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August 3, 2021

The Honorable Chair Liane Randolph
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Via Electronic Submission

Re: Public Workshop: 2022 Scoping Plan Update
Natural and Working Lands Technical Workshop

Dear Chair Randolph and Board Members:

The California Farm Bureau Federation ("Farm Bureau") would like to thank you for the opportunity to provide comment on the technical workshop on natural and working lands and their role within the update of the 2022 Scoping Plan. Farm Bureau is a non-governmental, non-profit organization representing nearly 30,000 farming members, whose purpose is to protect and promote agricultural interests throughout the State and to find solutions to the problems facing agricultural businesses and the rural community.

Our members, California's farmers and ranchers, are on the frontlines of climate change impacts with worsening drought and water scarcity, diminishing prime soils, pest proliferation, and severe weather patterns. These constraints are furthered by increased regulation, greater domestic and international competition, changing consumer preferences and labor shortages. The state's working lands sector is one of the first to feel the sting of the impacts of climate change and its stewards recognize the necessity and challenges associated with farmer-led solutions to lessen these impacts. We are heartened to hear in the technical workshop that the Air Resources Board (ARB) understands that landholders are a critical piece to achieving carbon neutrality and hope that this ethos continues to drive ARB's actions through the inventory, scoping and implementation processes. Farm Bureau would like to offer the following comments related to the Natural and Working Land Technical Workshop held on July 20th, 2021.

Natural and Working Lands Inventory

Farm Bureau appreciates the thorough background and framing provided in the workshop on the purpose and intent of the proposed inventory framework and the recognition of the efforts made by farm and ranch practitioners to actively pursue management practices that sequester carbon on working lands. Moreover, we are encouraged by the ability to harness the carbon storage capacity of soils, roots and above ground biomass on working lands, if properly incented, to progress towards carbon neutrality. The carbon stocks from cropland woody biomass, namely through permanent/perennial crops, is illustrative. While we understand that avoided emissions from maintaining working lands in lieu of converting to higher density uses and urban development is not included in the inventory, Farm Bureau encourages ARB to consider agricultural land protection as an important component to ensure that the demonstrable management practices populating the carbon outputs in the inventory be recognized.

Regardless, we concur that the overwhelming majority of carbon stocks and emissions in California's landscape is in its forest lands. Based on the geospatial inventory output noted by staff, 74% of the land disturbances (i.e., carbon stock changes) are attributable to wildfires from 2001 to 2014. This has and will continue to correlate to a precipitous drop in carbon storage capacity without direct and immediate intervention. These wildfire events also have dramatic impacts on adjacent agricultural operations, such as limiting forage on grazing lands, exposing communities and farm employees to wildfire smoke, destroying necessary and appurtenant farm

infrastructure and equipment and significant crop and land damage. Therefore, Farm Bureau encourages ARB to focus attention on efforts to reduce emissions and maximize carbon sink capacity within this land use type, while unfortunately, simultaneously recognizing catastrophic wildfire events and their climactic impact as an annual consequence for the foreseeable future.

Target Setting

Though the list of principles for the Natural and Working Lands target setting includes important and necessary components, it does not currently identify the weight of each principle in relation to one another. Farm Bureau encourages that the most guiding principle in the target development should be carbon. We recognize that carbon is not the sole factor used to determine a target for natural and working lands, nor should it be. We agree that food, fiber and floral production are necessary to protect the state's food security. The recent COVID-19 pandemic and ensuing damage on the international food supply network demonstrated that California is most secure when it can provide its own food source. Moreover, agricultural production provides a host of ecosystem services for the state's lands, including but not limited to pest and weed management, habitat protection, orderly urban development, water quality, biodiversity, as well as recreational and cultural value. However, we do suggest in the context of target setting, co-benefits such as improving other environmental and societal outcomes should be weighed with achieving carbon neutrality within an appropriate scale.

Also, in the context of the listed principles, economic and practical feasibility should be included. Audacious goal setting is trivial without being grounded in the possible. The inevitable impacts of future state policies and extreme weather events, such as drought and wildfire, will likely complicate the achievement of a statewide goal established at single point in time. For example, the Sustainable Groundwater Management Act (SGMA) requires critical groundwater basins in California to achieve sustainability by 2040. Recent studies have forecasted that this policy will result in the fallowing of more than 500,000 acres of productive agricultural lands in California's San Joaquin Valley.[1] As these once "working lands" become fallowed, their capacity to sequester carbon diminishes. The attenuation of farmland to this scale will realistically and significantly hinder the ability to achieve any carbon neutrality. Consideration of the feasibility to implement practices on the scale necessary will be best vetted by practitioners themselves and supplemented by the expertise of field-level specialists and agronomists like those at U.C. Cooperative Extension. This will have the benefit of deterring leakage of agricultural production out of state, which does not abide by California's progressive climate standards. This approach can also serve to not further disenfranchise California's small and mid-sized family-owned farms or socially disadvantaged farmers and ranchers struggling to keep pace with competition and California's unrivaled environmental regulatory standards.

Another important component of the target setting will likely be determining the appropriate unit of measure for natural and working lands. Acreage is likely the most readily accessible data point to use, however, we will caution ARB that acreage alone will not be indicative of the true carbon impact. Due to California's sheer agricultural diversity, with over 400 different commodities, growing regions and microclimates, management practices will manifest different carbon results across different crop types and production systems. We understand that it may be impossible at this point to model and track carbon by crop at the field level. However, we suggest ARB attempt to differentiate carbon storage by crop type categories (field, row, annual, etc.) and use averages to normalize the data as you seek improvement over time. Moreover, with respect to acreage accounting, we encourage ARB to differentiate acreage under management practices independently. That is, should one acre be managed using cover cropping and also be maintained with hedgerows, that one acre would effectively be counted as either two acres collectively or one acre under one practice and one under another. Many farmers and ranchers in California "stack" their management practices, maximizing the area they use for conservation and compounding their carbon benefit. It's important these efforts be accounted for properly. Farm Bureau also encourages ARB to be as inclusive as possible in its articulation of working land acreage under active management. This includes considering the amount of acreage under climate-beneficial management

[1] Hanak, Escriva-Bou, et. al. "Water and the Future of the San Joaquin Valley." February 2019. Public Policy Institute of California. https://www.ppic.org/wp-content/uploads/water-and-the-future-of-the-san-joaquin-valley-overview.pdf

practices (such as USDA-NRCS, or privately funded) or acres under agricultural conservation easement agreements. Continuing to incentivize and quantify voluntary action will ensure early adopters are not penalized and generate larger and more widespread adoption of needed changes.

Finally, Farm Bureau supports all types of agriculture in California. We believe that all commodities, all farm sizes, all production styles (organic, conventional, urban, rural) can play an important role in the state's efforts to decarbonize. However, we encourage ARB to not wholly endorse one production style or commodity as the preferred outcome without first conducting a lifecycle analysis of that practice. For example, while a practice may result in increased soil organic matter capable of carbon sequestration, its production style may require more tractor passes, resulting in higher emissions, have lower yield or require significant water infrastructure changes. We ask that ARB consider the totality of the impact of production changes (as a farmer would) before supporting them in the context of carbon neutrality. Farm Bureau recognizes ARB's intent is not to be prescriptive and top-down within the target setting process. Therefore, we look forward to commenting, when appropriate, on the actions and mechanism pathways pursued to achieve the determined carbon goal.

Modeling

Farm Bureau recognizes that development of a carbon target and subsequent modeling for natural and working lands will be particularly challenging. In carrying out these activities, ARB will need to confront many ecological unknowns which may require assumptions be made within the selected model. The presentation by ARB staff on the Regional Hydrological and Ecological Simulation System (RHESSys) highlighted the challenge of incorporating the feedbacks between carbon, water, and fire, particularly for the state's forest and shrublands. We request that this same consideration be offered and adopted, when possible, for the working lands sector. Understanding the ecological feedback loops between hydrology and carbon, particularly for agricultural soils and biomass, are critical for these venues to serve as long-term carbon sinks. This consideration will be essential to not only developing a baseline, but also in accurately assessing the capacity of the working landscape, more recently plagued by drought, salinity, and less airable or prime soils, to host the necessary carbon management practices and prescribe their adoption. Though COMET planner does not currently address this function, we understand the constraints of ARB's resource availability, ambitious timeline, and the need for a current user base in reviewing other models. Regardless of the model selected, Farm Bureau encourages ARB to explore opportunities to improve and adapt the selected model to incorporate these feedbacks.

Farmer/Rancher Community Outreach

Farm Bureau appreciates the work of the Department of Food and Agriculture (CDFA) to convene the Farmer-Rancher Led Solutions listening sessions and the opportunity it provided to share challenges and identify demonstrable policy and practice changes for natural and working lands. We hope the Natural and Working Lands Climate Smart Strategy, soon to be convened by the California Natural Resources Agency (CNRA), will be another opportunity to help guide the agencies towards practical solutions that are self-sustaining. We look forward to the Air Resources Board (ARB) incorporating these recommendations into the Scoping Plan and using them as markers on the road to carbon neutrality.

With that said, we encourage ARB to not solely rely on these reports to characterize the commentary from the agricultural community. California agriculture is not a monolith and due to its diversity, each commodity, region and community has distinct needs and challenges. As such, we encourage ARB to consider the work of CDFA and CNRA as complimentary but not supplementary. We encourage ARB host agricultural-centric meetings and workshops to solicit true feedback from practitioners (farmers, ranchers, foresters, and dairying operations) responsible for making progress towards these goals. Farm Bureau's network of County Farm Bureaus are advantageous and self-organized entities to help ARB staff explore the nuance in the theoretical framework proposed.

Thank you for the opportunity to provide comment and we look forward to future Scoping Plan action and workshops for the Natural and Working Lands sector.

Respectfully,

Taylor Roschen, Policy Advocate
California Farm Bureau Federation