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RE: California Natural and Working Lands Scoping Plan Draft Alternative Scenarios

Dear CARB,

Thank you for recognizing that ecosystem management practices and restoration of Natural and Working Lands are vital to California's ecosystem health and climate resiliency. Due to the complexity of California's ecosystems, a management policy should be as varied as the ecosystems throughout the state. As a fifth generation resident of northern California my comments intend to provide context for managing Yellow Pine and Mixed-Conifer (YPMC) forests in the Klamath Mountains and Southern Cascades based on 150 years of family history that has informed California's forestry policies.

On August 19, 2021, [I witnessed the Haypress Fire](#) burn through a section of the Trinity Alps Wilderness destroying a fragile late successional stage old growth forest at high-severity. Tens of thousands of old growth Jeffery and Ponderosa pine trees burned in a [stand replacing fire](#). Some of these trees were over 500 years in age and up to eight foot DBH. This region had never been logged, but a century of fire suppression caused anthropogenic change in forest structure, departing the forest from the historical range of variation. Two years prior to the fire, [Carl Skinner](#), PhD USFS retired, and I found that the average fire return interval was approximately 8 – 12 years prior to about 1920, but a fire had not burned that region for approximately a century. The over accumulation of forest fuels from fire suppression changed the fire regime to high-severity with devastating effects on ecosystem function and resiliency. In a matter of hours during the fire's run, tens of thousands of acres of old growth forest was lost. Initially, an incredible amount of GHGs were released through the pyrogenic disturbance, but legacy effects from biogenic decay, degradation of soil, impacts to watersheds, loss of net primary productivity of forest carbon sequestration and conversion to non-forest vegetation will likely degrade the function and resiliency of this ecosystem for hundreds, if not thousands of years. For the high-severity burned area, it is too late to save the old growth trees and restore old growth ecosystem function, but for millions of acres there is still hope. The mismanagement of the YPMC forests through misguided government policies and extensive old growth logging is well documented through peer reviewed scientific publications. The scientific community has outlined the problem. The issue is failure to implement management strategies to match the scale of the problem. A scale that needs to restore millions of acres of forested lands annually through sensible and well-informed management decisions.

The Catch 22s of forest management policies:

1. Putting out all wildfires will lead to more forest destruction. The more forests we try to save with a fire suppression centered response, the more forests we will eventually lose. The irony is that the more we depend fire suppression tactics for forestry management, the more susceptible our forests will be to high-severity fire.
2. Policies that limit or prohibit biomass utilization of over-accumulated small diameter trees will lead to destruction of neighboring old growth trees. The irony is that trying to save small diameter trees with misguided environmental idealism will result in continued destruction of the remaining old growth forests by promoting high-severity wildfire effects.

In [1924](#), my great grandfather, Jesse W. Carter¹, gave a speech at the Redding Rotary club condemning the Forest Service protectionist policies of not allowing burning. “To burn now might be serious he admitted, but the policy of not burning every few years as formerly, has allowed the dense brush thickets to grow up and create the fire menaces existing today. According to Carter, the trouble lies in the fire prevention policy of the Forest Service. He told of the time when the underbrush was burned periodically, and said that in those days serious forest fires were practically unknown. This was because the brush was burned out before it got high enough to make a fire hot enough to set the big trees on fire.” In [1939](#), Jesse introduced a bill in the State Senate that was “intended to bring a definite answer to a long-standing question of proper management of forest lands. Experiments in Shasta, Trinity and Tehama counties will determine the effect of brush burning at safe seasons upon water storage, grazing and forest conditions.” Jesse in his 1959 oral history said the bill was “a program for the protection of the forests, experimental burning to burn off the debris and underbrush to protect the large timber.”

Conclusion: In 1924, it was feasible to use fire at a landscape scale when the Natural Range of Variation (NRV) was relatively intact to support low-severity wildfire. A century later, forest where mean fire return intervals have departed from historical intervals the conditions largely support a high-severity fire regime. We first need to implement forest thinning practices; including biomass utilization for advanced bioenergy and wood products, to restore NRV and then landscape scale prescribed fire and assisted natural fire can be utilized for ongoing cost effective forest management. Mechanical treatments and prescribed fire are complementary management practices that need to be utilized together until forests are restored to resiliency.

Jesse’s son, Oliver J. Carter², continued Jesse’s efforts. Oliver introduced a series of landmark legislation in 1945. Oliver introduced [SB 555](#) that introduced a similar program to Jesse’s 1939 burning program that authorized the Division of Forestry to purchase lands in Shasta County to establish the first State demonstration forest to conduct experiments on forestry management to inform policy and forest practice, known as the Latour Forest. Oliver introduced [SB 556](#) to amend the Public Resources Code to establish the State Board of Forestry of seven members who “shall be persons of practical knowledge and experience in the field they are to represent and two members shall be appointed from the general public at large”. The Board, for “the protection of the State’s interests in forest resource on private lands, shall determine, establish, and maintain an adequate forest policy. General policies for guidance of the Division of Forestry shall be determined by the board.” Oliver introduced [SB 637](#) that established the Forest Practice Rules by the creation of forest

districts in the State and to authorize the creation of district forest practice committees whose duty shall be to formulate and adopt forest practice rules, and approve forest management plans for final approval of the State Board of Forestry; to specify the manner in which forest practice rules shall be administered; to provide for the functioning of the district forest practice committees in an advisory capacity to the State Board of Forestry.” Oliver describes the atmosphere at the time in his oral history that it was important to provide a system where persons with practical knowledge and experience could counter ill-informed public policy such as the Forest Service protectionist policies that were responsible for dangerous fire conditions and that persons directly involved with forestry management were better suited to make decisions surrounding forest practice and policy than agency bureaucracy. An example of practical knowledge and experience at the period is expressed in a [report in 1938](#) by Clinton Walker, Red River Lumber Co., who managed approximately 900,000 acres in the region where the Dixie Fire burned in 2021. The report predicts the conditions that resulted from the Dixie Fire due to neglect in sensible forestry management. Jesse Carter’s brothers, Henry and John, born in Coffee Creek in 1874 and 1888, express a similar atmosphere as Walker in an [oral narrative](#). Unfortunately, Coffee Creek was largely destroyed in the Haypress Fire, something that was avoidable if more emphasis and resources were dedicated to protect our forests a century ago, as many people advocated at the time.

Conclusion: CARB has recently improved processes to seek input and guidance from subject experts in the scientific community. This has resulted in CARB more accurately outlining the problem and CARB continues to develop better models to improve accuracy in data collection. However, it should be recognized that for practically a century, informed input from subject experts with practical knowledge and experience is largely unchanged, particularly from our [Native American communities](#). This shows that the communities and persons most effected by change in forest structure and high-severity wildfire have always and still do advocate for sensible and well-informed forest management practices. However, even with this input, government policies have failed for the last century. This shows that the government agencies do a poor job in listening to input or to acknowledge that policies continue to degrade forest ecosystems and effect the resiliency of surrounding communities. Forest and Shrubland ecosystems are diverse throughout that state. A one-size fits all strategy is guaranteed to fail because a sensible management practice in one forest ecosystem or community may not be appropriate for another forest ecosystem or community and general opposition to management strategies will stall much needed ecosystem restoration. CARB should be careful to weight input and guidance based on locality, subject expertise, and most importantly direct exposure to the consequences if policies fail. Persons with little direct exposure to failed policies are quick to prescribe what is best for those most impacted. The historical context of the Washington philosophy of the Forest Service bureaucracy has unintentionally imposed incredible harm to Native American peoples and underserved communities surrounding national forests. The current environment feels hopeless and there is deep mistrust in agency imposed solutions. Community Forest Collaborative Partnerships made up of persons who live in the communities they serve can be an important element to bridge the gap of mistrust and develop ecosystem appropriate restoration strategies in each community or region.

Feedback on NWL Forest and Shrubland Scenarios:

Scenarios 1 and 5 are not practical because they will never reach consensus from opposing interest groups.

Scenarios 2 through 4 may be applicable to a specific ecosystem, geography, or region and are not mutually exclusive.

2 - Prioritize restoration and climate resilience	3 - Model mix of strategies from current commitments/plans	4 - Prioritize wildfire reduction, with additional complimentary policies
Decrease fire severity and stabilize carbon stocks by 2045. Increase prescribed fire and thinning, increased heterogeneous harvesting and management, biomass available for advanced bioenergy and wood products. Decrease harvesting frequency.	1M acre strategy, 30x30 strategy, NWL Implementation Plan (where unavailable from other strategies). Align regional management with regional plans/reports, where feasible.	Decrease wildfire emissions, wildfire around communities, and fire sizes. Maximize fire suppression. Increase fuel breaks in lands around communities. Increase prescribed fire and thinning. Increased heterogeneous management.
This is a great strategy for YPMC forest ecosystems outside of the Wildland Urban Interface.	This sounds like a framework for collaborative engagement and goal setting, but not a prescription for management practices. It would be advisable to seek participation from Community Forest Collaborative Partnerships or similar community groups for treatment prioritization and implementation.	This is a great strategy for the NWL in the Wildland Urban Interface. Fire suppression is a necessary tactic for community protection. Where wildfires are wind driven (as opposed to fuel driven), fuel reduction treatments are less effective and defensible space / home hardening strategies may be a more appropriate. For example, cultivated agricultural land can be conserved as an urban growth buffer and used as community defensible space.

Thank you again for outlining that ecosystem management practices are required to restore our ecosystems. Fortunately, many of these practices have been recommended for approximately 100 years. I hope that CARB can recommend they finally be implemented at the scale required.

Respectfully,
Alex Carter, northern California resident.

¹ [Jesse W. Carter](#) DA Shasta County 1919-27; Mt. Shasta City Attorney 1927-39; City of Redding Attorney 1937-39; State Senate 1939; Supreme Court of California 1939-59.

² [Oliver J. Carter](#) State Senate 1941-49; US District Court Judge 1950-76.