



Objectives

- Identify and test climate adaptation and mitigation intervention strategies that can be applied to enhance sustainability and resilience of fruit and vegetable supply chains in the United States.
- Provide actionable strategies that contribute to a nutritious, reliable, affordable, and environmentally sound food supply.

Desired Impact

- Supply decision makers, growers, and other stakeholders in fruit and vegetable supply chains with science-based evidence to adapt to climate change impacts and mitigate greenhouse gas emissions.
- Sustainably deliver the nutritional value associated with greater consumption of fruits and vegetables, which is central to improving diets and combatting obesity in the United States.

Approach

- Use crop, economic, and environmental modeling to determine current and future climate and water availability impacts on selected fruit and vegetable crops.
- Investigate mitigation strategies and land use change that may result from future relocation of crops from water-stressed areas to new regions.

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Fruit & Vegetable Supply Chains Climate Adaptation & Mitigation Opportunities



Year 1		
		Tomatoes
Potatoes	S	weet Corn
	Year 2	
		Spinach
		Sprider
Green Bea	ns	Carrots
Year 3		
	Oranges	
Grapes	St	trawberries
	Year 4	
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United States.

YOIO, CAMonterey, CA Fresno, CA Yuma, CA

Maricopa, AZ







Crop Modeling Counties

The 32 crop modeling counties chosen for the project are located in 9 of the 14 major watersheds of the contiguous



These are the highest target crop acreage counties in the 31 crop reporting districts that collectively include 80% of the area in the United States where the target crops are planted (St. Johns, FL added to better represent potatoes).

Modeling Workflow





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