-dominated landscape in California. Fires would have been infrequent if lightning strike densities were similar to today. While large fires occurred, they would have been rare due to the low frequency of lightning in California and the asynchronicity between lightning strikes and extreme wind events (Bendix and Hartnett, 2018). As a consequence, fire rotations in chaparral may have been up to several centuries long prior to human arrival, particularly in areas where chaparral is the climax community. The natural fire regime would have also varied with climatic fluctuations (e.g., glacial and interglacial periods) and elevation as lightning strikes tend to be more common at higher elevations.

As chaparral ages, it continues to experience subtle changes important for floral and faunal diversity and continues to sequester carbon. Shrubs die for various reasons, either individually or en masse during chronic or acute droughts, while others continue to recruit despite the lack of fire (i.e., obligate resprouters). Wildlife alter understory structures, especially rodents (e.g., *Neotoma and Peromyscus spp*.), while lichens and fungi colonize older shrubs or dead limbs. Studies have shown that well after a stand of chaparral has matured past 100 years of age, productivity remains high (Luo, 2007, Baker and Halsey 2020).

Old-growth chaparral (twice the age of the average, natural fire return interval) is a healthy ecosystem that contributes significantly to the state's biodiversity. The notion that older chaparral is unhealthy is contrary to the research.

> *"Chaparral unburned for a century or more remains a viable community of vigorous shrubs with little evidence of a decline in species diversity or successional replacement by other vegetation types" (Keeley 1992).*

And,

> *"In general, there are no examples where fire-dependent shrublands are threatened by lack of fire and few instances where prescription burning would have natural resource benefits." (Keeley 2002b).*

Keeley et al. (2005) also makes it clear that long-interval, high-intensity fires in Sierra Nevada chaparral are perfectly natural events that result in rich recovery. This demonstrates that past fire suppression has not compromised the ecological health and integrity of northern California chaparral plant communities.

> *"In conclusion, we found that chaparral is resilient to long fire-free periods. It is not known with certainty whether the long fire-free period currently experienced by foothill chaparral in the southern Sierra Nevada is outside the historical range of variability. We can say that this long fire-free period has had little impact on the ability of these shrublands to recover following fire. In this respect, they are similar to other crown fire ecosystems."*

The concept of ecological restoration needs to be defined in a scientifically measurable way, involving successional and evolutionary processes, species composition, ecological interactions, non-native invasions, etc. Otherwise, it can be manipulated to justify the clearance of healthy, functioning ecosystems. The desire to restore anthropogenic manipulations, including assumed Indigenous burning practices, is not ecological restoration, but rather landscape architecture and gardening.

Recommendation 7: Avoid fuel-centrism - we don't describe what we see, we see what we can describe

There is a pervasive perception throughout the 2019 CalVTP, projects that have tiered off that document, and the land management community in general that nature is incapable of managing itself. Post fire landscapes filled with snags and successional plant species are viewed as abnormal, unhealthy, and filled with fuel. Naturally dense, old-growth chaparral stands older than estimated fire return intervals are seen as needing "ecological restoration."

For example, several years after the 2003 Cedar Fire in Rancho Cuyamca State Park, the Senior Environmental Scientist for California State Parks wrote,

> *"This was an area that for most of my lifetime was pine forest, but, as a result of the Cedar Fire in 2003, was converted to an unnatural monoculture of Ceanothus palmeri."*

The presence of a large seed bank of *Ceanothus palmeri* indicates the Cuyamaca plant communities in question had evolved with infrequent, high-intensity crown fires over hundreds of thousands of years. There is no other way the massive ceanothus seed bank and the resulting growth would have been possible. So, rather than being "converted," the area was merely going through its natural successional processes. Although the perception of an "unnatural" response was based on the short time frame of a human life and misunderstanding of ecology, California State Park managers proceeded to cause significant ecological damage by removing the successional habitat and plant trees, most of which died during the first few attempts (Figure 1).

Figure 1. Rancho Cuyamaca State Park. Left: *Ceanothus palmeri* created a rich, pyrogenic habitat after the 2003 Cedar Fire. The presence of this species indicates that the historical fire pattern included infrequent, high-intensity wildfire. Right: CA State Parks masticated a nearby stand, disturbing the soil's integrity, setting the stage for a cheatgrass invasion. Photos: CA Chaparral Institute.

During the February 4, 2026, California Coastal Commission meeting, a proposal was heard for a project similar to Cuyamaca, but was tiered off the 2019 CalVTP. The plan was to conduct significant clearing activities within Big Basin Redwoods State Park. The staff report stated that,

> *"The goal of ecological restoration treatments is to facilitate natural post-fire re-establishment and successional stages of the vegetation alliances that existed prior to the 2020 CZU fire"* (Agenda item W16a).

In other words, State Parks believed the current successional process, with resprouting redwood trees, snags that were providing a rich, post-fire habitat for an array of birds and invertebrates, and large numbers of native, fire-following shrubs, in this case *Ceanothus thyrsiflorus,* was not natural.

According to the staff report, the project would,

> *"… return forest and shrubland conditions to a more resilient state where mature trees can thrive and native understory plant species can naturally regenerate. This will be accomplished by reintroducing ecologically appropriate disturbance regimes, initially by partially reducing fuel loads via mechanical mastication and hand thinning tailored to each site-specific vegetation community, and subsequently, through the use of prescribed fire…*

Consider the language here. It discusses the desire to "*return forest and shrubland conditions to a more resilient state*," so that, "*mature trees can thrive and native understory plant species can naturally regenerate.*"

The problem of such a desire is that the ceanothus are already naturally fire "resilient" and "naturally regenerate" only after high-severity fire. As was the case in Cuyamaca, the presence of ceanothus indicates that infrequent, high-severity fire has been an occasional, natural event in the park area. The significant resprouting by the burned redwoods is also an indication that this system has evolved to survive high-severity fire (Figure 2).

The staff report continued by stating,

> *"Prescribed fire will be used in grass and shrub fuel types to maintain current species assemblages and prevent ongoing type conversion to less fire-tolerant communities. Prescribed fire, both broadcast and pile burning, will reintroduce fire to plant communities at an ecologically-appropriate interval, to reduce dead and dying fuel loads in the footprint of the 2020 CZU Lightning Complex Fire, and as a means of biomass treatment.*"

The report never explained what "less fire-tolerant communities" were or what an "ecologically-appropriate" fire interval was, but based on the project description, the actual goal appears to create an artificial, open forest that will never again encounter the fire regime in which it evolved or support its previously rich biodiversity.

We submitted a comment letter prior to the Coastal Commission meeting, as did several others, warning of the project's risks (CCI 2026). The item was postponed to the March meeting.

Figure 2. Big Basin Redwoods State Park post 2020 CZU lightning fire showing redwoods vigorously resprouting and successional *Ceanothus thyrsiflorus* shrubs creating a rich understory. Photo by Famartin.

Recommendation 8: Avoid prescribed fire in chaparral

The potential environmental impact of cool season prescribed burns in chaparral is illustrated in Figure 3. Spontaneous type conversion can be the consequence.

Figure 3. Type conversion of chamise chaparral caused immediately after a cool season prescribed fire at Pinnacles National Monument (now National Park) in the 1990s. Explanation found in Keeley 2006.

The research is clear that the use of prescribed fire in chaparral can cause significant environmental impacts.

> *"These experiments illustrate a probable cause for the lack of shrub and herbaceous seedling response observed throughout the Marin watershed on areas by prescription under cool, moist conditions. The seeds of most of these species become particularly sensitive to heat when moist. Consequently, higher mortality occurs with prescribe burns of this type, even though the fires are of generally lower intensity" (Parker 1987a).*

And,

> *"Another problem with prescribed fires is seasonal timing of burns. In the Marin watershed and elsewhere in the state, Adenostoma fasciculatum has shown particular sensitivity to the time of year it is burned. In Marin nearly all of the chamise resprouted following early fall burns, but survival declined to less than thirty percent for spring burns. Much of this mortality did not occur during the fire but followed one or two years later. Chamise mortality has been attributed to the fact that during winter and spring resources from the burl are allocated to above-ground growth, flowering, and fruiting, so reserves are quickly exhausted if a fire occurs at this time.*
>
> *Managing chaparral for conservation will require a sensitive and intelligent approach. Managers need to understand the dynamics of the species that make up their chaparral community. Long-term success of management programs will depend on the degree of understanding"(Parker 1987b).*

Knapp et al. (2009) provides a literature review of the ecological effects of prescribed fire. For chaparral, they concluded,

> *"The bottom line is that the potential for shifts in the plant community exists when the heat generated by prescribed burning is dissimilar to what would have been experienced with the fire regime that species evolved with."*

Recommendation 9: Identify and address all environmental impacts, with enforcement

Although not specifically stated in the 2019 CalVTP or the update, based on the stated goals and objectives, the state appears to want to eliminate high-severity fire from the landscape. This aligns with the Orwellian, anthropocentric false dichotomy of "good fire," "bad fire."

Whether a stated goal or not, habitat clearance projects designed to change fire behavior modify the natural environment in a way that is biased against all the species and plant communities that have evolved with high-severity or high-intensity fire. This includes chaparral (California's most extensive plant community), bishop pine forests, lodgepole pine forests, black-back woodpeckers, and a host of invertebrates including fire beetles and even bees (Hutto 2025, Maust et al. 2026).

CEQA is intended to force project proponents to address all the potential environmental impacts. The 2019 CalVTP failed to do so. The update needs to correct those omissions, especially since it is targeting all remaining wild spaces under state jurisdiction.

In addition, there needs to be a mechanism within the CalVTP process that allows for independent oversight other than forcing private citizens to challenge projects in court. Project proponents have demonstrated a habit of ignoring the limitations of the CalVTP itself.

For example, Tomales Bay State Park has proposed a logging and habitat clearance project that is tiering off the 2019 CalVTP, but one that violates the document's parameters. Neither the Board nor Cal Fire stepped in to correct the problem.

The 2019 CalVTP clearly states that the Bishop pine forest is a closed-cone, sensitive natural community that has a high-severity, crown fire regime. The document also states that mechanical thinning in such forests,

> *"...will not trigger the opening of serotinous cones that release their seeds in response to fire, or create the favorable seedbed conditions that fire creates for these species to regenerate… Therefore, mechanical treatments can reduce regeneration and recruitment in these communities even if implemented within the appropriate fire return interval and would generally not provide an ecological benefit."*

And yet, what does California State Parks want to do in Tomales Bay? They are planning on using mechanical thinning (logging), mastication, pile burning, grazing, and herbicide to "ecologically restore" the park. A California Coastal Commission staff report describes the ecological restoration project as seeking to,

> *"...restore ecosystem processes, native stand conditions, and ecosystem resilience through the removal of dead, dying, diseased trees and shrubs, and unnaturally dense understory fuels…" (Agenda item Th12a, 10/10/2023).*

We are currently in the California Appellate Court challenging this habitat clearance project.

Recommendation 10: Focus on saving lives and property rather than trying to prevent wildfires.

Nearly all lives and property are lost during wind-driven wildfires. More than 95% of the state's wildfire risk reduction budget is used to endlessly rearrange sticks on the ground far from communities at risk in order to manage non-wind-driven wildfires. This contradiction needs to be honestly addressed by the CalVTP update.

Attachments

1. Halsey and Syphard. 2024.
2. Baker, B, and R.W. Halsey. 2020.

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