The Nature Conservancy
Protecting nature. Preserving life.™

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Mr. Ryan McCarthy, Chair's Office
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments from The Nature Conservancy on September 15, 2015 Draft Short-Lived Climate Pollutants Strategy

Dear Mr. McCarthy:

The Nature Conservancy appreciates the opportunity to comment on the Draft Short-Lived Climate Pollution Reduction Strategy (hereinafter "Draft Strategy") developed by the California Air Resources Board (CARB) in conjunction with other state agencies. We support the strategy to reduce short-lived climate pollutants as part of the State's long-term strategy to reduce greenhouse gas emissions. It is consistent with the Governor's Executive Order B-30-15, establishing interim greenhouse gas reduction goals for 2030. We also strongly support the related goal of improved management and conservation of natural and working lands to help the state meet its long-term GHG reduction goals. These two initiatives are interrelated, and the comments we offer below stem from this interrelationship.

GHG goals for wildfire and black carbon should be established through a public, joint-agency process that includes a common GHG accounting framework

The Conservancy supports the inclusion of black carbon from wildfire as part of the state's overall goals to reduce short-lived climate pollutants and related global warming potential. We agree with the Draft Strategy's recognition that goals to reduce black carbon from wildfire should be linked to a more holistic strategy to manage, conserve and restore our forests for multiple benefits, including climate mitigation and resilience. The Draft Strategy identifies that this holistic strategy is being developed through a separate process, the Forest and Climate Action Team (F-CAT). Information from the F-CAT process has been limited, making it challenging for stakeholders to understand or assess how GHG goals could be established for wildfire and black carbon. We, therefore, strongly recommend that the CARB and Resources Agency host joint public workshops to offer recommendations and solicit public feedback on wildfire, black carbon, forest health and GHG reductions.

As part of this effort, we also recommend that CARB, in collaboration with the Resources Agency, develop a holistic GHG accounting framework for forests (and natural and working lands generally) to advance a common understanding and approach to estimate and monitor GHG reductions from these resources. Such a framework is critical to minimize different and sometimes conflicting assumptions about what constitutes a greenhouse gas reduction in this sector and can help overcome accounting complexities associated with wildfire and fuels reduction activities, among others. It will also help minimize double counting and uncertainty about which sector to attribute a reduction (e.g., whether a reduction should be counted in the energy sector or natural and working lands sector). Furthermore, this type of framework can create better synergy and bridge accounting gaps across different landscape scales, from the activity (or project scale) to the regional and statewide scales.

Attributes of this common accounting framework should include the following:

1) **A statewide carbon inventory:**
   A landscape carbon inventory is essential for establishing a GHG baseline (or reference scenario) for natural and working lands and monitoring emissions and reductions from land-based activities that either increase or decrease carbon over time. The California Air Resources Board's recent carbon inventory analysis and any recent updates could serve as the basis of this inventory.[1]

2) **A statewide GHG baseline scenario:**
   Similar to the reference scenarios (or GHG baseline scenarios) that the state is developing for other sectors, GHG baseline scenario(s) should be developed for natural and working lands. Without a GHG baseline for the landscape, it will be very challenging for the state to estimate and monitor GHG reductions over time. Baseline scenarios are projections into the future of "business as usual" or what is likely to happen in the absence of human interventions to minimize emissions and sequester carbon. Other jurisdictions have developed GHG baselines for the landscape by using historical carbon inventory data over different points in time to establish trends for net changes in landscape carbon, which can inform how a GHG baseline can be forecasted into the future. Establishing a trend or reference scenario for the baseline (versus just one inventory year) is also important to be able capture net sequestration over time and the relative permanence of carbon sequestered in the landscape.

3) **Statewide GHG reduction scenarios that are spatial:**
   Once a carbon inventory and GHG baseline are established for natural and working lands, it is possible to develop estimates of GHG reduction potential based on alternative scenarios (relative to the baseline) across regions in the state. This type of analysis should be spatial, where opportunities for interventions (or activities) to sequester more carbon or minimize emissions across regions of the state can be identified. Anticipated climate change impacts can also be included in the scenarios. This carbon data can be aggregated and compared to the GHG

[1] *See* http://www.arb.ca.gov/cc/inventory/pubs/battles%20final%20report%2030jan14.pdf

baseline to develop ranges of GHG reduction potential that can be achieved through a variety of activities and incentives. They could be used to inform the 2030 Scoping Plan target. This type of assessment should be considered alongside other statewide plans, such as the State Water Action Plan and Safeguarding California, to provide the opportunity to optimize multiple benefits and make strategic investments.

4) **A monitoring, reporting and verification system that bridges different landscape scales (i.e., landowner to region and state):**
Building from the statewide baseline and scenarios mentioned above, a statewide monitoring, reporting and verification framework should also be established to track progress in the natural and working lands sector. The statewide carbon inventory, as it is updated over time, can be used as the basis to track changes in carbon across the landscape and monitored against the GHG baseline and reduction scenarios mentioned earlier. A complementary monitoring and reporting framework can also be developed for the interventions or activities that are implemented at the smaller scale to reduce emissions/sequester carbon through programs or policies. This complementary framework can act as a bridge between monitoring at the project/activity scale and the monitoring at the statewide and regional scales.

As part of the regulatory process, develop guidelines for use of compost as soil amendments that optimize GHG reductions and public benefits and avoid unintended consequences

The Conservancy supports ongoing efforts to reduce methane emissions and the goal of diverting all organic waste from landfills by 2025 as a key emission reduction strategy. The use of organic waste for compost and soil amendments can be an effective way to reduce methane emissions from landfills and sequester more carbon in soil. We recommend the use of this compost in areas that are highly disturbed, such as irrigated farm fields, fallowed fields, previously tilled lands and irrigated pasture. Based on preliminary analysis, these areas in California cover roughly 7.5 million acres in California. In support of this approach, we recommend that CARB (with CDFA and other experts), as part of the regulatory process, incorporate criteria to identify the most suitable areas for soil amendments, such as highly disturbed areas.

Before applying compost more extensively (beyond highly disturbed areas) to rangelands, including wetland types, meadows, vernal pools, desert grasslands, and other special soil types, we recommend a process to solicit additional research and scientific input. This process should ensure that more widespread application would be beneficial not only for carbon sequestration, but also for habitat and biodiversity enhancement and protection. If more widespread application will be considered, we strongly recommend that a panel of California rangeland scientists including (but not limited to) individuals with expertise in biodiversity conservation, ecosystem ecology, native plant ecology, and soil carbon be convened to further study and develop guidelines for this practice. It will be important to develop clear regulatory guidance to avoid unintended consequences of using compost in soils that encourage growth of non-native species and alter habitat.

We appreciate the hard work of staff to develop this Draft Strategy and look forward to the ongoing discussions on this topic. Please contact Michelle Passero at MPassero@tnc.org if you have any questions.