



July 8, 2016

Mary D. Nichols, Chair
Members of the Board
California Environmental Protection Agency
Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: 2030 Target Scoping Plan Update Concept Paper

Dear Chair Nichols and Members of the Board,

Thank you for this opportunity to comment on the 2030 Scoping Plan Update Concept Paper (concept paper). This concept paper lays out very important guidance and intent with regard to embedding a more holistic approach and acknowledging the interplay between different emissions sectors, especially between the fossil fuels and lands sectors. While this approach presents challenges because so often expertise is siloed into different agencies, we are confident ARB will be more than equal to this, as it is vital to recognize that natural lands interact with other GHG emission sectors (energy and bio energy, for example). In addition, there are four points we want to draw your attention to:

- 1) We endorse the continuation of the exiting “cap and trade” system because it is the most cost effective and it encompasses the greatest range of emissions, while also leveraging sequestration.
- 2) It is critical to ensure the endurance of net carbon gains within biological systems.
- 3) The concept paper needs to recognize the historic and necessary role of fire in our ecosystems, and establish an appropriate “rolling baseline” for those emissions that fall within a “natural” range over time.
- 4) There are opportunities to improve synergy with other state documents by aligning concept paper goals with climate change adaptation efforts.

1) We support “Concept 1: Complementary Policies with a Cap-and-Trade Program”:

Cap-and-Trade has proven to be the cost containment mechanism it was intended to be, while also spurring innovation and new approaches to forest and other lands stewardship to reduce net carbon. Indeed, the forest emissions reductions projects now set a global standard. While the allowance auction establishes a market price for carbon and ensures that California meets its climate targets, the offset program provides an opportunity for forest landowners to engage in the carbon market in a

way that provides remuneration for a long-term commitment to maintaining additional carbon on the landscape.

Furthermore, investing auction proceeds in forests and other natural lands provides extremely cost effective opportunities to remove carbon from the atmosphere¹ while securing co-benefits such as improved wildlife habitat, water quality, and supporting rural economies. Tightening up the allowances would, of course, stimulate more market activity, and further generate funds to invest in decarbonizing the economy faster.

2) Ensuring enduring gains in the lands sector:

Forests and other natural lands are a critical tool to meeting the state's climate goals. One of the specific goals under natural and working lands is to restore 500,000 acres of forest annually. We applaud setting an aggressive goal for restoration, and note that it is important to *secure these improvements so that they achieve their intended goals persist over time*. Forest and other lands change ownership – and hence management goals and methods – frequently, which can lead to reversals of restoration activities if they have not been secured. Where possible, nesting restoration work within permanent protection of the land, via a conservation easement or other equally durable mechanism, helps maintain habitat and carbon gains for the long-term.

For example, in one of our recent projects (not an emissions reduction project) where we have enshrined a new approach to forestry within a conservation easement, carbon stores will double over the next 50 years, all while harvest operations continue annually on a commercially owned and operated forest. Restoration, management, commercial management, and enduring gains are synergistic and compatible.

It is worth noting that in just ten years between 2001 and 2011, California lost over 500,000 acres to development.² While amounts of carbon stored in land types vary (forests store carbon in the hundreds of tons and grasslands in the tens of tons), this still represents tens to hundreds of millions of tons of carbon emitted, as well as lost sequestration potential. Notably, this conversion occurred during an economic downturn. As the state's population continues to grow to 50 million by 2050 (or before) the need increases to focus development in infill and other appropriate areas while protecting working forests, farms and other lands for all their services: from commodities to ecosystem services such as climate mitigation and adaptation. Hence, investments in land-based carbon gains need to have enduring benefits.

¹ Legislative Analyst's Office. 2016. Administration's Cap-and-Trade Report Provides New Information, Raises Issues for Consideration. Available at: <http://www.lao.ca.gov/handouts/resources/2016/Cap-and-Trade-Report-Provides-New-Information-042016.pdf>

² Theobald DM, Zachmann LJ, Dickson BG, Gray ME, Albano CM, Landau V, and Harrison-Atlas D. 2013. Description of the approach, data, and analytical methods used to estimate natural land loss in the western U.S. For the Project Entitled: The Disappearing West. *The Center for American Progress*.

3) Establishing an appropriate “natural fire emissions” baseline:

One of the questions raised in the concept paper concerns the potential trade-offs between near-term carbon loss and ultimate forest health and resilience. The carbon loads in many of our forests are unhealthy and not resilient. While these forests carry far less total stock than they naturally can,³ their current condition has been shaped by decades of fire suppression and past forest management which resulted in overstocked, even aged stands that have not been thinned. These forests need restoration to a condition where they can accumulate and hold more carbon in a more resilient fashion. And, there will inevitably be significant emissions on the way to restoring those more resilient, carbon rich forests.

There will also continue to be fire in our landscape. The range of emissions associated with nature’s “rebalancing” of fuel loads, however, falls within what science shows is the hundred-year fire range. We need to establish and account for that natural rebalancing as part of the natural “background” of emissions. For instance, allowing prescribed burns or managed natural fires result in short-term emissions which improve ecological resilience. However, as fire area and frequency are still well below the historic average for the state,^{4,5} such emissions should be considered to be within the natural range of emissions rather than as a trade-off. Using this ecological, historic baseline for fire emissions will help encourage a more natural management of fire across all land ownerships and avoid perpetuating the era of fire suppression.

Finally, as noted above in (2), we can ensure that the emissions associated with restoration are, in fact re-stored, by ensuring that those restored areas are also protected for the long-term through binding mechanisms. We should endeavor to do this to the maximum extent possible.

4) Mitigation measures in the Scoping Plan Update must align solidly with related state adaptation planning efforts:

The state has issued a number of excellent and synergistic goals and targets in Safeguarding California and the State Wildlife Action Plan. The Scoping Plan should align with these, as well as local and regional planning efforts to leverage them and create synergistic public gains for climate. This will be particularly important in the natural and working land sector, because well-planned actions to improve the sequestration ability of our forests and other lands can improve resilience to extreme

³ Hudiburg T, Law B, Turner DP, Campbell J, Donato D, and Duane M. 2009. Carbon dynamics of Oregon and Northern California forests and potential land-based carbon storage. *Ecological Applications* 19(10): 163-180.

⁴ Stephens, S.L., Martin, R.E., Clinton, N.E., 2007. Prehistoric fire area and emissions from California’s forests, woodlands, shrublands, and grasslands. *Forest Ecology and Management* 251, 205–216. doi:10.1016/j.foreco.2007.06.005

⁵ Marlon, J.R., Bartlein, P.J., Gavin, D.G., Long, C.J., Anderson, R.S., Briles, C.E., Brown, K.J., Colombaroli, D., Hallett, D.J., Power, M.J., Scharf, E.A., Walsh, M.K., 2012. Long-term perspective on wildfires in the western USA. *PNAS* 109, E535–E543. doi:10.1073/pnas.1112839109

events and facilitate the migration and continued prosperity of our state's extraordinarily diverse fish, plant and wildlife resources.

We look forward to continuing to work with you on the 2030 Scoping Plan and related policies and would be happy to discuss these comments further.

Sincerely,

A handwritten signature in black ink that reads "Laurie A. Wayburn" with a long horizontal flourish extending to the right.

Laurie Wayburn
President, Co-founder, and Co-CEO