

Clerk of the Board, Air Resources Board 1001 I Street Sacramento, California 95814

April 10, 2017

Re: Proposed Scoping Plan

Dear Chair Nichols and Members of the Board,

Thank you for this opportunity to comment on the Proposed Scoping Plan. We appreciate the work that has gone into this roadmap guiding California towards its greenhouse gas reduction goals for 2030. There are many actions for natural and working lands (NWLs) presented in this proposed plan. The following suggestions are intended to identify how these can be more effectively leveraged for climate goals:

- 1. Assign NWLs an appropriate portion of the 2030 greenhouse gas reduction target;
- 2. Clarify state leadership and standards in regional implementation;
- 3. Target land protection to large, strategically important and ecologically functional landscapes, linking this with provisions for improved management for climate benefits; and
- 4. Incorporate more natural fire regimes to the landscape as a means to promote natural resilience and reduce uncharacteristic fire intensities.

Assign an appropriate portion of the 2030 greenhouse gas reduction target to NWLs

Restoring more natural levels of carbon in NWLs presents a cost-effective opportunity to mitigate GHG emissions and presents the largest opportunity to safely remove excess CO₂ already in the atmosphere. A synergistic benefit is that many actions which increase net carbon stocks also improve resilience in natural systems.

In the period 2020-2030, we estimate that forests alone could reduce emissions by at least 20-45 MMTCO_{2e} through increased sequestration from improved forest management. This is an immediate opportunity to increase carbon stocks in the next decade and also supports longer term climate goals, with cumulative gains of 100-200 MMTCO_{2e} by 2050.

Incorporating the NWLs into the target will not only help meet 2030 goals; it ensures that NWLs are directly engaged in ongoing climate policy discussions and investment decisions. This sector is absolutely vital to successful adaptation. Hence, in preparing for a warmer climate and more extreme weather events, it's critical that NWLs be part of the

quantified reductions, not part of a parallel process without binding mandates. Without such policies, NWLs will continue to be degraded and lost to development—as of 2016, 20 percent of California's natural lands had already been lost to conversion¹.

Furthermore, assigning a portion of the 2030 target to NWLs would also relieve some of the pressure on the cap-and-trade system and other complementary strategies. Relying on cap-and-trade for 28 percent of the 2030 reductions is ambitious. Diversifying the mechanisms to meet the target will increase the likelihood of success.

Clarify state leadership and standards in regional implementation

Both the Scoping Plan Update and the Forest Carbon Plan propose regional implementation. Action will ultimately happen at a local and regional level, but there must be an ongoing role for the state to ensure progress, consistent planning assumptions, coordination with other planning processes, and relevant deliverables. Implementation efforts will benefit from state-level guidance in thoughtful prioritization, a timeline for deliverables, and external expertise, and may require new staff and analytical capacity.

Rather than trying to develop and implement regional actions across the entire state simultaneously, we suggest identifying a few priority areas to use as pilot projects where enduring benefits can be achieved. Pilot projects should be identified with two key criteria to increase climate benefits:

- 1. Data is available on the carbon stocks in the ecosystem and methods exist for estimating how actions will affect carbon stocks (e.g., for forests).
- 2. Actions are recommended in those landscapes which have the greatest potential to increase carbon sequestration and help meet state goals of water security and adaptation.

This prioritization for pilot projects should be completed within 12 months, with initial implementation on the landscape within no more than 12 months.

The NWL implementation process could be jointly led by CalEPA and the CNRA, with an advisory group of senior staff from CDFA, CAL FIRE, DFW, and the SWRCB. Other departments and conservancies can be consulted regularly, but the core group should be manageably small.

This process could also benefit from external expert advisors to make recommendations on how to effectively promote ecological and climate resilience across traditional departmental and regulatory boundaries. This external group could help bridge some of the interagency differences in perspective, expedite the identification of common ground, and ensure integrity. Target land protection to large, strategically important and ecologically functional landscapes, linking this with provisions for improved management for climate benefits We were pleased to see the goal to "protect land from conversion through conservation easements and other incentives." However, the goal is currently defined in the Lawrence Berkeley National Laboratory (LBNL) study (in Appendix G) as a *reduction of the rate* of land lost to development. This is like closing the barn door after the cows have left. Lands imminently at risk of development *are already substantially fragmented and ecologically degraded* with limited potential gains in carbon storage.

This goal should be framed in terms of proactive conservation and management of large, ecologically functional landscapes. Conservation easements can, and should, be used to ensure that such landscapes remain functionally intact and are managed to increase both resilience and carbon stores. Ensuring that important lands are placed on a trajectory for desired future conditions—and that the desired management continues over time—is essential to achieving our long-term goals.

Restore more natural fire regimes to reduce uncharacteristic fire intensities

Experts agree that we cannot simply seek to suppress all fires in the state; this is part of the out-of-control high intensity fire regime we are currently in. The Scoping Plan has a mixed message on fire and needs to clarify that California's forests need more fire (low intensity and frequent) rather than suggesting we need less fire through more fire suppression. For instance, the goal to "minimize the net GHG and black carbon emissions associated with management, biomass utilization, and wildfire events" (pages 108-109) should be reworded to reflect that black carbon emissions from wildfires are part of an essential ecological process. California is currently in a fire deficit² and black carbon emissions.³

We recommend that the Scoping Plan suggest restoring fire to a greater number of acres at mixed levels of severity, which can help reduce the public health impacts from high severity fires⁴ and provide greater control over where and when emissions occur. Statements such as "while not all of this stored carbon is in imminent danger of emission to the atmosphere, recent trends indicate that significant pools of carbon risk

¹ https://www.disappearingwest.org/

² 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

³ https://www.pacificforest.org/short-lived-climate-pollutants/

⁴ Long, J.W., Tarnay, L.W., North, M.P., 2017. Aligning Smoke Management with Ecological and Public Health Goals. Journal of Forestry 115.

reversal" (page 109) should be revised, because they do not place the emissions from fire in the appropriate historic context of fire suppression.

We appreciate your consideration of our comments to assign a quantifiable target to natural and working lands, coordinate implementation at the state level, and encourage the restoration of fire. We look forward to working with you further on implementation.

Sincerely,

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Laurie Wayburn President