

November 18th, 2008

**Re: PFT Comments on Proposed Scoping Plan to CARB**

Submitted online at <http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>

The Pacific Forest Trust (PFT) appreciates the opportunity to submit comments on the Proposed Scoping Plan (PSP)<sup>1</sup>. These comments build upon our previous submissions dated July 25<sup>th</sup>, 2008 and August 11<sup>th</sup>, 2008 on the Draft Scoping Plan. The PSP represents a tremendous accomplishment for the California Air Resources Board (CARB) and continues California's unparalleled leadership on fighting climate change. PFT commends CARB for seeking to establish a comprehensive and ambitious plan for reducing greenhouse gas (GHG) emissions for the 2020 target, as well as recognizing the need to plan for even greater reductions by 2050. Global warming is indeed the gravest environmental crisis we have ever had to face.

PFT applauds CARB's inclusion of the forest sector, recognizing its critical role in the ultimate success of the economy-wide approach articulated in the PSP. In this, we commend CARB for working to address both the significant emissions from the forest sector as well as the great potential to restore and increase carbon stocks across California's landscape—moving towards a system to assure forest carbon stocks are *monitored*, losses are *mitigated*, and that when rigorously accounted for, additional emissions reductions are available to be *marketed*. Forests are a critical piece of the climate solution, able to reabsorb their own and other sectors' emissions. Strategies in this sector, and across connected sectors such as energy, land use and waste management, are key to achieving our short-term as well as long-term climate goals. As such, it is also crucial to ensure that the PSP sets a clear path for success. While many aspects of the PSP show immense progress and promise for the forest and related sectors, a number of improvements should still be made to enable successful implementation and overall positive environmental outcomes. PFT respectfully submits the following recommendations for CARB's consideration.

**Summary**

These recommendations address remaining issues in the PSP that pose challenges to achieving the forest sector target and creating enduring climate gains in all sectors.

- 1. Further clarify and refine the required forest sector target: Incorporate cumulative carbon stock targets and track individual components within the forest sector**
- 2. Restore target for additional forest sector reductions to a minimum 5 MMTCO<sub>2</sub>e**
- 3. Include entity-level forest carbon reporting for private lands**
- 4. Provide clear directive for cross-sector, full-lifecycle accounting**
- 5. Ensure integrated accounting and rigorous environmental safeguards for bioenergy**
- 6. Reinforce land use connection through CEQA coordination and enhanced local and regional planning sections**
- 7. Incorporate sustainability and adaptation principles into forest sector strategies**

---

<sup>1</sup> For the sake of simplicity, the use of "PSP" in these comments refers to the main plan and Volume 1 of the appendices.

## Detailed Recommendations

### **1. Further clarify and refine the required forest sector target: Incorporate cumulative carbon stock targets and track individual components within the forest sector**

While commitment to a “no net loss” target is a very important start, further clarification and refinement is needed to ensure California really does achieve “no net loss” of forest climate benefits by following environmentally sound, measurable strategies. The forest sector target is currently expressed as the annual statewide net CO<sub>2</sub> flux<sup>2</sup>, or the growth in carbon stocks minus CO<sub>2</sub> emissions from carbon stock loss and decay (e.g. fire, forestland conversion, wood processing, landfills). While CO<sub>2</sub> flux is an important indicator of overall performance within a sector, a target focusing solely on flux fails to set clear goals for increasing net carbon stocks across the landscape. To address this, CARB should take steps to include cumulative carbon stock targets for 2020 and 2050.

In addition, in order to ensure no net loss, individual sources of carbon emissions or sequestration within the sector itself and in connected sectors need to be accurately identified and tracked. To maintain and increase the climate benefits of California’s forests, strategies must be developed to prevent and mitigate emissions from forest loss while increasing sequestration through reforestation and appropriate forest management. Data should be gathered and analyzed for specific sources of emissions and sequestration. This will allow CARB to more effectively evaluate forest sector progress and identify new problems and solutions. This in turn will help CARB fully maximize forest climate benefits. Such data, while it can be further developed, is already available from a variety of sources including: CalFIRE, the California Energy Commission, county governments, the California Integrated Waste Management Board, and the California Board of Equalization.

Finally, since the current statewide CO<sub>2</sub> flux metric captures sequestration and emissions from federal lands, it will be critical to utilize carbon stock and emissions data that can target actions and evaluate progress on state and private forestlands that must be the focus of AB 32 implementation. While actions on federal lands are important and CARB can coordinate with the federal government, those lands are outside California’s direct control.

### **2. Restore target for additional forest sector reductions to a minimum 5 MMTCO<sub>2</sub>e**

The level of forest sector carbon stocks today is well below the level California’s forests could hold from a biological carbon sequestration and storage perspective. Therefore, in addition to the regulatory “no net loss” target, CARB has rightly included further gains that could be achieved in the forest sector above and beyond the current base. In the previous Draft Scoping Plan, CARB included a minimum of 5 million metric tons CO<sub>2</sub>e as a non-binding reach target, bringing the overall potential of the forest sector to 10 MMT in 2020. PFT applauded this goal and noted that even more could be achieved with the right programs and policies in place.

Unfortunately in the PSP, this additional target was reduced to a minimum of 2MMT for reasons that are unclear in the appendices. California has always been a leader in setting

---

<sup>2</sup> As part of the effort to improve the accuracy and effectiveness of the forest sector target, CARB should revisit the data and assumptions used in the current emissions estimates for the statewide CO<sub>2</sub> flux for land use change and forestry. Questionable assumptions include a constant level of annual emissions from forest conversion from 1990 to 2004.

and meeting ambitious goals, and this should be true for the forest sector as well. PFT urges CARB to reinstate the more ambitious minimum of 5MMT additional reductions, and continue to evaluate opportunities for *increasing*, not decreasing, this goal.

### **3. Include entity-level forest carbon reporting for private lands**

To effectively and accurately track the performance of state climate policies, CARB must implement and spearhead a sector-wide monitoring effort. This monitoring program should capitalize on the respective knowledge and expertise of the agencies whose management activities directly affect the forest sector, particularly CalFIRE and the Board of Forestry. We believe this is CARB's intent and PFT appreciates the current PSP call for CARB, the Resources Agency (including the Department of Fish and Game), CalFIRE, and the Board of Forestry to work together to develop a forest sector monitoring and assessment plan. This information will also help the state develop effective adaptation policies and actions for the sector.

However, to create and maintain an effective regulatory and accounting framework that accurately tracks climate performance within the forest sector, monitoring needs to include high-resolution data from within the sector itself. While coarse, state-level data can provide a useful indicator of overall sector performance, this level of data resolution is not fine enough to accurately discern the exact sources of emissions and sequestration. Without the ability to identify and monitor specific performance within the sector it is not possible to identify where improvements must be made to strengthen the overall performance of the sector.

In segregating private lands from public, and to more accurately, efficiently and effectively improve overall sector outcomes, the PSP should explicitly direct the monitoring program to build upon existing regulatory reporting mechanisms and require private lands that harvest timber to report carbon stocks. Current reporting mechanisms include: 1) Sustained Yield Plans (SYPs), 2) Timber Harvest Plans (THPs), and 3) Non-industrial Timber Management Plans (NTMPs). Due to the different requirements for each reporting tool, it may be desirable to start with SYPs, phasing in THPs and NTMPs as procedures are developed. A cost-share program for landowners could also be used to improve and standardize reports over time. This information will be used to better inform decision makers on supportive actions for the forest sector, and is a critical addition to top-down state level monitoring and assessments.

### **4. Provide clear directive for cross-sector, full-lifecycle accounting**

The forest sector is integrally connected with multiple other sectors, especially energy, manufacturing, construction, and waste management (i.e. landfills). As a result, cross-sector accounting is of paramount importance, particularly if the state wants to assess the carbon contribution of forest products. Carbon emissions must be accurately tracked as forest products are disseminated throughout other sectors, and accounting practices must ensure there is not a net increase in upstream emissions on the land base. CARB should highlight this issue in the PSP as a challenge and include a call for a system to achieve full lifecycle accounting across interconnected sectors. This system will also support a more sophisticated forest sector target, as discussed above.

## **5. Ensure integrated accounting and rigorous environmental safeguards for bioenergy**

Implementation of integrated carbon accounting between the forest sector and the energy sector is particularly crucial for eliminating concerns around leakage, or the transfer of emissions from one part of the state or economy to another. Currently, the PSP does not specify how the accounting will be addressed for woody biomass combusted for energy. While biomass may ultimately provide an important source of low-carbon, or even carbon neutral, renewable energy, it cannot do so unless accurate accounting standards and rigorous environmental safeguards are in place for the production and harvest of biomass for energy. In addition to the above recommendation on accounting, CARB should recognize the ecological considerations involved in producing bioenergy and call for environmental safeguards that ensure bioenergy production realizes net climate benefits while preserving fish and wildlife habitat, biodiversity, and protecting invaluable watersheds.

Measures that achieve comprehensive full lifecycle accounting are needed before the net climate cost of wood-based bioenergy can be assessed and net benefits assured. Until then, *CARB should count emissions from biomass combustion in the cap, not assume they are carbon neutral.* This conservative approach to biomass energy emissions would motivate the accounting needed to develop truly low-carbon or carbon neutral bioenergy. Counting biomass combustion emissions in the cap at the outset also ensures that emissions reductions are not arbitrarily assigned to the energy sector by simply eliminating an emissions source from the accounting.

## **6. Reinforce land use connection through CEQA coordination and enhanced local and regional planning sections**

Forest loss from conversion to development and other uses can result in significant immediate emissions as well as the loss of future sequestration benefits. We commend CARB for recognizing the importance of land use decisions under AB 32 and support the use of CEQA as a tool for assessing and mitigating GHG emissions from forestland conversion. We trust that CARB is collaborating with the Office of Planning and Research (OPR) to ensure that through the CEQA revision process to incorporate GHG evaluation and mitigation, the updated guidelines directly address emissions from the loss of biological carbon stocks and future sequestration capacity. This is an essential piece of plan, helping ensure climate benefits on all natural and working lands are appropriately assessed, valued, and mitigated for if unavoidably lost.

In addition, local and regional planning efforts should incorporate consideration of emissions and lost sequestration from forest conversion. PFT strongly supports the regional land use efforts to reduce emissions from vehicle miles traveled and energy consumption, and agree with advocates that this target could be significantly higher—11 to 14 mmt.<sup>3</sup> In support of the statewide goal to reduce forest conversion emissions, regional land use planning should also include targets for conservation and the associated GHG savings. The current PSP recognizes the open space and habitat preservation benefits of improved regional land use planning (p. 50-51), but CARB should expand this section to recognize the GHG implications of losing biological carbon stocks and sequestration, and call for conservation as a direct element of land use strategies. Additionally, the development of

---

<sup>3</sup> As shown in analysis by Reid Ewing, Ph.D. and Arthur Nelson, Ph.D. University of Maryland and Utah.

local government and community goals and protocols (p. 27) should integrate methods for evaluating land-based GHG emissions and targets for conservation. CARB and partner agencies can assist local governments in this regard.

## **7. Incorporate sustainability and adaptation principles into forest sector strategies**

While forests can serve as an invaluable tool for climate change mitigation, the ability of a forest to sequester carbon is inextricably linked to its ecological health and resiliency. As California's forests face new and exacerbated stressors from climate change, the resilience of these ecosystems can be diminished. To reduce the susceptibility of forest carbon stocks to disturbance, such as wildfire, drought, and forest pathogens, climate strategies must focus on preserving the ecological integrity and resilience of forest ecosystems. To achieve this, CARB should integrate adaptation considerations into the mitigation process, ensuring that all forest climate strategies also maintain or enhance a full suite of ecological values within forests, including water supply and quality, fish and wildlife habitat, biodiversity, and the sustainable harvest of wood. The Department of Fish and Game will be instrumental in informing actions that preserve the ecological benefits of forest ecosystems and guarantee the durability of climate gains. Changing forests will require dynamic strategies that integrate adaptation and mitigation. To provide long-term climate benefits, it makes both climatic and ecological sense to ensure that the carbon gains in the forest sector are as adaptive and resilient as possible.

Fuels management to reduce the threat of wildfire can be an important component to promoting overall ecosystem resilience, but it should not be relied upon as a climate strategy under AB 32. When properly done, the removal of overstocked, small diameter trees combined with low-intensity, controlled burns, can reduce excess fuel loads, provide a source of biofuels<sup>4</sup> and in fact allow remaining trees to grow larger and sequester more carbon. However, while fuels management may reduce emissions from future wildfires, there currently is no way of accounting for these emissions reductions to ensure they are indeed real, additional, verifiable, permanent and enforceable. Additionally, the bulk of the need for fuels management in California currently exists on federal lands.<sup>5</sup> While important to collaborative efforts, these lands are not under the state's jurisdiction. Until rigorous, credible accounting protocols can demonstrate actual climate benefits on lands within the state's purview, emissions reductions from wildfire avoidance should not be credited to fuels management efforts. While we support fuels management activities to support forest ecosystem resilience, we urge CARB to avoid placing undue reliance on fuels management strategies to meet state climate goals.

## **Conclusion**

The Pacific Forest Trust greatly appreciates the effort that CARB and others have put into completing the Proposed Scoping Plan. We especially appreciate the ongoing work to craft a sound and robust role for the forest sector, utilizing our forests for their climate benefits

---

<sup>4</sup> See comments on biomass energy above and in previous submittals. Care should be taken to ensure fuels management is not done for the purpose of bioenergy in areas where such management is not appropriate.

<sup>5</sup> On federal lands, and elsewhere, it is also critical that proper sidebars ensure fuels reduction activities are not used as an excuse to deplete forest carbon reserves and erode forest ecosystem functions.

while ensuring forests continue to provide wood, water, wildlife, and well being for generations to come. It is key for CARB to maintain its leadership to develop climate policies in the forest sector while working collaboratively with other agencies and local governments. The most important tool CARB has is to facilitate and support accurate accounting.

If you have any questions or thoughts regarding these comments, please do not hesitate to contact us. We look forward to working with you as the Proposed Scoping Plan is put forward for adoption, and afterwards during the regulatory process.

**Contacts:**

Rachael Katz, [RKatz@PacificForest.org](mailto:RKatz@PacificForest.org)  
Anton Chiono, [AChiono@PacificForest.org](mailto:AChiono@PacificForest.org)