CalCAN
CALIFORNIA CLIMATE & AGRICULTURE NETWORK

Liane Randolph, Chair
California Air Resources Board
Sacramento, CA 95812

June 24, 2022

Re: Draft Scoping Plan - Natural and Working Lands

Dear Chair Randolph,

I write on behalf of the California Climate & Agriculture Network (CalCAN) to express our concerns with the draft Scoping Plan, which lacks ambition and clear direction on natural and working lands climate strategies. The scenarios modeling conducted to inform the policy pathways for natural and working lands, including agriculture, was flawed from the very beginning, resulting in modeling that cannot be used to inform the state's understanding of the potential role of natural and working lands to sequester carbon and reduce overall greenhouse gas emissions. This is deeply troubling, especially as we know that time is ticking to scale up effective action to avoid the worst impacts of a changing climate.

We request that CARB increase the ambition of the NWL scenarios and re-do some of its modeling this summer to better inform the final Scoping Plan. We also request that CARB convene a scientific advisory committee this year, made up of university researchers and other experts in the field of climate change and natural and working lands science and practice to 1) review new modeling of climate change scenarios for this sector, 2) review more ambitious policy pathways and 3) advise state agencies on implementation. This work should happen within the year and should inform the work of state agencies, which oversee natural and working lands climate change programs, as well as legislature leaders to inform their efforts to scale up this work.

We cannot understate the urgency to go beyond the draft Scoping Plan. Without new modeling to inform policy pathways, the Scoping Plan presents flawed guesswork that fails to meet the needs of our time.

Finally, we align our comments with those who are calling for greater ambition overall in the Scoping Plan. The climate crisis is here and already exacting devastating losses on our farms, ranches, and rural agricultural communities. The draft Scoping Plan's Proposed Scenario underestimates the costs of delayed climate action on agriculture and food security. To avoid catastrophe, we must push up our deadlines, put aside untested technologies, and reach carbon neutrality in ways that embrace climate resilience for the state no later than 2035.

Thank you for your consideration.

Sincerely,

Jeanne Merrill, Policy Director

Comments:

The Reference Scenario should more accurately describe the baseline scenarios for healthy soils practices on croplands. As described in the draft SPU, the Reference Scenario for croplands assumes no healthy soils or other climate-smart agriculture practices occurred in the state over the period 2001 to 2014 because the state's Healthy Soils Program did not exist during this time. This is simply not accurate and does not reflect our efforts to highlight to CARB the adoption of these practices over time in the state. We appreciate the inclusion of organic agriculture in the NWL modeling as it is one important farming system that provides climate benefits and it can help provide some baseline data on climate smart practices. Since the 1970s, California has been a national leader in organic agricultural production, so it is simply not accurate to state that healthy soils practices have not occurred during the Reference Scenario. USDA's Natural Resource Conservation Service, which provides technical and financial incentives for organic and conservation agriculture, is an important data source on these practices along with USDA's Economic Research Service. Additionally, some agriculture trade associations, including wine grapes, almonds, and others in the state survey their members about their use of conservation practices, including healthy soils practices. University researchers can offer additional data on the use of climate beneficial practices in agriculture. While no data source is complete, recognizing that California farmers in the state have used and continue to use climate beneficial practices should inform the baseline and modeling scenarios as the state moves forward to scale up these practices. We request that CARB work with science advisors, as described above, to better inform the state's understanding of the Reference Scenario and Alternative Scenarios.

The combination of on-farm practices with land conservation easements in the croplands scenarios obscures our understanding of the unique contributions of those practices on carbon sequestration and GHG emission reductions; Better reporting is needed. We request that CARB report on the modeling output for the croplands conservation easement modeling separate from the output of on-farm practices. Without this separate reporting, we cannot discern the impacts of those two very distinct efforts - land conservation through easements and on-farm management practices - on carbon sequestration and reduced GHG emissions.

By reaching just 10 percent of the state's agriculture (i.e. 50,000 acres/year), the lack of ambition in the draft SPU leaves too many farmers and ranchers vulnerable to climate change. The state should seek carbon-neutral agriculture by 2030. The Proposed Scenario will only reach a little more than 1 million acres of annual and perennial crops in California, leaving behind the vast majority of California's 9 million acres of irrigated cropland. We know that many of the practices that increase carbon sinks and reduce GHG emissions in agriculture also provide resilience benefits in the form of reduced water use, energy savings, increased drought and flood tolerance, greater biodiversity, and more. We simply cannot afford to only touch roughly 10 percent of California croplands with climate smart strategies, as outlined in the Proposed Scenario. We call on CARB to reconsider its scenarios for agriculture and look to achieve carbon neutrality in agriculture by 2030, as outlined in a public comment letter from sustainable agriculture, conservation, and other leaders in this space.

By conserving just 6,000 acres of cropland annually, California will be on track to lose 700,000 acres of agricultural land by 2045. The state should move to eliminate ag land conversion to urban sprawl. The Proposed Scenario will only protect 15 percent of cropland acreage that is lost annually to urban conversion and other non-agricultural development. At this rate, California would lose a little more than 700,000 acres of cropland by 2045. Such agricultural land loss would result in the loss of

carbon sinks associated with the converted farmland and likely lead to greater GHG emissions through increased vehicle miles traveled and building emissions. The Proposed Scenario does not go far enough to support the state's efforts to increase in-fill, affordable, transit-rich housing development that protects agricultural lands on the urban and suburban edge. The state should seek to end the conversion of agricultural land to sprawl and rural ranchette development by 2045.

CARB's Proposed Scenario should include the best case scenarios for each landscape type, wherever possible. Currently, CARB's Proposed Scenario for NWL includes the less ambitious scenarios across all of the landscape types, but for many of the landscape types more ambitious scenarios will result in better outcomes (i.e. more carbon stored, fewer emissions) without huge increases in cost. For example, the difference in funding between the more ambitious Perennial Agriculture Scenario and the Proposed Perennial Scenario is $4 million annually. We recognize that most ambitious scenarios for forests and urban forests are likely cost-prohibitive, but that does not appear to be the case across the other landscape types. We request that CARB re-do its Proposed Scenario for NWL to include more ambitious scenarios across the landscape types.

The Proposed Scenario needs a better multi-benefit/risk analysis that goes beyond wildfire emissions and smoke impacts to include other, likely impacts of inaction for NWL. The analysis of the Proposed Scenario versus the Alternative Scenarios lacks a review of the impacts on the resilience of those landscapes. What is the difference between the Proposed Scenarios and the Alternative Scenarios vis-a-vis improved drought and flood tolerance? Heat impacts? Food security? Water and air pollution (beyond wildfire smoke)? Without a greater understanding of how investment in these lands makes a difference to the state's resilience to greater weather extremes and public health outcomes, the state will likely continue to under-invest in these NWL climate solutions. This is work that can and should be done with the input of science advisors working on these issues in California, as described in our cover letter.

CARB needs a holistic GHG emissions reduction and carbon sequestration strategy for NWL. The focus on carbon sequestration to the near exclusion of GHG emission reduction strategies in NWL means the state is missing out on key opportunities to reduce potent GHG emissions across NWL, especially in agriculture. The modeling of croplands is confusing because it did not include the benefits of eliminating synthetic fertilizers when transiting to organic agricultural production. Furthermore, the nitrous oxide emissions reductions associated with healthy soils were constrained by the assumption that all synthetic fertilizers would be replaced by only compost, when other practices like cover crops, can also replace synthetic fertilizer use. Consequently, we lack an understanding of the full climate benefits of these strategies. The inclusion of dairy and livestock methane in the industrial sector also limits whole-farm strategies that would allow dairy and livestock producers to consider strategies to not only reduce methane emissions but consider their entire operation's carbon footprint and increase carbon sinks where possible.

CARB needs measurable outcomes, lead agencies, and policy pathways. In most cases, the "Strategies for Success" fail to include measurable outcomes, lead agencies, and related policy pathways for achieving those outcomes. Much more detail is needed if the state is to be successful in achieving its 2030 GHG emission reduction target and carbon neutrality.