

January 17, 2017

Clerk of the Board, Air Resources Board

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Sent via Internet: <http://www.arb.ca.gov/lispub/comm/bclist.php>

The following are comments on the Revised Draft Short-Lived Climate Pollutant Reduction Strategy and Revised Draft Environmental Analysis.

We commented on the first draft SLCP Strategy and DEA on May 26, 2016, attended a public hearing and webcast, all which have contributed to our understanding and comments on the revised documents.

Our primary comments are focused on characterization of fire in California’s forests and issues around appropriate science-based characterizations of fire as a key ecosystem process, black carbon as a result of prescribed burning and wildfire in California’s wildlands and contribution of fire to resilience and sustainability in these forest systems.

We understand that the issue of prescribed fire and wildland fire and their role in generation of black carbon other climate change forcing pollutants will be discussed in the Forest Carbon Plan. We believe there is still some confusion and lack of clarity in the Revised SLCP Strategy and Draft EA that needs clarification in the final documents.

**I. Comments of the Revised SLCP Strategy**

A. Page-45 “Wildfires are the largest source of black carbon in California. Prescribed fires also emit black carbon, but are an important tool for forest managers.”

This statement fails to accurately characterize federal land managers (FLMs) options to use wildland fire for multiple resource benefits (National Wildland Fire Policy 2009).

**2009 Wildland Fire Policy Guidance**

6. A wildland fire may be concurrently managed for one or more objectives and objectives can change as the fire spreads across the landscape.

Use of Wildland Fire

Wildland fire will be used to protect, maintain, and enhance resources and, as near

 as possible, be allowed to function in its natural ecological role. Use of fire will be based on L/RMP and associated Fire Management Plans and will follow specific prescriptions contained in operational plans.

Preference will be given for natural ignitions to be managed in meeting the role of fire as an ecological process.

The SLCP Strategy must clarify that within the ecological or bioregional boundary of the

State of California wildfire is a significant management tool on Forest Service, National Park Service, Bureau of Land Management, Federal Wildlife Refuge DOI lands, and Defense Department land within the State boundary. In FY 2016 Wildland Fire Use on Forest Service lands accounted for a significant net gain in fuels treatment acres (Rob Griffth, Assistant Director-Fuels, Fire Ecology and Air Quality, R5 Fire and Aviation Management, *Pers. Comm.*).

The Forest Carbon Plan development is largely a state agency driven document. In the first round draft these agencies struggled to leave their California State jurisdiction mentality behind and address California forests and ecosystem function in a more defendable, science-based, ecoregional manner. In other words, prescribed fire in not the only “important tool for land managers.” Wildland fire use for multiple resource benefits (ecological, public health and safety, and fuels reduction) is also a critically important tool for federal land managers in California. This fact needs to be acknowledged and discussed in the Forest Carbon Plan and mentioned in the SLCP Strategy.

Wildfire on State Responsibility Area Lands (SRA) under Cal Fire’s jurisdiction is always suppressed. Wildfires occurring on lands within California under federal jurisdiction are regularly considered for management use for multiple ecological and other benefits, depending on season, staffing, logistics, location and other concerns.

The Black Carbon discussion in the Revised SLCP Strategy and Draft EA should acknowledge the existing, science-based relationship between fire and vegetation in California. The fire regimes include spatial scale of fires, intensity, frequency (mean and range) and other factors.

The level of wildfire that is outside the natural range of variation of specific vegetation types could reasonably be considered a black carbon level in excess of expected range and therefore a climate pollutant problem. The Air Resources Board, whether in the SLCP Strategy or the Forest Carbon Plan, should be very careful is disclosing this distinction (of “good and bad fire”) and not mischaracterize or frame a fundamental natural ecosystem process as “bad” or as a source to be controlled or altered for the sake of pollutant reduction under the Forest Carbon Plan.

We understand that wildfire-associated black carbon may have climate forcing impacts as discussed in the SLCP Strategy but those effects have been around for several million years, likely since the last Sierra Nevada uplift, and long before we thought burning fossil fuel was a good idea.

Carbon stability represents the equilibrium reached during longer-term restorations in the ongoing fire cycle of carbon sequestration and emissions in a fire-adapted ecosystem such as the Sierra Nevada and California in general.

In the early 1800’s the fire resilient landscapes of California were burning 1.8 million ha (4.45 million acres annually (Stephens et al. 2007). Stephens furthers states that a national fire season that burns 2 million hectares and which is characterized as “extreme” is “certainly a twentieth or twenty-first century perspective.”

**II. Comments on the Revised SLCP EA**

The SLCP Strategy states that the forest-related black carbon issue will be discussed in the revised Forest Carbon Plan which has not been released as of today, (1-17-17) leaving us no ability to judge if the FCAT plan is adequate or not.

Leaving this issue unaddressed would leave a glaring whole in the Environmental Analysis and fail to address many potential significant impacts (air quality, public health and safety, carbon stability, forest conversion) under CEQA. The value of wildland fire use was raised in our May 2016 letter to the ARB and remains a pillar in the fire science literature and a critical tool for building forest resilience and eventually forest carbon stability (North et al. 2012).

Also, please note that air regulators treat prescribed fire as an anthropogenic emission (fire ignited and permitted by humans) and currently do not do a great job of dealing with the need for increased fire use in forest management. Emissions trade-offs and the cumulative impacts of mage-emissions and the failure to address a century of fire exclusion are critical issues that should be included in the Forest Carbon Plan and Revised EA. Please see Long et al. (2017) *Aligning Smoke Management with Ecological and Public Health Goals* in the Journal of Forestry

due for publication in the near future (final draft copy included).

Thank you for this opportunity to comment.

Sincerely,



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**References**

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Guidance for Implementation of Federal Wildland Fire Management Policy

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