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Rajinder Sahota
Branch Chief, Climate Change Program Evaluation
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments in response to the Draft Healthy Landscapes 2030: Climate Vision and Goals for Natural and Working Lands

Dear Ms. Sahota:

The Nature Conservancy appreciates the opportunity to submit comments on the draft vision, Healthy Landscapes 2030: California's Climate Change Vision and Goals for Natural and Working Lands (hereafter "Draft Vision"). The Conservancy strongly supports the Governor's Executive Order B-30-15, establishing interim greenhouse gas reduction goals for 2030 so the State can meet its longer term goals established for 2050. Moreover, we support the inclusion of natural and working lands as one of the six pillars of the State's long-term climate strategy. The State will not be able to meet its long term goals without the inclusion of this sector.

Overall, the ideas presented in the Draft Vision lay a strong foundation for the kinds of actions that the state should undertake to continue reducing greenhouse gas emissions beyond 2020. We provide specific comments on these recommendations in the following pages. In addition to these specific comments, we also offer some overarching recommendations that are fundamental to advance natural and working lands as a key strategy to meet long-term climate goals.

Overarching Recommendations:

The state should establish greenhouse gas reduction goals for natural and working lands that are informed and supported by a quantitative, standardized greenhouse gas accounting framework and a clear definition of a greenhouse gas reduction

To understand the scope of greenhouse gas reduction potential from California's natural and working lands and monitor progress over time, the state should establish goals for this sector that are informed by a standardized and quantitative greenhouse gas (GHG) accounting framework that also defines a greenhouse gas reduction. While a host of other considerations, such as climate resilience, habitat, water quality, biodiversity, and jobs, should be applied as additional filters to statewide GHG goals for natural and working lands, this fundamental building block should be established so the reduction potential is well understood by the state and the public and can be monitored and considered alongside the many other objectives for our natural resources.

Such a framework is also needed in California to advance a common understanding of what constitutes a GHG reduction in the natural and working lands sector, thereby reducing different and often conflicting assumptions about what constitutes a greenhouse gas reduction (vs. a carbon/GHG inventory or a carbon pool). It will also help minimize uncertainty about which sector to attribute a reduction (e.g., whether a reduction should be counted in the energy sector, transportation 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. For precedent, the state should refer to "jurisdictional accounting" approaches being developed and implemented in tropical forest jurisdictions to meet international greenhouse gas reductions pledges.¹

Attributes of establishing GHG reduction goals and supporting 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.²

2) A statewide GHG baseline scenario:

¹ "Guidelines for REDD+ Reference Levels: Principles and Recommendations" Prepared for the Government of Norway, by Arild Angelsen, Doug Boucher, Sandra Brown, Valerie Merckx, Charlotte Streck, and Daniel Zarin. Available at www.REDD-OAR.org. See also, http://scienceforconservation.org/downloads/climate_action_through_conservation

² See <http://www.arb.ca.gov/cc/inventory/pubs/battles%20final%20report%2030jan14.pdf>

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) Develop 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 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) Develop 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.

Express a priority for climate resilience by incorporating specific recommendations for it in all goals

We appreciate and strongly support the acknowledgment that resilience should be incorporated in the state's goals and strategies to reduce greenhouse gas emissions in the natural and working lands sector. As stated in EO B-30-15 and the Environmental Goals and Policy Report, the state's planning and investments should *prioritize* actions that "build climate preparedness and reduce greenhouse gas emissions" (EO B 30 15), "especially in the natural resource sector" (EGPR, page 26).

Within the goals, resilience is explicitly mentioned in goal #2 (enhance carbon resilience through management and restoration). We strongly recommend the inclusion of resilience in all of the goals with examples of how resilience may be included alongside the activities to reduce GHG emissions. Resilience applies to more than just the stored carbon. For example, in goal #1 (Land Protection and Land Use), the suggestion to protect natural and working lands would provide resilience for species habitat and migratory corridors.

In goal #2, in addition to the overarching goal of building a resilient carbon bank, climate resilience could be recognized throughout each of the recommended sub-goals. The restoration of wetlands can protect against sea level rise and flooding. Riparian restoration can protect water quality and habitat for fish. Healthy soils with more carbon can retain more moisture and be more resilient to drought. Goal #3 seems to emphasize the need to integrate strategies across sectors. Such an effort could be designed to not only optimize and create more synergies for GHG reductions, but it can create more synergies to build resilience and should be explicitly be incorporated in the design. Likewise, in goal #4, urban forestry and green infrastructure in general can reduce emissions and enhance resilience. A more explicit acknowledgment of how this can and should be done would provide helpful additional direction.

Provide flexibility to adjust goals once analysis of greenhouse gas reduction potential for natural and working lands is completed

Overall, the draft vision provides good recommendations for activities that will likely reduce greenhouse gas emissions (i.e., sequester carbon and minimize emissions) across natural and working lands while enhancing other important public and environmental benefits. The document suggests that additional analysis on statewide GHG reduction potential will be conducted. This analysis could highlight additional or different opportunities for achieving

reductions and other public benefits than what is currently identified. Consequently, it would be helpful for the Draft Vision to acknowledge this and identify a process for adjusting the document to reflect this new information. The “Related Activities” section could be the section where this kind of language could be inserted.

Include a guiding principle that aligns climate actions for natural and working lands with benefits to disadvantaged and low income communities

The guiding principles enumerated in the Draft Vision are constructive and will help guide meaningful climate outcomes with respect to natural and working lands. In parallel policies, the Administration and Legislature have sought to ensure that communities that are most vulnerable to climate change, such as disadvantaged and low income communities, are protected. With this in mind, we recommend that the guiding principles include an additional principle to align greenhouse gas reduction strategies (and climate strategies overall) with existing and evolving goals to protect and assist communities that are most vulnerable to climate change.

Clarify the intended greenhouse gas reduction benefit of each of the goals

The goals identified in the Draft Vision contain a number of strong recommendations that will likely produce GHG reductions. The goals would be clearer, from a greenhouse gas reduction perspective, if each of the objectives explicitly stated the anticipated GHG reduction benefit (in addition to other important public benefits). For instance, the Land Protection and Land Use Goal, which we strongly support, would benefit from an explicit statement that the increased protection of natural and working lands will avoid GHG emissions and foster ongoing and additional carbon sequestration. The objective in goal #2 more clearly identifies the GHG reduction benefits – increase carbon storage (or carbon sequestration) and minimize emissions. The GHG reduction objective for goal #3 is less clear and would benefit from additional language that explains the intended GHG reduction benefit (optimizing GHG emission reductions by integrating GHG strategies across sectors?).

Provide more detail on the kinds of tools and policies that could be employed to achieve GHG reductions across natural and working lands

Overall, there are many good ideas expressed in the Draft Vision for how the state might incorporate natural and working lands into the State’s reduction goals. The Vision would be even stronger if it provided more detail on the kinds of tools, mechanisms and policies that could be implemented to help achieve the stated goals and objectives (similar to the detail of the Forest Carbon Plan). Each of the categorical goals could include a section of specific measures that could be considered to achieve the identified goals and strategies.

Specific Recommendations:

Goal Category #1: Land Protection and Land Use

- The Conservancy supports this goal as a means to reduce biological carbon emissions and other indirect emissions (e.g., transportation and energy) associated with land conversion to other uses.
- We support the recommendation to promote the development of regional plans, climate action plans, and greenprints as a means to reduce GHG emissions and sequester carbon and recommend that the draft vision provide specific recommendations to advance this goal. Recommendations should include the provision of funds to develop/augment such plans to include natural and working lands and criteria and points in state grant processes that strongly encourage the development and implementation of such plans. The Draft Vision document should also encourage these plans as a mechanism to optimize and integrate GHG reduction efforts and benefits across sectors (which dovetails with Goals 3 and 4).

Goal Category #2: Enhance: Management and Restoration

- The conservancy supports the general objective for this goal and suggests that the recommendation to develop common accounting be moved to an overarching goal that applies to all the goals and strategies since such a framework is needed for all activities.
- The forest goals would benefit from a more explicit explanation of the intended GHG reduction goals for this resource. For example, in certain regions of the state, forests may be managed for decreased risk of catastrophic fire, while other areas may be restored or reforested to sequester more carbon. Forest management planning can be an important part of supporting this overall GHG goal. The Conservancy will provide more explicit recommendations for forest-based GHG reduction goals in response to the Forest Carbon Action Plan.

Goal Category #3: Innovate

- As stated earlier, this goal and objective would benefit from more explicit language regarding the GHG reduction that would be achieved through this objective. It appears that the objective is integration of natural and working land strategies with other sectors to reduce emissions and promote sustainable management. As currently written, it is a little unclear.

- If the objective is to encourage strategies that integrate natural and working lands with other sectors, this section should also include the recommendation for the state to support the development of plans that help integrate such strategies.

Goal Category #4: Urban Forestry and Green Infrastructure

- The conservancy supports this goal and objective. Urban forestry and green infrastructure are important strategies for reducing GHG emissions, enhancing resilience and achieving many other public benefits.
- For the same reasons that green infrastructure is important in highly urban areas, green infrastructure is also important in both exurban and more rural areas. We, therefore, recommend that the Draft Vision include the goal to conserve or restore green infrastructure across different communities, from urban to rural.
- Green infrastructure could be encouraged with better upfront planning. Therefore, we recommend that the Draft Vision include the recommendation for funding and incentives to include green infrastructure in multi-sector plans to reduce GHG emissions.

We appreciate your consideration and are happy to provide input in this important process. Our natural and working lands are a critical part of the climate solution and California's leadership provides a strong platform to demonstrate how this can be implemented to provide multiple benefits. If you have any questions, please contact Michelle Passero at mpassero@tnc.org.