PACIFIC FOREST TRUST

November 1, 2013

Mary Nichols, Chair
Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Comments on the October 2013 Discussion Draft of the Scoping Plan

Thank you for the opportunity to provide comments on the Discussion Draft of the 2013 Scoping Plan update. We appreciate the inclusion of forests and other natural and working lands in the document. The acknowledgement that improved management, restoration and conservation of these natural resources can provide enormous benefits to California is both welcome and essential to achieving the state's goals. Benefits of actions in this overall sector include increased sequestration, improved ecological resilience, water supply protection, and more stable rural employment,. However, as the Scoping Plan properly notes, actions and funding in the next 10 years are critical so that long-term benefits actually accrue by 2030 and 2050.

While we appreciate that the draft Plan inclusion of Natural and Working Lands, there are a number of ways that this section can be clarified and improved. Our suggestions are set forth below.

Actions, not just acknowledgement

The Scoping Plan properly notes that not all natural systems have the necessary inventory and accounting methodologies in place to adequately assure that quantifiable increases in carbon stocks result from specific actions. For example, wetlands and grasslands require further research to help guide incontrovertibly beneficial climate actions and investments. However, the Scoping Plan *does* recognize that we have the necessary and sufficient understanding of forests to warrant action and investment to increase net forest carbon stocks. The sooner we take action, the greater the demonstrable carbon increases and climate benefits over time. The science is there. The systems are in place. The tools are available.

It is insufficient to simply acknowledge the benefits and potential of this critical natural resource and identify that plans will be made to utilize them at some unknown future point. It is a timely and necessary area for strategic investment that will achieve major carbon and climate gains that endure.

Planning for resilient forests with enhanced carbon stocks

To the extent that the Scoping Plan recommends further planning for the forest

sector to some future document, that effort should be one undertaken by the Resources Agency overall, not just CalFire and the Board of Forestry. Carbon in forests is not simply a unitary commodity associated with the growth and yield of timber, rather it is part of the overall *forest system*. That system's stability is a significant determinant of the carbon's stability. Thus, any such plan should be focused on ensuring the broad suite of forest values and ecosystem services – not just carbon stocks.

How carbon is stored within landscape has a huge impact on its stability, habitat value and ecosystem resilience. Science clearly demonstrates that the more natural an ecological system is, the more resilient and robust it is. Especially given increasing climate change stress, both the Scoping Plan and the Forest Plan should focus strongly on the resilience and health of the forests in which we are increasing total carbon stocks – and avoid oversimplifying the situation by focusing solely on maximizing carbon stocks in the short term.

While it appears to be the author's intent that the "Forest Carbon Plan" take this ecologically sound and interdisciplinary perspective, the discussion on page 101 of the Scoping Plan should be modified to be clearer on this issue.

Setting targets for gains from the forest sector

While relying on the Resources Agency to further develop specific recommendations and actions, ARB should establish broad targets or goals (i.e, increase net forest carbon stocks by 25% by 2050, or maximize increases in resilient forest carbon) to help drive bold and assertive action. While California's forests are already a net benefit to the state's carbon goals, they have the capacity to do far more. Maximizing the contributions from the forest sector in an ecologically appropriate manner will be essential to reaching our 2050 targets in a cost effective and socially feasible manner.

Increase forest and landscape carbon connectivity

Ecologically, forests are woven in and between many agricultural, range and grasslands systems. In investing in forests, we should also integrate investments in these other systems, for example along riparian corridors, restoring riparian gallery forests, enhancing native species plantings typical of these natural systems, and building a more resilient landscape. Likewise, in forest investments we can encourage restoration of native grasses, which store more carbon more securely than non-native grasses, and of wet meadows with their deep carbon-rich soils. California's plans for and investment in forests, natural and other "working" lands should build upon natural systems and support those systems. Overall, this will result in increased resiliency and stability of carbon gains.

Secure permanent carbon gains and enhance forest resilience – and other natural systems – using conservation easements

California has deep experience in conserving natural and working lands through using permanent conservation easements. These have been used for decades to protect forest, farm and ranch lands, as well as other lands threatened with

development, obtaining permanent public benefits for water quality, wildlife and recreation amongst other values. Using permanent conservation easements as a key tool to avoid emissions from conversion and increase resilient carbon stocks in forests, farms, ranches and other natural lands should be explicitly mentioned in the Scoping Plan. This is a cost effective, know and proven system the state can utilize and implement now with its existing infrastructure.

Intersection with energy, agriculture, land use and water sectors

The role of forest and natural land conservation and management should be acknowledged and integrated into the Energy, Water, Agriculture, and Transportation & Land Use sections of the document.

Energy and Forests: There is real potential for a new, clean energy source derived from the waste material from forest fuels reduction. Notably, much of this material is found on public lands, especially those managed by the USFS and BLM. Utilization of forest thinning residue in modern, small-scale biomass energy facilities would benefit the Energy Sector with renewable energy, while simultaneously contributing to improving forest resilience.

Projects that are supported with public funding (such as auction revenue) should be focused on maximizing overall public benefit, such as achieving the desired improvements to forest resilience while incurring the minimum carbon debt. This will likely require the development of new standards or guidance by the USFS, BLM, CalFire, the Board of Forestry, and ARB.

Urban systems and forests: Trees have significant and documented ability to reduce energy demands by providing natural cooling and natural insulation. Investments in urban forestry from the Energy Sector are clearly appropriate, and can be in concert with linking natural and urban systems, by focusing where possible on the use of native species that promote greater adaptation, as well as their other climate benefits.

Water and Forests: There is a well-documented and accepted relationship between water quality, water security, and forest watershed health. Unfortunately, the Draft Scoping Plan fails to recognize the importance of conserving and restoring of our source water areas. As we deal with a changing climate and an increase in frequency and severity of wildfire, we must not take the health of our forested watersheds for granted. The scale and severity of the Rim, Barry Point and other fires provide a stark example of the vulnerability of some of our forests and the risk that can pose to water supplies.

Investments in enhancing forest carbon, as well as in better protecting and managing the forested watersheds that are the source of most of California's water, should be synergistic. For example, investments in enhancing forest carbon should also yield improved water security and quality in key targeted watersheds that supply drinking and agricultural water.

Agriculture and Forests: Many farms and ranches are within natural forest ecosystems. Many of California's farms are converted forestland. Amongst

these are a significant subset that have watercourses where early farming practices denuded riparian forest. Re-establishing those riparian woodlands and forest cover would have both climate and carbon benefits, and also improve water quality, as trees will cool the water, and remove pollution both as sediment and as specific elements (e.g. nitrogen compounds). The Scoping Plan should recommend an integrated investment in agricultural lands to enhance carbon stocks along riparian corridors through re-establishing native tree cover where feasible. A plan for this could be targeted for development by 2016, actionable by 2017.

Land Use Planning and Forests: Many millions of acres of California's forestland have been lost to development and urbanization, which has resulted in direct emissions from that land use conversion as well as the loss of the ongoing sequestration capacity of those forests. The Scoping Plan appropriately highlights the importance of thoughtful planning to accommodate future population growth. The conservation of forests and other natural and working lands in these interface areas prevents emissions from the conversion. It can provide a growth boundary along with the usual environmental and social benefits. Future land use plans should require conservation of connecting areas between urban and rural working and wildlands to provide for minimal carbon losses and greater wildlife adaptation. They should also require that the greening of new development areas include or focus on the use of native plants: grasses, shrubs, and trees (California abounds in compellingly beautiful flora) will also benefit resilience and adaptiveness.

Market mechanisms

The Scoping Plan refers to the need to develop further market mechanisms to encourage forest landowners to increase carbon stocks (p.102). We would note that the ARB currently has such a system, widely recognized as the standard globally, in the forest offsets program. Great care should be taken in developing further market mechanisms that could undermine the exiting system, which has a significant investment nation wide in project development and market momentum.

Broadly speaking, ARB should seek to build on its experience in developing carbon offsets for the cap and trade program. For example, when defining "standard units" for comparing activities between differing sectors, which has been done with the differing sectors included under cap and trade, carbon dioxide emissions reduction equivalent (CO_2E) is the working standard for defining those carbon benefits equivalently across sectors. This definition does not need to be reinvented. Further, the offsets under cap and trade are defined as providing benefits for *at least* 100 years. This temporal dimension of carbon does not need to be redefined either. We must ensure that the climate benefits of any public investment in increasing carbon on natural and working lands be at least as robust, resilient and durable as those gained under the cap and trade program.

Thank you for the opportunity to provide these written comments. Please feel free to direct any follow-up questions to Paul Mason at pmason[at]pacificforest.org or Laurie Wayburn at lwayburn[at]pacificforest.org.

We look forward to further discussions with ARB staff.

Regards,

Laurie Wayburn
President

Cc: John Laird, Secretary, Natural Resources Agency
Ann Chan, Undersecretary, Natural Resources Agency