## CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE







# **Objectives**

- Share overview of the Climate Resilience Strategy for California Agriculture (RSA)
- Gather input to build an inclusive strategy that represents the needs of the agricultural community
- Input from workshops will be incorporated into the final RSA



# Agenda

- Introductions
- Context and Purpose of RSA
- Overview of RSA and How to Read It
- Equity Principles
- Next Steps



# Mentimeter Question

## Have you read the RSA?

- Yes
- Skimmed it
- Read the Executive Summary
- No



# Mentimeter Question

Question: What are you most interested in getting out of today's workshop?

- Generally learn about the RSA
- Dive into one chapter
- Share about what the RSA is missing
- Other (open ended)



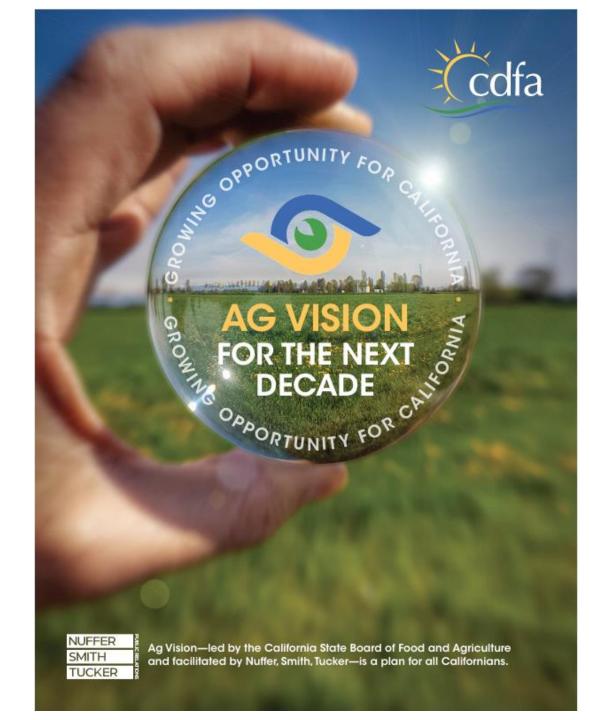


Background



# Why create a Climate Resilience Strategy?

Follows Ag Vision For The Next Decade priority to **Foster climate-smart**, resilient, and regenerative food systems.



## The Climate Resilience Strategy:



Highlights climate-related agricultural challenges, policies, and actions across state government



Identifies areas of opportunity for future action



Explores connections with partners, including local and federal initiatives



Provides equity principles to evaluate and improve access to state projects, programs, policies, and more!

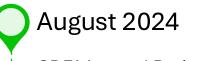


# Primary Audiences



# How did we get here?





CDFA Internal Review and Revisions



Pre-release listening sessions & outreach



att 2025

Public comment and stakeholder outreach

CDFA Science Advisory
Panel Workshop learning
from partner agencies and
subject experts
on specific topics

May 2024

Interagency and stakeholder review; Bluepoint Planning brought in!

Fall 2024

Interagency Review and Revisions

Summer 2025

Tentative Release

Winter 2026





# **Context and Purpose**



# California Agriculture by the Numbers

Geography and
innovative growers
make our state the most
profitable agricultural
economy in the nation

Over **400 crops**, supplying 1/3 of the nation's vegetables and 3/4 of its fruits and nuts

**\$61.2 billion** in sales in 2024

Specialty crops thrive in California

90% of farms are **small**, **family-owned** and 62% are under 50 acres

67% of California farms earn less than \$100,000 annually; 50% earn under \$50,000



## **Climate Hazard Impacts**



Increased pest pressure



Stress on plants, animals, and people



Less water availability



Soil, water, and air quality degradation



Higher energy demands



# Threats to Agricultural Industry



Negative animal and human health effects, including mortality



Lower yields



Product and crop losses



High production costs



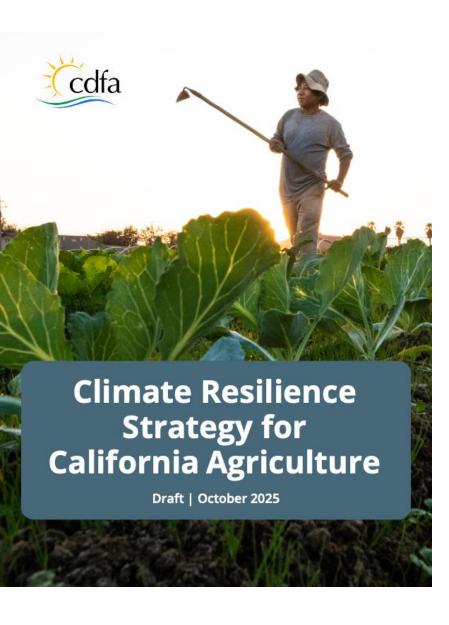
Agricultural land conversion



# State Action on Climate Change

- AB 1279 and AB 32: Carbon Neutrality by 2045
- SB 1383: Reduce methane emission 40% below 2013 levels by 2030
- AB 1757: Nature-Based Solutions Targets





# **How to Read the RSA**



## **Table of Contents**



- Purpose and Need
- Pillar 1: Support a Thriving and Resilient Food Sector
- Pillar 2: Protect Natural Systems Critical to Agriculture
- Pillar 3: Encourage Resilient Agricultural Practices
- Summary and Conclusion to be added



# **Climate** Resilience **Strategy** Framework

**Key Objectives** The following are the twelve key objectives for the document, divided into three organizational Pillars organizational Pillars.



Support a Thriving and **Resilient Food Sector** 

- 1. Foster a Robust and Sustainable **Agricultural Economy**
- 2. Ensure a Water System for Food System Resilience in a Hotter, Drier Future
- 3. Support Agricultural Workforce **Wellbeing and Health**
- 4. Protect Animal Health
- 5. Advance Energy Efficiency and **Decarbonization for Agricultural Operations**



**Protect Natural Systems** Critical to Agriculture

- 6. Conserve Productive Farmland
- Deploy Sustainable, Adaptable, and **Integrated Pest Management**
- 8. Boost Biodiversity on Farm Lands



**Encourage Resilient Agriculture Practices** 

- 9. Enhance Agricultural Practices to **Support Clean Air Communities**
- 10. Advance Climate-Smart and Healthy **Soils Practices**
- 11. Improve Ranching Sustainability and Rangeland Management
- 12. Increase Dairy Farming Sustainability

## Goals

These five goals will be implemented through targeted strategies and actions under each key objective area.

### Goal 1 **Increase and Enhance Technical Assistance**

Increase and enhance technical assistance to promote and share program information and enable all farmers to utilize a broad suite of agricultural resources.

### Goal 2 **Enhance Program Effectiveness**

Align program design, through engagement, tracking and monitoring, to on-the-ground requirements including funding, eligibility, and access to spur the transition to climate smart practices.

## Goal 3 **Grow Partnerships and** Collaboration

Grow durable local. state, federal, tribal, and academic partnerships and internal collaboration to increase awareness. effectiveness, and expand reach and uptake of programs.

## Goal 4 Align and Simplify **Policies and Regulations**

Improve policies and regulations to be simpler, aligned across agencies and sectors, reducing barriers to implementation and participation.

## Goal 5 **Demonstrate and Invest** in Innovation and **Technology**

Demonstrate and scale climate smart agriculture through research and investment in novel technologies.

## **Equity Principles**

These principles will be used to help evaluate and develop more equitable initiatives and policies for the California agriculture industry.

Health & Wellbeing

**Accessibility** 

**Capacity Building** 

**Accountability & Transparency** 

Cultural Relevance

**Financial** Viability

**Key Objectives** 



- Foster a Robust and Sustainable Agricultural Economy
- Ensure a Water System for Food System Resilience in a Hotter, Drier Future
- 3. Support Agricultural
  Workforce Wellbeing and
  Health
- 4. Protect Animal Health
- 5. Advance Energy Efficiency and Decarbonization for Agricultural Operations



# Protect Natural Systems Critical to Agriculture

- 6. Conserve Productive Farmland
- 7. Deploy Sustainable, Adaptable, and Integrated Pest Management
- 8. Boost Biodiversity on Farm Lands



# Encourage Resilient Agriculture Practices

- Enhance Agricultural
   Practices to Support Clean
   Air Communities
- 10. Advance Climate-Smart and Healthy Soils Practices
- 11. Improve Ranching Sustainability and Rangeland Management
- 12. Increase Dairy Farming Sustainability

# Mentimeter Slide

- Do the pillars capture the big buckets of issues for California agriculture?
  - Slide Bar, with open ended option



## Goals



## Goal 1: Increase and Enhance Technical Assistance

Increase and enhance technical assistance to promote and share program information and enable all farmers to utilize a broad suite of agricultural resources.



# Goal 4: Align and Simplify Policies and Regulations

Improve policies and regulations to be simpler, aligned across agencies and sectors, reducing barriers to implementation and participation.



# Goal 2: Enhance Program Effectiveness

Align program design, through engagement, tracking and monitoring, to on-the-ground requirements including funding, eligibility, and access to spur the transition to climate smart practices.



# Goal 5: Demonstrate and Invest in Innovation and Technology

Demonstrate and scale climate smart agriculture through research and investment in novel technologies.



# Goal 3: Grow Partnerships and Collaboration

Grow durable local, state, federal, tribal, and academic partnerships and internal collaboration to increase awareness, effectiveness, and expand reach and uptake of programs.



# Mentimeter Slide

Are there other cross-cutting goals that should be considered throughout the Strategy? [open ended]



# Format of Each Chapter



Context: Summarizes high-level background information and overall climate related challenges relating to each chapter topic.



Strategies and Actions: Summarizes information related to each action, including relevant existing programs and policies.



Case Studies: Share relevant case studies in sidebars.



Implementation Table: At the end of each chapter, an implementation table with actions and lead implementer is included.





## Chapter 1: Foster a Robust and Sustainable Agricultural Economy

### **Strategies and Actions**

There are a number of solutions that California can adopt to help our farms and ranches thrive even as climate change progresses. In this chapter, we will focus on policy, program, and investment solutions that address climate-driven risk and financial resilience responses, including policy and regulatory support opportunities, technological innovations, market and supply chain strengthening measures, and opportunities to build a climate-smart paricultural workforce.

## Strategy ·

Goal

#### 1.1 Support financial risk reduction measures for farmers.

As climate change continues to increase the likelihood of natural disasters, pest pressure, diseases, among others, farmers are looking to protect their crops and financial livelihood. Supporting financial risk reduction measures for farmers, through existing mechanisms like on-farm resilience-building practices, crop insurance, and disaster relief, and through new tools like parametric insurance, will alleviate some of the burden on farmers from the impacts of climate change. In addition, programs that provide recovery funding are critical in filling gaps that crop insurance may not cover or cover completely.

## 1.1.1 Expand insurance options for specialty crops, especially to reduce risk from extreme weather-related losses.



Goal 2: Enhance Program Effectiveness

#### Crop Insurance and Specialty Crops

Crop insurance is a type of insurance that protects farmers from natural disasters, pest destruction, poor harvests, and other unforeseen circumstances. In fact, losses are seen as inevitable in farming. Crop insurance is essential to farming because it provides financial stability and helps manage risks associated with adverse growing conditions and market conditions. Crop insurance fills gaps that private insurance coverage may not cover, ensuring that farmers can recover and continue farming.

Crop insurance is managed through a public-private partnership between the federal government, specifically, the USDA Risk Management Agency (RMA), and private insurance providers. Farmers buy insurance through an approved provider, and the federal government subsidizes the insurance premium. While policies are set by the RMA, ensuring that prices are the same for the same policy no matter where it's purchased, the price can still vary depending on the value of the crop and the risk of

Action





# Foster a Robust & Sustainable Agricultural Economy

**Objective**: Improve the economic resilience of California farms and ranches in the face of climate change.

- Support financial risk reduction measures for farmers.
- Reduce workload associated with meeting or exceeding regulatory goals.
- Invest in research and development to provide new options for building resilience on farms.



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

**Objective**: Create sustainable and reliable water access for ensuring a resilient food system.

- Bring aquifers into balance to ensure groundwater supply.
- Build new water storage capacity and maintain conveyance infrastructure.
- Continue improving on-farm water use efficiency.



# **Support Agricultural Workforce Wellbeing & Health**

**Objective**: Improve on-farm safety and community wellbeing for California's agricultural workforce.

- Enable a safer and healthier work experience for those in the agricultural industry.
- Support state policies for better working conditions for hotter, drier conditions.



## **Protect Animal Health**

**Objective**: Protect the health and wellbeing of our livestock and poultry from climate-related threats.

- Establish and support proactive approaches to threats against animal health.
- Be proactive to threats against animal health with ongoing technical assistance.
- Support research and predictive tool development.



# **Advance Resilient Energy for Farming Operations**

**Objective**: Increase energy efficiency and access to a reliable and clean energy grid for all agricultural operations.

- Support energy needs assessment and planning for local jurisdictions.
- Support energy efficiency projects that reduce energy consumption in the food system, both on and off-farm.



## **Conserve Productive Farmland**

**Objective**: Employ a climate resilience lens to identify and protect the most productive and valuable farmland to support a thriving and diverse food system.

- Implement policies and initiatives to support the protection and conservation of agricultural lands.
- Facilitate informed land use decisions that support resilient agricultural systems.
- Facilitate equitable land access to promote local food production and economic growth.



# Deploy Sustainable, Adaptable, and Integrated Pest Management

**Objective**: Manage emerging and accelerated pests, plant diseases, and noxious weeds pressure through sustainable and integrated pest management practices through methods of least harm on human, animal, and environmental health.

- Expand and enhance the state's ability to deploy and proactively address pest issues related to climate.
- 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.



## **Boost Biodiversity on Farmlands**

**Objective**: Increase beneficial biodiversity on-farm to improve resilience of farms, plants, and animals to climate change.

- Build understanding of resources available to limit and/or reduce negative impacts to on-farm biodiversity.
- Increase beneficial biodiversity on farms.
- Understanding the role of farm and ranch lands in the landscape for wildlife connectivity.



# **Enhance Agricultural Practices to Support Clean Air Communities**

**Objective**: Reduce air pollutants from agricultural operations and practices while ensuring health of surrounding communities and workers while meeting air quality standards.

- Improve air quality from agricultural operations.
- Support research of air quality impacts related to agricultural operations.
- Increase access to equipment upgrades and changing agricultural operation practices that improve air quality.



# **Advance Climate-Smart and Healthy Soils Practices**

**Objective**: Meet state nature-based solution climate targets by 2030, 2038, and 2045 and support healthy and resilient soil ecosystems for growing food and fiber.

- Creating and standardizing methodologies for measurement and tracking of soil health properties in connection with soil health practices over time.
- Promote technical assistance for increasing the knowledge of healthy soil practices and ensuring successful implementation.



# Improve Ranching Sustainability and Rangeland Management

**Objective**: Utilize climate-smart and emissionsreducing agricultural practices to promote resilience ranching and rangeland management.

- Promote multi-benefit rangeland management.
- Conserve and restore rangelands to protect natural ecosystems.
- Reduce enteric methane from grazing livestock.



## **Increase Dairy Farming Sustainability**

**Objective**: Foster a robust and environmentally friendly dairy industry and reduce methane emissions 40 percent per SB 1383.

- Increase knowledge and implementation of currently available methane reduction technologies.
- Collaborate with sister agencies and other partners to carry out additional research to bring on new methane reduction methods.
- Support new dairy waste utilization pathways that offer additional revenue streams for agricultural operations.

# Mentimeter Questions

- How well do these chapters capture the major issue areas?
  - Slide bar, with open ended option
- Anything else we should know?
  - Open ended

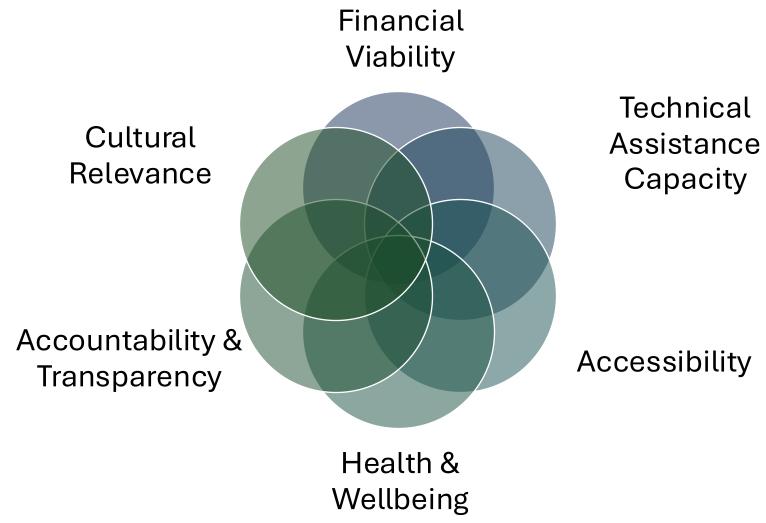




# **Equity Principles**



Guide state initiative development through consistent set of equity concepts





# **Financial Viability**

**Objective:** Ensure participation and financing that works for all California growers.

# **Technical Assistance Capacity**

**Objective:** Ensure that all farmers and farmworkers can take part in the transition to climate resilient agricultural practices.



# Accessibility

**Objective:** Ensure equitable access to initiatives, trainings, and resources.

# Health & Wellbeing

**Objective:** Protect and promote the health of the agricultural workforce, especially as it relates to climate change impacts.



# **Cultural Relevancy**

**Objective:** Deliberately and respectfully honor cultural traditions and history to maintain cultural heritage for the benefit of all generations.

## **Accountability and Transparency**

**Objective:** Ensure initiatives have clear and transparent mechanisms to monitor long-term implementation.



# Mentimeter Slide

• What is missing? What other considerations should we include? [open ended]





# **Next Steps**



# **Next Steps**

- Visit the Community Document website to read the Climate Resilience Strategy and leave comments. Free account sign-up required.
- Download a copy of the strategy to read offline and then email <u>climate@cdfa.ca.gov</u> to share your comments.
- Share the news about our upcoming Workshop on Tuesday October 28<sup>th</sup> from 9:00 – 10:30 am!

Public Comment is open until November 7th!

