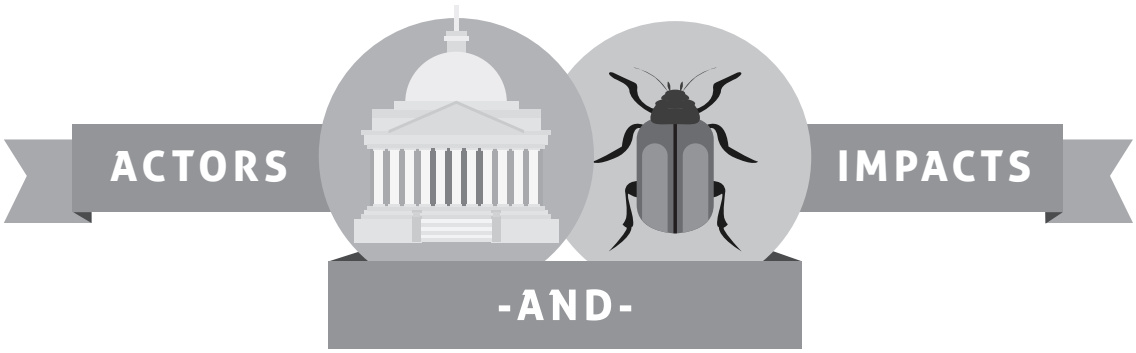
REFERENCE SHEET



ACTORS

Producer: the person, or group of people that operate a farm

Agro-Industry: business connected with agriculture; involves researching technologies and disseminating information to producers

Government: agencies responsible for the creation and implementation of programs and policies to support producers and the agro-industry

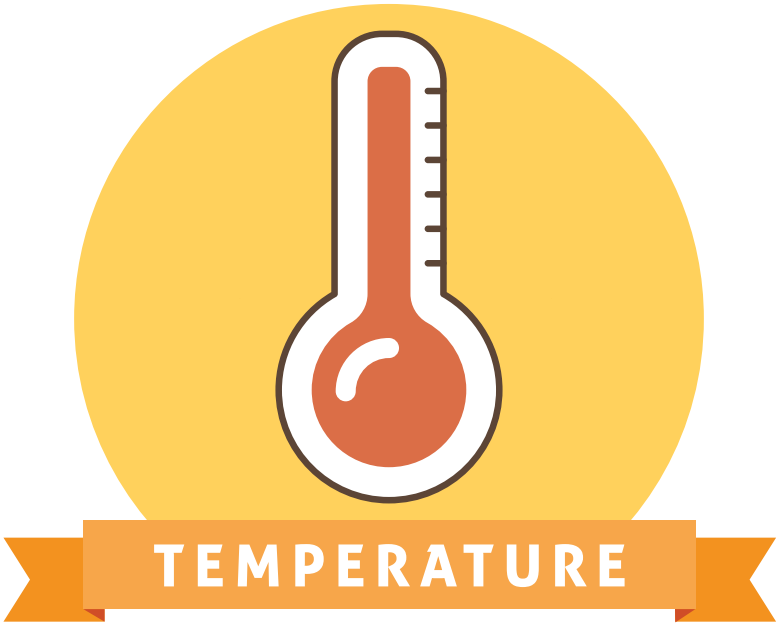
IMPACTS OF CLIMATE CHANGE

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

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

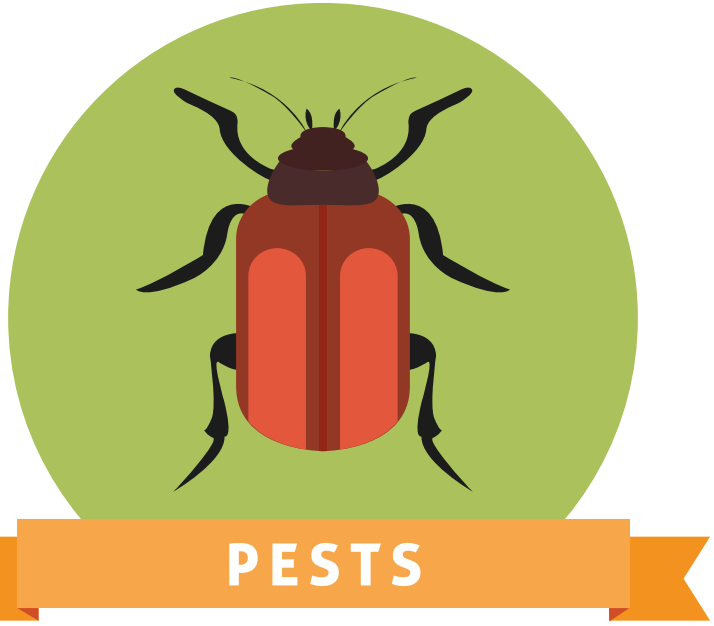
Pests:
- Altered temperature and water availability will have direct impact on individual pest species
- Climate change will alter inter-species dynamics and the larger ecosystems upon which agriculture depends
- Conventionally grown, monoculture agriculture will be more vulnerable to pest changes
-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

Pollinators:
- Altered temperature and water availability will have direct impact on 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

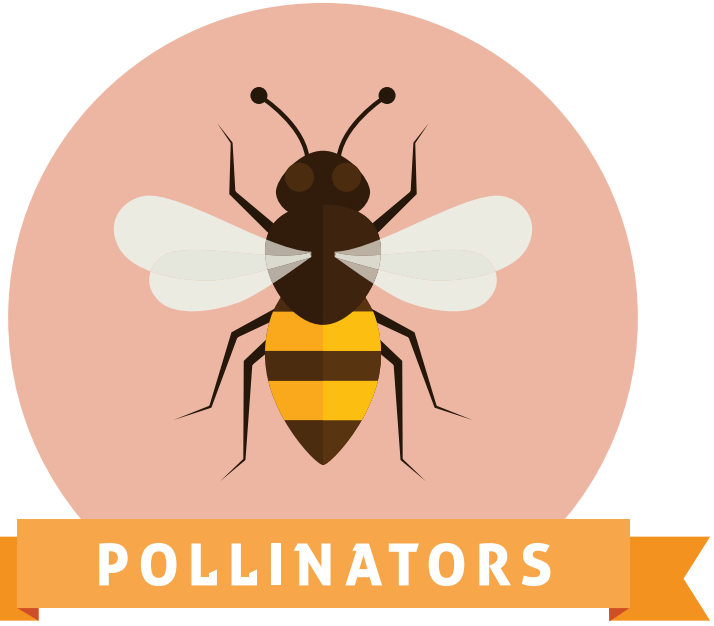


TEMPERATURE

WATER



PESTS



POLLINATORS

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(CDFA,2013)

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GOVERNMENT

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