



## PACIFIC FOREST TRUST

Private Forests. Public Treasures.

October 30, 2017

Shelby Livingston  
Air Resources Board  
1001 I Street  
Sacramento, CA 95814

### **Re: Natural and Working Lands Climate Change Implementation Plan**

Dear Shelby Livingston,

Thank you for this opportunity to comment on the Natural and Working Lands (NWL) Climate Change Implementation Plan (Implementation Plan). We applaud ARB for setting a quantitative goal for NWLs as these lands have enormous potential to sequester carbon and help achieve California's climate goals. This modest goal could be increased to 20-30 MMTCO<sub>2e</sub> if it were limited to the state and private lands where the state has jurisdiction. We suggest that this target also be disaggregated based on ecosystem type to make it more actionable. Moving forward with this plan, we also urge you to consider the following suggestions:

**Goals for 2030 should be nested within more ambitious goals for 2050 and 2100, with actions taken today setting NWLs on a trajectory for durable carbon gains.**

Some actions taken in the next ten years will temporarily increase carbon stores whereas others – such as improved forest management secured with a conservation easement – will create permanent carbon gains by increasing carbon densities and preventing loss to conversion. In prioritizing the goals for 2030, durable actions that can also help meet goals for 2050 and 2100 should be given more weight. The target for these later years can also be much more ambitious if the actions put in place now can secure future gains in carbon sequestration.

**Prioritizing investments in NWLs based on synergistic, resilient benefits – for carbon, water, wildlife, and ecological function – can ensure greater overlap with other state goals.** A true climate change plan for NWLs would focus on how these lands can be leveraged for climate change adaptation alongside their essential role in mitigation. These lands will be essential for safeguarding our water supply, creating a more fire adapted landscape, and helping wildlife adapt to changing conditions. Restoring natural conditions by fostering older, uneven-aged forests is often the key to enhancing watershed function and creating more resilient ecosystems. Promoting an integrated approach which includes both climate change mitigation and adaptation in this plan will also enhance the synergies between this effort and other state goals such as those set out in the State Wildlife Action Plans, Safeguarding California, the Water Action Plan, and others.

**Given the limitations of the CALAND model, it should be just one of many tools used to guide the NWLs Implementation Plan.** The CALAND model as it is currently envisioned has a number of major shortcomings and is not well suited to evaluating the carbon impacts of different interventions because of its sectoral rather than stand-level approach. The CALAND model could also lead to actions for unstable increases in carbon rather than resilient carbon-rich landscapes. We recommend that the Implementation Plan use a wide variety of carbon assessment tools and additional research to complement the CALAND efforts and promote a restoration of naturally functioning systems. For instance, data from the implemented GGRF projects could be used to estimate the costs per acre of various activities and their carbon benefits. Additional scientific research and experts in terrestrial carbon models may also be able to shed light on the expected carbon gains of specific practices over time.

**An analysis of the cost per acre and the number of acres on which proposed interventions are possible would help guide the goal-setting process.** One of the questions raised during the recent workshop was where the 15-20 MMTCO<sub>2e</sub> goal originated. An analysis of the opportunity for increased carbon sequestration on NWLs could help support the goal-setting process. We recommend creating a table with each practice, the expected carbon gains per acre from that practice in 2030, 2050, and 2100, the cost per acre, and the number of acres in the state on which that practice would be possible. Such an analysis could be similar to a recent study which evaluated the carbon impacts of different NWLs practices on a global scale.<sup>i</sup> This analysis could help provide bounds on potential carbon gains from NWLs to provide a scientific basis for a more ambitious goal on state and private lands.

Thank you for considering these recommendations. We look forward to continuing this conversation as the NWL implementation plan progresses.

Sincerely,



Laurie Wayburn  
President

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<sup>i</sup> Griscom et al. 2017. Natural Climate Solutions. *PNAS*. Available at: <http://www.pnas.org/content/early/2017/10/11/1710465114>