# California's Natural and Working Lands Climate Change Implementation Plan

NOVEMBER 16, 2018











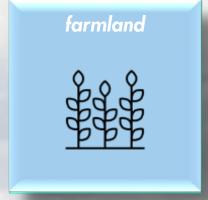
#### California's Natural and Working Lands



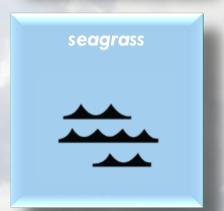














#### Recent Direction and Commitments

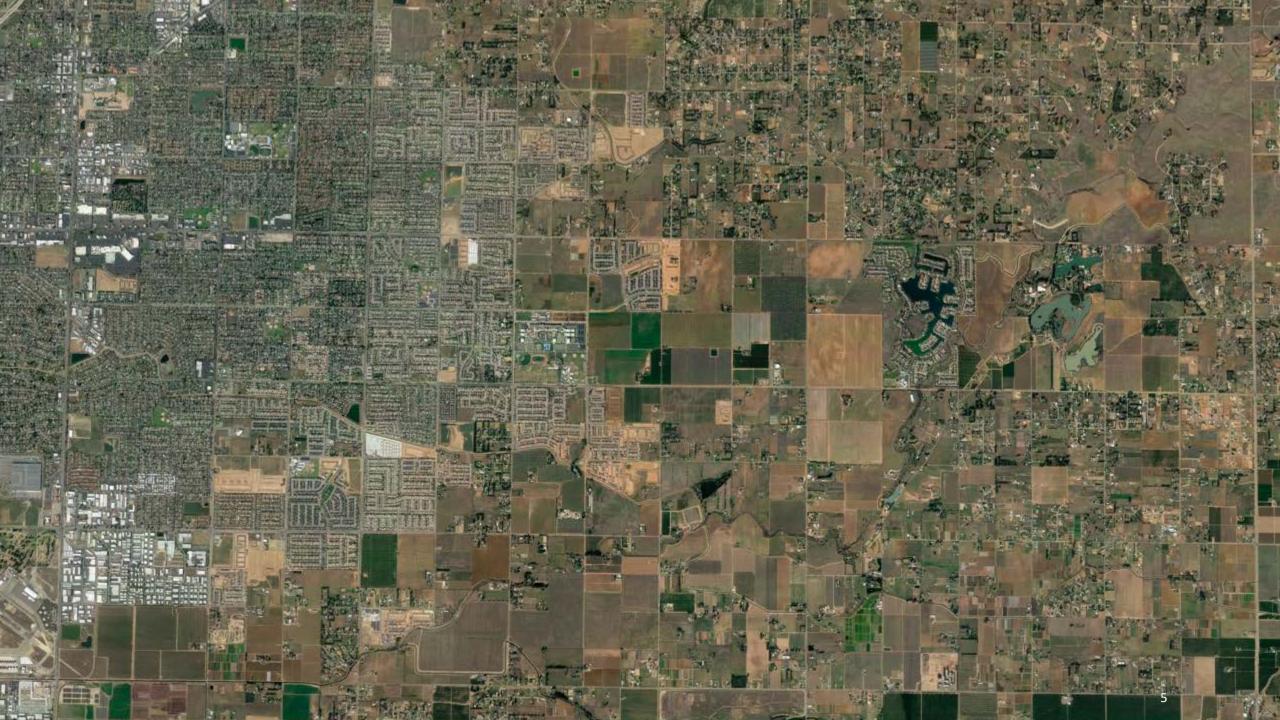
- 2017 Scoping Plan: near-term action needed to meet the long-term objective for lands as a net carbon sink
- Governor's Executive Orders: manage forests, enhance biodiversity, and achieve carbon neutrality
- 2018 IPCC Report: carbon neutrality is needed by 2045 to keep temperature rise to 1.5° C
  - Natural and working lands are critical

## Natural and Working Lands: Sink or Source?

- 5.5 Billion MT total ecosystem carbon (2014)
- 170 MMT carbon loss (2001-2014)

Equivalent to 635 MMT CO<sub>2</sub>e





## Untapped Opportunity in Natural and Working Lands

- Proceedings of the National Academy of Sciences:
   Cameron et al. (2017)
  - 56-147 MMT CO<sub>2</sub>e by 2030
- Next10: Marvin et al. (2018)
  - 31-46 MMT CO<sub>2</sub>e by 2030
- Science Advances: Fargione et al. (2018)
  - Up to 234 MMT CO<sub>2</sub>e by 2030

#### Activity Examples: Expected Climate Benefits

Pathway	Near-term Climate Benefits (to 2030)	Long-term Climate Benefits (to 2050/2100)
Coastal wetlands restoration		

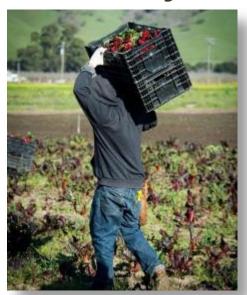
#### Past and Current Efforts

Resource
Management
Objectives

Climate Objectives

## Double the Pace and Scale of State-Supported Land Restoration Activities by 2030 and Beyond

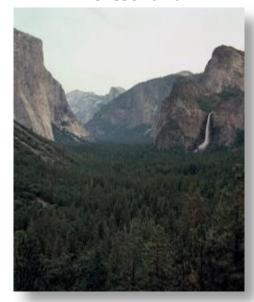
#### **Cultivated & Rangeland**



**5**x

State-funded acres in soil conservation practices

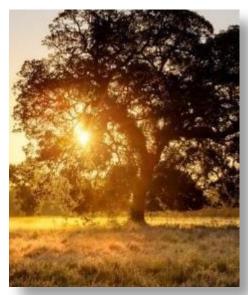
**Forest Land** 



**2**x

Pace and scale of forests managed or restored

**Savanna and Woodland** 



3**x** 

Pace of reforestation of oak savannas and riparian areas

**Wetlands & Seagrass** 

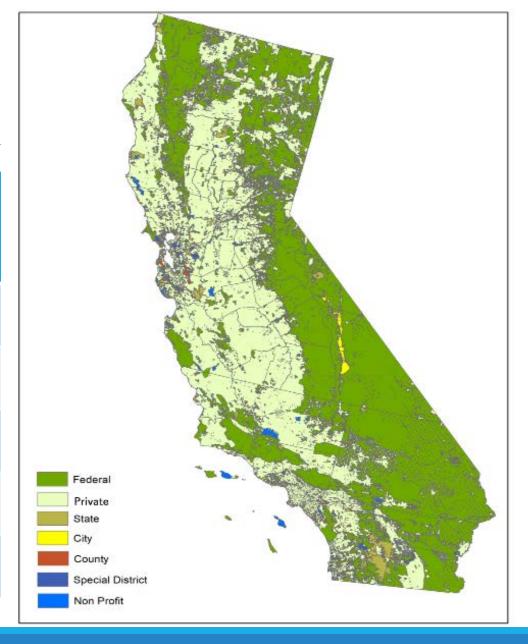


2x

Rate of wetland and seagrass restoration

### Land Ownership

Ownership	% of Total Acreage
Federal	48%
Private	47%
State	3%
City/County/Special District	< 2%
Non-Profit	< 1%



#### Next Steps

- Finalize Implementation Plan for State action
- Explore how to expand beyond State-supported activities
- Continue to develop quantification approaches including methods to assess cross-sector interactions
- Further integrate sector into next Scoping Plan Update