

SCIENTIFIC ADVISORY PANEL on Resilient and Sustainable Agriculture



cdfa
The Office of
Agricultural Resilience
& SUSTAINABILITY

WHO WE ARE



The Scientific Advisory Panel (SAP) advises the California Department of Food and Agriculture (CDFA) on research, demonstration, and incentive grant programs that advance agricultural sustainability in California to help meet California's climate goals.

Established under the Cannella Environmental Farming Act of 1995, the panel advises the Secretary of Food and Agriculture and other relevant agencies to ensure agricultural policies and programs are grounded in the best available science.

WHY IT WAS CREATED



California agriculture is foundational to the state's economy and environment:

- Agriculture supports 1 in 10 California jobs
- California has led the nation in total farm production since 1948
- As a large land use, agriculture affects air and water quality for communities throughout the state
- Farms and ranches can provide critical wildlife habitat and protect open space

WHAT DOES THE PANEL DO?



- Evaluates data and information on agriculture's impacts on air, water, soil, and wildlife
- Supports coordination among state agencies with oversight of working lands
- Advises on implementation of key Climate Smart Agriculture programs, including the Healthy Soils Program (HSP) and State Water Efficiency and Enhancement Program (SWEEP)
 - There have been:
 - 12 funding cycles for SWEEP
 - 7 funding cycles for HSP
 - 6 funding cycles for HSP Demonstration
 - Total climate benefits from these programs are estimated at: 2.6 million metric tons of CO₂e over the lives of the project

Learn More at cdfa.ca.gov/oars/sap

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CORE CONTRIBUTIONS



Advancing Soil Biodiversity

In July 2023, the Scientific Advisory Panel contributed to the publication of Soil Biodiversity in California Agriculture: Framework and Indicators for Soil Health Assessment. The framework strengthens how California evaluates soil biological health, establishing indicators that support climate-smart management and long-term agricultural resilience.



Agricultural Climate Resiliency Strategy (RSA)

The SAP is helping shape California's Agricultural Climate Resiliency Strategy, anticipated for release in 2026. The RSA identifies climate challenges facing agriculture, highlights existing state investments and tools, and outlines opportunities to strengthen resilience across the sector. Developed with broad stakeholder input, the strategy provides a science-based roadmap for long-term agricultural sustainability.



Launching a 2026 Task Force on MMRV for Specialty Crops

In 2026, the SAP will convene a task force on Measurement, Monitoring, Reporting, and Verification (MMRV) of agricultural greenhouse gases related to California specialty crops. This effort will strengthen greenhouse gas quantification methods, improve accountability, and ensure Climate Smart Agriculture investments are measurable and scientifically credible.

Who Serves on the Panel

- Dr. Jeff Dlott, Chair, COO at LandScan
- Shanna Atherton-Bauer, California Department of Conservation
- Don Cameron, Vice President and General Manager of Terranova Ranch Inc.
- Leonard Diggs, Director of Operations and Farming Education at Pie Ranch
- Jon Gustafson, Natural Resources Conservation Service, USDA (non-voting)
- Dr. Erik Porse, California Institute for Water Resources, UC ANR (non-voting)
- Judith Redmond, Owner Full Belly Farm
- Brianna St. Pierre, State Water Resources Control Board, CalEPA
- Dr. Jonathan Wachter, California Natural Resources Agency
- Erin Uchida, CalEPA
- Dr. Jamie Whiteford, Ventura Resource Conservation District