

# Climate & Agriculture:

## *Climate Smart Agriculture Policy and Practice*

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**CalCAN**  
CALIFORNIA CLIMATE &  
AGRICULTURE NETWORK



# CalCAN: Early Policy Campaigns

## Investing in Sustainable Agricultural Solutions to Climate Change

**2010:** SB 1241 (Wolk) – Proposed Climate & Ag program (died)

**2011:** SB 237 (Wolk) (died)

**2015:** SB 367 (Wok) (died)

**2016:** SB 1350 (Wolk) - Established Healthy Soils program - Success

## Farmland Conservation as Climate Strategy

**2013:** AB 823 (Eggman) – Farmland Mitigation (died)

**2014:** AB 1961 (Eggman) – Sustainable Farmland Strategy Act (died)

**2017:** SB 732 (Stern) – Ag land planning grants – Success

## Connecting On-Farm Renewable Energy to the Grid

**2011:** SB 489 (Wolk) – Expanded the types of on-farm RE projects NEM - Success

**2012:** SB 594 (Wolk) – Established the Net Energy Metering Aggregation – Success



# Climate Smart Agriculture

## 2014: First Cap-and-Trade Investments:

- ▶ Sustainable Ag Lands Conservation Program(SALCP)
- ▶ State Water Efficiency and Enhancement Program(SWEEP)
- ▶ Dairy Digester Research and Development Program (DDRP)

## 2017: Second Wave of Climate Smart Ag Programs:

- ▶ Healthy Soils
- ▶ Alternative Manure Management Program (AMMP)
- ▶ Adaptation program – Wildlife Conservation Board



# California meets greenhouse gas reduction goal years early

CHRISTOPHER WEBER July 11, 2018



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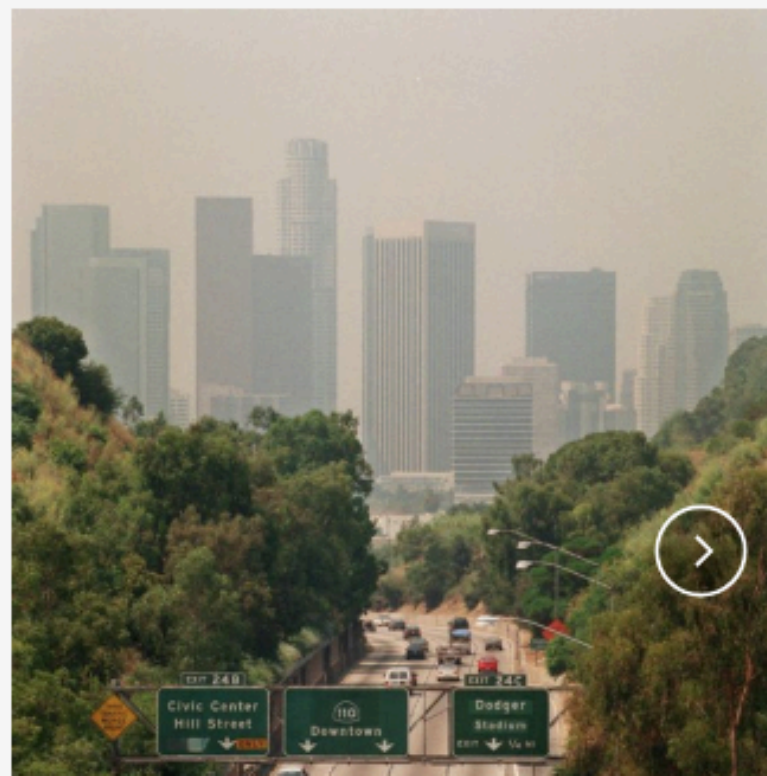
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LOS ANGELES (AP) — California greenhouse gas emissions fell below 1990 levels, meeting an early target years ahead of schedule and putting the state well on its way toward reaching long-term goals to fight climate change, officials said Wednesday.

The California Air Resources Board announced pollution levels were down 13 percent since their 2004 peak — as the economy grew 26 percent since that year. The achievement was roughly equal to taking 12 million cars off the road or saving 6 billion gallons (22.7 billion liters) of gasoline a year, the board said.





# Climate Change Investments

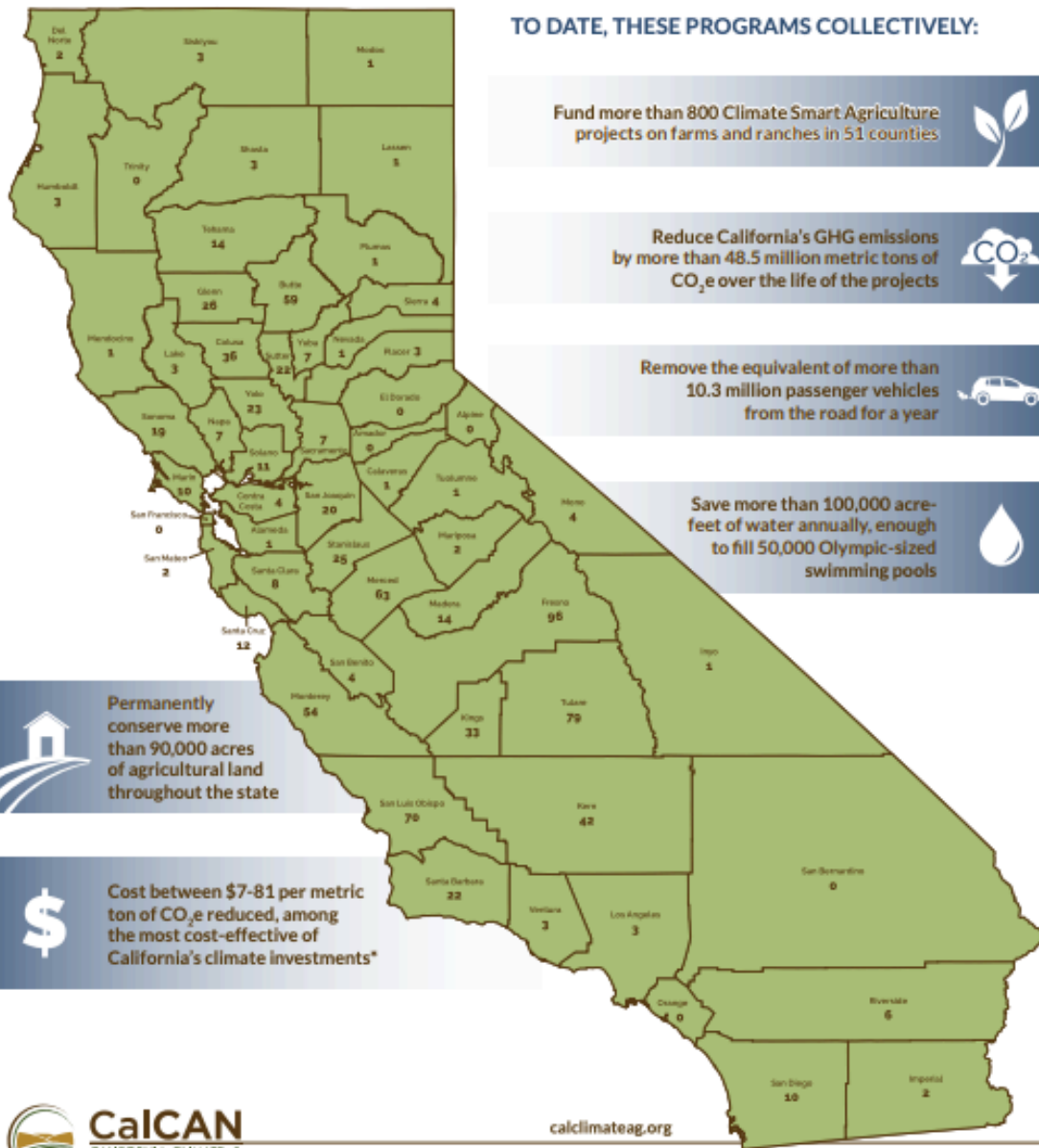


**Over \$9 billion invested in climate change programs since 2014.**



# CLIMATE SMART AGRICULTURE IN ACTION

## PROJECTS BY COUNTY



### TO DATE, THESE PROGRAMS COLLECTIVELY:

Fund more than 800 Climate Smart Agriculture projects on farms and ranches in 51 counties



Reduce California's GHG emissions by more than 48.5 million metric tons of CO<sub>2</sub>e over the life of the projects



Remove the equivalent of more than 10.3 million passenger vehicles from the road for a year



Save more than 100,000 acre-feet of water annually, enough to fill 50,000 Olympic-sized swimming pools



Permanently conserve more than 90,000 acres of agricultural land throughout the state



Cost between \$7-81 per metric ton of CO<sub>2</sub>e reduced, among the most cost-effective of California's climate investments\*



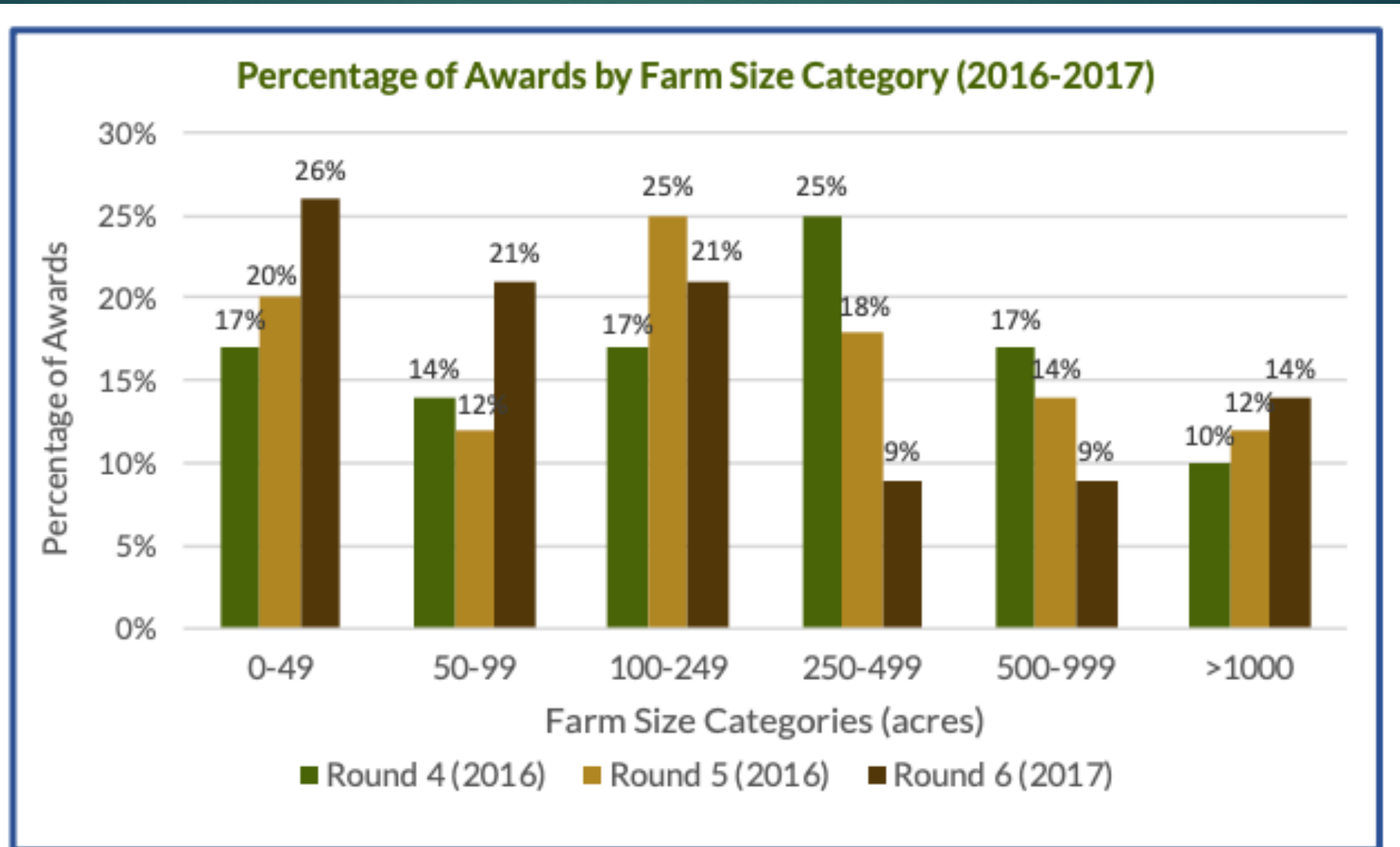
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January 2019

DATA SOURCES: California Department of Conservation, California Air Resources Board, CDFA, and the US EPA's Greenhouse Gas Equivalencies Calculator. \*The cost per ton of CO<sub>2</sub>e was available only for SALCP and SWEEP at time of publication.

# SWEEP Awards by Farm Size, 2016-17





# Sustainable Ag Lands Conservation Program

## SUSTAINABLE AGRICULTURAL LANDS CONSERVATION PROGRAM (SALCP)

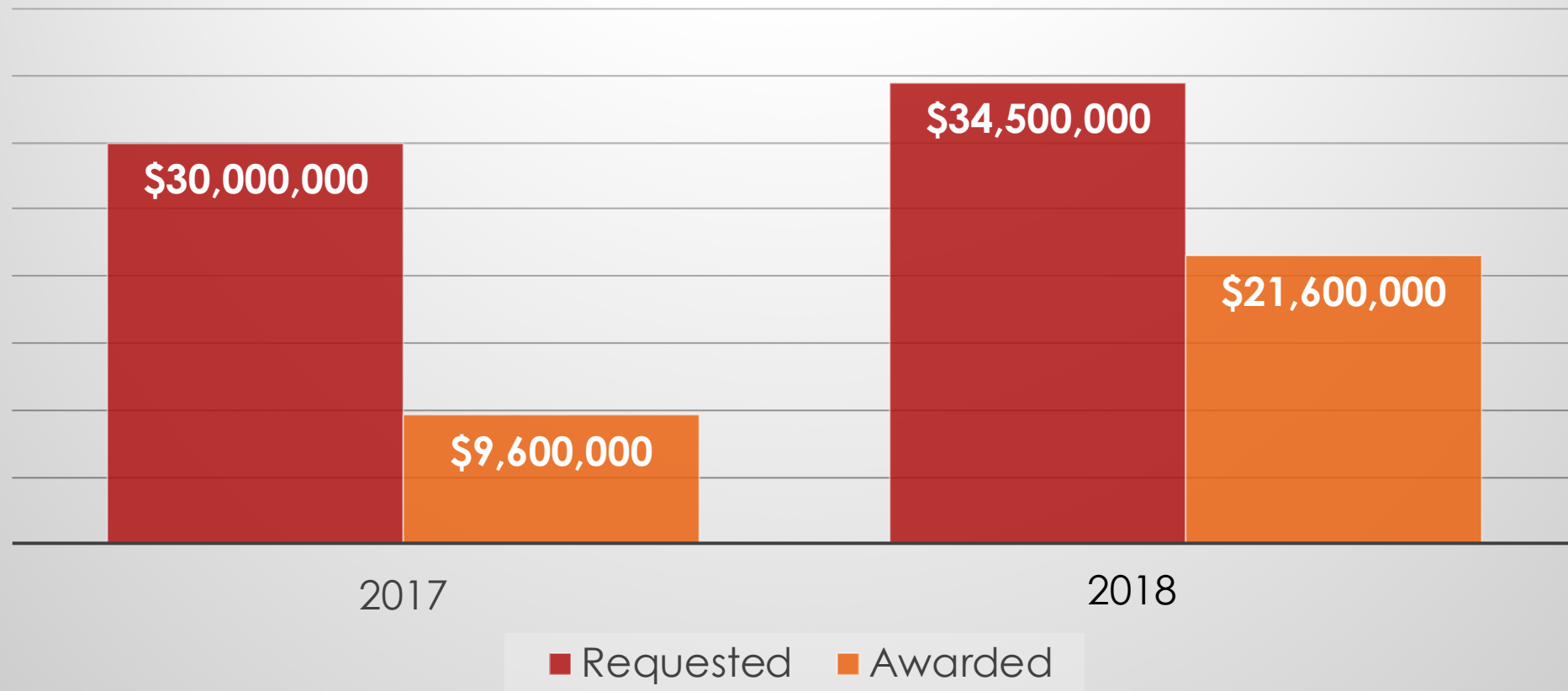
SALCP supports the reduction of GHG emissions associated with urban sprawl and rural ranchette development by protecting at risk agricultural lands. The program funds agricultural conservation easements to maintain land in farming as well as grants to local governments to improve farmland conservation planning and policy development.

- Launched in **2014**
- Administered by the **Department of Conservation** on behalf of the Strategic Growth Council
- **\$124 million** awarded to date
- More than **90,000 acres** protected in 31 counties
- **47 million metric tons of CO<sub>2</sub>e** reduced over 30 years



# Alternative Manure Management Program

## AMMP Requested vs. Awarded Funds, 2017 - 2018





# Healthy Soils

**Figure 9. Implementation acreage goals for CDFA**

Scenario	Annual Acres	Cumulative GHG Benefit by 2030	Cumulative GHG benefit by 2045	Estimated Annual Program Costs (millions)*
A: 500,000 acres by 2030	41,667	-5.3 MMT CO <sub>2</sub> e	-12.0 MMT CO <sub>2</sub> e	\$18.2
B: 1,000,000 acres by 2030	83,333	-10.7 MMT CO <sub>2</sub> e	-24.1 MMT CO <sub>2</sub> e	\$36.3

\*Costs based on \$436 per acre award.

Negative values indicate GHG emission reductions or sequestration. For details on the management activities this scenario examines, please see Appendix A.



# Scale Up

**Scale Up** investments in multi-benefit Climate Smart Ag programs



Increase GHG emission reduction target from natural and working lands



# Integrate

Increase the adoption of Climate Smart Ag by **integrating** efforts across programs.





# Streamline

Focus on regulatory **streamlining** to improve outcomes for the environment and farmers.





# Level the Playing Field

Small and mid-scale farmers and socially disadvantaged farmers – least prepared for climate change – but important to our food security, rural viability.

Prioritize investment here to **level the playing field**.





### Climate Smart Agriculture Budget Proposals (in millions)

	FY 2018-2019 Funding	<u>CalCAN's</u> Budget Asks	Governor's May Revise	Senate's Proposal	Assembly's Proposal
<b>SWEEP</b>	\$20 million (Prop 68)	\$40	\$0	\$25	\$45 total for Climate Smart Agriculture
<b>Healthy Soils</b>	\$15 million (GGRF and Prop 68)	\$50	\$28	\$30	
<b>Dairy Methane</b>	\$99 million (GGRF)	\$40 (AMMP budget line item)	\$35 (for both digesters & AMMP)	\$35 (AMMP budget line item)	
<b><u>CalRecycle's</u> Organic Waste Program</b>	\$25 million (GGRF)	\$100	\$25	\$75	\$25
<b>Adaptation Tools for Farmers (AB 409)</b>	\$0	\$2 million	\$0	\$100 for suite of adaptation programs*	\$185 for climate mitigation & resilience*



# AB 1086 – SWEEP 2.0 Bill

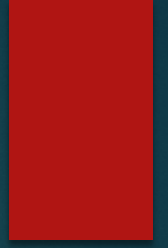
Authored by Assemblymember Rebecca Bauher-Kahan (D-Orinda)

1. Incorporates groundwater recharge practices into the program
2. Prioritizes grants for small and mid-scale farms and socially disadvantaged farmers and ranchers
3. Provides trainings to irrigation operators to maximize the benefits of their new systems
4. Enables CDFA to pursue integrated pilot projects with irrigation districts and groundwater sustainability agencies
5. Establishes a technical advisory committee to improve the program's reach, user-friendliness, and develop SWEEP 2.0

**Passed Assembly Floor 53-18**



# AB 409 – Adaptation Tools Bill



**Authored by Assemblymember Monique Limón (D-Santa Barbara)**

1. Develop science-based, farm-level agricultural adaptation planning tools.
2. Pilot the tools in three regions with local farmers, ranchers, TA providers, and ag organizations.
3. Provide trainings for TA providers and ag organizations on how to use the tools and effectively communicate about climate adaptation.

**Passed Assembly Floor 76-0**



# Join us!







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