

Food System Assessment for Yolo & Sacramento County Delta Communities



Delta Protection
Commission



Rural-Urban Connections Strategy



Enhancing rural economic viability and environmental sustainability

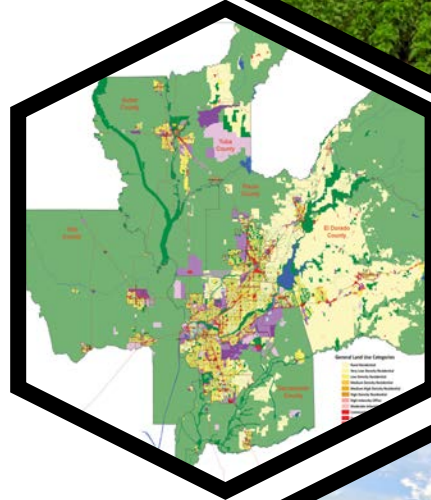


RUCS Topics

Land Use and
Conservation



Forest Management



Regulations



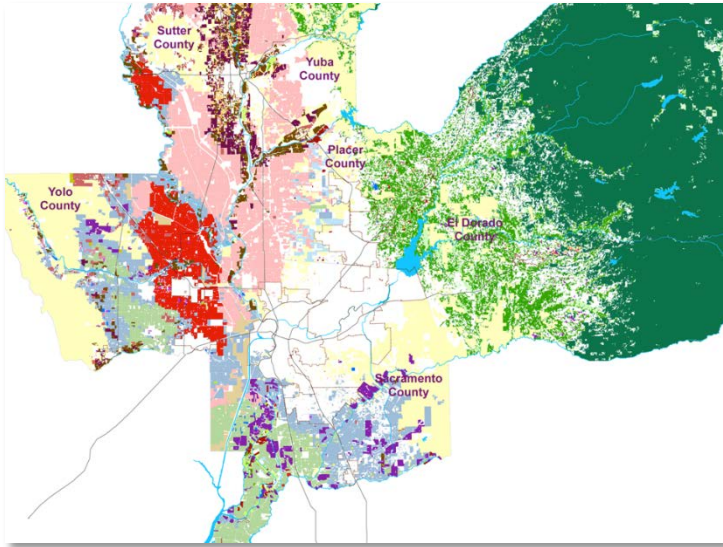
Infrastructure for
Agriculture



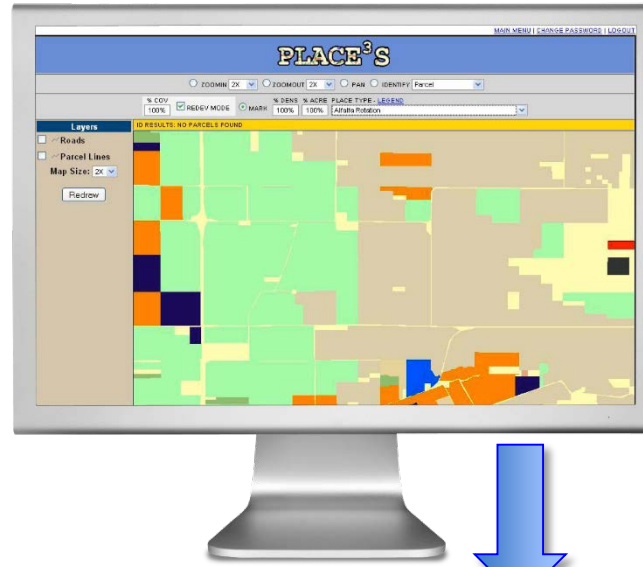
Market Opportunities



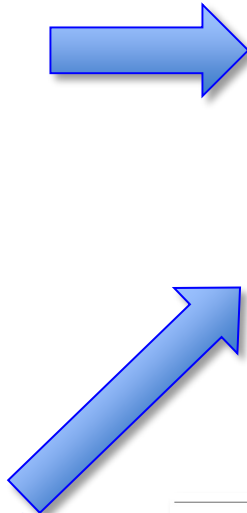
RUCS Crop Map



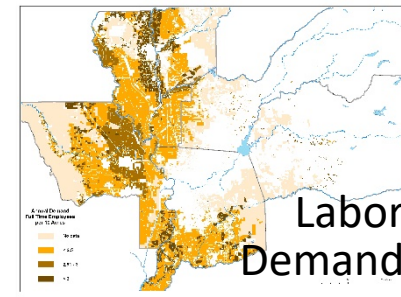
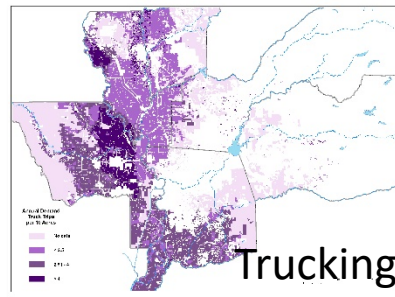
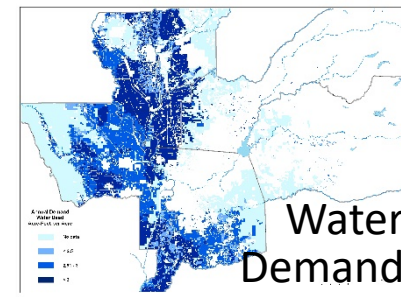
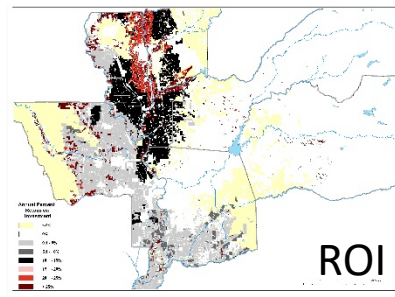
RUCS Scenario Analysis Tool



Ecosystem Services

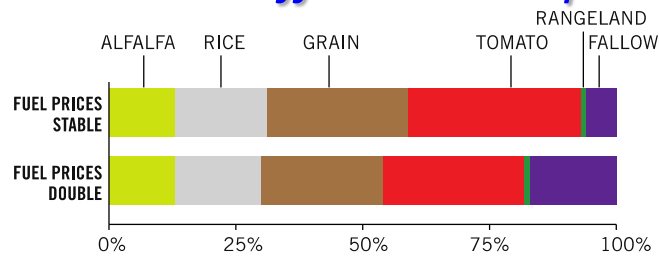


Scenario Results

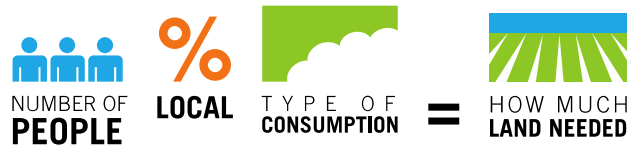


Modules Informing Scenarios

Market Affects on Crops

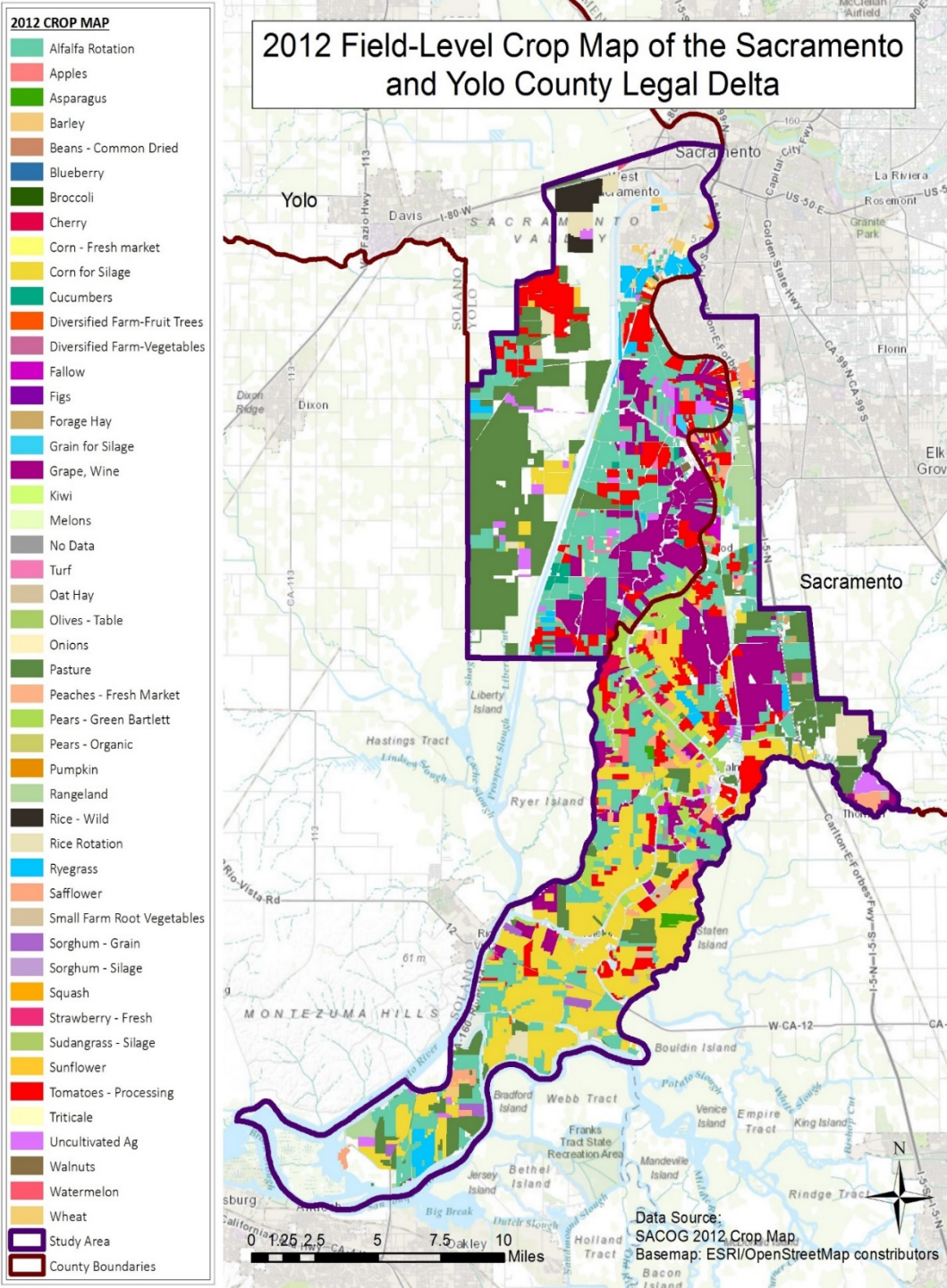


Local Market Food Production



Food System Multiplier Study





Study Objectives

- Generate new data specific to study area
- Update/customize models
- Examine new market opportunities
- Assess production conditions
- Model “food hub” feasibility
- Run scenarios to gauge economic viability





- 10 million residents between Sacramento and Bay Area regions
- Together consume 12.5 billion pounds of food each year
- Demand for locally grown food increasing 9% year over year
- Price premiums of around 20% for local food



Assessing Opportunities

BAY AREA CONSUMPTION OF TARGET LOCAL CROPS FOR DELTA AGRICULTURE, 2014

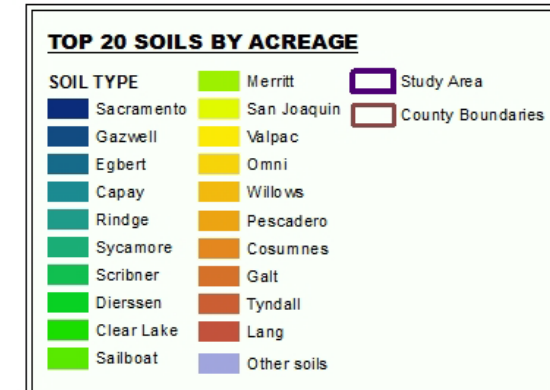
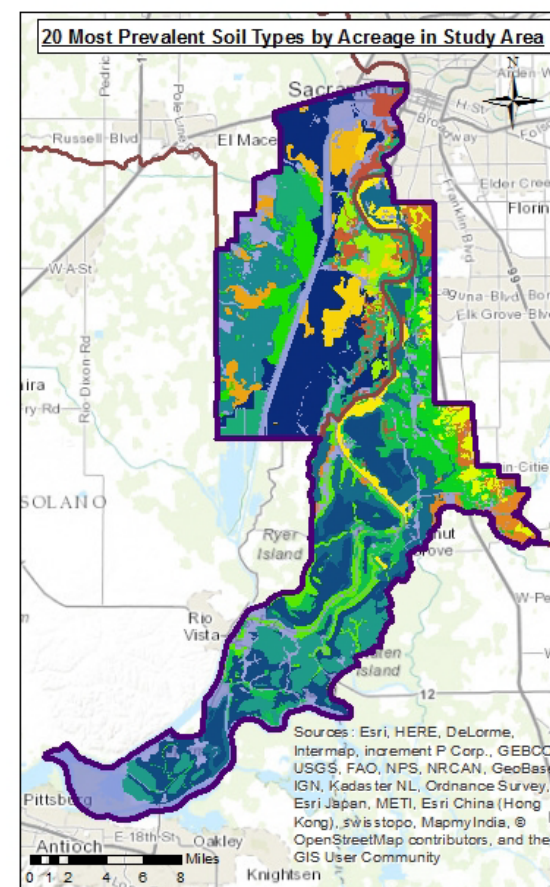
Target Crop	Pounds Consumed per Individual	Tons Consumed Across Bay Area Region
Apples	13.6	50,915
Cherries	1.2	4,327
Pears	2.5	9,497
Peaches	3.8	14,136
Blueberries	1.1	4,124
Strawberries	6.1	23,025
Iceberg Lettuce	13.2	49,474
Green leaf Lettuce		
Red Leaf Lettuce	8.6	32,233
Romaine Lettuce		
Spinach	1.4	5,215
Broccoli	5.6	21,019
Kale	0.2	667
Tomatoes	15.5	58,381
Bell Peppers	9.0	33,682
Celery	5.2	19,533
Carrots	7.0	26,092
Potatoes	30.6	114,824
Sweet Potatoes	5.5	20,619
Onions	16.1	60,612
TOTAL	--	548,375

Source: SACOG Regional Food Consumption Calculator analysis of USDA's FICRCD and LAFA data bases.

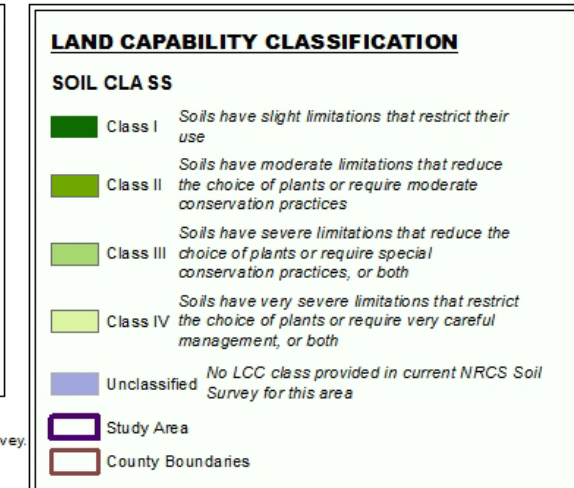
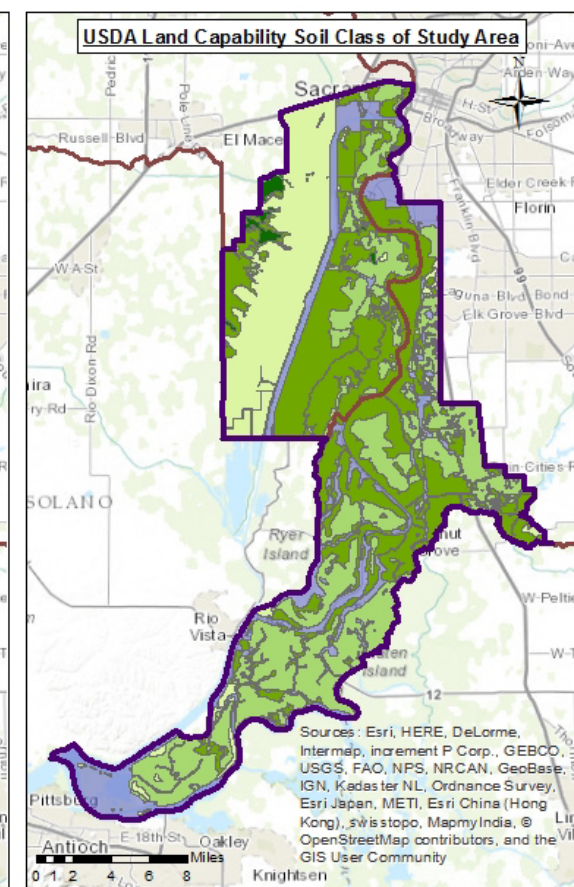
These soils can grow these crops



- Water availability OK
- Labor supply??
- Scenarios determine how much and where inputs are needed
- Modeled small changes in cropping patterns to replicate:
 1. Current trends
 2. Food hub
 3. Agritourism



Soil Data Source: Soil Survey Staff, Natural Resources Conservation Service, USDA. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed 23 September 2015.





Trend Scenario

Continue recent cropping shifts

- Crop changes on 1,075 acres
- \$6 million increase in farmgate value
- Small increases in costs and labor
- ROI increases; supporting trend

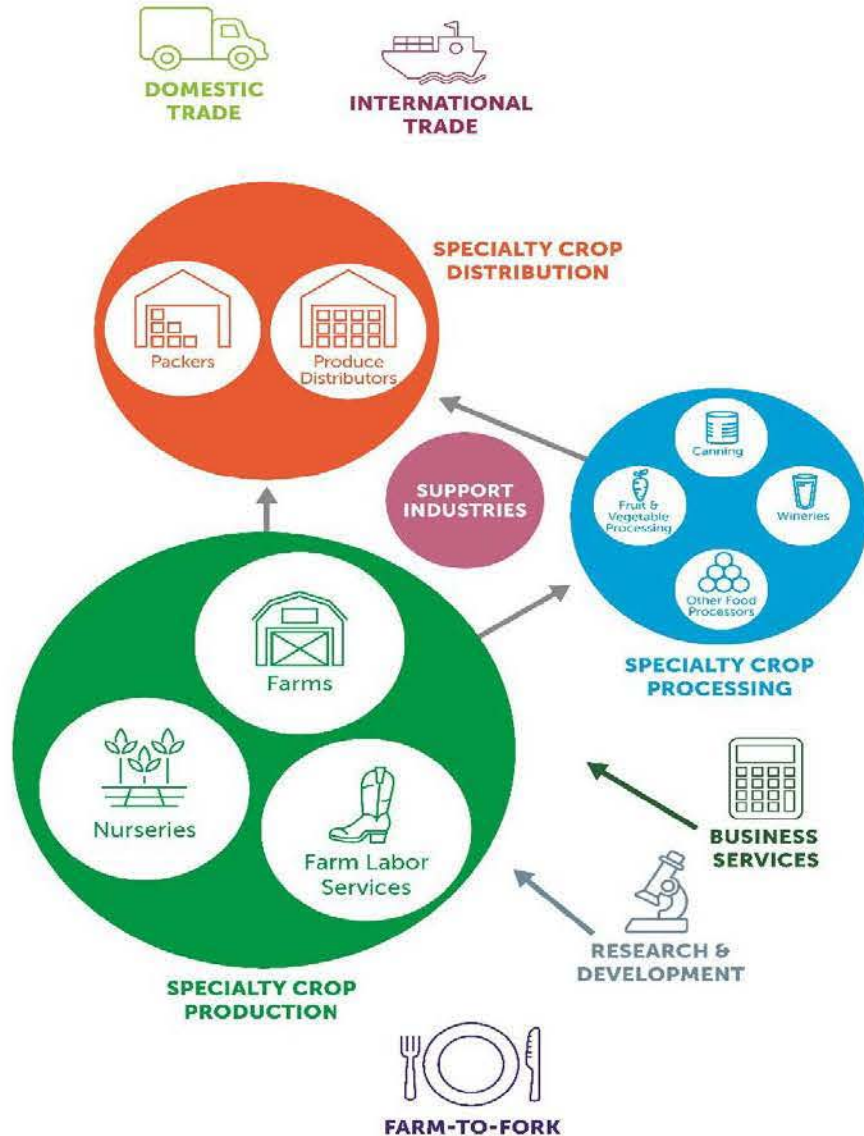


Food Hub Scenario

Scaling the local food system

- Crop changes on 503 acres
- \$6.3 million increase in farmgate value
- Target crops based on market assessment
- ROI doubles; supports food hub concept

Specialty Crop Cluster Multiplier Study



CLUSTER	EMPLOYMENT MULTIPLIER	VALUE ADD MULTIPLIER
Manufacturing	2.3	2.06
Construction	1.98	1.93
Specialty Crop Cluster	1.82	1.9
Professional & Scientific Services	1.75	1.82
Finance, Insurance, & Real Estate (F.I.R.E)	1.7	1.52
Health	1.67	1.63
Legal	1.63	1.41
Retail	1.34	1.55



Agritourism Scenario

Bringing the fork to the farm

- Tourism crop changes on 1,000 acres
- \$9.4 million increase in farmgate value
- ROI increases; supports tourism
- Access to roads; activity clusters, zoning

WORKING LANDSCAPES PILOT STUDY: AGRICULTURE AND HABITAT

in the Sacramento & Yolo County Delta

