CLIMATE SCIENCE ALLIANCE

Building Climate Resilience *with* Southern California Agriculture

MARCH 12, 2020

THE CLIMATE SCIENCE ALLIANCE

Our Vision

CLIMATE SCIENCE ALLIANCE

The mission of the Climate Science Alliance is to safeguard natural and human communities in the face of a changing climate. We do this through leading activities and creating partnerships which increase awareness of climate change impacts, promote solutions, and facilitate action.

Responses to Climate Change

Mitigation:

- Addresses causes
- Focus on reducing greenhouse gas emissions

Adaptation:

- Addresses impacts on people and ecosystems
- Focus on preparing for and managing impacts
- Resistance/Resilience – Accommodation - Transformation

Climate Change Consortium for Specialty Crops

Vision:

Convene growers, technical advisors, stakeholders, researchers and representatives of California's specialty crop industry to make recommendations on strategies for climate change adaptation

2012 Consortium Recommendations:

1. Research Needs

2. Planning & Resource Optimization

3. Outreach & Education

4. Technology & Innovation

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Learn more about 2012 Consortium Final Report that summarizes these recommendations:
www.cdfa.ca.gov/oefi/climate/climate_change_consortium_info.html

Climate Change Consortium for Specialty Crops

Outcomes of 2012 Consortium:

Online Platform for Educational Resources

Office of Environmental Farming & Innovation (EOFI)

Advancements in Research & Technical Tools

Informed State & Federal Programs

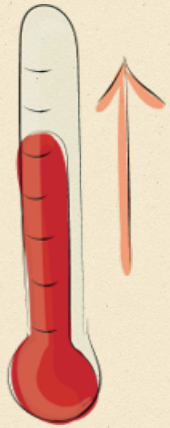
Creation of Climate Resilience Incentives:

Targeted assistance for farmers and ranchers

New in 2019!

STATE OF THE CLIMATE

Regional Climate Projections



Temperature

Increases in overall average temperatures, with higher daily maximum temperatures and more frequent/intense heat events

Precipitation

Precipitation will become more variable and extreme events will continue to intensify

Wildfire

Increased risk of high intensity wildfires

Drought

More dry days, dry years, and more frequent/intense droughts. Projections indicate a drier Southern California

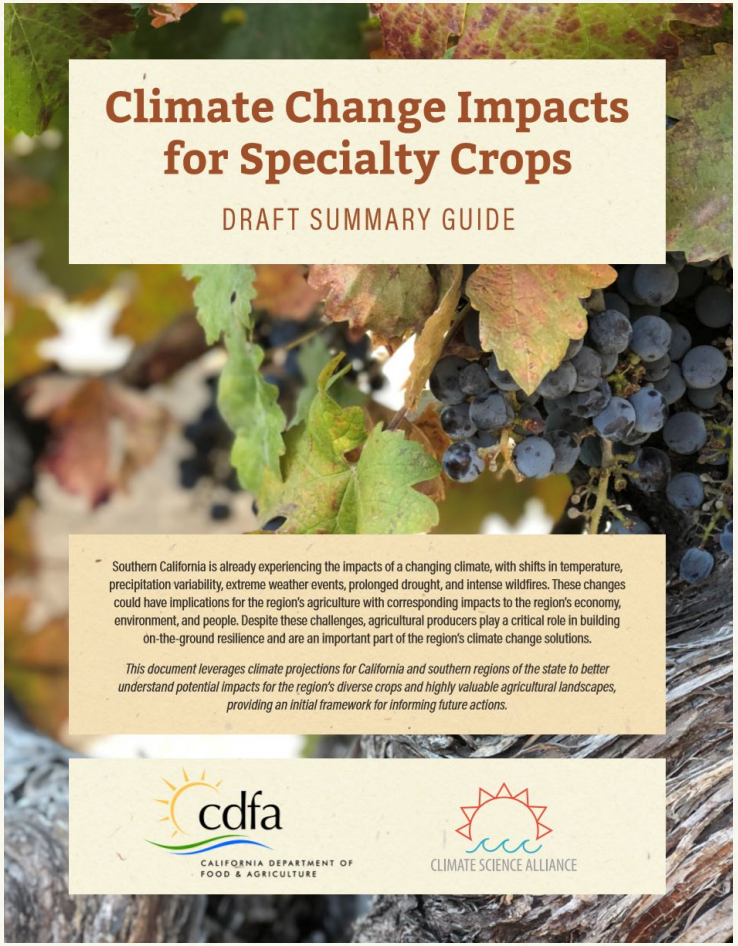
www.climatesciencealliance.org/sdc-ecosystems-assessment

STATE OF THE CLIMATE

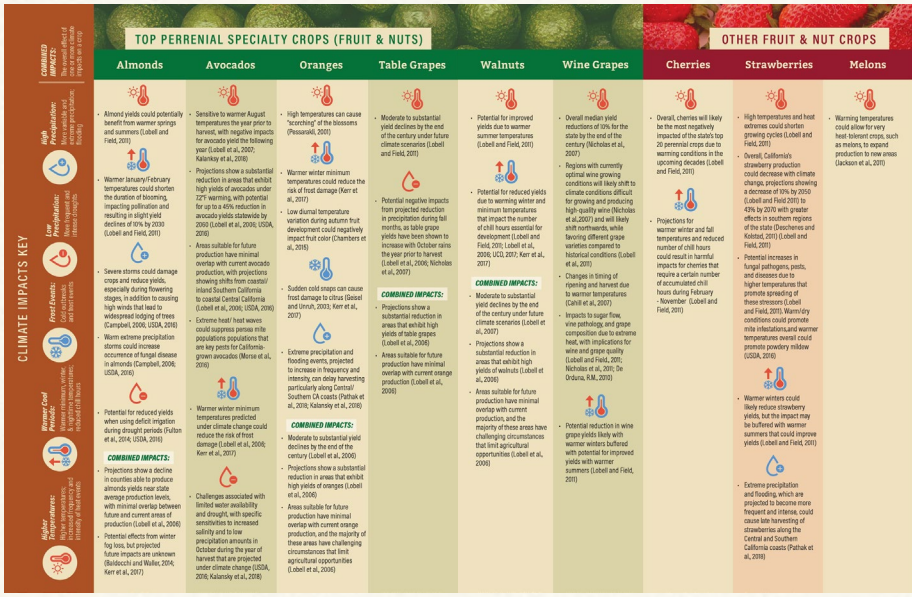
Climate Impacts to Agriculture

2020 CLIMATE CHANGE CONSORTIUM FOR SPECIALTY CROPS

Draft Summary Guide



- Regional climate projections
- Overview of climate impacts for agriculture
- Potential impacts for California's top crops



www.climatesciencealliance.org/farmer-feedback

www.cdfa.ca.gov/oefi/climate/climate_change_consortium_info.html

STATE OF THE CLIMATE

California Crops & Climate Change

Avocados

- Declines in yields
- Decreases/shifts in areas suitable for production
- Reduced risk of frost damage
- Sensitivity to rainfall and water availability

Citrus

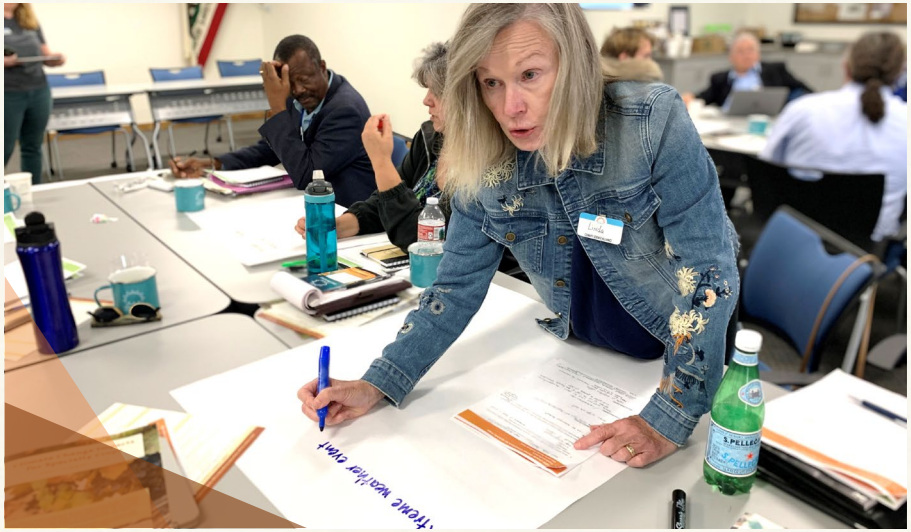
- Delayed harvesting due to extreme precipitation/flooding
- Impacts to fruit quality and yields
- Decreases/shifts in areas suitable for production

Grapes

- Shifts in areas suitable for production
- Different varieties
- Impacts to quality
- Changes in timing of ripening/harvest

2020 Climate Change Consortium for Specialty Crops

Over 40 producers, researchers, technical advisors, and representatives



Challenges and opportunities moving forward

2020 CLIMATE CHANGE CONSORTIUM FOR SPECIALTY CROPS

Case Studies of Resilience

Learning from our region's producers

and the strategies they are testing to

build on-the-ground resilience

Input & Recommendations

Challenges & Concerns:

- Greater seasonal unpredictability
- Shifts in growing season and harvest
- Difficulty in crop planning
- Crop losses

Recommendations & Opportunities:

- Diversified & new crop varieties
- Local research, data and monitoring
- Cover cropping, composting, mulching, agroforestry
- Funding and subsidies

We Need Your Input!

Climate Change Consortium for Specialty Crops

Share your input & recommendations through our surveys:

Producer/Farmer Survey & ***TA/Researcher Survey***

- **San Diego Region: Follow-Up Feedback Session**
- **South San Joaquin region: Consortium event**

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2020 CLIMATE CHANGE CONSORTIUM FOR SPECIALTY CROPS

Thank you!

For questions and to get involved, please contact Lindsey at:
ljasperse@climatesciencealliance.org

2020 Consortium resources, events, surveys, and case studies:
www.climatesciencealliance.org/farmer-feedback

2012 Climate Change Consortium for Specialty Crops final report:
www.cdfa.ca.gov/oefi/climate/climate_change_consortium_info.html

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