



March 17, 2017

Russ Henly
Assistant Secretary of Forest Resources Management
California Resources Agency
1416 9th Street
Sacramento, CA 95814

Submitted electronically to
fcac.fire@fire.ca.gov and Russ.Henly@resources.ca.gov

Re: Comments on the California Forest Carbon Plan (CFCP) - January 2017

Dear Asst. Secretary Henley:

Ebbetts Pass Forest Watch, we submit the following comments addressing the January 2017 draft of the California Forest Carbon Plan. We previously commented on the concept draft and those comments (attached) are still relevant to this draft plan. We have also signed on to the Center for Biological Diversity's letter on the 2017 CFCP.

We acknowledge the challenges of developing strategies to increase forest carbon sequestration (or at least prevent decreases), to increase forest resiliency, and to enhance and safeguard forest benefits even as climate change impacts become more intense.

Our current federal government's opposition to climate change, and the public's active demand for climate change action, highlights the need for California to continue its leadership in addressing climate change emissions and impacts. It is also extremely important, given the nature of the state's diverse ecology and Californians' unguarded appreciation of the state's natural resources, for any plan that addresses forests and climate to emphasize ways to protect forests and their environmental benefits.

For the CFCP to be viewed by the public as credible and defensible it must:

- Be free of skewed or unsupported assumptions and recommendations that might be perceived as biased toward any particular industry's interests;
- Recognize the distinct forest regions in California and tailor recommendations to reduce carbon emissions while also enhancing resiliency and diversity in all regions;
- Recognize that timber growth and yield rates of the past will likely not be the pattern in the future and that future growth and yield rates will likely decline due to the impacts of climate change;
- Ensure that models considering forest and wood products emissions and sequestration are robust and based on calculations that are rigorous and defensible; and
- Objectively address carbon emissions, storage and resiliency opportunities on both private and public lands, including the impact of various management methods.

Unfortunately, the current draft of the CFCP do not meet these criteria.

Summary of our review of CFCP and summary of an independent review (attached)

The current CFCP is riddled with inconsistencies and contains conclusions that are not adequately referenced or supported. Additionally, key scientific literature has been ignored.

The plan includes a vision of conditions that would result in more forest resilience and better safeguard other co-benefits. However, in its body, the plan focuses mainly on recommendations for increased thinning on public lands, greater use of biomass plants, and business as usual on private commercial lands. It is focused primarily Sierra forest region issues.

The authors ignored and failed to analyze the differences in management practices that California's forest practice rules allow on millions of private forestlands and the carbon and resiliency impacts of those allowed practices. For instance, the plan did not analyze how changes in rotation length could increase carbon storage, or how reduced clearcutting would dramatically reduce near-term emissions and how those changes could offset some emissions from needed fire and thinning.

Additionally, dense stocking on private land plantations is ignored from both fire and insect/pathogen risk standpoints, while dense stocking on public lands and those impacts are highlighted. The absence of discussions on and recommendations about industrial tree plantations is troublesome and glaring and undermines the credibility of this plan. In short, the plan manages to encourage new logging and development of new logging-related industries, including biomass energy, without considering existing logging impacts.

EPFW commissioned an independent review of CFCP (see attached) This review was done by Dr. John Campbell who has expertise in forest carbon dynamics (Oregon State University Department of Forest Ecosystems and Society). We have attached his review in its entirety which includes observations on strengths and shortcomings including:

- Conflating forest health with carbon storage;
- Failure to embrace natural disturbance as part of the solution vs part of the problem;
- Over reliance on accounting schemes to keep commercial timberland carbon neutral;
- Applying a double standard regarding the high threats of high density on public forests vs private forests;
- Unsubstantiated assertions that commercial forests store more carbon; and
- Wood products carbon storage accounting issues.

Specific strengths of the CFCP

Overall, we do not believe the CFCP serves as an adequate plan for managing the effects of climate change or for ensuring optimal carbon sequestration. However, we do believe there are strengths in the plan that deserve highlighting. Specifically:

- **The executive summary contains sound statements that note that efforts to increase Forest carbon sequestration must be aligned with other co-benefits.** For instance, the on page 2, paragraph 3, the executive summary contains a strong and valid statement that “These principles and policies, which are grounded in existing laws and regulations, place carbon sequestration and reducing black carbon and GHG emissions as one set of management objectives in the broader context of forest health and other climate change objectives. California will manage for carbon alongside wildlife habitat, watershed protection, recreational access, traditional tribal uses, public health and safety, forest products, and local and regional economic development.”
- **The vision statement is and strong and balanced.** The vision statement reflects the complex requirements that must drive forest management.
- **Wildland forest goals are sound.** Chapter 3 has a number of strong statements recognizing that the vision is for healthy forests that provide a variety of services, including plant and wildlife habitat improvement and expansion.
- **It recognizes that fire is needed on the landscape for forest health and resilience.** See, for instance, page 30, paragraph 2, which recognizes that fire is naturally occurring and an important part of forest management. (Nevertheless, the document fails to adequately discuss and integrate natural fire into the plan.)

- **Centralized data base is needed.** In chapter 5, Measuring Progress, on page 46, the plan smartly recommends and supports developing a centralized database or automated system to track progress. This database should be made easily available online and the results available to the public.
- **Urban forestry efforts are needed.** The urban forestry section of the report is sound and encourages greater attention to urban forests and the benefits that increasing these resources can provide.
- **Management practices impact wildlife.** At discrete points, such as on page 95, the plan acknowledges the wildlife habitat that forests provide and notes that certain management practices can benefit wildlife more than others, and emphasizes the need to restore wildlife habitat.

Additional observations and recommendations

The primary concern for the state to achieve the goals of reducing carbon emissions and ensuring forests provide multiple benefits should be restoring forests to ecological health/resiliency and increasing carbon sequestration, and to do this will require more fire disturbance. Currently, the plan's narrative and recommendations focuses too much on thinning and too little on natural disturbance to restore and to increase resiliency on both public and private forests

The plan needs to set clear and inspirational targets for the amount of carbon California forests must sequester and the amount of carbon dioxide released through timber harvest and natural disaster.

And timing is important. Carbon emissions must be reduced as soon as possible, not decades from now. Unfortunately, the plan is deficient in this regard. For instance, the plan:

- Assumes that commercial harvests will continue as is while thinning will drastically increase, causing UC Berkeley's modeling to show California forests becoming a carbon source for the next 40-50 years.
- The plan contains no recommendations as to how to offset the additional emissions and decrease near-term reduced sequestration of the proposed thinning. Will those emission offsets come from some other sector such as oil and gas? Or would they come from reduction of emissions from certain forest management practices such as clearcutting and soil deep ripping that are large sources of emissions?

Despite a robust vision statement, the CFCP focuses on increasing thinning and mentions controlled burns and lays out the amount of thinning in great detail while providing no specific targets for the amount of controlled burns.

Clearcutting and tree plantations clearly are inconsistent with forest health and resiliency, but are a significant part of public and private forest acreage. Yet the plan is essentially silent on these forest management practices and their impact on climate change. It should note, for instance, that:

- A clearcutting site is a net emitter of carbon dioxide for 20-40 years afterwards.
- Plantations are comprised of dense young trees generally of one species and they have higher fire and disease risks and must later be thinned.
- Clearcutting reduces soil health, soil carbon, and the ability of the soil to retain water by removing most biomass.
- Battles's 2006 study and other studies indicate that in the Sierra, the growth and yield of pine plantations will decline more than other forests. This would have a significant negative impact on growth and yield and carbon calculations.
- The Plan needs to provide details on the acres and conditions of tree plantations on both private and public land and activities needed to make them more biodiverse and resilient..

The Plan should contain more details as to how to manage for older, larger trees to enhance carbon and resilience.

Dead trees comprise a significant portion of sequestered carbon but the plan treats them as hazards and emitters and of little value. Trees remove carbon dioxide from the atmosphere and store it. Both functions are important. The removal stops when the tree dies, but the carbon storage can continue for 100 years or more. Logging dead trees reduces the length of time the carbon will be stored as half of logged trees go into producing bioenergy not to mention the energy needed to fell, transport, and burn the tree.

Clear and transparent accounting is needed to establish a baseline and monitor progress.

- The inventory must include all carbon pools: live trees, dead trees, soil carbon, wood products.
- Wood product accounting methods must encompass the energy needed to log, transport, and mill or burn a tree and properly reflect the longevity of the type of wood product.

Biomass burning or bioenergy is a major theme in the plan. But the plan is short on analysis of impacts and implications of bioenergy and alternatives.

- If the biomass industry is developed per this chapter's expectations, it is very likely that once a healthy system is established in forests, there won't be enough forest biomass to sustain all the biomass facilities.

- Additionally, alternatives to biomass burning are not adequately discussed or prioritized. They include biochar, soil amendments use on rangeland restoration, enhanced use on forest land for soil improvement etc.

Forestland conversion should be prevented. Item C.1 calls for increasing the acreage of forestland protected by conservation easements by 10 percent. This sounds like a low number and there is no rationale here or in the rest of the document for arriving at this low number.

Clear and overt definitions are needed throughout the CFCP. Definitions for key terms are missing and should be added to the plan. Examples include: sustainable, treatment etc.

Export of raw logs is an inappropriate element in this plan. The recommendation to advocate opening up raw log export from federal lands should be eliminated. This would likely increase carbon emissions from transport and less responsible milling and energy practices than in California and would reduce wood jobs in California.

We appreciate the opportunity to submit these comments.



Susan Robinson
Vice President
Ebbetts Pass Forest Watch
srmw@comcast.net