



November 21, 2025

*Submitted Via Email Only*

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RE: Comments on Climate Resilience Strategy for California Agriculture

Dear Ms. Jameson:

In response to requests for comments regarding the Climate Resilience Strategy for California Agriculture (Strategy), comments provided in this letter reflect common

viewpoints of the agricultural organizations and coalitions (herein referred to as “organizations”) that have signed below.

First and foremost, we must address fundamental questions about implementation and funding mechanisms for these recommendations. This document references numerous programs currently operated by state agencies and industry organizations, as detailed in our comments below. Future drafts must clearly specify and itemize any anticipated cost increases to agricultural operations and require consultation with agricultural stakeholders across the state. Growers face mounting regulatory expenses while net returns fail to commensurately rise, an unsustainable and concerning trend. Recent research on California lettuce production revealed that regulatory compliance costs surged by 1,366% between 2006 and 2024, while overall production costs rose 44.4% during the same period (Hamilton and McCullough, 2025, p.3).<sup>1</sup> Further, the cost of electricity has increased 47% since 1995 and more than 70% in just the last 5 years, with more cost increases on the way. CDFA's implementation of any recommendations should foster a sustainable and prosperous agricultural sector without imposing additional financial burdens on growers.

The comments below are specific to recommendations made in the Strategy.

### **Chapter: 1.2.1 Simplify and Streamline Regulatory Compliance Reporting**

We appreciate the Strategy’s acknowledgment of the importance of improving the effectiveness of current regulations and reducing compliance costs, while achieving the same benefits. The regulatory alignment study underway by CDFA, CalEPA and State Water Resources Control Board is cited as a tool for doing so. While we appreciate the intent and effort of this study, there are several concerns with the current recommendations that we and others submitted via a comment letter to CDFA on October 15. We echo those here and encourage they be considered in the context of this Strategy as well.

Strategies that incorporate information sharing between agencies may streamline and lessen the burden on growers but must also ensure compliance with privacy laws. Additionally, data must be used only for its intended statutory purpose, not repurposed by other regulatory programs beyond the original requirement's scope.

Further, we support the reduction of regulatory burdens for growers of all types and sizes and we ask that, when identifying strategies to reduce burdens, the needs of all types of growers of be considered.

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<sup>1</sup> Hamilton, L., & McCullough, M. (2025). Two decades of change: Evolving costs of regulatory compliance in the produce industry. Cal Poly Digital Commons. [https://digitalcommons.calpoly.edu/agb\\_fac/163/](https://digitalcommons.calpoly.edu/agb_fac/163/)

Related to the stated goal of collaborating, convening, and forming partnerships to address water-related challenges and opportunities, water quality coalitions and third-party organizations have proven essential in advancing grower education and achieving measurable water quality improvements in watersheds and groundwater basins.

Additionally, groundwater sustainability agencies statewide are actively refining and implementing groundwater sustainability plans to meet Sustainable Groundwater Management Act requirements. All these programs are funded by farmers across the state. Any additional initiatives addressing water-related concerns and opportunities must complement existing efforts and be developed in consultation with agricultural leaders to ensure alignment with grower needs without adding new financial burdens.

### **Chapter 1.3.1: Invest in Research for Precision Agriculture Technology to Identify How to Optimize Inputs and Improve Efficiency**

We support CDFA's recommendation to expand investments in research and technology development that advance precision agriculture. Prioritizing nutrient and irrigation management, along with tools enabling increasingly precise pest management will lead to valuable investments that benefit direct participants and the broader agricultural community. We encourage CDFA to structure collaborations with technology companies to ensure early and ongoing engagement with farmers, thereby ensuring that agricultural technology development addresses real-world systems and operational challenges.

## **Chapter 2: Ensure a Water System for Food System Resilience in a Hotter, Drier Future**

Throughout this chapter, references to water storage, conveyance, and the Sustainable Groundwater Management Act (SGMA) require additional context and specificity. To better support California's water supply priorities, we recommend the following enhancements be included in subsequent drafts of the Strategy.

### ***Water Storage and Conveyance Infrastructure***

Our organizations strongly support CDFA's recognition of the need to build new water storage capacity and maintain conveyance infrastructure, as outlined in Section 2.2. California's current water storage system was designed for a smaller population and different climate conditions. This infrastructure is no longer sufficient to meet the demands of California's growing population while addressing increased regulatory pressures and declining water allocations. Increased surface and groundwater storage, coupled with modernized conveyance systems, are vital to sustaining both agricultural production and community water reliability. The Strategy must take a more active stance in supporting new state and local investments in these systems. Without expanded water storage, increased recharge capacity, and reliable water conveyance, California will

continue to lose the opportunity to capture and store water during wet years which will result in fallowing of farmland, lost jobs, and higher food prices for all.

The San Joaquin Valley Water Blueprint's Economic Impact Analysis (Economic Analysis) provides a clear picture of what is at stake if the state fails to act. The Economic Analysis found that, without additional water supply investments and conveyance improvements to offset SGMA restrictions, the San Joaquin Valley could permanently fallow up to one million acres of productive farmland, leading to the loss of up to 85,000 jobs and over \$7 billion in annual farm revenue (Sunding & Roland-Holst, 2020)<sup>2</sup>. These impacts would ripple far beyond agriculture affecting rural communities, local tax bases, and California's food supply chain. This Economic Analysis demonstrates that with a coordinated effort to expand groundwater recharge, improve conveyance infrastructure, and capture high flow water during wet years, much of this loss can be avoided. The Strategy should reflect and build upon these findings, emphasizing the need for immediate investment and policy alignment to preserve both water resilience and economic stability in the state's most productive agricultural regions.

#### ***Support for GSA and Local Project Funding***

The Strategy also fails to adequately emphasize the critical role of Groundwater Sustainability Agencies (GSAs) and local water management entities in building resilience. GSAs have been tasked with achieving sustainability under the Sustainable Groundwater Management Act (SGMA), yet most lack the dedicated funding or technical support necessary to complete infrastructure projects that provide recharge and conveyance benefits. CDFA should work with the Department of Water Resources and the State Water Board to create a long-term funding mechanism for GSA projects that expand groundwater recharge capacity, improve conveyance systems, and increase surface storage capacity. Resilience begins at the local level. Without allocating appropriate funding to support GSA projects and proper support the goals of Chapter 2 cannot be achieved.

#### **Chapter 2.3.2: Expand Implementation of Riparian Zone Restoration Practices in Agricultural Land**

Although the proposal for riparian zone restoration on agricultural land outlined in this Strategy suggests positive expected outcomes, it is essential to acknowledge the substantial resources required for installing riparian vegetation. These include irrigation, and at times inputs required to promote riparian establishment, as well as ongoing maintenance. Furthermore, significant conflicts exist between riparian buffers and food safety requirements, many of which mandate vegetative setbacks adjacent to production fields.

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<sup>2</sup> Sunding, D., & Roland-Holst, D. (2020, February 15). Blueprint economic impact analysis: Phase one results. UC Berkeley. [https://cawaterlibrary.net/wp-content/uploads/2024/09/Blueprint.EIA\\_PhaseOne.2.28-v41.pdf](https://cawaterlibrary.net/wp-content/uploads/2024/09/Blueprint.EIA_PhaseOne.2.28-v41.pdf)

Riparian installations should remain a voluntary farm-level management practice, incentivized in watersheds where they represent scientifically sound mitigation strategies, rather than prescribed requirements. Support for riparian restoration should continue through CDFA's Healthy Soils Program as an incentive-based option that accommodates food safety requirements. It should be clearly stated in this Strategy that riparian installations should be encouraged through grant making and other incentives and in no way should this recommendation be referenced to support a regulatory mandate.

### **Chapter 2.3.3: Promote Responsible Nutrient Management to Reduce Nutrient Leaching Runoff from Agricultural Land**

The Strategy makes little reference to the organizations leading substantial regulatory compliance efforts related to nitrogen management. The generalized assumptions made in the Strategy regarding fertilizer use and water quality implies that fertilizer use has remained unchanged, which is categorically inaccurate.

Throughout the state, Irrigated Lands Regulatory Program (ILRP) Coalitions and third-party groups are working with growers to develop and implement plans and programs to understand and manage water quality impacts from irrigated agriculture. As an example, in the Central Valley ILRP Coalitions have made considerable progress in a variety of ways including:

- Completion of Groundwater Quality Assessment Reports to delineate areas across the Central Valley that are vulnerable to nitrate contamination and characterize current groundwater quality conditions
- Establishment of Groundwater Trend Monitoring programs to track changes in groundwater quality and Drinking Water Supply Well Monitoring programs to evaluate on-farm drinking water supply well quality and notify users and the Central Valley Regional Board of exceedances
- Establishment of routine grower-reporting programs to understand trends in implemented practices and nitrogen application (“A”) and removal (“R”) rates for all parcels enrolled in the ILRP
- Development of Management Practice Evaluation Programs to identify, evaluate, and promote practices that are protective of groundwater quality
- Creation of a robust and comprehensive Groundwater Protection Formula, Values, and Targets approach to estimate current nitrate discharge rates at the field-scale and consider local hydrologic conditions; establish and routinely revise (every five years) targeted township-based discharge rates that are protective of groundwater quality; and track progress towards these targets over time
- Proposal of crop-specific Acceptable Ranges of A/R to establish agronomically appropriate nitrogen use efficiencies based on research and the current grower-

reported distribution of A/R ratios by crop and identify growers outside of the Acceptable Ranges for follow-up actions

- Establishment of Groundwater Quality Management Plans to synthesize the above information into coherent plans to manage irrigated agriculture's impact on groundwater quality

This framework integrates monitoring, detailed reporting, state-of-the-art modeling, township-scale water quality and individual grower-based efficiency metrics, and outreach and education to growers and their advisors to chart a clear path forward toward protecting water quality while sustaining a vibrant agricultural landscape. Such accomplishments represent a substantial improvement to the Central Valley's collective understanding of the state of nitrate issues and what is needed to address them.

These coalitions and third-party groups are notably absent from this Strategy section despite their substantial contributions to positive outcomes related to nutrient management practices. The significant progress achieved and ongoing advancements by these coalitions and third-party organizations must be incorporated into any discussion of promoting responsible nutrient management, and these entities should be recognized as leaders in this field.

### **Chapter 3.1: Enable a Safer and Healthier Work Experience for Those in the Agricultural Industry**

This recommendation encompasses several key elements, including support for state policies that improve working conditions and investment in research and collaborative development of on-farm health and safety tools. Our organizations and stakeholders are deeply committed to workplace safety and have worked diligently to foster cultures that prioritize compliance with the law (California Code of Regulations, Section 3395) and meet requirements for heat illness prevention in agriculture.

California has the most stringent heat illness protection standards for workers in the nation and only one of only three states in the nation with this type of regulation. The regulations are effective and are working. Instances of heat illness still occurring in the state have consistently been due to regulations not being followed.

As CDFA considers its role in supporting the Department of Industrial Relations' (DIR) regulations, the department should prioritize education and outreach. Previously, DIR published pocket guidelines for workplace use to help employers and workers make compliant decisions in real-time. However, these guidelines have been unavailable for several years, and educational resources are now primarily accessible only online. CDFA could play a valuable supporting role by developing and distributing physical, field-ready resources similar to DIR's former pocket guides. At this stage of implementation, such

practical educational tools would be more impactful than pursuing further policy development.

Related to any questions about the implementation of heat illness regulations, we strongly encourage the department to engage directly with our organizations. This engagement will provide crucial insight into the extensive measures already in place to protect the health and safety of all workers in hot and dry conditions. Input from those actively implementing current regulations will be essential to making informed, effective decisions about how best to support California's agricultural workforce.

## **Chapter 5: Advance Energy Efficiency and Decarbonization for Agricultural Operations**

As the Strategy points out, facilitating electrification in agriculture while decarbonizing the economy requires multi-agency collaboration. This is especially important for ensuring that agricultural operations continue to have access to clean, renewable energy sources. Unfortunately, recent decisions by the California Public Utilities Commission (CPUC) are discouraging, rather than encouraging, on-farm renewable energy development. The CPUC's elimination of Net Energy Metering aggregation in the agricultural sector effectively eliminates future opportunities for on-farm solar systems. The CPUC is also currently proposing to eliminate the bio-energy feed-in- tariff program known as BioMAT. Elimination of this program will further impact the development of on-farm bioenergy projects, including dairy digesters, which can produce clean renewable electricity. Elimination of BioMAT will also eliminate the ability to finance small, renewable distributed agricultural biomass projects.

California's energy rates remain high and continue rising. Electricity rates are double the national average and outpacing inflation significantly. Some farms now pay over \$0.40 per kilowatt-hour, dramatically increasing irrigation and energy-related operational costs. Agriculture depends on electricity throughout the entire supply chain, from farm operations through packing, cold storage, processing, and transportation. These escalating electricity rates directly increase water pumping costs, exacerbating already high on-farm expenses and driving up food prices statewide.

Energy rates in California are also far more expensive than those found in other western states, putting California farmers and food producers at a significant cost-of-production and competitive disadvantage.

The unfortunate reality is rates are going to continue to skyrocket over the next decade as electrification continues. Cost drivers include investments in transmission lines, undergrounding of power lines, extension and expansion of distribution lines to meet the state's electrification goals, and the development of offshore wind resources. Combined, these drivers represent more than a hundred and fifty billion dollars in increased costs that

will be passed along to ratepayers. These cost increases will come at the expense of farmers, food processors, and other customers.

State policymakers and regulators must take meaningful action to mitigate electricity cost pressures. Without such measures, electrification efforts will be undermined as additional farming and food processing operations face closure or relocation.

### **Chapter 5.2.2: Improve Energy Efficiency and Flexible Electricity Demand Through Technological Upgrades**

This section includes a focus on electric vehicles, including medium and heavy-duty vehicles used by agriculture. There are several factors that make a transition to electric vehicles challenging and expensive. Electric medium and heavy-duty vehicles cost significantly more than their diesel equivalents, and the business case for transitioning remains unclear to many, especially given inadequate charging infrastructure and grid capacity limitations. While this Strategy acknowledges some of the infrastructure challenges, the cost of making this transition is not sufficiently considered, and should be incorporated into this strategy, along with solutions and opportunities to offset those costs.

We have received reports that electric vehicles and equipment lack the robustness necessary for farm work; must be charged before the day is over, necessitating work stoppage; are affected by weather; don't have enough power; and require too long to recharge. Further, the typical lifespan is often less than five years compared to the decade or more usually found with traditional farm tractors and trucks.

Within this section, there is also mention of the Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program, which provides funding through local air districts for agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations. This program has been a valuable multi-benefit resource for updating equipment but has inconsistently allocated funding resources. We request CDFA to support this program by encouraging continued funding so that new technologies may be made available to agricultural operations, benefiting farms and improving air quality.

### **Chapter 7: Deploy Sustainable, Adaptable, and Integrated Pest Management**

California is experiencing an unprecedented influx of invasive species in recent years, including multiple fruit fly species, Carpophilus beetle, cotton seed bug, diamondback moth and others. While debate continues regarding root causes, one fact is clear: the state's resources to combat this growing threat are woefully inadequate.



Staffing shortages present a critical challenge. For example, a recent statewide rodent infestation was addressed by only a single team responsible for trapping and monitoring across the entire state. Additionally, the retirement of key UC Cooperative Extension (UCCE) personnel specializing in Integrated Pest Management has left growers without essential guidance on combating these invasive species.

The organizations signing this letter fully support bolstering CDFA's resources in this critical area through expanded Plant Health and Pest Prevention Services and enhanced monitoring capabilities. Specifically, we need:

- Increased personnel dedicated to pest prevention and rapid response
- Enhanced coordination with USDA APHIS for federal-state collaboration
- Restored UCCE partnership capacity through UC Agriculture and Natural Resources (UC ANR) and UC Integrated Pest Management (UC IPM) programs

California has lost numerous expert entomologists who provided region-specific and crop-specific expertise through UCCE. These specialists are essential and many of the sustainable pest management strategies we use every day originated from UCCE research and outreach. Reinvesting in this infrastructure is critical to protecting California agriculture from invasive species threats.

This section also refers to sustainable pest management and the Sustainable Pest Management Roadmap (Roadmap) interchangeably, although they are two distinct concepts. Our organizations wholeheartedly support programs that provide access to additional tools, resources, and sustainable methods for addressing pest pressures in agriculture, and we are committed to advancing sustainable pest management. However, while stakeholders from various groups participated in developing the Roadmap referenced in this section, certain elements of that document lacked consensus. Therefore, referring to the Roadmap interchangeably with the broader concept of sustainable pest management does not accurately represent the view of many agricultural stakeholders.

Further, this section states that "In July 2024, the state legislature embraced the broad goals and recommendations of the SPM Roadmap..." (Page 147). This does not accurately represent the legislation adopted in July 2024 (AB 2113). The bill amended existing law (Food and Agricultural Code Section 11520) to declare the importance of implementing sustainable pest management in California and identified ways to do so. However, it did not endorse the Roadmap itself, as this section appears to suggest.

It is critical to note that the SPM Roadmap is not in state statute or in California Department of Pesticide Regulation's (DPR's) legislative charter. Moreover, it is our understanding the work group was encouraged to develop recommendations without

regard to cost or implementation timeline and that items were not developed through consensus. Rather, AB 2113, instead of endorsing the Roadmap, supported sustainable pest management efforts in part by setting forth funding and direction to DPR to prioritize hiring for positions within the pesticide registration branch and improve the timeliness of the registration and reevaluation process (Food & Agricultural Code Section 12840).

We urge CDFA to support sustainable pest management, something agriculture has done for many years through the responsible use of registered materials, adoption of integrated pest management systems, incorporation of alternative methods when they are feasible and effective, and more, but not conflate that effort with the Roadmap in this Strategy.

## **Chapter 8: Boost Biodiversity on Farmlands**

This section refers to farms being positioned to provide “habitat and habitat connectivity in landscapes that lack significant natural habitat,” (page 161). Consistent with our comments related to section 2.3.2, we are concerned that while the food safety challenges inherent in creating habitat are briefly mentioned, there is little information provided in this Strategy related to the pathogen vector that new habitat may become in some systems. New habitat can attract birds, rodents, and other animals that may carry foodborne pathogens such as *E. coli* O157:H7 and *Salmonella*. Food safety auditors and buyers often require buffer zones between production areas and wildlife habitat. Creating habitat too close to fields may conflict with these requirements or necessitate larger setbacks, reducing productive acreage.

California agriculture has been dedicated to supporting research to better understand these systems to effectively manage food safety goals while also identifying opportunities for co-management. However, adding this priority without recognition of that effort only tells part of the story. It is critically important that this strategy document not lead to future requirements that conflict with the Food Safety Modernization Act, the Leafy Greens Marketing Handler Agreement, and any other food safety rules.

Further, for almost 20 years the Center for Produce Safety (CPS), working with farmers, shippers, state and federal government has funded research to advance food safety, benefiting consumers worldwide. In a recent publication, CPS specifically noted that “Research surveys have demonstrated that a wide range of wild animals including insects, birds, amphibians, and reptiles can carry human pathogens and must be considered when conducting hazard analyses and risk assessments. Mitigating the potential risks from wild animal intrusions is about leveraging our understanding of the biology of the animal, i.e., contamination hazards within the environment, the animal’s movements relative to those hazards and the farm or facility, and the animal’s basic behaviors. Aggressive monitoring of

fields and preharvest application of buffer zones have proven to be effective in mitigating risks for some types of animals.” (Center for Produce Safety, 2025, p. 1).<sup>3</sup>

Within this section of the Strategy, the Center for Produce Safety’s considerable trove of research should be referenced as a resource, especially as CDFA works to transfer known information regarding animal intrusion and food safety to various groups listed in this Strategy, a list that should also include farmers.

## **Chapter 9: Enhance Agricultural Practices to Support Clean Air Communities**

### ***Fertilizer Application & Air Quality***

We have serious concerns about the Strategy’s assumptions of air quality impacts due to fertilizer application. Our interpretation of the referenced CARB Expert Panel Report is that more research is needed to correctly identify emissions associated with fertilizer application. Their report points out that “estimating the magnitude of soil NOx emissions, both globally and regionally, has been fraught with uncertainty.” (California Air Resources Board, 2025, p. 10).<sup>4</sup>

As noted in our response to Section 2.3.3 above, farmers throughout the state have made significant strides in their understanding of fertilizer management and have applied that knowledge to on-farm practices. This section should acknowledge these demonstrated improvements over the last decade and recognize the expectation of continued advances in nitrogen use efficiency in the coming years and refrain from making or proposing to make policy recommendations related to fertilizer application.

### ***The FARMER Program***

As stated in our response to Section 5.2.2, the undersigned organizations appreciate CDFA highlighting CARB's FARMER program in this chapter. FARMER, in partnership with the Carl Moyer Program, has proven to be one of the most cost-effective programs for reducing criteria pollutants in California.

San Joaquin Valley growers, many operating within the boundaries of disadvantaged communities, have achieved remarkable results: over 12,000 tractors replaced, eliminating more than 11 tons per day of criteria pollutants. These accomplishments represent billions of dollars in grower investment through cost-share funding over the life of the FARMER program. A separate CARB-funded study on tractor use and equipment

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<sup>3</sup> Center for Produce Safety. (2025). Fueling change: 17 years of research insights.

<https://www.centerforproducesafety.org/uploads/files/uploads/files/Acc.-at-a-Glance-Overarching-Lessons.pdf>

<sup>4</sup> California Air Resources Board. (2025, May 28). Scientific evaluation of nitrogenous emissions from soils: Final report (Contract No. 23RD017). [https://ww2.arb.ca.gov/sites/default/files/2025-06/Soil%20N%20SMERP\\_Final%20Report\\_20250527.pdf](https://ww2.arb.ca.gov/sites/default/files/2025-06/Soil%20N%20SMERP_Final%20Report_20250527.pdf)

efficiency found that 80% of monitored tractors were converted to cleaner technology through the FARMER program.

While CDFA does not administer FARMER, we recommend that CDFA and CARB jointly promote this successful program during the Legislature's annual budget development process to ensure continued and expanded funding.

### ***Dust & PM 2.5***

We are deeply concerned by the Strategy's characterization of agriculture's contribution to particulate matter emissions. The agricultural industry has sponsored and coordinated numerous peer-reviewed studies specifically examining emissions from field activities. The evidence consistently demonstrates that agricultural dust is not a significant source of PM<sub>2.5</sub>:

- Almond harvest studies have quantified that PM emissions during harvest operations range from 1.1–1.6% of total suspended particulates, making it an insignificant source of PM<sub>2.5</sub>. (Faulkner et al., 2011, p. 409-417)<sup>5</sup>
- The California Regional Particulate Matter Air Quality Study (CRPMAQS), funded and conducted by the California Air Resources Board during the 1995 Integrated Monitoring Study, found that "Geological Material" (which includes agricultural dust) constituted less than 1% of total source contributions. (Magliano, 1997)<sup>6</sup>

These findings establish that dust from in-field agricultural activities is an insignificant contributor to PM<sub>2.5</sub> emissions statewide.

### ***Strategic Focus for Emissions Reduction***

While agricultural land fallowing may increase dust, this represents coarse particulate matter with minimal PM<sub>2.5</sub> impact. Resources would be far more effectively directed toward combustion-related emissions, where meaningful air quality improvements can be achieved. Programs like CARB's FARMER initiative, which targets mobile agricultural equipment emissions, represent the most impactful pathway for reducing agriculture's contribution to criteria pollutants. Sustained and expanded funding for such combustion-focused programs should be the priority.

### ***Electrification***

We are concerned with CDFA's support of CARB's pursuit of total electrification within the agricultural sector. To date, electrification efforts have imposed significant costs on

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<sup>5</sup> Faulkner, W. B., Shaw, B. W., Ullman, J. L., & Lacey, R. E. (2011). Evaluation of particulate matter abatement strategies for almond harvest. *Journal of Air & Waste Management Association*, 61(4), 409–417.  
<https://doi.org/10.3155/1047-3289.61.4.409>

<sup>6</sup> Magliano, K. L. (1997). Chemical mass balance modeling of data from the 1995 integrated monitoring study. California Regional PM<sub>10</sub>/PM<sub>2.5</sub> Air Quality Study.

participating growers, with the industry too often serving as a testing ground for unproven equipment. These experiences have frequently resulted in equipment failures and financial losses, leading some operations to reject electric alternatives entirely. Expecting early adoption while using the agricultural industry for manufacturer research and development represents an unreasonable burden. Such "proof of concept" efforts result in inflated equipment costs, limited availability, and inadequate performance during critical operational periods.

The agricultural industry relies on numerous specialty equipment types to support diverse commodity needs. Cotton module movers, for example, transport harvested cotton from fields to gins. Only two module mover manufacturers remain in the United States, and only one has shown interest in developing a zero-emission vehicle (ZEV) model. The quoted price for this untested equipment, used just two months annually, exceeded \$450,000 for the truck and chassis alone, excluding the electrical infrastructure required for charging. The manufacturer has not conducted field research demonstrating the equipment's efficacy in traversing field conditions during harvest.

Electric truck efficacy is further questionable when considering commodity transportation from field to processing facility or from processing facilities to ports. Using module movers as an example, ZEV models sacrifice 9,000 pounds of carrying capacity due to battery weight. This reduction necessitates additional truck trips to transport the same volume of commodities, undermining the environmental benefits electrification is intended to achieve.

Utility companies are constraining electricity demand for agricultural operations through grid availability limitations. Multiple processing facilities seeking to expand electrical service in preparation for state electrification mandates have been informed that utilities will not expand substation capacity. In one case, PG&E offered a substation upgrade only if the facility paid \$250,000 for the required equipment, in addition to the escalating electricity rates agriculture already faces.

These cumulative challenges, including unproven specialty equipment, reduced operational efficiency, and inadequate grid infrastructure, demonstrate that wholesale electrification mandates are premature and economically untenable for California agriculture. CDFA should not endorse electrification policies until these fundamental barriers are resolved.

### **Chapter 12.1: Increase Knowledge and Implementation of Currently Available Methane Reduction Technologies**

We appreciate the Strategy's acknowledgement of the economic and cultural significance of California dairies. The dairy industry continues to be an economic driver in the state

economy despite increasing economic and regulatory pressures. While the Strategy acknowledges the success of programs and tools to reduce methane emissions, it does little to provide specific strategies and actions to increase funding for popular programs that have a track record of success in substantially reducing dairy methane emissions. The Strategy makes specific reference to larger dairies and their ability to absorb start-up costs for dairy digesters and other strategies. However, it does not provide tangible goals, strategies, or actions for increasing funding and availability of these tools for smaller dairy operations beyond increasing technical assistance.

CDFA should carefully outline specific strategies and partnerships to grow funding opportunities for dairy methane emissions reductions. Additionally, the contents of this chapter would be well served by the inclusion of cost analyses for various dairy methane emission reduction tools and strategies. Understanding potential costs to transition can better frame strategies for increasing adoption, especially among small- to medium-sized farms.

## Conclusion

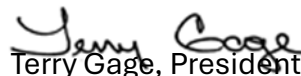
While we understand and appreciate the importance of identifying strategies for climate resilience for California agriculture, our comments outline significant concerns and elements of this Strategy that must be addressed as edits are made to this draft. Further, any recommendations ultimately implemented should not impose additional financial or regulatory burdens on California growers, who are already navigating substantial compliance requirements and economic pressures.

Thank you for your consideration of our comments, we look forward to your response. Please contact us if you have any questions.

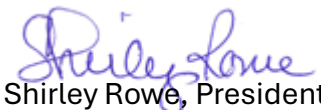
Sincerely,



Emily Rooney, President  
Agricultural Council of California



Terry Gage, President  
California Agricultural Aircraft Association



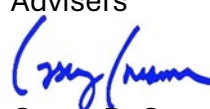
Shirley Rowe, President  
African American Farmers of California



Ruthann Anderson, President/CEO  
California Association of Pest Control  
Advisers



Tim Ashlock, PE  
Buena Vista Coalition



Casey D. Creamer, President/CEO  
California Citrus Mutual

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Roger Isom, President/CEO

California Cotton Ginners & Growers  
Association

Western Tree Nut Association



Kristy Kneiding, Manager

California Date Commission



Daniel Hartwig, President

California Fresh Fruit Association



Rick Tomlinson, President

California Strawberry Commission



Robert Verloop, Executive Director/CEO

California Walnut Commission



David Halopoff, PE, ILRP Coordinator

Cawelo Water District Coalition



Caitie Diemel, Executive Director

East San Joaquin Water Quality Coalition



Chris Linneman, Coordinator

Grassland Drainage Area Coalition



Christopher Valadez, President

Grower-Shipper Association of Central  
California



Nicole Bell, Manager

Kern River Watershed Coalition Authority



Debra Dunn, Coordinator

Kings River Water Quality Coalition



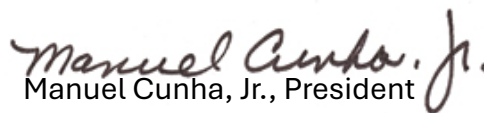
Breanne Vandenberg, Executive Director

Merced County Farm Bureau



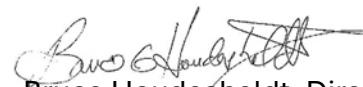
Norman C. Groot, Executive Director

Monterey County Farm Bureau




Manuel Cunha, Jr., President

Nisei Farmers League



Bruce Houdesheldt, Director of Water  
Quality

Northern California Water Association &  
Sacramento Valley Water Quality  
Coalition



Teri Bontrager, Executive Director

Santa Barbara County Farm Bureau



David De Groot, PE

Tule Basin Water Quality Coalition



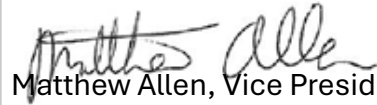
Kirti Mutatkar, President/CEO

UnitedAg

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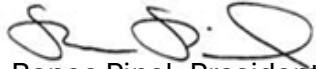
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Matthew Allen, Vice President, State

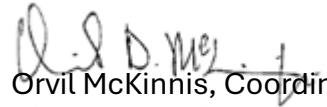
Government Affairs

Western Growers Association



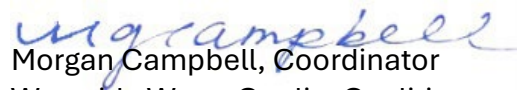
Renee Pinel, President/CEO

Western Plant Health Association



Orvil McKinnis, Coordinator

Westside San Joaquin River Watershed  
Coalition



Morgan Campbell, Coordinator

Westside Water Quality Coalition