Sustainable Agricultural Solutions to Climate Change

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Climate Change Impacts

- Increased water scarcity
- Crop yield reductions; shifting crop patterns
- Increased /shifting pest & disease pressures
- Reduced winter chill hours
- Heat stress for people and livestock
- Erratic & extreme weather events
Increases in Extreme Weather: Economic Impacts on Agriculture

Selected Annual Climate Records for 2011

Record Type:
- Green: Wettest
- Yellow: Driest
- Red: Warmest
- Blue: Coolest

These data are preliminary. A more complete list and map will follow once full quality assurance is complete.

Record Stations: Wettest 121, Driest 45, Warmest 17, Coolest 2
Source: GHCN-D
Last updated: January 18, 2012
Sustainable Agricultural Solutions to a Changing Climate

- Build Soil Health
- Increase Biodiversity
- Reduce Off-farm Inputs
- Water Use Efficiency
- Organic Farming
- Farmland Protection
Ready…Or Not?
An assessment of California agriculture’s readiness for climate change (March 2011)

• Research
   Since 2007, identified only 39 publicly funded research projects that focused on CA agriculture-specific climate mitigation and adaptation activities.

• Direct Conservation Incentives
   Unlike other states, CA lacks direct incentive programs for producers to adopt on-farm conservation programs.
     • Congressional cuts to USDA conservation programs
Technical Assistance

- CE Advisors
- CE Specialists
- Total


Values: 0, 100, 200, 300, 400, 500, 600
Supporting California Agriculture in Addressing Climate Change

- California-specific research on mitigation & adaptation solutions

- Technical assistance
  - Coop Extension
  - NRCS
  - RCD
  - Nonprofits

- On-farm conservation incentives: Whole farm approach

- Adequate, whole farm insurance