Via Email
climate@cdfa.ca.gov

November 7, 2025

California Department of Food and Agriculture
Attn: Virginia Jameson
1220 N Street
Sacramento, CA 95814

Re: Draft Climate Resilience Strategy for California Agriculture

Dear Virginia:

The California Farm Bureau Federation (Farm Bureau) would like to thank the California Department of Food and Agriculture (CDFA) for the opportunity to review and provide comments on the draft Climate Resilience Strategy for California Agriculture (RSA). The Farm Bureau is a non-governmental, non-profit organization representing over 26,000 agricultural, associate, and collegiate members in 54 counties, with a purpose to protect and promote agricultural interests throughout California and to find solutions to the problems facing agricultural businesses and rural communities.

As an overarching comment, California's farmers and ranchers are facing significant pressures from the effects of climate change, disrupting nearly every aspect of agricultural production. Shifting precipitation patterns and higher temperatures are straining the state's already limited water resources, putting severe stress on water dependent crops and making it increasingly difficult for producers to plan and maintain consistent yields. Warmer conditions have also allowed pests and plant diseases to persist year-round and spread to new regions, leading to significant crop losses and reduced productivity. At the same time, these changing weather patterns are contributing to more frequent and intense wildfires that damage crops, infrastructure, and air quality. Compounding these environmental challenges are economic and social pressures, including increased domestic and international competition, changing consumer preferences, and labor shortages.

In spite of these challenges, the state's working land sector has been implementing innovative climate-smart farming practices that both reduce its environmental footprint and play a crucial role in helping the state meet its climate goals. As water becomes increasingly scarce, many growers are adopting efficient irrigation technologies such as drip and micro-sprinkler systems to minimize water waste. Producers are also investing in healthy soil practices, like cover cropping, composting, and reduced tillage, that improve soil health, retain moisture and capture carbon. In addition, many producers actively manage forests, grasslands,

wetlands, and croplands through strategies such as targeted grazing, which helps reduce the buildup of dry vegetation that fuels catastrophic wildfires.

Recognition must also be given to the fact that many factors influence the scale and pace at which climate smart practices are adopted on farms or ranches. Agriculture is an industry shaped by numerous uncontrollable factors, so state goals and policies must align with the technological and economic realities of farming operations. To ensure meaningful and lasting progress, greater emphasis and funding should be directed toward agricultural research and innovation. Investing in new technologies, improved crop traits, and practical production practices will ultimately yield far greater benefits than imposing additional regulations that could further strain farmers, ranchers, and the broader economy.

Lastly, Farm Bureau commends the State's continued commitment to cost-effective, climate-smart land management through market mechanisms such as the Cap-and-Invest program. Through California Climate Investments, Cap-and-Invest dollars have supported initiatives such as the Healthy Soils Program (HSP), the State Water Efficiency and Enhancement Program (SWEEP), the Alternative Manure Management Program (AMMP), and the Food Production Investment Program (FPIP). These programs have not only reduced greenhouse gas (GHG) emissions, increased soil fertility, and improved water resilience, but have demonstrated that environmental stewardship and agricultural productivity can advance hand in hand. Farm Bureau asks that the State continue investing in these programs as they are essential to meeting California's climate commitments and supporting the economic sustainability of our farming communities.

To that end, Farm Bureau would like to provide the following comments on the RSA:

Chapter 2. Ensure a Water System for Food System Resilience in a Hotter, Drier Future

2.1.3 – Coordinate across agencies to develop new groundwater use and recharge strategies.

This section begins by stating that the goal of the Sustainable Groundwater Management Act (SGMA) is "to ensure that aquifers are brought back into balance through reduced pumping and careful monitoring of water extraction"; however, SGMA and its relevant code sections themselves do not identify or require specific actions, such as demand management efforts through reduced pumping, but rather are agnostic as to the means and methods Groundwater Sustainability Agencies (GSAs) must take to achieve their sustainability goals by 2040.

Nevertheless, in general, Farm Bureau supports this section's recommendation for expanded agency-level coordination to support California's ability to capture floodwater and divert it to recharge our aquifers. As the RSA notes, additional opportunities exist to ease regulatory

constraints, such as on water rights permitting, that will provide landowners and GSAs with greater flexibility to divert during high-flow periods.

2.1.4 – Work with water users to assist with groundwater use and recharge.

The description of this recommendation focuses heavily on reducing water demand through land repurposing and fallowing. To date, California has invested more than $300 million in LandFlex and the Multibenefit Land Repurposing Program to allow short- or long-term land conversion, but much more funding is needed. Farm Bureau encourages CDFA to consider taking a leadership role in developing a strategy for coordinated stewardship of lands that have been removed from production or converted to habitat, both to maximize preservation of productive ag land and to reduce risk to these properties when land is converted but not managed properly.

2.2.2 – Advance critical infrastructure projects for water conveyance.

The RSA mentions the State of California's efforts to invest in infrastructure through Proposition 1 and the State Budget. In the case of California's recent appropriation to help repair subsidence damages on the Friant-Kern and Delta-Mendota canals and the California Aqueduct, the RSA undercounts the total value of this historic investment. In fact, the Legislature and Governor appropriated a total of $100 million each in budget years 2021 and 2022, for a total of $200 million, to be spent improving conveyance along these critical arterial canals.

The funding cited specifically for the Friant-Kern Canal was instrumental in assembling a state-federal-local funding and financing package, advancing Phase I of the $500 million Friant-Kern Canal Middle Reach Capacity Correction Project in near record-time: the project broke ground in January 2022 and was completed just over two years later. While Farm Bureau understands that the State often prefers competitive grant funding efforts, such as Proposition 1's Water Storage Investment Program, for infrastructure, acting quickly to provide directed funding when available - as with the conveyance appropriations - is the best strategy for efficiently and rapidly building the infrastructure we need to increase our climate resilience. California needs good projects in 2030 rather than perfect projects in 2050.

2.4.1 – Upgrade equipment to be water efficient and conduct on-farm measurement to track water use.

Farm Bureau appreciates CDFA's continued support for the State Water Efficiency and Enhancement Program (SWEEP) but also wants to ensure that CDFA and its agency partners balance advocacy for on-farm conservation with advocacy and support for on-farm recharge that contributes to health of our groundwater basins. Traditional, less efficient irrigation

methods often result in significant "return flows" of excess water that seep into the ground and recharge local aquifers. Micro-irrigation's high efficiency (up to 90%) minimizes this excess water, thus reducing a historical source of artificial recharge.

Chapter 3. Support Agricultural Workforce Wellbeing and Health

3.1.1 – Support state policies for better working conditions for hotter, drier conditions.

The RSA describes General Industrial Safety Order (GISO) 3395 enforcement by Cal/OSHA and various education and training programs undertaken by the Western Center for Agricultural Safety and Health, the Worker Occupational Health and Safety Training and Education Program, and other state activities, but fails to mention outreach and training efforts of Cal/OSHA Consultation Program in providing support for agricultural employers' efforts to comply with GISO 3395 and safeguard the health of employees while they are at work. Consultation's efforts contribute greatly to employers' efforts to comply and protect their employees and deserves mention here.

3.1.4 – Implement programs that build and improve infrastructure in rural agricultural communities to better support resilience to extreme weather events.

While the RSA mentions the state's commitment to the Joe Serna farmworker housing program, the construction of approximately 4,200 new housing units is far from adequate to provide decent, healthy and affordable housing that will be appropriate for future climatic conditions. The housing stock in many rural communities remains too little to fill the need, substandard, overcrowded, antiquated, and often lack air conditioning. Still needed are reforms to zoning, land use, and other impediments to private sector (including agricultural employer) construction of housing for farm employees and for all Californians. These impediments cause housing construction to fall far short of housing needs statewide, including in rural California.

Chapter 5. Advance Energy Efficiency and Decarbonization for Agricultural Operations

5.2.1 – Support demand flexibility and improve energy efficiency through incentivized behavior changes.

Farmers and ranchers have consistently looked for and demonstrated their commitment to sustainability. This includes their adaptability with regards to time of use periods, which limit strain on the grid during peak hours. Further, when the state pushed for a transition to renewable energy, Farm Bureau and others found a solution in net metering aggregation which allowed farmers and ranchers who wanted to be more sustainable to viably use on farm generation from marginalized land and still continue to produce.

Opportunities for realistic net energy metering aggregation must be restored to allow our members to continue their commitment to sustainability and helping the state meet its clean energy goals. This becomes even more important as the push to electrify farm equipment increases and farmers and ranchers who wish to transition look for feasible solutions to do so. California's farmers and ranchers have demonstrated an ability to manage productivity and sustainability that will be lost to utility scale projects if aggregation or other meaningful solutions are not reached.

Chapter 6. Conserve Productive Farmland

6.1 – Implement policies and initiatives to support the protection and conservation of agricultural lands.

Farmers and ranchers have been protectors of their land's ability to inherently sequester carbon for generations through agricultural land conservation actions. The Williamson Act remains a critical tool for preserving agricultural and open-space lands through voluntary contracts between landowners and local governments. To sustain local participation in the Williamson Act, the state historically provided county subvention funds to reimburse counties for a portion of the property tax revenue lost under these contracts. However, state subvention funding has been significantly reduced over the past two decades, creating fiscal challenges for local governments. The RSA should recommend restoring county subvention funds as this would strengthen voluntary farmland conservation, uphold market-based land access, and reduce pressure for land conversion.

6.1.3 – Update General Plan guidelines to better address and prevent farmland loss.

The RSA mentions that the Office of Land Use and Climate Innovation is currently conducting an update of its General Plan Guidelines and that among the key updates will be a water analysis for land uses, including agriculture. This bullet point should mention that all water users must be considered – including agricultural, municipal, industrial, environmental, and emerging sectors such as AI data centers – to fully understand and plan for water scarcity across the state.

6.3 – Facilitate equitable land access to promote local food production and economic growth.

Any state or local government efforts aimed at expanding land access for new and beginning farmers should ensure that all land transfers are strictly voluntary, free from any use or coercion of eminent domain powers and based on the fair market value of agriculture lands.

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Chapter 7. Deploy Sustainable, Adaptable, and Integrated Pest Management

The Farm Bureau appreciates CDFA's focus on strengthening pest resilience under changing climate conditions. As CDFA and the Department of Pesticide Regulation (DPR) continue collaborating on pest-management initiatives, it is essential that all regulatory authority related to pesticide use, registration, and enforcement remain under DPR's jurisdiction. DPR possesses technical expertise, scientific review capacity, and regulatory framework necessary to ensure pesticide oversight remains consistent, science-driven, and protective of both environmental and public health goals. Maintaining a clear division of responsibility will prevent regulatory duplication and ensure consistency for growers statewide.

Farm Bureau also encourages CDFA and DPR to prioritize accelerating the review and approval of safer and more effective pest-management tools. As state and federal restrictions increase, growers face fewer registered products, which limits their ability to manage evolving pest pressures that are being intensified by climate change. CDFA should continue leveraging UC Cooperative Extension and future investments in pest resilience should focus on precision-application technologies—rather than on additional reporting or planning mandates.

7.1.1 – Bolster CDFA's capacity for monitoring for, treatment, and prevention of invasive species, pests, and diseases.

Farm Bureau supports CDFA's focus on emergency response operations under Section 7.1.1. The recent Oriental fruit fly infestations have demonstrated the immense economic damage that invasive pests can cause to California's growers and the broader food supply chain. These incidents underscore the need for the state to develop and maintain strong emergency programs and ensure that adequate, effective pest-management tools remain available to rapidly contain outbreaks. Supporting proactive monitoring and readiness will be essential to preventing widespread crop loss and market disruption in future infestations.

7.1.3 – Be proactive to threats against plant and animal health with ongoing technical assistance to facilitate widespread and equitable adoption of sustainable and integrated pest management.

While Farm Bureau supports the goals of the Sustainable Pest Management (SPM) framework, its implementation must remain science-based and practical for on-farm operations. CDFA's role should ensure that new approaches enhance, rather than restrict, growers' access to effective pest-management tools. SPM metrics and targets should not become de facto regulatory limits on pesticide use, and reported declines in pesticide use should be contextualized by changes in pest pressure, crop acreage, and environmental conditions to avoid creating misleading impressions of reduced need.

7.1.4 – Be proactive to threats against plant and animal health through research and predictive tool development.

Farm Bureau supports CDFA's intent under Section 7.1.4. However, this work must be paired with efforts to ensure that farmers retain access to existing registered products and that new products are approved in a timely manner. Across commodities and regions, growers consistently report that they are struggling to find effective and legally registered tools to manage key pests. Predictive models and advanced analytics can play an important role, but they cannot replace the need for practical, on-the-ground pest-control options.

We also urge CDFA to ensure that innovative precision-agriculture tools and predictive technologies are financially accessible to small and medium-sized farms. Without targeted incentives or workforce development support, these advancements risk being adopted only by large-scale operations, further concentrating production and reducing California's rich diversity of specialty crops. Efficiency and innovation are critical to maintaining California's agricultural competitiveness, but equity in access must be a guiding principle. To this end, we recommend that CDFA collaborate with California's community colleges and technical training programs to create certification pathways for agricultural workers in the use of advanced technology. In the coming years, the state may also need to consider cost-sharing or training reimbursement programs to ensure that producers—especially smaller operations—can afford to integrate new tools and remain viable participants in the agricultural economy.

Chapter 9. Enhance Agricultural Practices to Support Clean Air Communities

9.1.3 – Increase access to equipment upgrades and changing agricultural operation practices that improve air quality.

Farm Bureau appreciates the wide range of programs and incentives the state offers to provide farmers and ranchers with practical, cost-effective pathways to modernize equipment, adopt clean technologies, and improve air quality across rural and agricultural communities. The Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program, in particular, has a proven record of success delivering immediate air quality and public health benefits. The program has reduced over 28,000 tons of NOx, 1,600 tons of particulate matter, and 388,000 metric tons of carbon dioxide equivalent emissions annually, while prioritizing investments in disadvantaged and disproportionately impacted areas. FARMER also effectively leverages public dollars by generating over $1.5 billion in private matching funds to date. In a time of economic uncertainty, FARMER exemplifies a high-impact, cost-effective investment, one that advances environmental goals while strengthening the competitiveness and sustainability of California's farmers and ranchers. To build on this success, the state should continue and expand funding for the FARMER program, and other agricultural air quality

initiatives. Consistent and predictable investment will not only help the program maintain momentum, but it will provide certainty for equipment manufacturers and dealers and allow farmers to plan long-term upgrades that align with the state's emission reduction goals.

Separately, as the nation's largest agricultural producer, California generates vast amounts of agricultural waste. In recent years, extreme droughts, low commodity prices, and growing out-of-state competition have led to widespread orchard and vineyard removals, intensifying the state's agricultural waste management challenges. With open burning now banned or severely restricted across the state, farmers urgently need support to adopt sustainable and economically viable alternatives. Practices such as mulching or chipping for soil incorporation (whole orchard or vineyard recycling), composting, and biochar production offer effective solutions that reduce air pollution, improve soil health and fertility, manage dust, and sequester carbon. Increased investment in grants and cost-share programs would help offset high upfront costs that often prevent farmers from implementing these practices. In addition, developing regional biomass utilization and processing facilities would provide accessible outlets for agricultural byproducts while creating renewable energy and soil amendment opportunities. Furthermore, the state can strengthen these efforts by supporting research, demonstration projects, and equipment innovation that improve the efficiency and affordability of sustainable waste management.

Chapter 10. Advance Climate-Smart and Healthy Soils Practices

10.1.2 – Facilitate the adoption of climate-smart and healthy soils practices by farmers, ranchers, and private landowners.

Farmers recognize that healthy soil is one of the necessary, critical inputs of a successful farm. Soil health is vital for sustainability, productivity, and profitability. Unhealthy soil produces poor crops and poor feed for livestock, requiring soil inputs, while promoting weed growth or no growth at all. There are a wide range of practices that can help improve California's soil health, and to maximize the conservation and economic benefits of soil health on the farm, Farm Bureau provides the following recommendations:

1) Recognize that there is not a one-size-fits-all approach for on-farm soil health practices. There are over 400 commodities grown in California and each commodity and operation will have different conservation and economic needs to factor. We need to realize that in some circumstances, the practices that have been validated as promoting healthy soils may not make sense. In those circumstances, we can't make value judgements against those operations, but rather we need to use our motivation and resources to identify new practices that work;
2) Support programs that create incentives that encourage or recognize activities on working farms that enhance soil health. For example, to help address climate change,

we support compensation to farmers for planting crops or adopting farming practices that keep carbon in the soil. Application processes for these programs should be streamlined and not overburden producers, and compensation needs to be provided so that it actually makes financial and agronomic sense;

3) Continue to provide resources for research that supports soil practices;
4) Continue to utilize public-private partnerships for replanting fire-ravaged areas with beneficial species ecologically appropriate for the region that stabilize soil and reduce weed invasion;
5) Long-term implementation of on-farm soil health practices will depend on the practicality, feasibility, and availability of resources to the producer. Any soil health program should be locally focused and producer led.

Chapter 11. Improving Ranching Sustainability and Rangeland Management

11.1.1 – Facilitate grazing on public lands for ecological health and fuel load reduction.

Farm Bureau appreciates CDFA's intent under Section 11.1.1. California's forest and grasslands have been severely impacted by decades of drought, catastrophic wildfires, and pest infestations. Furthermore, inconsistent and insufficient management of these largely public lands has contributed to increasingly unhealthy landscapes. As the RSA mentions, well-managed livestock grazing plays a vital role in restoring and maintaining ecosystem health. It is often the most practical, cost-effective, and environmentally sustainable tool for reducing excessive vegetation and fuel loads that drive destructive wildfires on California rangelands.

To strengthen these outcomes, it is essential to educate both the general public and government agencies on the scientific research demonstrating the ecological benefits of strategic grazing management – including enhanced biodiversity, improved soil health, and reduced wildfire risk. Increasing outreach and soliciting education campaigns that highlight success stories can shift narratives and public perceptions.

11.2.1 – Uplift the role of rangelands in conserving and improving biodiversity, especially in conjunction with California's 30x30 Initiative.

Private rangelands are often located in California's fastest growing counties and are at significant risk of conversion to development and other uses. These rangelands are a critical foundation of the economic and social fabric of California's ranching industry and rural communities, and they will only continue to provide this important landscape for California's plants, fish, and wildlife if private rangelands remain in ranching. The species that rely on these rangeland habitats largely exist today due to the positive management practices of the ranchers who have owned and operated these lands and are committed to the continued health of these landscapes. The state must invest in grazing science and monitoring that can

improve our understanding of how adaptive grazing practices benefit native species, control invasive plants, and enhance soil health.

Chapter 12. Increase Dairy Farming Sustainability

12.1 – Increase knowledge and implementation of currently available methane reduction technologies.

CDFA's livestock methane reduction programs are among the state's most effective and cost-efficient GHG reduction projects funded under the Climate Investment Program. Combined, these programs have funded more than 300 methane avoidance projects on California dairy farms, reducing nearly three million metric tons of CO2e annually. These programs have leveraged close to $3 for every dollar invested by the state. These programs are oversubscribed, and CARB has estimated an investment of $75 million per year will be needed in each of the next several years leading up to 2030. Funding to incentivize livestock enteric emission reduction is also needed under a new program being established by CDFA. Adequate funding for these programs will enable further methane reduction that is critical for the state to meet its 2030 methane reduction and overall climate goals.

Thank you, again, for the opportunity to provide comments on the draft Climate Resilience Strategy for California Agriculture. Farm Bureau is eager to collaborate with CDFA and other stakeholders to develop a strategy that both aligns with California's vision for a sustainable and equitable future and protects the farm and its ability to combat climate change. Should you have any questions, please contact me at rfilgas@cfbf.com.

Best regards,

Richard Filgas
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California Farm Bureau