USDA

California Climate Hub

As California faces the challenges of climate change, its specialty crop industries may be uniquely vulnerable. This workbook provides guidance and resources for California's agricultural producers and technical service providers to help them identify actions that can increase their operation's resilience to a changing climate.

The workbook provides a brief description of each step's purpose and context and an accompanying worksheet that uses a series of guided questions to build a climate-adaptive management plan. Collectively, these steps and worksheets guide users through the adaptation process, from defining one's goals and objectives through monitoring and evaluating the adaptive actions taken.

Central to the five-step process is the adaptation menu (on reverse) which offers a list of possible science-based actions that producers could use as a starting point to adapt their operations to the effects of climate change. Also in the workbook is a thorough list of helpful resources. The full workbook can be found on the USDA California Climate Hub's website.

## ADAPTATION RESOURCES WORKBOOK FOR CALIFORNIA SPECIALTY CROPS

QUICK START GUIDE



# The Adaptation Menu

## Strategy 1: Support and Maintain Soil Health, Soil Biological Services, and Water Quality

Maintain and Improve Soil Structure Enhance Soil Biology and Nutrient Availability with Organic Amendments Manage for Soil and Water Salinization Manage Fertilizer Application to Protect Groundwater Quality and Soil Health

## Strategy 2: Cope with Uncertain Water Availability

Improve or Alter Water Systems to Meet Current and Expected Future Demands Manage for the Effects of Drought Prepare for Changing Patterns of Precipitation

## Strategy 3: Manage Biological Crop Stressors

Reduce Pest Pressure Reduce Disease Risk from Pathogens Reduce Weed and Invasive Plant Pressure

### Strategy 4: Prepare for Temperature Change

Adapt to Warmer Conditions Manage for Changing Seasonality Prepare for Longer-Term and Larger-Scale Temperature Changes

### Strategy 5: Enhance Preparedness for Extreme Events

Prepare for Extreme Heat Events Manage for Extreme Precipitation and Flooding Enhance Resilience to Extreme Wind Prepare for and Respond to Wildland Fire and Smoke Impacts

### Strategy 6: Manage Farms and Fields as Part of a Larger Landscape

Integrate, Improve, or Maintain Natural Ecosystems within Agricultural Operations Promote Biological Diversity Across the Landscape Conserve Individual Farms

### Strategy 7: Develop or Expand Co-Benefit Efforts to Mitigate Climate Change

Reduce On-Farm Greenhouse Gas Emissions Increase On-Farm Soil Carbon Sequestration

For more info<mark>rmation visit https://www.climatehubs.usda.gov/hubs/california.</mark>

