



TEMPERATURE



WATER



PESTS



POLLINATORS



## WATER

- Reduced precipitation (drought) or increased precipitation (floods)
- Decreased winter snowpack, altered (earlier) timing of snowmelt and spring river runoff
- More variable temperatures resulting in more variable precipitation and snowpack accumulation
- Altered reservoir storage regimes
- Reduced natural groundwater recharge
- Reduced water quality due to reduced fresh water supplies
- Uncertainty in predictions

(CDFA,2013)



## TEMPERATURE

- Increased average, minimum, and maximum temperatures in all seasons, and increased temperature variability
- More frequent and longer-lasting heat waves in the summer
- Reduced number of winter chill hours and fog
- Uncertainty in temperature change projections and forecasts
- High spatial variability

(CDFA,2013)



## POLLINATORS

- Altered temperature and water availability will have direct impact on individual pollinator species
- Climate change will alter inter-species dynamics and the larger ecosystems upon which agriculture depends
- Over-reliance on managed pollinators (honey bees) poses a potential risk to agriculture in light of climate change
- Climate change impacts to pollinator species are complex and unpredictable

(CDFA,2013)



## PESTS

- Altered temperature and water availability will have direct impact on individual pest species
- Climate change will alter inter-species dynamics and the larger ecosystems upon which agriculture depends
- Conventionally grown, monoculture agriculture will be more vulnerable to pest changes
- Climate change impacts to pests are complex and unpredictable

(CDFA,2013)