Sent to: fcat.calfire@fire.ca.gov ***on Date Shown below***

March 17, 2017

Forest Climate Action Team (FCAT)

RE: Comments on Draft California Forest Carbon Plan

Dear FCAT Team Members:

The following comments are submitted on behalf of the Environmental Protection Information Center ("EPIC") regarding the January 17, 2017 Public Review Draft of the California Forest Carbon Plan ("Draft Plan."). EPIC appreciates the opportunity to provide the FCAT Team with our comments and respectfully request a written response to all points raised herein.

The Forest Carbon Plan illustrates well the business-as-usual approach undertaken by the California Department of Forestry and Fire Protection ("CALFIRE") in its regulation of forest practice in California. Rather than dig in deep and effectively address the climate crisis, CALFIRE, as lead for this document, has issued nothing more than a plan for a plan. Of great concern is the lack of effective measures to regulate timber operations which ensure the net carbon sequestration we need from our forestlands. Instead, we see what we have experienced now for many years—an agency that is unwilling or unable to respond to legislative mandates and timelines, leaving our forestlands exposed to the impacts of climate change, and refusing to grapple with its role in facilitating the current unhealthy state of many of our private forestlands. The Forest Carbon Plan bears little relationship to, or understanding of, the existing regulatory and policy structure for California's private land forest management. Moreover, it does not even satisfy the directives which initiated its development. As a consequence, we are presented with a totally inadequate document, while the effects of climate change on our forestlands and their resources continue without effective action or response. Finally, the plan as written fails to reconcile the fact that much of the actions proposed in the Draft Plan are likely, at best, to lead directly back again to the unhealthy state of our forestlands that it claims to attempt to remediate.

As an organization which has spent four decades preventing harmful effects from timber operations and protecting forestlands, these comments focus on private timberlands.

I. Genesis of the Forest Carbon Plan.

A. Forest Carbon Plan Initiated in 2014.

The *First Update to the Climate Change Scoping Plan*, May 2014 ("2014 Update"),

requires that "[q]uantitative planning targets must be set to increase net forest carbon in California in the near term, mid-term, and by 2050, while ensuring forest resilience, health, and continued ecosystem services. Forest carbon inventory and assessments should be continually maintained and refined to support this effort, and appropriate measures, funding, and incentives must also be established." (*Id*., at 72-73.) The "[s]pecific actions to meet these planning targets for increasing carbon storage in California forests will be laid out in a 'Forest Carbon Plan' (Plan)." (*Id.*, at 73.)

According to the 2014 Update, at a minimum, the Forest Carbon Plan must:

- Set mid-term and long-term planning targets;
- Identify actions to meet those targets; and
- Provide recommendations on funding those actions. (*Id.*)

In addition, "the Plan should include a review of Forest Practice Regulations and recommendations for best management practices and potential additional regulatory measures or amendments needed to minimize GHG emissions and enhance carbon storage associated with silvicultural treatments. For example, a requirement for Sustained Yield Plans to demonstrate that activities not only maintain the current level of carbon sequestration, but actually increase carbon sequestration over the 100-year planning horizon." (*Id*.)

Further, the 2014 Update also provided that a working group

> "will be convened to produce a report that outlines funding needs and opportunities for the Natural and Working Lands Sector as a whole. The GHG Inventory, Forest Carbon Plan, local land use planning efforts, and other statewide efforts should be considered in development of the report." (*Id*., at 75.)

The "Forestry Sector" Working Paper, included as Appendix C in the 2014 Update, recognized:

> Future climate change scenarios predict increases in temperature, increases in atmospheric CO2 concentrations, and changes in the amount and distribution of precipitation. Altering these fundamental drivers of climate can result in changes in tree growth, changes in the range and distribution of species, and alteration to disturbance regimes (e.g., wildfires, outbreaks of pests, invasive species) . . . [and that] [r]elatively small changes in temperature and precipitation can affect reforestation success, growth, susceptibility to pests and forest productivity." (*Id*., App. C, at 5, 6.)

The Forest Sector Policy Framework depended upon the creation of the "Interagency Forestry Working Group" (IFWG) "to provide recommendations and coordinate efforts for all California forest and climate change related activities to protect the state's forests." (*See*, www.climatechange.ca.gov/climate_action_team/forestry.html, last accessed March 6, 2017.) According to Appendix C, the IFWG was created to "address a broad range of climate change issues," with three primary tasks: (1) update the GHG inventory for the forestry sector; (2) evaluate adequacy of existing forest regulations and programs to achieve the Scoping Plan forest

sector GHG targets, and (3) define biomass sustainability for biomass and biofuel utilization." (2014 Update, App. C. at 19.) The IFWG functioned for a short period of time, issued draft task reports, and last met in October 2010. (S*ee*, www.climatechange.ca.gov/climate_action_team/forestry/meetings/, last accessed March 6, 2017.)

B. Other Directives For The Forest Carbon Plan

1. Forest Climate Action Team

In 2014, the Natural Resources Agency in conjunction with CalEPA convened an inter-agency working group, called the Forest Climate Action Team, to develop the Forest Carbon Plan. (*Annual Report to the Joint Legislative Budget Committee on Assembly Bill 32 (Chapter 488, Statutes of 2006) The California Global Warming Solutions Act of 2006*, January 2015, at 26-27.) CNRA and CalEPA "are lead agencies for developing the Forest Carbon Plan document." (*Id*., at 27.)

2. Climate Change Adaptation Strategy

A component of California's efforts to address climate change is embodied in its Climate Change Adaptation Strategy. In 2016, the Natural Resources Agency moved beyond the 2014 Update finding that climate change "can" impact forests, to find that climate change is *already* impacting California forests:

> "Climate change in California forests is affecting tree survival and growth, forest composition, forest health and productivity, and has increased the intensity of ecosystem disturbances from wildlife, insects and spread of invasive species and land type conversion. These impacts result in less capacity to store carbon and more risk of greenhouse gas emissions." ("Safeguarding California: Implementation Action Plans" (March 2016), Forestry Sector Plan ["Forestry Implementation Action Plan"), at 92].)

The first action proposed in the Forestry Implementation Action Plan is to "improve forest health, resiliency and co-benefits by implementing forest management practices on public and private lands." (*Id*., at 97.). This includes "[c]oordinat[ing] efforts to reduce wildfire risks and severity to reduce associated emissions and avoid risk of landscape conversion to invasive species" and to "[m]anage the forest in such a way that increases overall carbon storage and provides multiple co-benefits such as water and biodiversity protection." (*Id*.) It also includes actions to invest in urban forestry, improve efforts for biomass utilization, implement forest management for overall health and protection of watersheds, implement priority research, and implement forest health monitoring in an adaptive management context. (*Id*., at 97-98.)

According to this document, the "Forest Carbon Plan will provide forest carbon targets and an array of strategies to promote healthy forests that protect and enhance forest carbon and the broader range of forest environmental services for all forest in California." (*Id*., at 99.) In addition, "[a]s part of the forest carbon plan, a Resource Economic Study will be drafted by UC

Berkeley academics. The study will evaluate several different management actions and investment choices identified in the Forest Carbon Plan." (*Id*., at 100.)

3. 2017 Scoping Plan Update.

The 2017 Update to the Scoping Plan "sits at the center of this broad tapestry of California's other climate-oriented plans and strategies. These include, for example, ... the State's Forest Carbon Plan . . . These are designed to focus on reducing carbon pollution while also delivering targeted results and a broad range of co-benefits." ("*The 2017 Climate Change Scoping Plan Update the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target*," January 20, 2017 ["2017 Update"], at ES7.) The 2017 Update "was developed in close coordination with other State agency plans and regulations, including . . . the Forest Carbon Plan . . . .", (*id*., at 7), and "builds off of ongoing efforts to identify targets for natural and working lands, such as through the Forest Carbon Draft Plan." (*Id.*, at 25.)

According to the 2017 Draft Scoping Plan Update: "[t]he Forest Carbon Plan will include the goal to reduce black carbon emissions from unmanaged wildfire events through forest management and restoration activities that are designed to reduce the risk of wildfire." (*Id*., at 14, fn.28.)

The 2017 Update states that it "comprehensively addresses for the first time the greenhouse gas emissions from natural and working lands of California—including the agriculture and forestry sectors." (*Id*., at ES1.)

The 2017 Update states that it includes "an initial analysis of business-as-usual net carbon sequestration rates from natural and working lands, including forecasts to 2030 and 2050." (*Id*., at 1101.) However, Chapter II, which assesses alternatives scenarios against business-as-usual, does not include any estimates for natural and working lands, because "work is still underway on how to quantify the GHG emissions within the natural and working lands sector." (*Id.*, at 31.) More projections need to be developed, which "will be used to estimate the difference between current carbon sequestration levels and expected sequestration levels in the scenarios to achieve the net zero loss goal by 2030 and net sequestration goal by 2050." (*Id.*, at 110.)

Thus, despite its claims, the 2017 Draft Scoping Plan Update does not "comprehensively address for the first time the greenhouse emissions from natural and working lands in California." (*Id*., at ES1.) At most, it recognizes that more work is needed to understand carbon sequestration in natural and working lands, dependent on future modeling and projections (1) to "help guide near and long-term State policies to ensure net sequestration in our natural and working lands," (2) to be refined over time, which "will be important to support implementation planning and to model implementation scenarios to 2100 to better understand the response of natural and working lands to major climate change impacts such as increased temperature, drought, and wildfire," and (3) the results of which "may also inform the accounting framework requirements set forth in SB 859." (*Id.*). Indeed, according to the 2017 Draft Scoping Plan Update: "Future work will identify and seek to fill gaps, and set a comprehensive and strategic path forward." (*Id*., at 111.)

Thus, another future plan is proposed: by 2018, the "state will complete an Integrated Natural and Working Lands Climate Change Action Plan" intended to "ensure the natural and working lands sector is a net carbon sink." (*Id*., at 115.) It is not clear if the Forest Carbon Plan may be included in this "Action Plan." (*Id*.) As part of Scoping and Tracking Progress, the Forest Carbon Plan will be completed and implemented by some date in the future, although it is not stated how or when it will be completed and implemented. (*Id*., at 118; Discussion Draft 2030 Target Scoping Plan Update, December 2, 2016, at 67.)

II. Summary Critique of the Draft Forest Carbon Plan.

The January 17, 2017 Public Review Draft of the Draft Forest Carbon Plan ("Draft Plan") is yet another example of a "plan for a plan," which mimics a *laissez faire* approach maintained by CAL FIRE and its Board of Forestry ("Board") with respect to climate change and its impacts on forest lands. It is more than disappointing, for example, that after more than six years, we still have no assurance from the Board that the rules and regulations which govern private land forest practices provide for adequate carbon sequestration to meet our state mandates. (Pub. Res. Code § 4551(b)(1).) To CAL FIRE and its Board, it seems as though climate change remains a future concern, rather than an imperative to take effective action. The Draft Plan is another illustration of lack of care, as it has no effective action to undertake efforts to deal with the impacts of climate change on our forestlands. To the extent its main emphasis is on "management," or "treatments," through "thinning," with utilization of biomass for non-urban forests, the Draft Plan fails to appreciate the need for action to protect and preserve our forestlands. While it gives attention to the need for large old trees, and land conservation, it provides no effective scheme to ensure these outcomes. It is long on ideas, and short on action.

A peer review of the Draft Plan conducted for Ebbetts Pass Forest Watch by Oregon State University Assistant Professor, Dr. John L. Campbell, provides the following summary of the review results, echoing our sentiments:

> "The CFCP advocates for increased logging and prescribed burning on public forest land and a continuation of business-as-usual logging on commercial forests. A case is made that both these actions result in favorable ecological, economic and social outcomes and that under this management regime state-wide forest carbon stocks will, in future decades, aggrade to levels higher than they are today. While the arguments in favor of forest restoration are generally defendable, the actions proposed by the CFCP rely almost entirely on a single dogmatic narrative of improved forest health through harvest without acknowledging the roll natural disturbance can play in maintaining healthy forest function or the easy carbon savings that would result from increasing rotation lengths on lands managed for timber production." (Campbell CFCP Peer Review, at 1, copy attached.)

The Draft Plan is at best incomplete and needs to be rewritten to be ready for public consumption. This comment letter addresses specific issues which underscore this lack of commitment to effectively deal with climate change impacts.

To start, Draft Plan lacks stated authority. The directives discussed above, as well as the Draft Plan itself, fail to identify the authority and implementation of the proposed Forest Carbon Plan. It is not clear, nor stated, under what authority and what agency or agencies review comments on the Draft Plan, and/or propose to take action on any decision about the Forest Carbon Plan. There is no clarity as to what status the Forest Carbon Plan has or will have in the existing regulatory structure for California's forest regulation, much less its roles in California's multi-faceted effort to deal with climate change. Nor are any protocols or standards provided to assess the Forest Carbon Plan.

The Draft Plan fails to satisfy the directives as set forth above. Moreover, it lacks any core reference to and understanding of the existing Forest Practice Act and the Forest and Rangeland Resources Assessment and Policy Act. These two statutory schemes provide the existing regulatory structure for commercial private land timber operations in California and the mechanism to ensure an ongoing and regular understanding our of forestlands and their resources. Forest practices in California depend on these statutes, and the Draft Plan largely ignores their existence and what role they could and should play in implementing the Plan. Nor is the Draft Plan accompanied by a required analysis under the California Environmental Quality Act ("CEQA").

Further, instead of meeting directives and existing in the context of our existing regulatory schemes, the Draft Plan relies on many assumptions, has no real action, and fails to reckon with how the use of offsets by timber industry can adversely affect reduction of GHG emissions and increased carbon sequestration. The Draft Plan is construed in such a way as though it is intended to exist in a vacuum.

III. The Forest Carbon Plan Lacks Statement of Authority and Protocols.

The public is asked to comment on a document which has no clear status. While conceived in the 2014 Update, it is unclear from that document or otherwise if the Forest Carbon Plan is a stand-alone regulatory tool, a part of the 2017 Scoping Plan Update, or some other kind of document. Nothing in the Draft Plan instructs as to its review protocols, adoption, and/or use by one or more agencies, or otherwise.

The Draft Plan itself starts by stating that it is the "detailed implementation plan for the forest carbon goals embodied in the 2030 Target Scoping Plan Update." (Draft Plan, at 1.) However, the 2017 Draft Scoping Plan Update makes no mention of the Forest Carbon Plan. Nor is there any mention of it in the accompanying Appendix F - Environmental Assessment, as part of the 'Project Description,' or elsewhere in the 2017 Draft Scoping Plan Update.

As noted above, the Draft Plan is listed as one effort which may be included in an as-yet-to-be-developed "Natural and Working Lands Climate Change Action Plan."(2017 Update, at 115.) The 2017 Update 'Scoping and Tracking Progress' lists the item "Complete and implement the Forest Carbon Plan," but it is not clear that this is one of the "many" efforts to be included in this future Action Plan. Nor does the 2017 Draft Scoping Plan Update identify what agency and when that progress effort may occur. (*Id*., at 118.)

As such, the opportunity for public comment on the Draft Plan is stymied, with no framework against which it can be assessed. Because no authority or protocols are identified and no framework given as to how the Draft Plan relates to existing statutory and regulatory laws governing California forest practices, we are left with the guidance as provided by statements in the 2014 Scoping Plan Update, the 2016 Forestry Implementation Action Plan, and the 2017 Draft Scoping Plan Update. In the absence of any clarity as to the authority and protocols by which public comments may be reviewed and responded to, and the Forest Carbon Plan may be acted upon, we object to, and challenge the manner and substance by which the Draft Plan has been issued and proposed for public review.

IV. The Forest Carbon Plan Does Not Satisfy the Directives Given.

The only guidance as to what is to be included in the Draft Plan is provided by the three references identified above. From these, we identify six specific requirements:

> 1) Set mid-term and long-term planning targets for increasing carbon storage in California forests;
> 2) Identify specific actions to meet those targets;
> 3) Provide recommendations on funding those actions;
> 4) Should review the Forest Practice Regulations and recommendations for best management practices and potential additional regulatory measures or amendments needed to minimize GHG emissions and enhance carbon storage associated with silvicultural treatments, such as a requirement for Sustained Yield Plans to demonstrate that activities not only maintain the current level of carbon sequestration, but actually increase carbon sequestration over the 100-year planning horizon (2014 Update, at 73);
> 5) A Resource Economic Study, which will evaluate several different management actions and investment choices identified in the Forest Carbon Plan" (Forestry Implementation Action Plan, at 100); and;
> 6) Include the goal to reduce black carbon emissions from unmanaged wildfire events through forest management and restoration activities that are designed to reduce the risk of wildfire" (2017 Update, at 14, fn 28).

The Draft Plan pays lip service to the requirement for targets, actions, and recommendations for funding; however, upon close review and as highlighted below, these don't come close to constituting a "detailed implementation plan for the forest carbon goals" in the 2017 Draft Scoping Plan Update.

For example, while it claims a "number of quantitative targets are included in this Draft Plan," (Draft Plan, at 24), this is the only time one finds the term, "quantitative targets." There is no clear path presented as to what are those "quantitative targets." And, to the extent the "goals" articulated in Chapter 3 are intended to provide these targets, they lack effective strategy to enable the specific actions required by the 2014 Scoping Plan Update.

Another example is found in the stated target for non-federal forest lands: to "ensure that timber operations conducted under the [Act] and Rules contribute to the achievement of healthy and resilient forests that are net sinks of carbon." (*Id*., at 30.) We note this is a driving force of

the Forest Practice Act, and the Board duty pursuant to AB 1504, which is ignored here, yet with no statement as to how this will occur. AB 1504 was chaptered in 2010, and there has not been any real effort on the part of the Board of Forestry to meet the mandates imparted by the Legislature to-date. At present, there is still nothing in the Forest Practice Rules enacted by the Board that would ensure reductions in GHG emissions from forestry-related activities, or ensure added carbon dioxide storage beyond the status-quo. The Draft Plan perpetuates the failure of the Board by completely failing to include an evaluation of extant Forest Practice Rules, as required by AB 1504.

The Draft Plan does not include a review of the Forest Practice Rules, or any recommendations for best management practices and additional regulatory amendments needed to minimize GHG emissions and enhance carbon storage with silvicultural treatments. Nor does the Draft Plan provide a "resource economic study." And, the Draft Plan explicitly states that "neither this plan, nor the draft Short-Lived Climate Pollutant Reduction Strategy (November 2016), includes an explicit, numerical emission reduction target for wildfire black carbon emissions." (Draft Plan, at 30.)

V. The Forest Carbon Plan Fails to Recognize the Governance and Duties Under Existing Statutes.

The Draft Plan effectively ignores California's regulatory structure governing private land forest practice, and the state's forest research program intended to inform policy and regulatory changes. Notably, the Draft Plan all but ignores and lacks recognition of core principles in the California's Z'Berg Nejedly Forest Practice Act ("Act"), Public Resources Code § 4511 *et seq*., the law which regulates private land commercial forestry operations. This law governs how logging is done, and what standards apply—all of which is key to developing a statewide plan to ensure net carbon sequestration from these forests. As mentioned above, the Draft Plan did not bother do provide a review of the existing regulations under the Act, or make recommendations. In addition, the Draft Plan fails to require information through the Forest and Rangeland Resources Assessment and Policy Act ("FRAP"), which is administered by CAL FIRE. Finally, the Draft Plan fails to comply with the California Environmental Quality Act ("CEQA"), lacking any analysis or determination under CEQA.

We provide here an overview of these statutory schemes to illustrate how they must be utilized and complied with in the development of any Forest Carbon Plan intended to provide an effective strategy to reduce GHG emissions and ensure net carbon sequestration in our forests.

A. The Z'Berg Nejedly Forest Practice Act.

When the Legislature created the Act in 1973, it recognized that "the forest resources and timberlands of the state are among the most valuable of the natural resources of the state and that there is great concern throughout the state relating to their utilization, restoration, and protection." (Pub. Res. Code § 4512(a).) California's policy is "to encourage prudent and responsible forest resource management calculated to serve the public's need for timber and other forest products, while giving consideration to the public's need for watershed protection, fisheries and wildlife, sequestration of carbon dioxide, and recreational opportunities alike in this

and future generations."(*Id*. § 4512(c), Emphasis added.)[1]

The Act is intended "to create and maintain an effective and comprehensive system of regulation and use of all timberlands so as to *ensure* both of the following:

> (a) Where feasible, the productivity of timberlands is restored, enhanced, and maintained. (b) The goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment. (*Id.* § 4513.)

The Board has a duty to ensure that our forest resources are protected, by among other things, adopting regulations which are regularly reviewed and revised in order to ensure that the "comprehensive system" envisioned by Section 4513. The Board, as part of CALFIRE, "shall represent the state's interest in . . . the protection of the state's interests in forest resources on private lands, and shall determine, establish, and maintain an adequate forest policy. General policies for guidance of the department shall be determined by the board." (*Id*. §§ 730(a), 740.)

The Act requires the Board to adopt rules consistent with the following three policies:

> (1) "The board shall adopt district forest practice rules and regulations for each district in accordance with the policies set forth in Article 1 (commencing with Section 4511) . . . to ensure the continuous growing and harvesting of commercial forest tree species and to protect the soil, air, fish and wildlife, and water resources, including, but not limited to, streams lakes and estuaries." (*Id.* § 4551.)
>
> (2) "The rules and regulations adopted by the board shall be based upon a study of the factors that significantly affect the present and future condition of timberlands and shall be used as standards by persons preparing timber harvesting plans." (*Id.* § 4552.)
>
> (3) "The rules and regulations shall be continuously reviewed and may be revised. During the formulation or revision of the rules and regulations, the board shall consult with, and carefully evaluate the recommendations of, the department, concerned federal, state, and local agencies, educational institutions, civic and public interest organizations, and private organizations and individuals." (*Id*. § 4553.)

To the extent the Board intends for CAL FIRE to exercise its professional judgment in applying any rules, the Board must provide "standards to guide the actions of director, and the director shall conform to such standards." (*Id*. § 4552.) The rules developed by the Board are known as the Forest Practice Rules or Rules, and are codified at 14 Cal. Code Regs. § 895 et seq.

---

[1])ADVANCE \u 31 While giving consideration to" means the rules and regulations "must provide for protection" of these resources and values. (*See* 58 Atty.Gen.Opn. 250 (1975).)

1. Key Forest Practice Act Provisions

At least two provisions of the Act are relevant to the issues presented by climate change: (1) the goal of "maximum sustained production of high quality timber products," and (2) the duty to ensure carbon sequestration.

First, the goal of "maximum sustained production of high quality timber products" (MSP) is "perhaps *the* core concept of the Forest Practice Act . . . ." (*EPIC v. California Department of Forestry and Fire Protection*, 44 Cal.4th at 476, fn. 4 , emphasis in original.) Indeed, the "the Forest Practice Act imposes a duty on the Board of Forestry to adopt and enforce regulations which, in a manner left to the discretion of the Board, limit the aggregate harvest of timber on private timberlands in relation to the present and anticipated future supply of standing timber." (*Redwood Coast Watersheds Association v. State Board of Forestry and Fire Protection* (1999) 70 Cal.App.4th 962, 970, emphasis added.)

Second, in 2010, the Legislature required forest resource management to protect the public's need for "sequestration of carbon dioxide." (Stats. 2010, c. 534 (A.B. 1504), § 1, codified as Pub. Res. Code § 4512(c).) At that time, the Legislature added a new section to the Act, finding that our "[s]tate forests play a critical and unique role in the state's carbon balance by sequestering carbon dioxide from the atmosphere and storing it long term as carbon," and that among other things,"[t]here is increasing evidence that climate change has and will continue to stress forest ecosystems, which underscores the importance of proactively managing forests so that they can adapt to these stressors and remain a net sequester of carbon dioxide." (*Id.,* § 2;_ amended by Stats. 2011, c. 296 (AB 1023), § 256, codified as Pub. Res. Code § 4512.5 (a), (d).) The Legislature instructed that "[t]he Board, the Department, and the State Air Resources Board should strive to go beyond the status quo sequestration rate and ensure that their policies and regulations reflect the unique role forests play in combating climate change." (*Id*. subd. (e).)

Also in 2010, the Legislature required the Board to:

> "[E]nsure that its rules and regulations that govern the harvesting of commercial tree species, where applicable, consider the capacity of forest resources, including above ground and below ground biomass and soil, to sequester carbon dioxide emissions sufficient to meet or exceed the state's greenhouse gas reduction requirements for the forestry sector, consistent with the scoping plan adopted by the State Air Resources Board pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code)." (Stats. 2010, c. 534 (AB 1504), § 4, codified as Pub. Res. Code § 4551(b).)

According to the 2014 Update, the "Board of Forestry has been evaluating the adequacy of existing forest regulations and programs for achieving GHG emission reductions and ensuring carbon sequestration on forest lands." (2014 Update, at 70.) To date however, the Board has not provided this assurance. The 2014 Update also refers to the duty under AB 1492 (2012) to "evaluate ecological performance measures, which are likely to include an evaluation of practices that may directly or indirectly affect GHG emissions." (*Id*., at 71.) To date, that

evaluation has not occurred. According to the most recent AB 1492 annual report to the Legislature, "[a]s discussed in previous Annual Reports, developing ecological performance measures for management outcomes on the State's nonfederal timberlands is a challenging task that will take significant effort and some time to accomplish." (Assembly Bill 1492 Annual Report to the Joint Legislative Budget Committee on the Timber Regulation and Forest Restoration Program, February 8, 2016, at 20.) According to this report, the "state review team agencies are early in the process to develop new ecological performance measures per the requirements of AB 1492." (*Id*.)

2. Regulations Intended to Implement the Act

The Board has adopted an extensive set of regulations governing the timber harvest plan ("THP") process, which are intended to:

> "[I]mplement the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 in a manner consistent with other laws, including but not limited to, the Timberland Productivity Act of 1982, the California Environmental Quality Act (CEQA) of 1970, the Porter Cologne Water Quality Act, and the California Endangered Species Act. The provisions of these rules shall be followed by Registered Professional Foresters (RPFs) in preparing Timber Harvesting Plans, and by the Director in reviewing such plans to achieve the policies described in Sections 4512, 4513, of the Act, 21000, 21001, and 21002 of the Public Resources Code (PRC), and Sections 51101, 51102 and 51115.1 of the Government Code." (14 Cal. Code Regs. § 896(a).)

These include regulations intended to fulfill the central requirement to ensure the goal of "maximum sustained production of high quality timber products." The Board has not, however, promulgated regulations concerning climate change, carbon emissions, or carbon sequestration.

a. Regulations Intended to Fulfill MSP

The Board's "silvicultural" rules are intended to implement the requirement for MSP, as they "provide for alternatives that when applied shall meet the objectives of the FPA (PRC 4512 and 4513)." (14 Cal. Code Regs. § 913.3.) These rules require that the registered professional forester ("RPF") "select systems and alternatives which achieve maximum sustained production of high quality timber products." (*Id*.) While CAL FIRE must deny a THP if it fails to achieve MSP, Rules, *see*, 14 Cal. Code Regs. § 898.2(g), the Rules do not define "maximum sustained production" ("MSP"), or require a specific process to show how or if MSP is attained. Rather, they provide three voluntary options to "achieve" MSP.

These options are set forth in Rules section 913.11, the goal of which is to achieve MSP "by meeting the requirements of either (a) or (b) or (c) in a THP, SYP or NTMP, or as otherwise provided in Article 6.8, Subchapter 7 [PTEIR]." Of the three options, only one, subsection (b), develops a "plan,"—the "Sustained Yield Plan." The Board has adopted a separate set of rules as to SYP contents, process of review, monitoring, and renewal. (*See*, 14 Cal. Code Regs. § 1091.1 et seq.) "A THP which relies upon and is found to be consistent with an approved SYP shall be

deemed adequate to achieve MSP." (*See*, 14 Cal. Code Regs. § 913.11(b)(4).)

The other two options—subsections (a) and (c)—require information to be presented in each THP, and have no similar language permitting ongoing reliance as with the SYP. These two options are distinguished by the timberland owner's acreage: Option-(a) is available for landowners with an acreage above 50,000 acres; Option-(c) is available for landowners with less than 50,000 acres. Additionally, Option-(c) may be used by a timberland ownership of more than 50,000 acres if an SYP or demonstration of achievement of MSP under Option-(a) "has been filed with the department and has not been returned unfiled or approved," and "[f]or scattered parcels on timberland ownerships of 50,000 acres or more." (*See*, 14 Cal. Code Regs. § 913.11(c).)

There is no requirement in any of these options to demonstrate anything about carbon sequestration.

b. No Regulations to Ensure Carbon Sequestration

While in 2010 the Legislature identified the requirement for forest resource management to protect the public's need for carbon sequestration, *see*, Pub. Res. Code §§ 4512, 4513, and directed the Board to ensure that its regulations provide for carbon sequestration, *id*.,§ 4551(b), to date the Board has not adopted any regulations, or amended existing regulations, to ensure carbon sequestration, or to provide standards and guidance to calculate and assess and greenhouse gas emissions and carbon storage. CAL FIRE developed a "Greenhouse Emissions Calculator, ("GHG Calculator"), which has not been adopted as a rule or a technical rule addendum by the Board. A download of the Excel file is available at http://bit.ly/2j57Jfg, and a "User Guide" for the GHG Calculator is available at http://bit.ly/2j8u4Ls.

The CAL FIRE GHG Calculator itself has been the subject of considerable objection and scrutiny. For example, in a letter submitted to the Air Resources Control Board regarding development of forestry protocols for GHG emissions reduction, Professor Mark Harmon of Oregon State University stated:

> "I have major concerns about this carbon calculator. First, I believe I have found some specific errors in the programming. But secondly, and most importantly I believe that the entire basis of this calculator is flawed. It is flawed because it fails to address the fundamental dynamic of any forest carbon system. It does this by ignoring the dynamics of the dead and soil carbon. In doing so it creates artificial carbon sinks. Ignoring what is happening in the dead and soil carbon is simply not following the best science available of 20 years ago let alone today. I also found the losses assumed for site preparation completely unrealistic and far too low. The calculator ignores the initial starting point of wood products stores. On some lands perhaps there were no previous harvests. But on land on which there were harvests, then it is scientifically invalid to not account for these existing wood products stores." (Harmon 2010, Letter to California Air Resources Control Board, copy attached.)

CAL FIRE's Board has not provided, pursuant to Pub. Res. Code § 4552, any guidance or standards to permit CAL FIRE to exercise its professional judgment in determining that harvesting of timber ensures carbon sequestration. (*See*, *Id*., § 4551(b).)

Thus, to the extent the Draft Plan disregards the Act, it fails to satisfy the directive from the 2014 Update, which expressly stated that the Draft Plan:

> "[S]hould include a review of Forest Practice Regulations and recommendations for best management practices and potential additional regulatory measures or amendments needed to minimize GHG emissions and enhance carbon storage associated with silvicultural treatments. For example, a requirement for Sustained Yield Plans to demonstrate that activities not only maintain the current level of carbon sequestration, but actually increase carbon sequestration over the 100-year planning horizon." (2014 Update, at 73.)

The Draft Plan provides no such review. Rather, the Draft Plan seems to largely avoid the statutory requirements of the Act, and that the Forest Practice Act and Rules exist at all.

3. The Forest Carbon Plan Fails to Reckon with The Act and Its Administration by CAL FIRE.

According to the Draft Plan, California's forests remain unhealthy and overcrowded. (Draft Plan, at 16.) The Draft Plan refers to the "current unhealthy state of forests." (*Id*., at 18.) and scientists are concluding that California forests as they currently are will not be successful in absorbing those changes (from climate change impacts drought and temperature) as they once did. (*Id*., at 53.) And on private corporate timberlands, there is "slightly" more growth than removal, with "less carbon stored per acre in live tree inventories, as they don't get as old and large as trees on public landscapes, but mortality is much lower." (*Id.*, at 74.) These statements suggest that CAL FIRE's management and regulation of the Act is not meeting the intent of the Act. Yet, the Draft Plan provides no discussion as to what role the Act should assume in assuring the carbon sequestration desired.

The Draft Plan states that "[f]inding policy solutions that encourage sustainable management and use of California's forestlands and wood products to reduce business and emissions leakage while ensuring decreasing carbon footprint is a critical consideration." (*Id*., at 103.) We believe the Act already includes this directive, particularly through the mandate to ensure MSP. Unfortunately, as borne out by above statements, CAL FIRE and its Board are doing nothing to ensure this. We need enforcement and metrics, not policy wonk as provided in the Draft Plan. The Draft Plan needs to explicitly explain how this directive is achieved, given the CAL FIRE's role and deficient administration of the Act and current forest conditions.

The Draft Plan refers to most forests in western United States as "fire prone." (*Id*., at 47.) THP regulations do not require any analysis of how the silviculture prescriptions to be used in any specific logging plan may contribute to fire-prone conditions. This is a clear oversight in the Act, yet the Draft Plan ignores the need to deal with this key problem for private timberlands. Instead, it merely assumes that fire prone forest can be remedied with "treatments," as though

analysis of silvicultural methods is irrelevant. It is remarkable, given where we are today, that the Draft Plan does not recommend the obvious need to eliminate clearcutting in California. We ask that a full explanation be given as to why this has not been provided. Here again, had the Draft Plan taken its charge to review regulations, it would have evaluated these concerns, and recommended changes.

The Draft Plan fails to identify or acknowledge what role the Act must play in achieving the climate change mitigation and adaptation goals set forth. It fails to consider or discuss if or how the forest management goals it sets forth will be enforceable, under the Act or otherwise. It does not explain how forest management and restoration practices will be "informed by the expected future changes," and be "robust over a wide range of plausible future climate change outcomes." (*Id.*, at 13.) The Draft Plan does not say how it will achieve the recommendations set forth. (*Id*., at 100-101.) It provides no consideration of how a "focus on overall forest health and accompanying implementation of the recommendations identified in [the plan] will help to diversify management practices, and will achieve the [plan's] goal of sequestering and maintaining more carbon over time." It is totally unclear how this plays out. And, to the extent the Draft Plan claims it is the "detailed implementation plan" for the 2017 Scoping Plan Update, that document does not even list the Act as a applicable law or regulation pertaining to forest resources in California. (*See*, 2017 Update, Appendix F [Environmental Assessment], Attachment A, Table A2-2, at 149-152.)

The Draft Plan relies heavily on the concept that regional implementation is needed, with development of "Forest Carbon Action Plans." (*Id*., at 5.) In doing so, it ignores the Act's three district forest district divisions. (*See*, Pub. Res. Code § 4531.) The Draft Plan does not explain how this regional implementation will occur, particularly given the existing Act. Is the intent to replace the Act, at least as it governs private land forestry operations? The current Act limits what local areas may do. Local governments have no authority to regulate the conduct of timber operations, except where authorized by the Board or the parcel is less than three acres and not zoned Timberland Production Zone. (*See*, *Big Creek Lumber Co. v. County of San Mateo* (1995) 31 Cal.App.4th 418, 424; Pub. Res. Code § 4516.5(d).)

While the Draft Plan advances the intent to work regionally, it provides no context of the current regulatory scheme, nor how it is to be done, coordinated, under what regulatory scheme, and how it may enforced. (*See*, Draft Plan, at 22.) Nor does the Draft Plan explain how "[n]ew information and tools will have a great impact as the Forest Carbon Plan begins implementation at the regional level and as strategies turn into actions." (*Id*., at 117.)

The existing statutory scheme does not constrain what private forestland owners do—it regulates what they do. Thus, when the Draft Plan claims that private landowners, "may be induced to improve management for carbon sequestration and other public benefit outcomes through incentive payments," *id*., at 29, it fails to explain just how this will occur, particularly under existing law. Is California intending to pay commercial enterprises for proper management of their lands? Similarly, under what mechanism will private commercial timberland owners be required to report carbon stock and GHG flux? (*Id*., at 45.) What is the method by which this will be included in the review of proposed logging operations, in a manner that is transparent and enables the public to readily review the information?

The current Rules have "minimum resource conservation standards," or "minimum stocking standards." (*See*, 14 Cal. Code Regs. § 912.7.) The Draft Plan proposes to "increase annual area reforested by 25% over the current level by 2030." (Draft Plan, at 31.) No explanation is given as to how this will be done, and under what authority. How will private landowners be required to do this, if it is not part of the existing Act?

The Draft Plan proposes to explore opportunities for regulatory and policy changes and streamlining for various activities, including the increased use of fire and for restoration and to develop new wood product and biomass facilities. (*Id*., at 6.) This translates into seeking exemptions to allow for forest "treatments" or "thinning" which is proposed as a major management scheme. (*See e.g*., *Id*. at 16, 18, 29, 30, 41, 113.) Once again, with no mention of the Act, it appears the Draft Plan wants to change the rules, with no explanation as to what is the current regulatory scheme, what rules should be changed, and how those changes could conflict with the Act, as well as other laws such as CEQA. This is a bold attempt to undermine necessary environmental and public review.

B. The Forest and Rangeland Resources Assessment and Policy Act Informs Forest Practices.

Relevant to the Draft Plan and its need to understand forestland conditions in California, is the "Forest and Rangeland Resources Assessment and Policy Act" ("FRAP"), an additional tool created in 1977 to protect our state's forest resources to ensure adequate and continuous understanding of the value of our forested resources. FRAP also documents the significance of our forest resources, and the need to continually understand the needs and constraints of those resources. The Legislature found that although our forest resources "provide vitally important economic and environmental benefits," "[f]orest resources in California are limited," and "[d]emands on forest resources in California are expected to increase significantly in the next decades." (Pub. Res. Code §§ 4789.1(a), (c).) The Legislature determined that "[b]etter use of forest resources can result where there is good information as to anticipated needs and constraints and the potentials for meeting such needs consistent with Section 4513." (*Id*. subd. (d).)

FRAP is to "provide for the assessment of California's forest resources in order to develop and implement forest resources policies for the state." (*Id*. subd. (f).) FRAP imposes a duty on CAL FIRE to provide regular and timely assessments of our state forest resources.

> "[U]nder policy guidance from the board and in consultation with the Secretary of Resources, the director [of CalFire] shall prepare and submit to the board and the Secretary of the Resources Agency, a preliminary forest and rangeland resource assessment and analysis not later than July 1, 1979, and shall present a full and updated assessment by January 1, 1987, and by January 1 of each fifth year thereafte[r]." (Pub. Res. Code § 4789.3(a), emphasis added.)[2]

[r] Based on this, reports were due in 1992, 1997, 2002, 2007, 2012, and prospectively, in 2017. Currently, the most recent (2008) report was issued only in 2010. No report has been issued since. (*See*, CalFire, *California's Forests and Rangelands: 2015 Assessment*,

The FRAP assessment also "shall recognize distinct differences in ownership and management of forest and rangeland resources in California between the various public and the various private owners." (*Id*.)

The FRAP assessment is to include, among other items:

> "(1) An assessment and analysis of the supply and availability of the various present and potential forest and rangeland resources of the state;
>
> . . . .
>
> (3) An analysis of present and anticipated demand for various forest and rangeland resources in the state;
>
> . . . .
>
> (5) A discussion of important policy considerations, laws, regulations, management responsibilities, and other factors expected to influence and significantly affect the use, ownership, and management of forest and rangeland resources." (*Id*. subd. (a)(1), (3), (5).)

According to FRAP, CALFIRE is responsible for regulating and tracking certain activities, such as timber harvest and vegetation management, as well as providing land owner advice about sustainable practices. The Forest Practice Rules provide guidance for sustainable timber harvesting. Additionally, CAL FIRE provides incentives and assistance for sustainable private forest and range stewardship such as the California Forest Improvement Program ("CFIP"):

> "When assessing the conditions of forests and rangelands *every five years*, we want to know if CALFIRE's management policies and assistance programs are working to create sustainability. We want the ability to track over time if conditions are improving or *deteriorating*. But then again, we need to know what "improving" means, and *conversely, what "deteriorating" means. In short, we need to have a definition of sustainable and some agreed upon ideas of what to measure to assess progress toward or away from it."* (CALFIRE, "FRASC: California's Montreal Protocol Criteria and Indicators," http://bit.ly/2j1WqVj, last visited Jan, 11, 2017, emphasis added.)

Such an assessment of our forests, at this time of critical change due to rapidly evolving climate conditions, is fundamental to understanding the relationship of logging to climate change and to implementing a framework to reduce GHG emissions and protecting our forests for this and future generations.

Despite the requirement to assess conditions "every five years," the scheduled—and already tardy—2015 Assessment has not been done, leaving regulatory management of our forests without key information and guidance necessary to inform decision-making. Instead of having this required and timely information, the Draft Plan is forced to rely upon Forest Service data, through its Forest Inventory Analysis Program. (*Id*., at 43.) The FIA has its limitations, and

frap.fire.ca.gov/assessment/2015/assessment2015, last visited Jan. 11, 2017.)

is not current given its 10-year cycle of analysis. (*Id*., at 43, 62.) Even though the FIA information is recognized as a sufficient protocol, the failure by CAL FIRE to do its job to ensure timely reporting of forest conditions undermines the Legislative directives to timely and consistently develop reliable data about our forest lands.

C. The Forest Carbon Plan Fails to Comply with CEQA.

There can be no question that the Forest Carbon Plan must be evaluated under CEQA. If it is intended as a stand-alone document, as it describes itself as the "detailed implementation plan for the forest carbon goals embodied in the 2030 Target Scoping Plan Update," (Draft Plan, at 1), then it must be evaluated under CEQA. If it is not a stand-alone document, but intended to be part of the 2017 Update, then it should be evaluated as part of that project in its Environmental Assessment. It is not. And, to the extent it is intended to be the "foundational component" of the Natural and Working lands Climate Change Action Plan identified in the 2017 Update, it should be evaluated in the 2017 Update Environmental Assessment. It is not.

The Forest Carbon Plan is a project under CEQA as it is a discretionary action undertaken, supported and authorized by a public agency—in this case, and based on the 2014 Update, CALFIRE, CNRA and CalEPA. (Pub. Res. Code §§ 21065(a), 21080(a); 14 Cal. Code Regs., §§ 15357, 15378(a*)*; *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 262; *Citizens for Non-Toxic Pest Control v. Department of Food & Agric.* (1986) 187 Cal.App.3d 1575.) And, it is a project which may cause physical change to the environment, particularly through the use of thinning and other management techniques, and the advancement of biomass and biomass facilities. (Pub. Res. Code § 21065; 14 Cal. Code Regs., §§ 15060(c)(2), 15378(a).) No exemption applies.

The Draft Plan does have the potential to significantly adversely impact the environment. A key example is the thread throughout the document to engage in extensive "treatment" or "thinning" for management. This requires environmental review. Moreover, to the extent the Draft Plan leans toward securing regulatory 'exemptions' to implement this strategy, there is an even greater need to understand the full component of what effects such management may cause. While the Draft Plan assumes that "thinning" for management will facilitate, in the very long term, forested conditions to increase carbon sequestration, it provides no analysis of what may be the real environmental consequences in the course of the years during which this management will unfold.

The proposed enhanced use of exemptions, which is not evaluated in Section 4.2.1 of the Draft Plan, appears key. (Draft Plan, at 41.) Yet, such a proposal means there will be no public or other agency review, and no environmental analysis of any proposed management scenario. The Draft Plan notes that a report to the Legislature on the use of exemptions was due at the end of this year 2017. (*Id*.) We are concerned that the Draft Plan lays the foundation for the report to advance this expanded use of exemptions. Instead, the use of exemptions needs to be limited, given existing practices to use them when not appropriate.

It is common practice, for example, for many large industrial timber companies to submit annual notices to CAL FIRE to conduct exempt timber operations to remove, "dead, dying, and

diseased," trees from their property throughout the year and at their discretion, relying upon 14 Cal. Code Regs. § 1038 in the Forest Practice Rules for the entirety of ownership, or for large areas of ownership, often totaling in the thousands of acres per-exemption. It is also known that exempt timber operations carried out pursuant to 14 Cal. Code Regs. §§ 1038 and 1052 ("Emergency Timber Operations"), are not analyzed for cumulative effects as part of other discretionary permits, such as THPs. At present, Emergency Timber Operations carried out pursuant to 14 Cal. Code Regs. § 1052 of the Forest Practice Rules contain no plain-language requirement to either meet minimum resource conservation standards post-operations or to artificially regenerate or have an artificial regeneration plan in the event minimum resource conservation standards are not attained immediately upon completion of operations. Thus, we have substantial questions and concerns about the lack of CEQA review of the Draft Plan, as it purports to encourage the Board of Forestry to contemplate expanding the use of ministerial CEQA permitting exemptions.

The Draft Plan must comply with CEQA before it proceeds any further. Because it is not clear under what statutory or agency authority this Draft Plan has been developed, we cannot comment on whether at this time any functional equivalent program may apply, which could inform the type of CEQA document to be prepared. Regardless, we believe that given the potential for significant individual and cumulative adverse environmental impacts which may result from the Draft Plan as written, an environmental impact report, or its equivalent, must be developed.

VI. The Forest Carbon Plan Relies on Unsupported Assumptions, Lacks Definition, and Fails to Identify Specific Actions to Meet Targets for Increasing Carbon Storage in California Forests.

A. The Forest Carbon Plan Lacks Definitions and Relies on Many Assumptions.

In addition to items identified above, here we identify provisions which lack definitions, and present assumptions without explanation.

For "treatments," the Draft Plan does not explain what is meant by thinning, e.g. vegetation management. (*See*, Draft Plan, at 16.) What are "large scale thinning treatments," and how are they to be regulated? What are "other similar stand-density reduction treatments" in addition to thinning? (*Id.*, at 18.) The Draft Plan assumes that untreated areas are worse than treated areas, relying on a 2012 Dore report, without adequate explanation. (*Id*., at 17 fn. 36.)

On non-federal lands, the Draft Plan claims that CAL FIRE estimates increasing treatment on private lands to 500,000 acres per year, which the Draft Plan then concedes is not realistic. (*Id*., at 29.) Thus, the Draft Plan projects an outcome based on an unrealistic assumption for levels of treatment. It becomes a "target . . . pending increased resources," which is just another assumption. (*Id*.). The Draft Plan goes on to assume that treatments "can include" those that generate revenue. (*Id*.). Yet, it fails to identify under what authority these treatments can be required, or subject to payments as revenue. The Draft Plan also assumes that there will be a doubling of the rate of fuels reduction treatments within three years, from 2017 to 2020, based upon the Vegetation Management EIR. (*Id*., at 30.) However, this type of treatment is not subject

to regulatory controls on private lands.

The Draft Plan goes on to assume that there will be "successful fuel reduction and forest management activities [that] will result in reduced area of forestland impacted by wildfire statewide." (*Id.*) But this is based on it being "successful," without any measures to ensure and enforce these efforts, and no metrics to determine what is considered "successful." The Draft Plan claims that by "fuel reduction treatments and sustainable forest management . . . will aim to minimize total black carbon emissions from forests." (*Id*.) This is yet another assumption, based on a premise these things will occur, and will occur successfully, even though the Draft Plan concedes that it does not include "explicit, numerical emission reduction target for wildfire black carbon emissions." (*Id*.)

For growth, volume, and retention of large old trees, the Draft Plan also makes assumptions. For example, it assumes that lost carbon is sequestered within 15 to 20 years "if stand growth continues on the same trend." (*Id*., at 19.) However, stand growth will be affected (adversely) by climate change. (*See*, *e.g*., *Id.*, at 10, 11 ["drought impact[s] tree growth (and therefore carbon sequestration rates) during the drought itself, [and] that growth rates post-drought can remained stunted for one to four additional years."]; 17 [drought suppresses growth . . . would result in decreased carbon sequestration.]; and at 53, 54.) The Draft Plan also assumes, without documenting just how this will occur, that, "[t]imber and other biomass harvest volumes are expected to increase as a result of the forest management activities outlined above." (*Id.*, at 32.) The Draft Plan at one place advises that timber harvest volume has been trending upward in the last five years, (*id*., at 50), yet elsewhere it advises that timber harvesting has been on the decline since the mid-1980's, (*id*., at 71, 103). This contradiction underscores the need for clarity. Additionally, the Draft Plan incorrectly assumes that increases in growing stock and volume of wood in our forests will automatically extrapolate into carbon dioxide sequestration with no reference, or research cited or presented to support the assumption.

The Draft Plan states that the "carbon benefits from treatments that promote growth and retention of larger trees include increased sequestration rates, more stable carbon storage, and decreased risk from the growing threat of climate change." (*Id*., at 60.) While we would agree that growth and retention of larger trees should increase sequestration rates, this provision fails to acknowledge that currently the Act does not include any such standards, and neither do the Forest Practice Rules. So how will this happen; what regulatory provisions will ensure, for example, retention of large old trees, particularly on private industrial timberlands or public timberlands? While we have a very good Forest Practice Act, we have a lead agency administering that Act which does not require MSP to facilitate this kind of management. How will that change? The Draft Plan does not identify the management scheme necessary for retention of large old trees and old forest stands.

The Draft Plan provides that the "carbon stock reported in each year will be in the ten-year rolling average of carbon stocks, so the value reported for 2015 is the average carbon stock over the years 2006 to 2015." (*Id*., at 44.) The Draft Plan does not explain or justify a 10- year rolling average as appropriate for keeping track of GHG emissions over time. Given the climate crisis we face, justification for this proposal is necessary.

The Draft Plan also "does not include targets or propose direct protocols for co-benefits from activities intended to improve forest health, such as benefits to air quality, biodiversity, and watershed function." (*Id*., at 87.) The Act would require their inclusion. Their omission here is further evidence of how the Draft Plan is not complete or capable of satisfying the directives of its creation or the Forest Practice Act.

The FCP depends on regional collaboration. (*See*, *Id*., Table 3 at 36.) The Draft Plan also relies heavily on ownership cooperation—by both the federal government and private timberland owners. Given the current federal administration, it is clearly unrealistic now to rely on the U.S. Forest Service to fulfill any existing metrics or maintain policies from previous administrations. This agency is going to have significant budget cuts. Our federal public lands are under assault, and at risk of being heavily exploited, if not lost. Under these circumstances, how can California require the federal government to do anything? (*See*, *e.g*., *Id*., at 28, 31, 32, 37, 38.) This includes any expectation of funding. Similarly, reliance on private industry does not guarantee anything. (*Id*., at 44, 49.)

Lastly, the Draft Plan is based on assumptions as about funding. (*See*, *Id.,* at 38.) It assumes that non-monetary resources will be given through technical assistance, and tools that identify forest conditions. (*Id*., at 39.) It does not explain how this information will be developed or adequate. Further, the Draft Plan assumes financial assistance may be available to assist with regulatory compliance by private landowners. (*Id*., at 43.) No explanation or actual basis is provided to support these kinds of claims.

B. The FCP Does Not Provide Effective Actions Needed to Increase Carbon Storage in California Forests.

The FCP states "California cannot meet the climate change goals of either this Draft Forest Carbon Plan or the broader Natural and Working Lands strategy without increasing the levels and resilience of forest carbon sequestration and storage in its wildlands forests." (*Id*., at 26.) The Draft Plan fails to define specific actions to ensure this outcome, which can be enforced in a manner that is transparent and subject to the Act. The Forest Carbon Plan fails to provide concrete regulatory proposals which would restore the Legislative policies and require actions. Even the implementation measures set forth in Chapter 4 provide very little in the way of taking action; while it speaks about high-level performance objectives - and implementation goals, it fails to set forth concrete action necessary to increase carbon storage in California forests. (*Id*., at 44.)

Some examples include the proposal for non-federal lands, to "increase annual area reforested by 25% over the current level by 2030." (*Id*., at 31.) This is a statement of intent, with no clarity as to how it will occur, be regulated and ensured. Similarly, the claim is made that transportation of forest biomass will be limited to local areas. (*Id*., at 32.) There is no mechanism in place to make that happen, and no concrete proposals to make sure it happens.

The goals for forest health described in the FCP call for, in most instances, a significant increase in the pace and scale of management activity beyond what can be supported by existing funding levels, such that "[t]o meet these goals, the complex collaborations and implementation

strategies needed to achieve the goals of this Forest Carbon Plan will need to leverage resources from existing state, federal and private efforts." (*Id*., at 36, 37.) And some of those resources are subject to annual appropriation decisions, so may not be reliable. (*Id.*) In other words, there may be resources in the future, but it is not clear what will be available. Indeed, according to the FCP, the "CNRA will seek resources to develop and implement a centralized database to track implementation activities identified in this plan by December 31, 2018." (*Id*., at 46.) This means that only a search for funding will occur in two years' time. At some later time a data base for tracking activities may be developed, depending on funding. So there is no assurance that activities will be implemented or tracked. It is only an effort "to seek resources." Without funding, the FCP cannot achieve even the minimal proposals its sets forth, particularly in the time frame needed. When the FCP claims the need for repetition and maintenance of fuels treatment, *id.*, at 61, it does not, and cannot, provide any specific action which is assured and can be enforced.

Further, the presumption that turning un-merchantable forest materials into biomass for a fuels source, with cogeneration is "carbon-neutral" and a net-carbon savings is not founded in facts or the available research. Here again we refer to the Peer Review of Dr. John L. Campbell:

> "When un-merchantable harvest residue finds its way to a mill, utilizing it for energy through combustion is reasonable, but to credit this entire carbon stream as a carbon offset denies the fact that a an equal amount of energy could have been acquired through the combustion of much less fossil fuel and the fact that energy demand by the mill was itself created by the harvest. As it pertains to the objective of the CFCP, fuel offsets should apply only to any residual energy sent to independent users, with the additional realization that just because a fuel source is renewable does not make it carbon neutral." (Campbell, 2017, Peer Review of CFCP, at 4-5.).

VII. The Forest Carbon Plan Fails to Acknowledge The Role of Offsets.

In addition to the Draft Plan's failure to acknowledge or grapple with the reality of pre-existing governing statues and regulations, the Draft Plan also fails to acknowledge, discuss, or analyze in a meaningful way how the actions proposed may impact market-based carbon offset trading under the current AB 32 Cap-and-Trade system or under the guise of the Federal Forest Carbon trading system. Currently, private industrial timberland owners in California, such as Sierra Pacific Industries ("SPI") (the largest industrial land owner in California), and Green Diamond Resource Company sell carbon offsets for designated timber projects. As we understand this practice, this means a company like SPI develops a timber project, which it characterizes as a good carbon sequestration action. It gets credits for that project, and provides offsets to another industrial emitter, like a fossil fuel industry entity, *e.g*. Chevron. In this way, while a company such as SPI appears to be creating net carbon sequestration in its project, it sells some or all of that sequestration to another polluter, who in turn then can use it to claim an "offset" for its emissions. The other polluter does not actually reduce its emissions, but instead relies on the offsets from elsewhere to get credit for reduced emissions. The net effect of this practice is that the people and environment in which those real time emissions occur still are exposed to those emissions; the offsets do not reduce emissions, they simply give credit for

better practices elsewhere.

This process has at least two consequences for the Draft Plan at issue here. **First**, the Draft Plan references "offset projects" as evidence of improving management for carbon sequestration, *id*., at 29, 38, but does not acknowledge how this is contributing to ongoing GHG emissions from the fossil fuel industry. Nor does it discuss how this practice will be factored in terms of increasing carbon storage in California's forests. California needs reductions in GHG emissions, not forest offsets to allow continued GHG emissions in other sectors. If carbon storage is being "sold" to give offsets for other GHG sources, then it is not increasing carbon storage, and certainly is not assuring increased net carbon sequestration over time. Based on this, it appears that GHG reductions are not actualized, but simply are being traded and shuffled around like any other market commodity with no assurance or verification of the authenticity of the purported outcome.

Second, this practice has an environmental justice impact which the Draft Plan fails to acknowledge or even address. It is worth noting that in the 2017 Update, the Environmental Justice Advisory Committee recommended that as matter of equity, for Natural and Working Lands "timely and comprehensive data collection is essential to avoiding negative impacts and ensuring co-benefits. Such data must include: a. emissions from forestry and wood products, *since forest management is a net source of greenhouse gases*." (2017 Update, Appendix A: AB 32 Environmental Justice Advisory Committee (EJAC) Initial Recommendations for Discussion Draft Version of 2030 Target Scoping Plan Update August 26, 2016, revised December 22, 2016, at 19 of 25, emphasis added.)

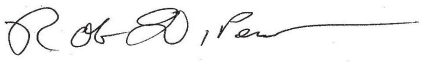
Forest offsets are allowed, permitting emissions to occur elsewhere. This means air quality may not benefit. This has direct impacts on many different populations, including those more vulnerable populations like in the Central Valley. And it has a direct impact in terms of the ongoing GHG emissions. Offsets from forestry must not be allowed. Our forests must not be assumed to be or offered as compensation for fossil fuel industry GHG emissions. These must be separately accounted, and our forests must be protected to ensure the high quality resources they provide, such as water, fisheries, and wildlife.

CONCLUSION

The Forest Carbon Plan needs to be entirely redone. Further, it needs independent peer review. EPIC suggests that future peer review guidelines be conducted pursuant to the guidelines established by the federal Office of Management and Budget's "Final Information Quality Bulletin for Peer Review" for "influential scientific information." (*See* Office of Management and Budget, Budget's "Final Information Quality Bulletin for Peer Review," Dec. 16, 2004, available at http://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf). Further, the Forest Carbon Plan requires accompanying CEQA analysis. And it must satisfy the directives which identified its existence, and provide a clear statement of authority, process for review and action, its implementing authority, with express understanding and relationship to the existing Forest Practice Act and in reliance upon contemporary FRAP information. As a matter of policy, the use of thinning as the management scheme must be revisited, and under no

circumstances should the use of exemptions be available for any such management.

Respectfully Submitted,



Rob DiPerna
California Forest and Wildlife Advocate
Environmental Protection Information Center (EPIC)

LIST ATTACHMENTS

CAMPBELL, JL. (2017). Peer Review of California Forest Carbon Plan. *Prepared for Ebbetts Pass Forest Watch.*

HARMON, 2010. Letter to California Air Resources Board re: CAL FIRE Greenhouse Gas Calculator.