

# Farmer- and Rancher-Led Climate Change Solutions Stakeholder Meetings

# **Annual Crops - Session 1**

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Image from: https://www.workfront.com/blog/project-management-101-the-5-ws-and-1-h-that-should-be-asked-of-every-project















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## Governor Newsom Launches Innovative Strategies to Use California Land to Fight Climate Change, Conserve Biodiversity and Boost Climate Resilience

Published: Oct 07, 2020

"The state's natural and working lands sustain our economy, support our unique biodiversity and contribute to the global food supply."

"California ralia and 100 raillians an

"California relies on 100 million acres of land for food, water and habitat, and feeds the nation and world through its agricultural activities."

"The \$50 billion California agriculture industry produces over 400 commodities, including over a third of the nation's vegetables and two-thirds of the nation's fruits and nuts."



**EXECUTIVE ORDER N-82-20** 

- 2. To support the global effort to combat the biodiversity and climate crises, it is the goal of the State to conserve at least 30 percent of California's land and coastal waters by 2030. The California Natural Resources Agency and other relevant state agencies, in consultation with the Collaborative, are directed to develop and report strategies to the Governor no later than February 1, 2022 to achieve this goal in a manner that:
  - a. Safeguards our State's economic sustainability and food security.
- 4. To advance efforts to conserve biodiversity, the California Department of Food and Agriculture is directed to take the following actions with existing authority and resources:
  - a. Coordinate with other relevant state agencies and private partners to reinvigorate populations of pollinator insects across the State, which restore biodiversity and improve agricultural production.
  - b. Implement strategic efforts to protect California's native plants and animals from invasive species and pests that threaten biodiversity and economic activities.
  - c. Enhance soil health and biodiversity through the Healthy Soils Initiative.





**EXECUTIVE ORDER N-82-20** 



 The California Department of Food and Agriculture shall work with agricultural stakeholders to identify farmer- and rancher-led solutions to inform the next Scoping Plan process.





















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## Top Climate-related Highlights for CDFA

#### News Release

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Media Contacts: Steve Lyle (CDFA), 916-654-0462, officeofpublicaffairs@cdfa.ca.gov

#### CDFA ANNOUNCES STAKEHOLDER ENGAGEMENT OPPORTUNITIES ON FARMER-AND RANCHER-LED CLIMATE-CHANGE SOLUTIONS

## cdfa Print This Release

SACRAMENTO, January 28, 2021 - The California Department of Food and Agriculture (CDFA), per the Governors Executive Order N-82-20, will be holding stakeholder meetings in February to solicit feedback from the public and agricultural stakeholders on farmer-and rancher-led climate solutions that sequester carbon, reduce greenhouse gases and enhance biodiversity.

"These outreach meetings are essential to ensure we gain information and knowledge from the people who live and work on the land and the organizations that support them," said CDFA Secretary Karen Ross. "We want to hear from all those interested in discussing farmer- and rancher-led efforts to help ensure climate resilience, greenhouse gas mitigation, biodiversity and food security."

The meetings will be organized around three agricultural categories; livestock and dairy; row and field crops (annual crops); and trees and vines (perennial crops). The resulting report will be made available for a 30day Public Comment period, after which the information will be used to inform CDFA and other state agencies about farmer-and rancher-led climate solutions. The collected information will also inform the nex update of the California AB 32 and SB 32 Scoping Plan, and ongoing and future work of the Natural Working Lands Climate Smart strategy.

#### Engagement Opportunities On Farmer- And Rancher-Led Climate-Change Solutions

The CDFA will hold stakeholder meetings in February to solicit feedback from the public and agricultural stakeholders on climate-change solutions that sequester carbon, reduce greenhouse gases and enhance biodiversity.

The meetings will be organized around three agricultural categories: livestock and dairy; row and field crops (annual crops); and trees and vines (perennial crops). For each agricultural category CDFA will host two meetings of approximately two hours each. The first meeting will include an introductory presentation followed by an opportunity for stakeholder input. The second meeting will allow further discussion and capture additional feedback. Those interested in attending are invited to register via the following links:

- Livestock and Dairy Meeting #1, February 8 at 2 p.m.: https://csus.zoom.us/meeting/register/tZYsdOqrjwpE9TCt74IRi0V4FaVYS9f5jNu
  - Livestock and Dairy Meeting #2, February 12 at 9 a.m.: https://csus.zoom.us/meeting/register/tZEpceopzMsGNAruyE0r0-kytgobtBN\_cNN
- Annual Crops Meeting #1, February 16 at 2 p.m.: https://csus.zoom.us/meeting/register/tZYtdOqgqj0sGNRlzD5RdDouZcGBWa3d\_RMc









Next



























## Climate Change Consortium for Specialty Crops

#### Climate Change Consortium – Statewide Effort (2012-2013)

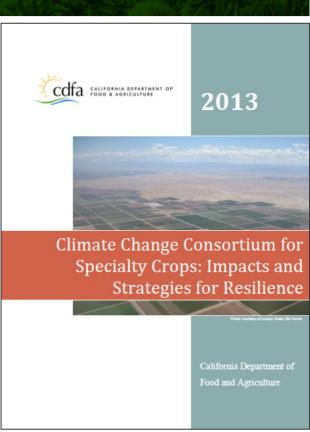
OEFI Climate Change Consortium for Specialty Crops

In the summer of 2012 CDFA announced the formation of the Climate Change Consortium for Specialty Crops to identify solutions for climate change impacts to California's valuable specialty crop industry. The Consortium was comprised of 21 people including growers from the top ten specialty crops; agricultural association representatives and stakeholders; researchers from the University of California and California State University systems; an agricultural commissioner; a certified crop advisor/ pest control advisor; and a member of the California Association of Resource Conservation Districts. The Consortium members met for four two-day meetings over the course of six months. At each meeting the Consortium heard from various researchers working on the interface of agriculture and climate change. The Consortium was asked to assume that climate change is occurring and to make recommendations to CDFA drawing on their own backgrounds and expertise. The final report summarizes the potential impacts of climate change to California's specialty crop industry and outlines the recommendations of the Consortium.

- ▶ Final Report Climate Change Consortium for Specialty Crops: Impacts and Strategies for Resilience 🖹
- ▶ Outreach Presentation on the Impacts of Climate Change on California's Specialty Crops 🖹
- ► Acknowledgements 🖹

CDFA Home

- ▶ Summary of Recommendations 🖾
- ► Summary of CDFA's Response to the Climate Change Consortium's Recommendations 🖾 October 2016





## Climate Change Scoping Plan

https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scopingplan

The 2017 Scoping Plan identifies how the State can reach our 2030 climate target to reduce greenhouse gas emissions by 40 percent from 1990 levels, and substantially advance toward our 2050 climate goal to reduce greenhouse gas emissions by 80 percent below 1990 levels.

CDFA Incentive Programs



Climate Change Research Plan (4<sup>th</sup> Climate Assessment Research)

https://www.climateassessment.ca.gov/about/

California's Fourth Climate
Change Assessment (Fourth
Assessment) advances
actionable science that serves
the growing needs of state and
local-level decision-makers from a
variety of sectors.

## State Adaptation Strategy

https://www.slc.ca.gov/sea-level-rise/safeguarding-california-plan-2018-update/

The 2018 Update to the Safeguarding California Plan is a roadmap showing how California's state government is taking action to respond to climate change.

Recommendation	Key Partners	Level of Priority	Timeframe	Potential Cost to CDFA
<ul> <li>Improve Growers' Ability to Adapt to Climate Change</li> <li>CDFA should support USDA Natural Resources Conservation</li> <li>Service in a review and/or creation of policies to improve growers' ability to adapt to climate change. These policies should:</li> <li>Promote new technologies for climate change relevant to water, soil, and pest management;</li> <li>Incentivize grower adoption of technologies and practices for improved water management, which includes use of: water meters, soil moisture sensors, on-farm water storage, and groundwater recharge where possible;</li> <li>Suggest ways to scale best management practices (BMPs) to all sizes of farms.</li> </ul>	<ul> <li>USDA Natural Resources         Conservation Service (NRCS)</li> <li>Ag Associations &amp;         Commodity Groups</li> <li>Growers</li> <li>Resource Conservation         Districts</li> <li>UC ANR Cooperative         Extension</li> <li>Irrigation districts</li> <li>California Department of         Water Resources (DWR)</li> </ul>	Secondary	Medium	Low

## Used feedback to inform;

- AB 32 Scoping Plan update (Climate change mitigation focused)
- Safeguarding California Report (Climate change adaptation focused)
  - 4<sup>th</sup> Assessment for Climate Change (Research)
- Budget change proposals
  - Development of incentive programs using California Climate Investment Funds (Greenhouse gas reduction fund)

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### SWEEP;

- Promotes new technologies
- Incentivizes grower adoption of technologies and practices for improved

water management

 Scales conservation management practices to all sizes of farms



# SWEEP provides financial assistance in the form of grants to implement irrigation systems that reduce greenhouse gases and save water on California agricultural operations

Total awarded = \$87.5 million Number of projects funded = 828 Total number of acres covered = 134,000 Total match to date = \$50.1 million Total GHG reductions = 80,000 MTCO2e/year

Total Water Reductions = 115,000 Acre feet/year Projects are CDFA verified 3-year reporting on GHG and water savings post project implementation









First Climate Smart Agriculture incentive program set up by CDFA (2014)

Incentive programs allow growers to try one or more of 27 management practices that they may have or have not done before or implemented in parts of their agricultural operation to sequester carbon

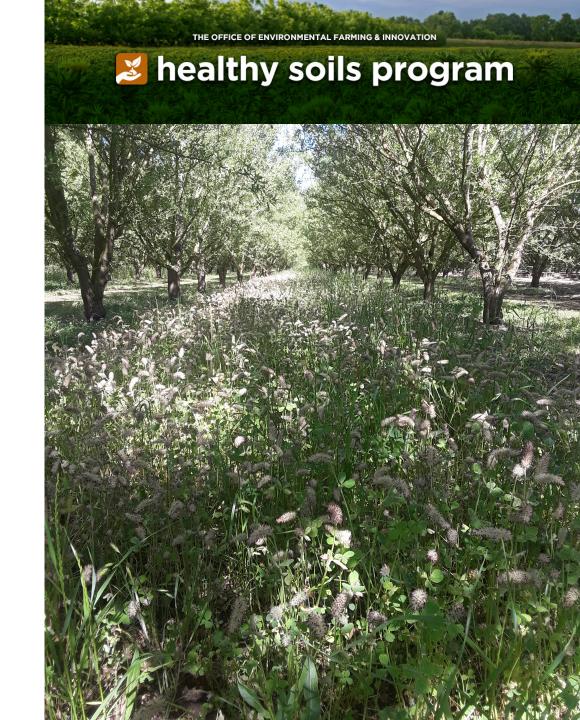
https://www.cdfa.ca.gov/oefi/healthysoils/IncentivesProgram.html

First in nation to tie soil management practices with GHG reductions in soils (Comet-Planner)

Contributes to climate change adaptation, GHG mitigation and agricultural sustainability

Also funds Demonstration Projects to further advance HSP adoption

https://www.cdfa.ca.gov/oefi/healthysoils/DemonstrationProjects.html







\$48 million total to date
580 Incentive Projects (\$100,000 cap)
66 Demonstration Projects (\$100,000 to \$250,000 cap)
54,000 acres from Incentive Projects
~105,900 MTCO2e/year reduction from Incentive Projects
Uses GGRF (revenues from Cap-and-Trade Program) and Bond funding
Quantified using COMET-Planner tool

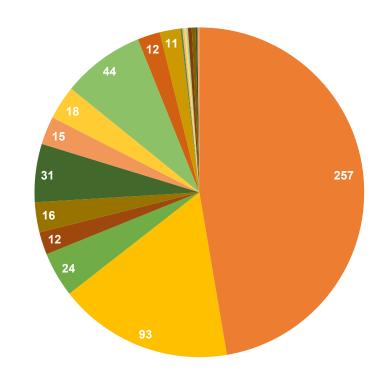




# 2020 HEALTHY SOILS PROGRAM (HSP) INCENTIVES PROGRAM – PROJECTS SELECTED FOR AWARDS

Most Frequently
Requested Practices
by Number of Projects
(Total ~319 projects)

Note: Majority of projects proposed multiple practices.



- **■** Compost Application
- **■** Nutrient Management
- Whole Orchard Recycling
- Windbreak/Shelterbelt Establishment
- Silvopasture
- **■** Forage and Biomass Planting
- Prescribed Grazing

- Cover Crop
- **■** Conservation Cover
- Reduced Till
- Range Planting
- Riparian Forest Buffer
- Tree Shrub Establishment

- No-Till
- **■** Hedgerow Planting
- Mulching
- Multi-story Cropping
- Riparian Herbaceous Buffer
- **■** Grassed Waterway



Technical assistance in the form of hands-on application assistance to farmers and ranchers is critical to the success of CDFA's Climate Smart Agriculture programs.

State investment to further advance adoption of climate smart practices.

	AMMP	HSP	Total
Individuals Assisted	41	1,125	1,166
Applications Submitted	23	324	347
SDFR Individuals Assisted	11	166	177
Farming < 500 Acres Assisted	20	723	743
Non-English Speakers	0	107	107
Provided Computer Access	12	68	80
Priority Population Individuals	13	235	248

- 33 Organizations
- Assistance provided in English, Spanish, Chinese, Hmong, Portuguese
- Total Invoiced: \$728,592
- Total Awarded: \$2,139,360 for 3 years













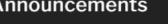


















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RESOURCES



The SALC Program protects at-risk agricultural lands from sprawl development in order to promote growth within existing jurisdictions, ensure open space remains available, and support a healthy agricultural economy. SALC is one of the many California Investments programs. For more information about these investments, visit:

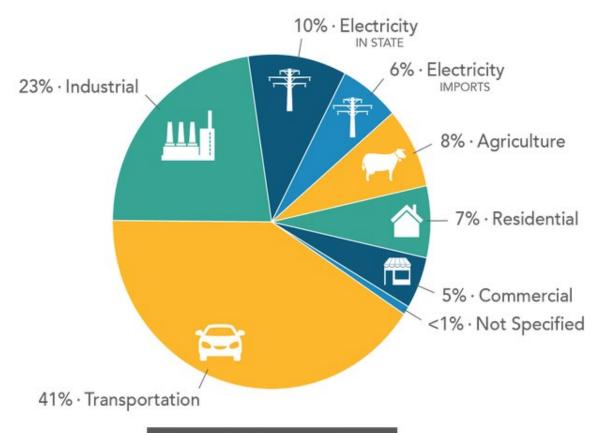
caclimatenvestments.ca.gov 🗹

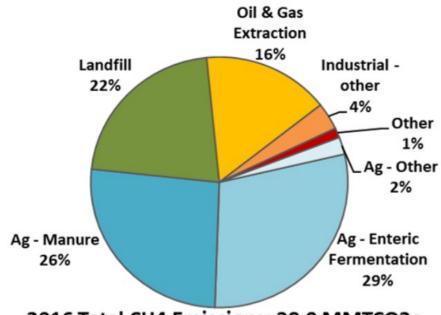




## DDRDP and AMMP work to achieve 2030 and 2050 GHG reduction goals set by Governor(s)

80% reduction below 1990 levels by 2050 (2006) 40% reduction below 1990 levels by 2030 (2015)





2016 Total CH4 Emissions: 38.9 MMTCO2e

**429.4 MMTCO**<sub>2</sub>**e** 2016 TOTAL CA EMISSIONS



**EXECUTIVE ORDER N-82-20** 



 The California Department of Food and Agriculture shall work with agricultural stakeholders to identify farmer- and rancher-led solutions to inform the next Scoping Plan process.



Discussion should also include food processors, renewable energy and engine replacement and understanding biggest barriers to wider adoption of climate solutions (e.g., risk; economic benefits, shortage of labor, technical assistance)



Thank you for you time and look forward to your feedback and comments