

# Ecosystem Service Benefits of Projects Funded by California Climate Investments (CCI)



Beyond reducing atmospheric greenhouse gas (GHG) concentrations, CCI projects contribute to a host of ecosystem services, or the benefits that healthy functioning ecosystems provide that improve the well-being of California residents, communities, and economy.

## BY THE NUMBERS

# 7,800

CCI projects implemented between 2015 and 2020 assessed for ecosystem service benefits potential

# 13

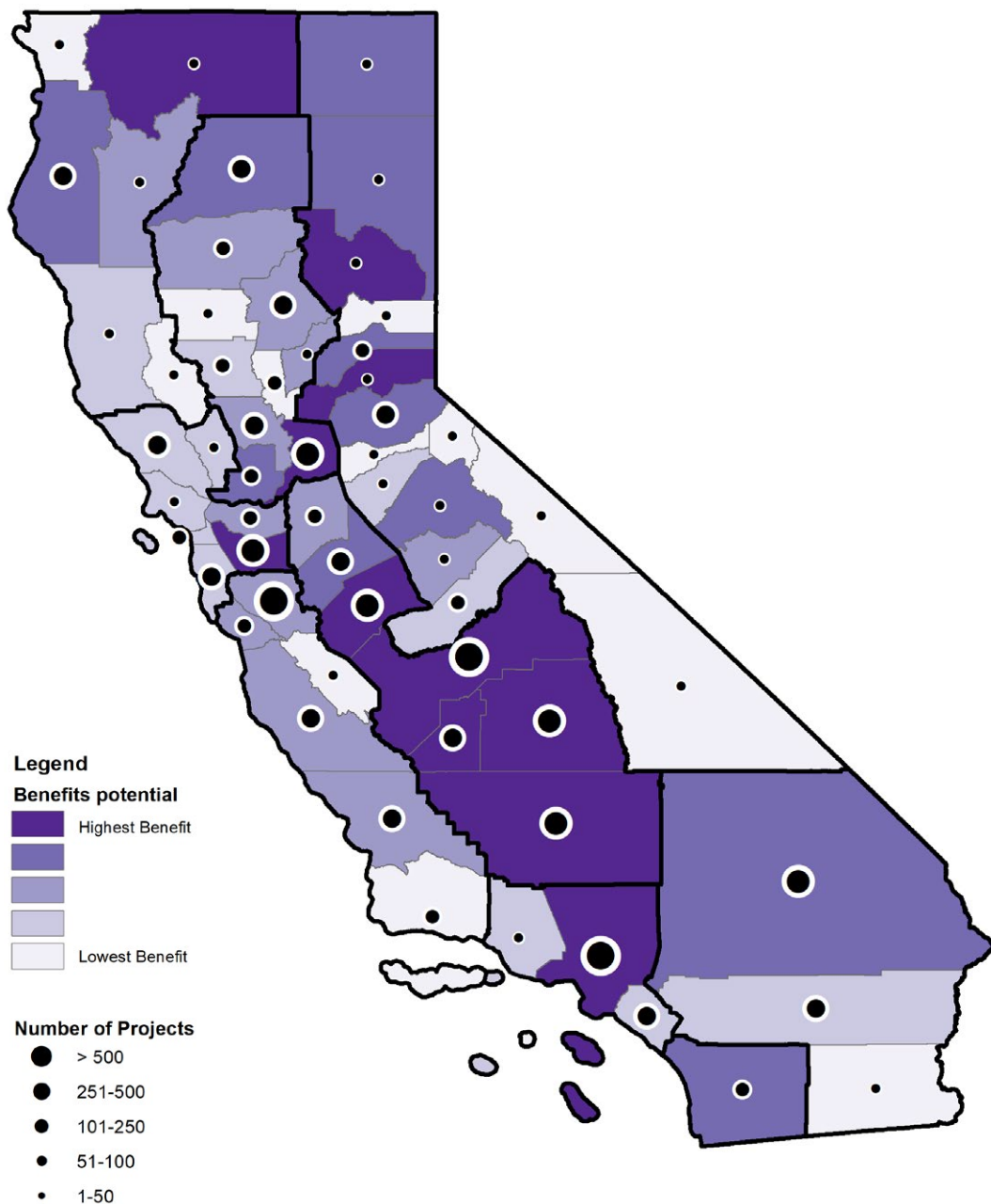
state agencies implementing projects included in this study

# 12

broad categories of projects that improve ecological conditions in California (see flip side)

# 30

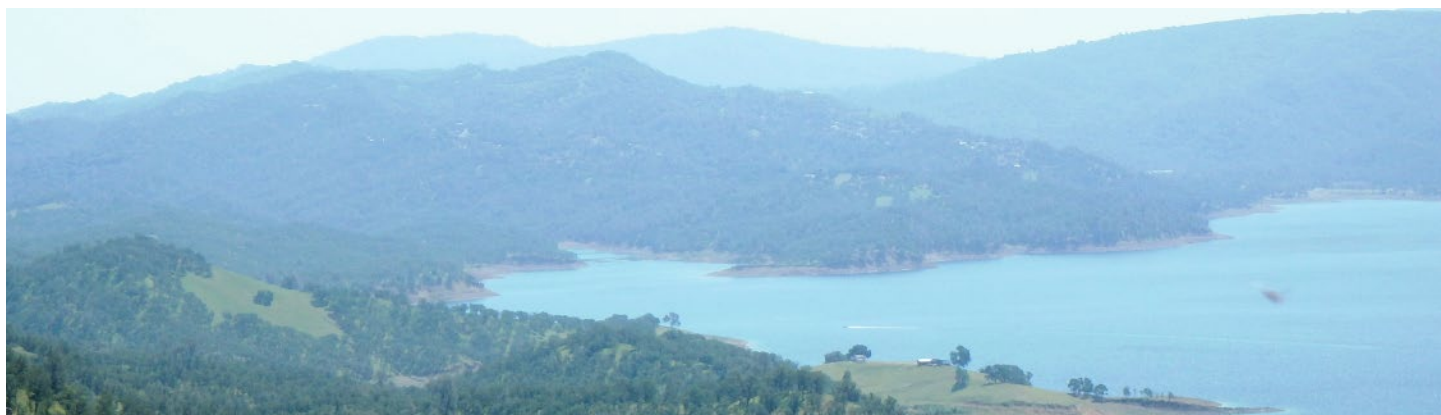
ecosystem service endpoints with monetized benefits potential results



## READ THE FULL REPORT

The report was prepared for the California Air Resources Board by Industrial Economics, Inc. Visit the [California Climate Investments website](https://www.caclimateinvestments.ca.gov) to find the full report: <https://www.caclimateinvestments.ca.gov/ecosystem-services>

# Ecosystem Service Benefits of Projects Funded by California Climate Investments (CCI)



CCI projects contribute to more sustainable agricultural production, restore beneficial wetland functions, reduce the threat of future forest fires, increase green space in urban areas, reduce consumption of scarce water and energy resources, and prevent waste of reusable products.

These projects help protect and preserve the valuable ecosystem services that sustain California's residents, communities, and economy.



## **Agricultural Land Conservation**

People value the continued existence of agricultural land. Sustained agricultural production generates revenue for farmers and food security for residents.



## **On-Farm Conservation**

**Management** Increased soil health reduces erosion, increases water retention, and improves habitat quality. New pollinator habitat increases productivity of nearby parcels.



## **Increased Efficiency of Agricultural Irrigation**

Improved water use efficiency reduces water needs and avoids property damage through reduced subsidence. More efficient pumps increase local air quality and improve human health.



## **Alternative Manure**

**Management** Sustainable manure management and compost production is associated with benefits related to soil health, odor reduction, and improved human health.



## **Wetland Restoration and Maintenance**

Well-functioning wetlands improve water quality, provide water storage, protect wildlife, and generate recreational and educational opportunities, among other benefits.



**Fuels Management** Reducing the likelihood of catastrophic fire avoids future property damage and the loss of ecosystem services provided by forests.



## **Restoration and Reforestation**

Restored forests increase air quality, control erosion, reduce flood and storm hazards, provide recreational opportunities, and bolster water supply.



## **Waste Prevention and Food Rescue**

Reducing food waste avoids meal costs and landfilling tipping fees while increasing food security. New production of compost, recycled products, and biogas increases commercial revenues.



## **Forest Conservation**

People value the continued existence of forested land and benefit from the ecosystem services forests provide.



## **Urban Forests and Green**

**Space** Expanded tree canopy may reduce energy needs, naturally manage stormwater, and reduce crime. Improved green space provides recreation opportunities that benefit human health and well-being.



## **Domestic Water Systems**

Improved water use efficiency reduces water supply maintenance needs, avoids property damage through reduced subsidence, and supports the continued existence of riverine habitats.



## **Woodsmoke Reduction**

Upgrading residential woodstoves improves human health through improved air quality and human safety through avoided home fire risks. Increased efficiency of stoves reduces wood burned for heating purposes.