

CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

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# CLIMATE RESILIENCE STRATEGY FOR CALIFORNIA AGRICULTURE

Listening Sessions – Winter 2025



# Objectives

- Public input to build an inclusive strategy that represents the needs of the agricultural community
- Feedback on:
  - Proposed Strategy Framework
  - Topic Areas
  - Equity Outcomes
- Input from these sessions will be incorporated into the draft that will be open for public comment in Summer 2025



# Agenda

- Introductions
- Context and Purpose of Strategy
- Overview of Climate Strategy
- Equity Outcomes
- Next Steps



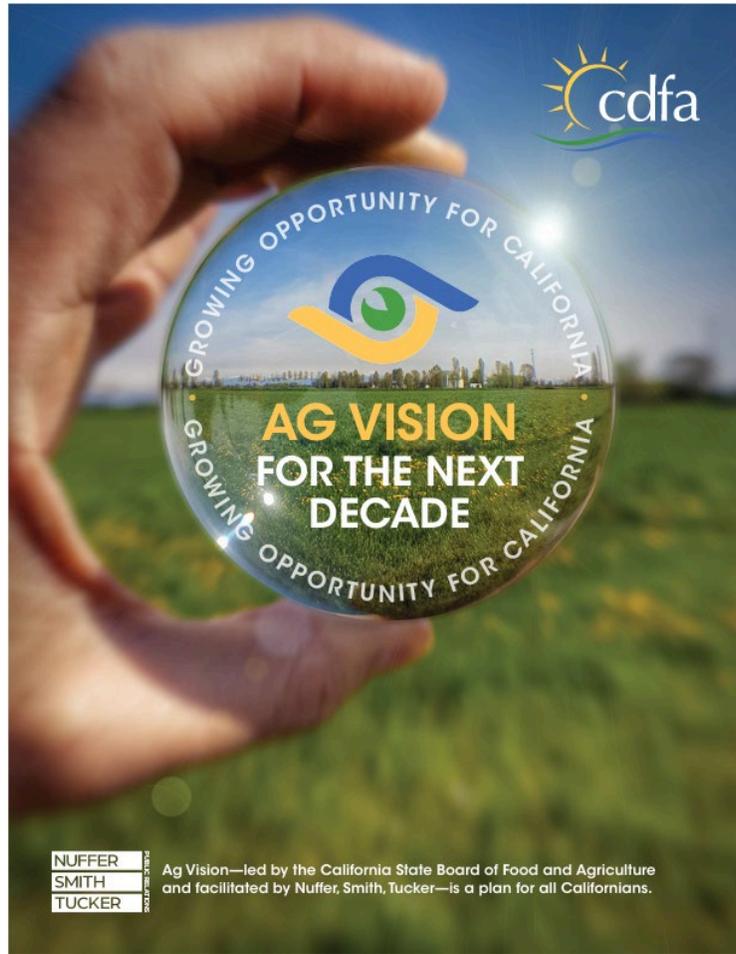
## CDFA Staff

- Virginia Jameson, Deputy Secretary for Climate and Working Lands
- Dr. Nina Bingham, Senior Environmental Scientist



# Background

# Why create a Climate Resilience Strategy?



- Ag Vision For the Next Decade
- Number one Priority: **Foster climate-smart, resilient, and regenerative food systems.**
- This strategy brings together:
  - Previous targeted input
  - Opportunity for new and additional input to create a comprehensive strategy for achieving the Ag Vision priority and building resilience in agriculture

# Previous Feedback on Climate & Equity Topics



2020 Report to the California Legislature on the Farmer Equity Act

# EQUITY



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# 2013

## Climate Change Consortium for Specialty Crops: Impacts and Strategies for Resilience

Photo courtesy of Jocelyn Grettz, Rio Farms

California Department of Food and Agriculture

# FARMER AND RANCHER-LED CLIMATE CHANGE SOLUTIONS

## LISTENING SESSIONS: Summary of Public Input



CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE  
California Department of Food and Agriculture

November, 2021  
Final Draft

Page 0 of 65

# What is the goal of the Climate Resilience Strategy?

Present a comprehensive picture of challenges, actions, and work needed to build climate resilience for California Agriculture

Covers water, energy, natural resources, animal and human health, economy and workforce, greenhouse gas emission measuring and tracking, and more!



# What is the Climate Resilience Strategy?



Be representative of the needs of the agricultural community



Embed equity and inclusivity



Reflect previous conversations and reports

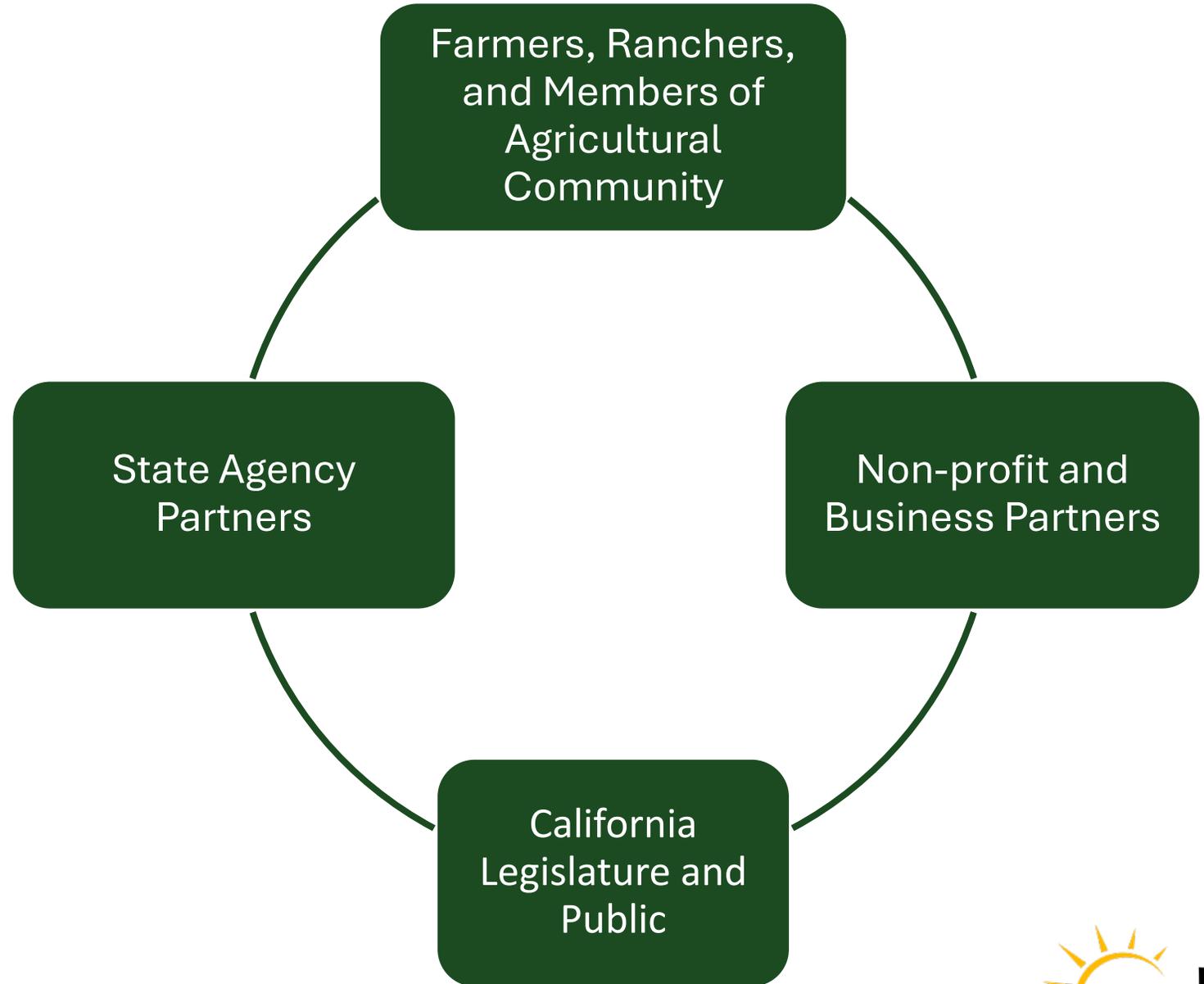


Incorporate state-wide actions and planning

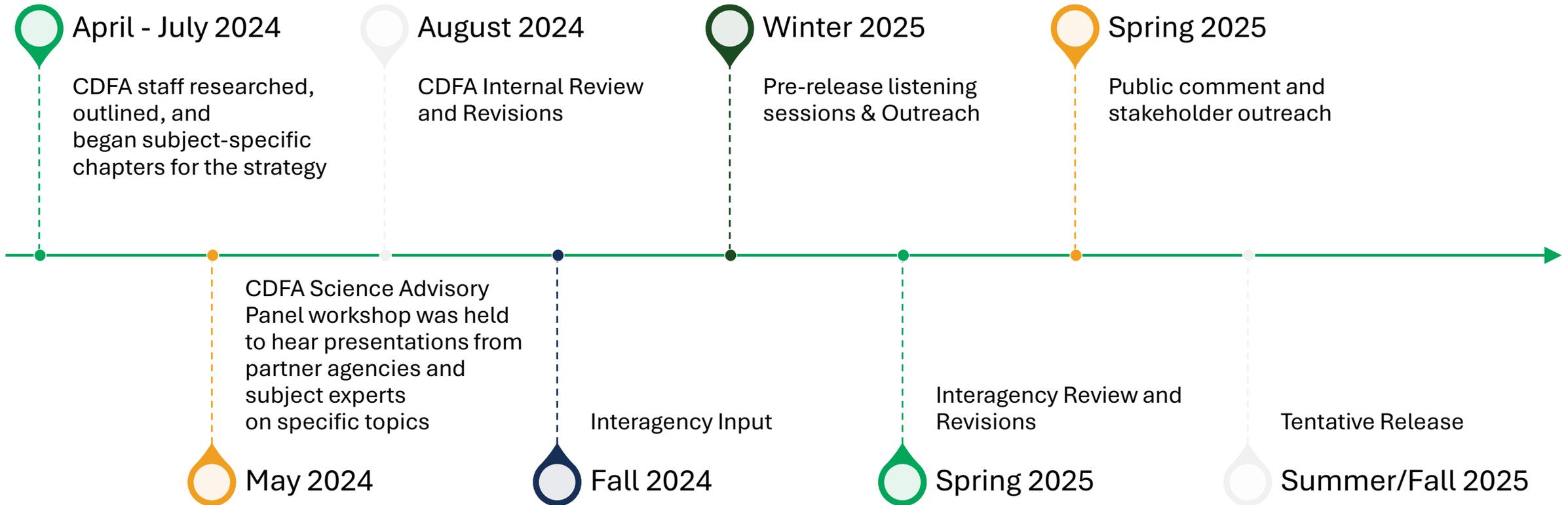


Provides a pathway for building resilience in agriculture

# Primary Audiences



# Resilience Strategy Timeline





# Context and Purpose

# California Agriculture

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

**\$59 billion** in sales in 2022, 11% of U.S. agricultural sales

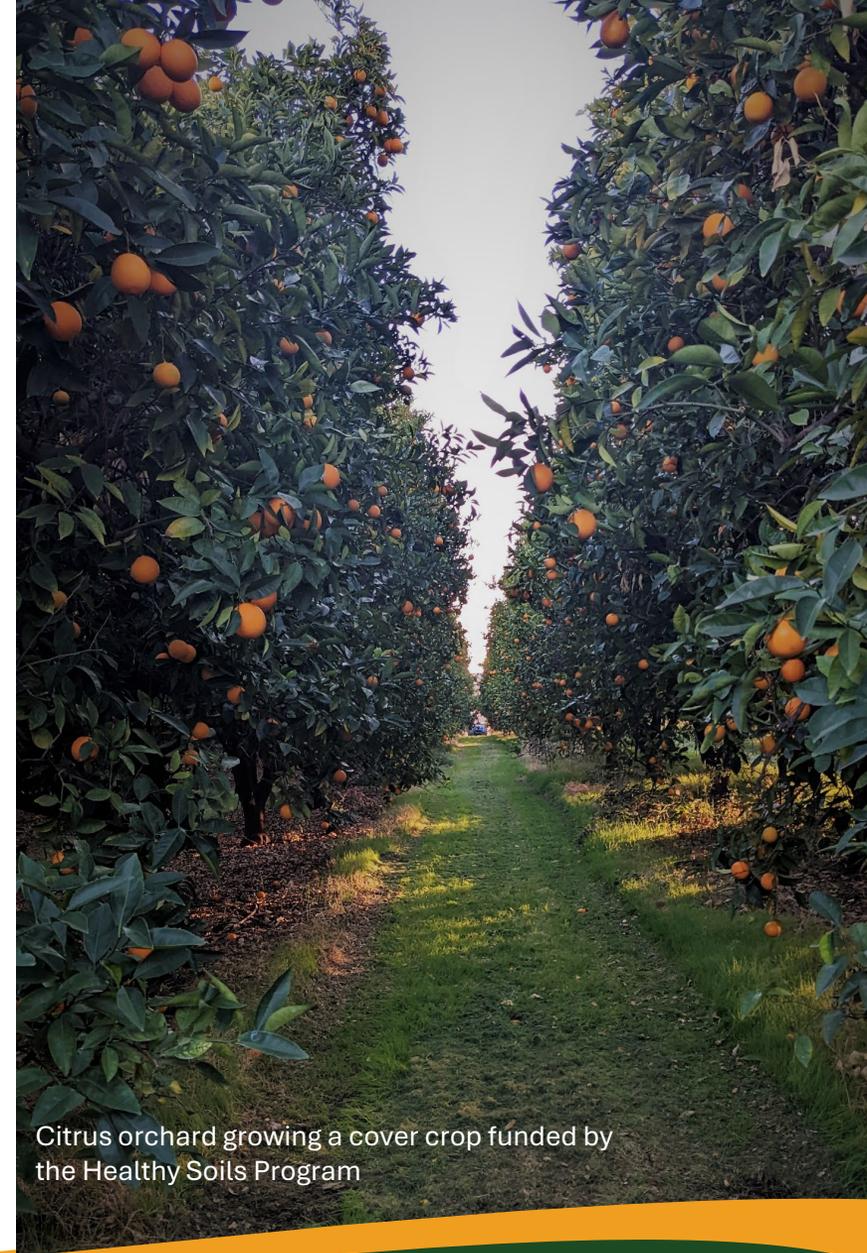
Specialty crops thrive in California

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

67% of California farms earn less than \$150,000 annually

# Climate Change in California

- Generally means warming temperatures and less predictable, more variable precipitation
  - Extreme weather events
  - Weather whiplash
- Hazards include:
  - Drought
  - Extreme Heat
  - Extreme Storms
  - Flooding
  - Sea Level Rise
  - Decreased Snowpack
  - Wildfire
  - Rising Temperatures



Citrus orchard growing a cover crop funded by the Healthy Soils Program

# These climate hazards cause



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

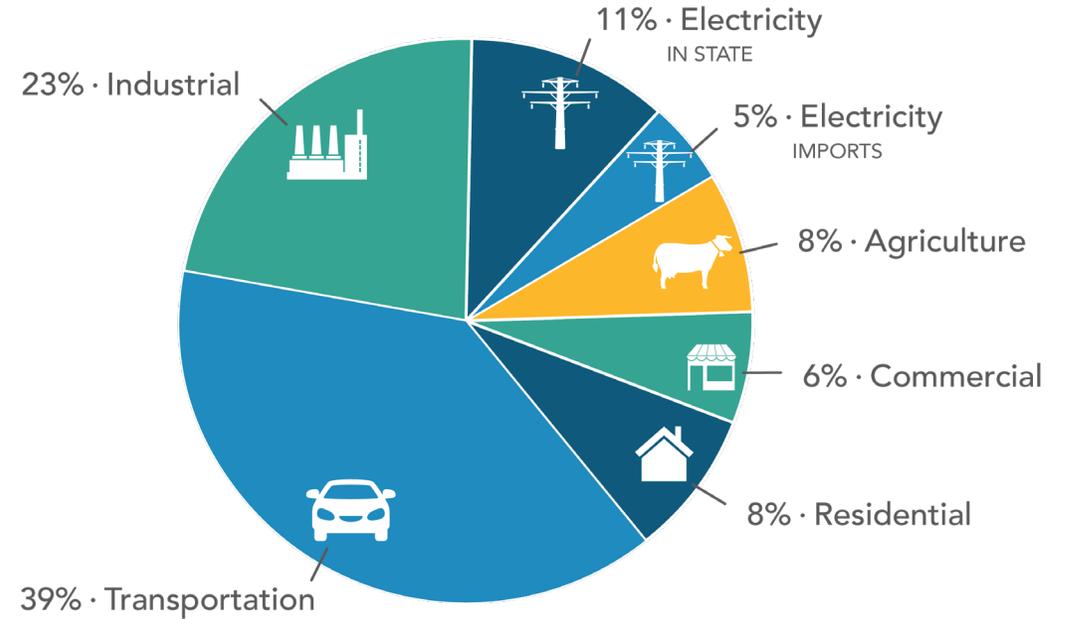
- Negative animal and human health effects, including mortality
- Lower yields
- Product and crop losses
- High production costs
- Agricultural land conversion



[https://news.northeastern.edu/wp-content/uploads/2024/02/Tulare-Lake\\_1400.jpg?resize=1100,733](https://news.northeastern.edu/wp-content/uploads/2024/02/Tulare-Lake_1400.jpg?resize=1100,733)

# 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



371.1 MMT CO<sub>2</sub>e  
2022 TOTAL CA EMISSIONS



# Overview of Strategy

# Climate Resilience Strategy Framework



## Support a Thriving and Resilient Food Sector

- Support a Thriving and Sustainable Farm Economy
- Ensure a Sustainable Water System
- Support Agricultural Workforce Wellbeing and Health
- Protect Animal Health
- Engage with Local, National, and International Partners
- Resilient Energy for Farming Operations



## Protect Natural Systems Critical to Agriculture

- Conserve and Manage Productive Farmland
- Deploy Sustainable, Adaptable, and Integrated Pest Management
- Boost Biodiversity on Farm Lands



## Encourage Resilient Agriculture Practices

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

# Format of Each Chapter

Challenges: How this topic affects/is affected by climate change

Guiding Policies and Plans specific to the topic

Current Actions by the state

Opportunities for future actions

Case Studies

How the state is addressing equity for each topic area

1

## Support a Thriving & Sustainable Farm Economy

**Objective:** Leverage technology, tools, and innovations to help transition the food system to be climate-smart and resilient

2

## Ensure a Sustainable Water System

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

3

## Support Agricultural Workforce Health & Wellbeing

**Objective:** Improve the quality of life of farmworkers and foster a skilled food systems workforce

4

## Protect Animal Health

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

5

## Engage with Local, National, and International Partners

**Objective:** Collaborate with other jurisdictions around science, tools, and technology for building resilience to climate change.

6

## Advance Resilient Energy for Farming Operations

**Objective:** Increase energy efficiency and facilitate the use of reliable and clean energy for all agricultural operations.

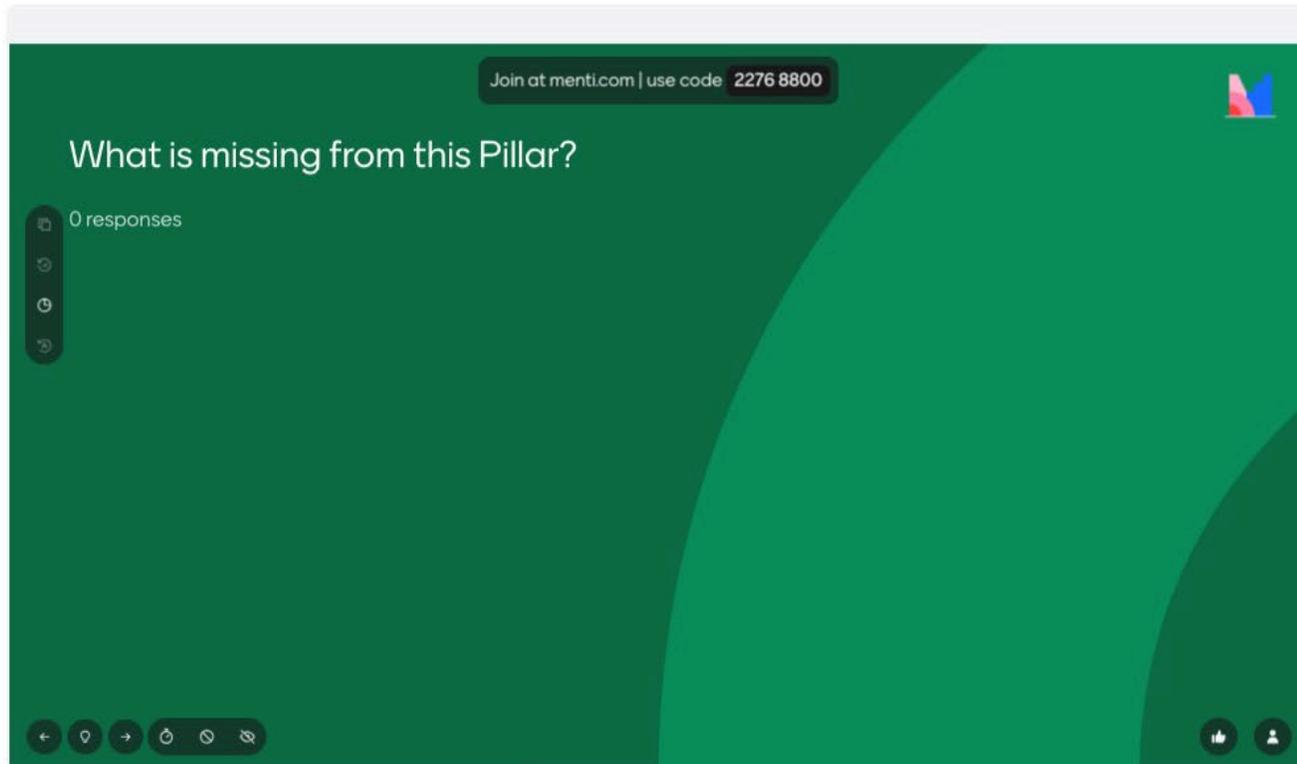
# After Pillar 1



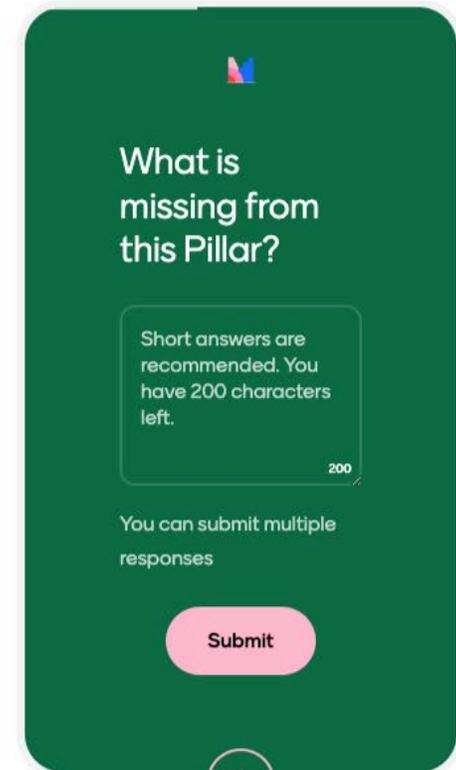
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Show test responses

Presenter screen



Audience screen



7

## Conserve Productive Farmland

**Objective:** Protect farmland to support a thriving and diverse food system.

8

## Deploy Sustainable, Adaptable, and Integrated Pest Management

**Objective:** Manage pests, plant diseases, and noxious weeds through sustainable and integrated pest management practices.

9

## Boost Biodiversity on Farmlands

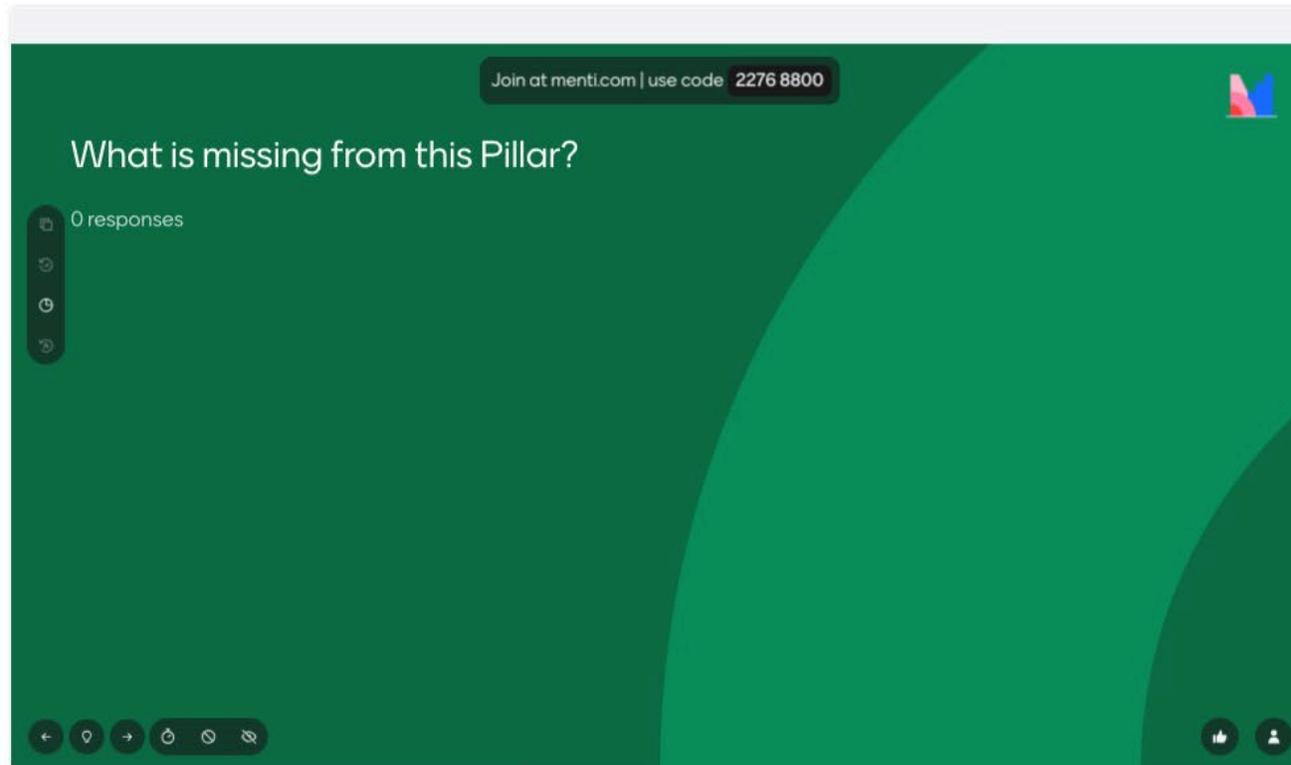
**Objective:** Facilitate agricultural operations and land management policies and practices which support above- and below-ground biodiversity.

# After Pillar 2

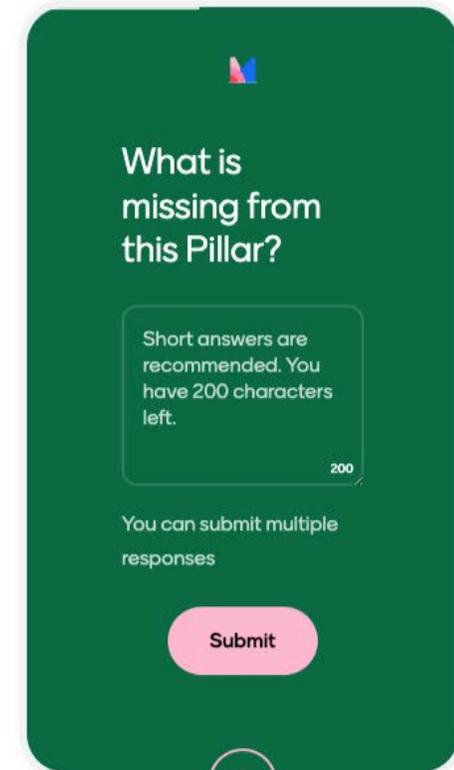
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Presenter screen



Audience screen



10

## Enhance Agricultural Practices to Support Clean Air Communities

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

11

## Advance Climate-Smart & Healthy Soils Practices

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

12

## Improve Sustainability of Ranching and Rangeland Management

**Objective:** Reduce emissions from ranching through grazing practices and methane mitigation practices to promote resilience of the rangelands through vegetation management.

13

## Increase Dairy Farming Sustainability

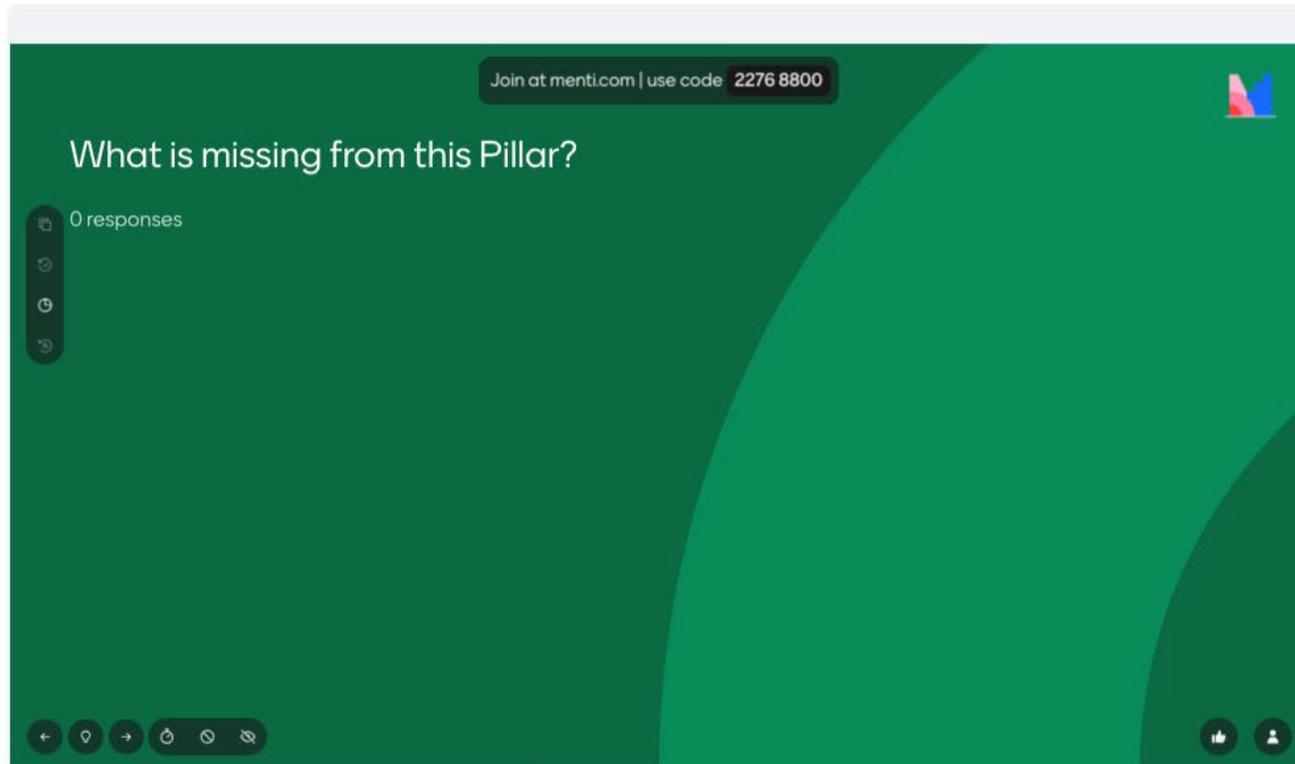
**Objective:** Foster a robust and environmentally friendly dairy industry and reduce methane emissions 40% per SB 1383.

# After Pillar 3

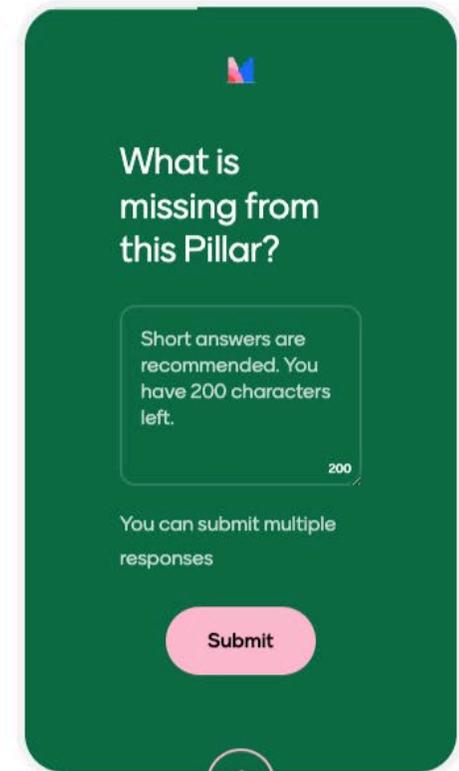
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Presenter screen



Audience screen





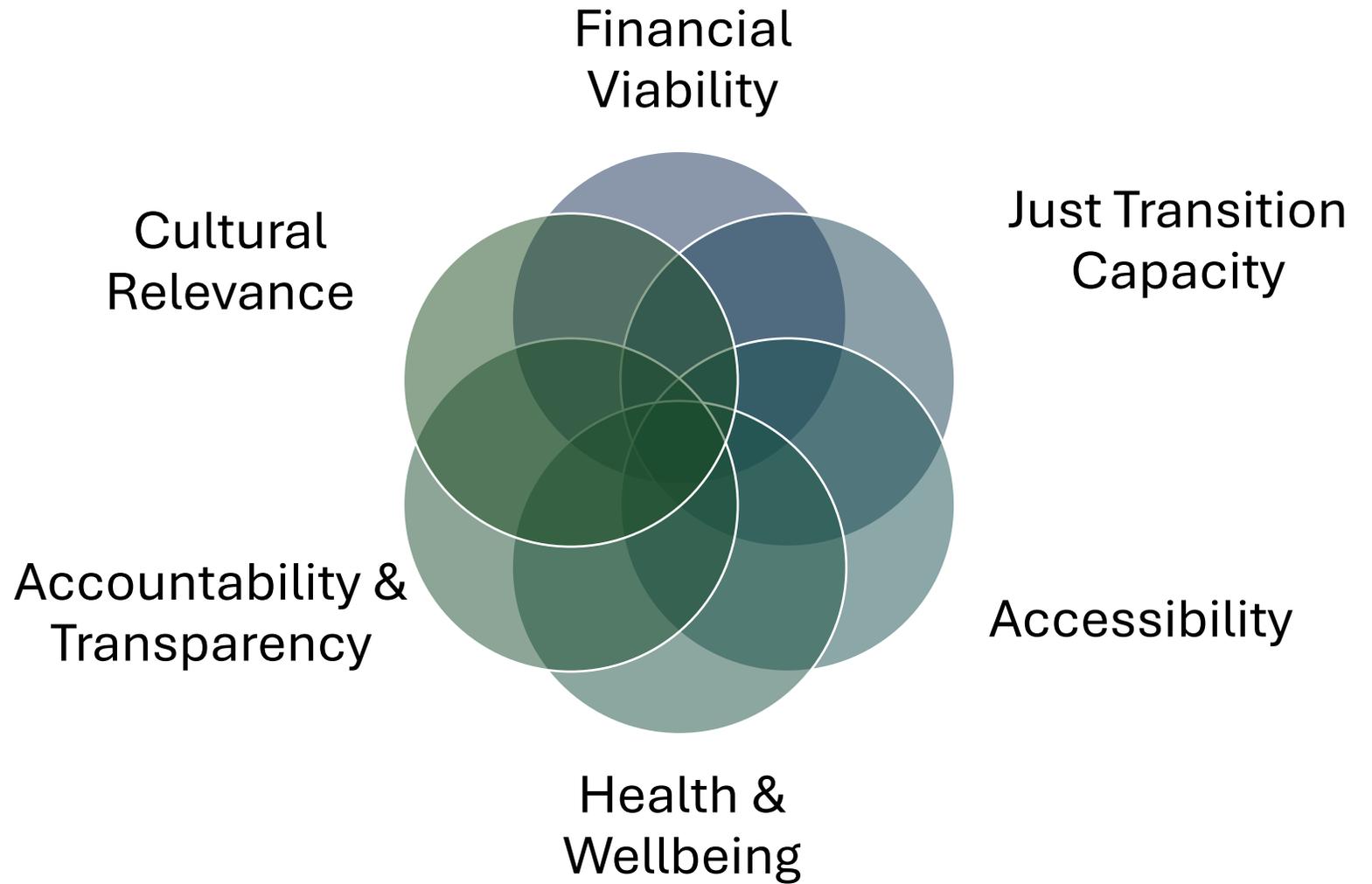
# Equity Outcomes

# Purpose

- Help evaluate and develop more equitable initiatives and policies for the California agriculture industry.
- Enable CDFA and other agencies to consider a consistent set of equity concepts and questions to guide plans, programs, and policy development and implementation.



# Draft Equity Outcomes



# Financial Viability

**Objective:** Secure inclusive initiative participation and financing for those who lease their land, who lack access to land, or who have been underserved by programs.

*These farmers face financial challenges like:*

- *Land tenure and shorter-term leases*
- *High-upfront funds for land purchasing and high cost of land leasing*
- *Difficultly participating in initiatives*

*These farmers may require additional funding to achieve goals or may not have access to land to start.*

# Just Transition Capacity

**Objective:** Ensure that farmers and farmworkers who have been underserved by programs are able to take part in the transition to climate adaptive agricultural practices.

*A just transition is one that helps workers transition to a climate-smart food system with high road jobs.*

*Upskilling and training farmers to participate in the shift to a low carbon economy, utilizing alternative and regenerative agricultural methods.*

# Accessibility

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

- *Initiative design must center the needs of underserved farmers, as well as beginner farmers and under resourced farmers.*
  - *Considerations and flexibility around applications and participation*
- *Initiatives should be available and advertised sufficiently*
  - *Translate materials into key languages*
- *Planning and policy documents should be written in clear language that minimizes technical jargon*
- *Technical assistance should be provided by trusted partners*
- *Trainings should be in diversified locations to reach multiple audiences*

# Health & Wellbeing

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

*There are many health risks that farmers in the field face from the impacts of climate change, such as extreme heat, pesticides, wildfire smoke, dust and particulate matter, and airborne illness and allergens.*

- *Center the wellbeing of farmworkers in the pursuit of equitable farm programs and policies*
- *Provide resources and care for undocumented workers*

# Cultural Relevancy

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

*Farming and ranching is a long-standing field, and many ethnic groups may have their own culturally specific practices and utilize traditional ecological knowledge in their practices.*

- *Ensure that initiatives aimed at sustainable farming practices incorporate traditional ecological knowledge as available*
- *Support culturally relevant farming practices*

# Accountability and Transparency

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

*If initiatives aim to increase equity amongst farmers who need assistance but do not include mechanisms to hold agencies accountable, then these policies can lose their impact.*

- *Agencies must ensure that equity actions are properly implemented*
- *Agencies should track and monitor their implementation*
- *Include transparent mechanisms to track the progress its benefits to farmers underserved by programs*

# Live feedback for equity outcomes



This is a preview. Your responses will not be saved.

Show test responses

Presenter screen

Join at [menti.com](https://menti.com) | use code **3793 8122**

How well do these objectives capture equity concerns?

Not Well Very Well

Navigation icons: back, forward, refresh, mute, volume, share

Audience screen

How well do these objectives capture equity concerns?

Skip

0  10

Not Well Very Well

Submit

# Live feedback for equity outcomes part 2



This is a preview. Your responses will not be saved.

Show test responses

Presenter screen

The presenter screen features a dark green background with a large white question: "What is missing? What other considerations should we include?". At the top right, a dark box contains the text "Join at menti.com | use code 3356 1861" and a small Menti logo. On the left side, a vertical toolbar shows "0 responses" and several icons for navigating the poll. At the bottom, there is a row of navigation icons including a home icon, a location pin, a right arrow, a refresh icon, a lock icon, and a close icon. On the bottom right, there are thumbs up and thumbs down icons.

Audience screen

The audience screen is a mobile-optimized version of the poll. It has a dark green background with the same question: "What is missing? What other considerations should we include?". Below the question is a text input field with a character count: "Short answers are recommended. You have 200 characters left." and a "200" indicator. At the bottom, it says "You can submit multiple responses" and has a pink "Submit" button.



# Next Steps

## Details for communicating

- Please scan the QR code to provide more thoughts and comments on the CDFA Climate Resilience Strategy
- The team will continue to solicit feedback from the general public, stakeholders, and tribes through Spring 2025
- For more information please visit our website [www.cdfa.ca.gov/climate](http://www.cdfa.ca.gov/climate)
- Or email at: [climate@cdfa.ca.gov](mailto:climate@cdfa.ca.gov)

