



**Solano and Yolo County
Agriculture Current Basis for
Planning for the Future**

November 16, 2011

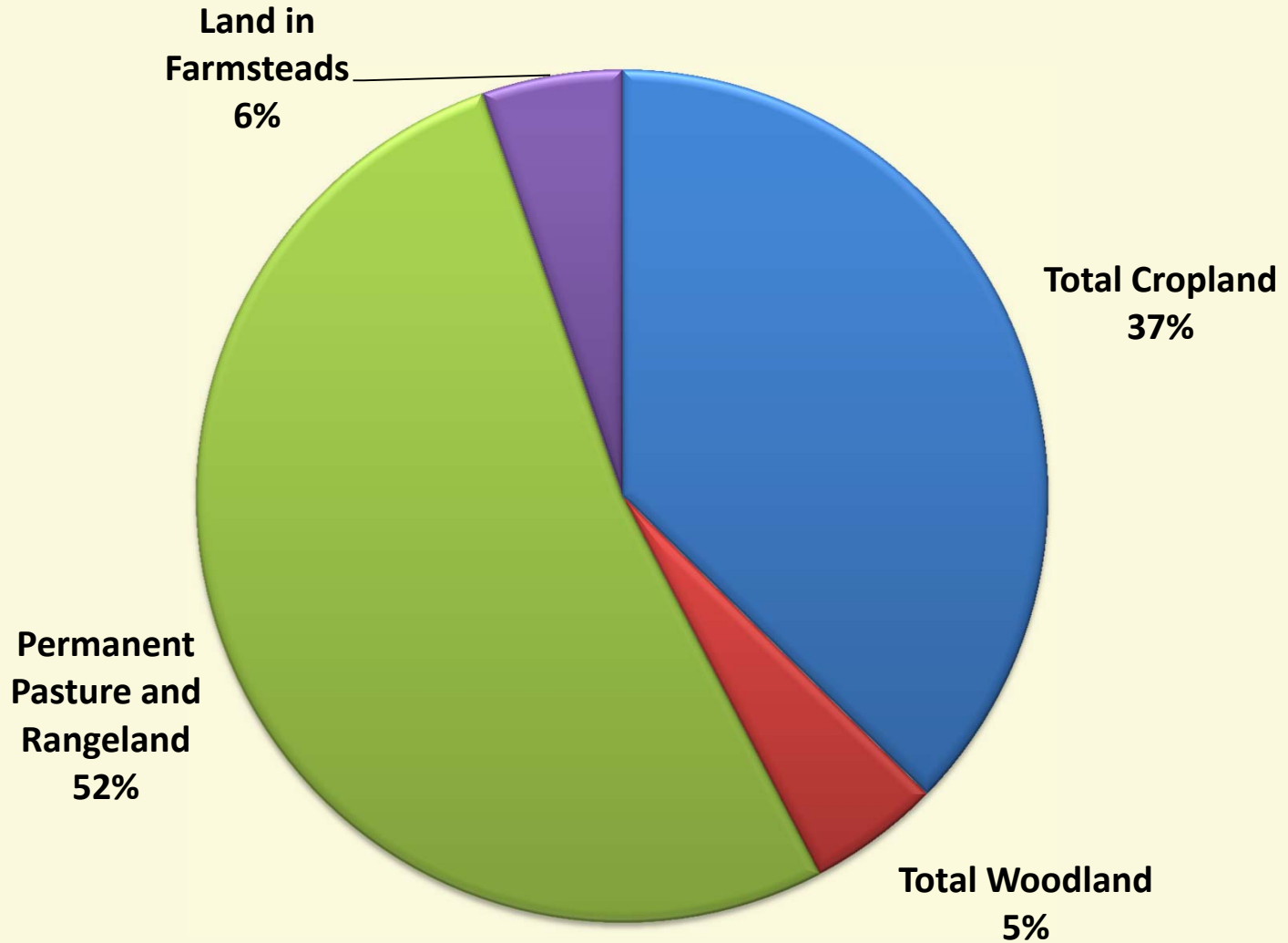
Daniel A. Sumner

University of California Agricultural Issues Center

Outline of presentation

- **Agricultural profiles of Yolo County and Solano Counties**
 - **Trends and anticipated changes in land use and production**
 - **What counties can do to support agriculture in Solano and Yolo Counties**
- **Climate Change and the possible effects on agriculture in Yolo and Solano counties**

LAND IN FARMS IN CALIFORNIA



Source: USDA NASS, 2007 Census of Agriculture

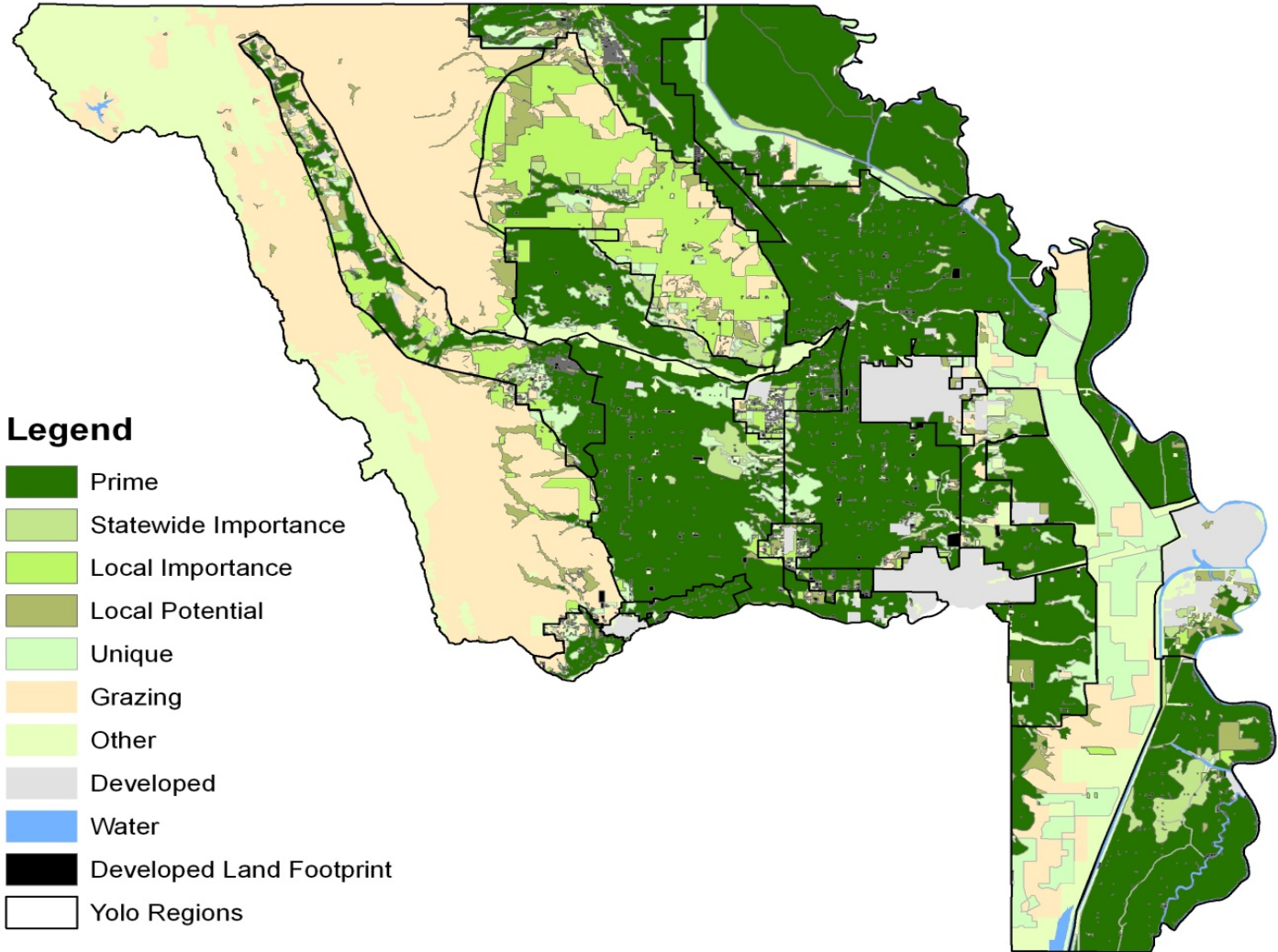
Yolo Data

For more information:

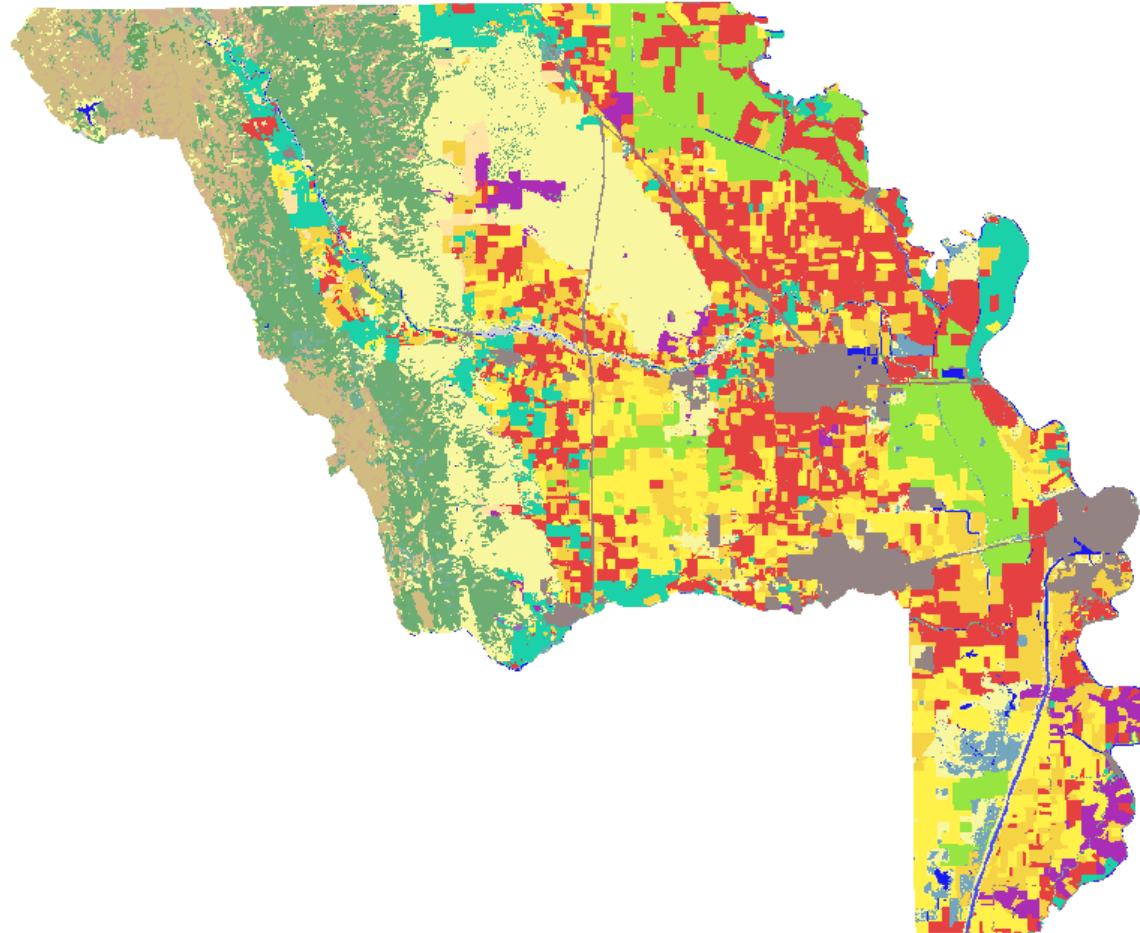
Richter, Kurt. 2009. *Sharpening the Focus of Yolo County Land Use Policy*. University of California Agricultural Issues Center

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Map of Yolo County, California, showing agricultural land (FMMP 2006)



Map of Yolo County, California, showing land use types (DWR 1997)

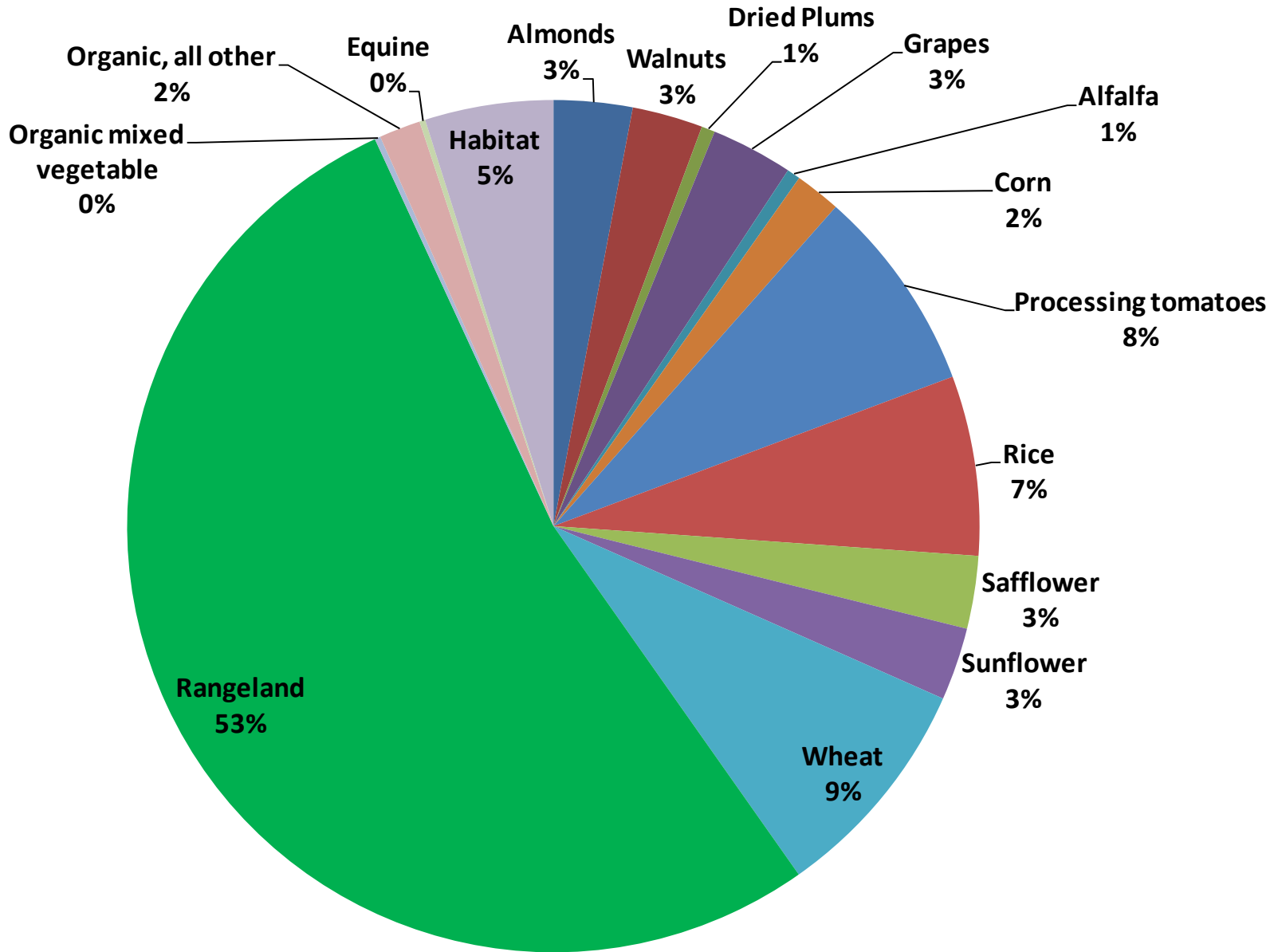


Land Cover

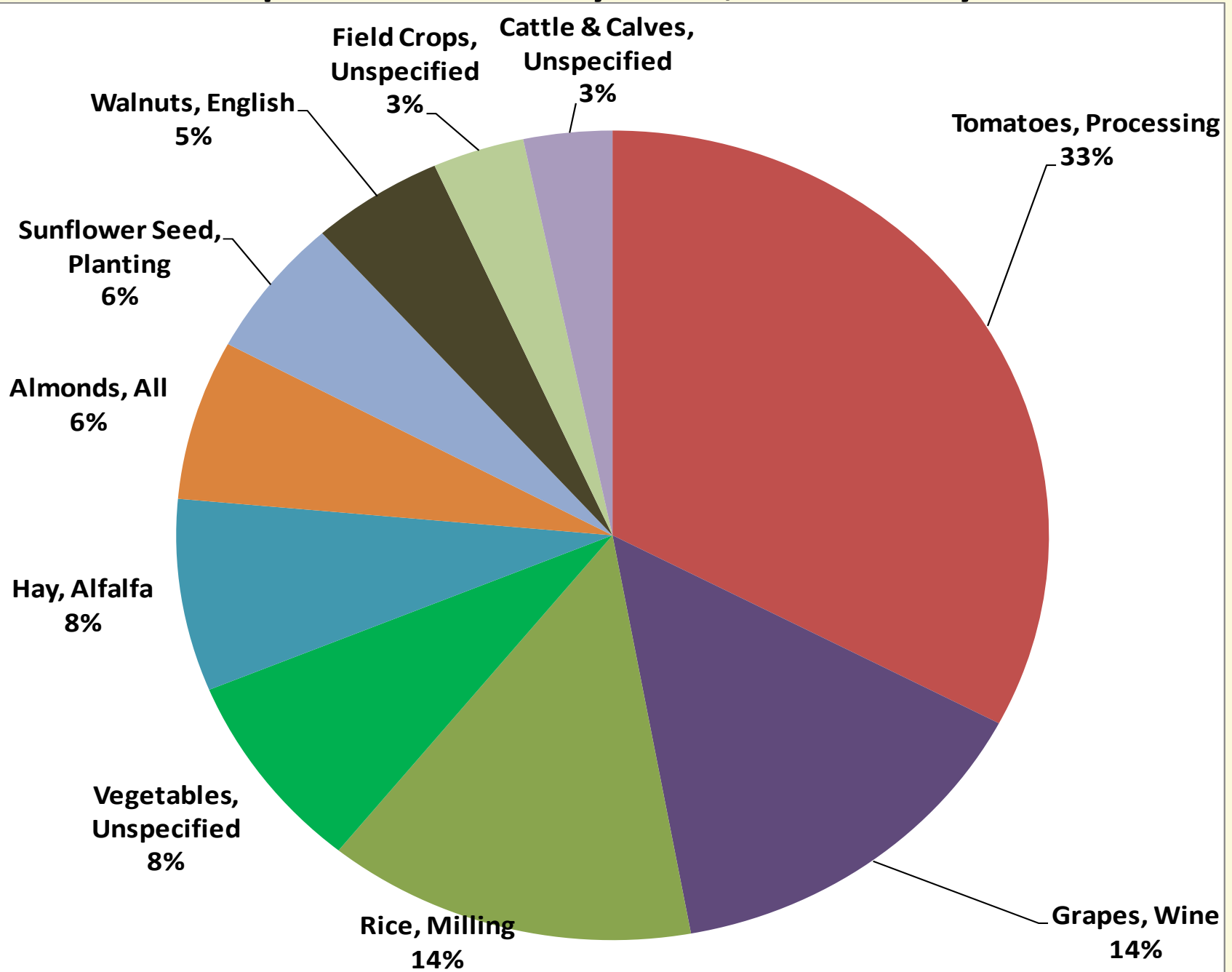
- 3) Annual Grassland
- 6) Barren
- 8) Blue Oak-Foothill Pine
- 9) Blue Oak Woodland
- 12) Chamise-Redshank Chaparral
- 22) Freshwater Emergent Wetland
- 28) Lacustrine
- 32) Mixed Chaparral
- 35) Montane Hardwood-Conifer
- 36) Montane Hardwood
- 39) Perennial Grassland
- 43) Riverine
- 53) Urban
- 55) Valley Oak Woodland
- 56) Valley Foothill Riparian
- 57) Water
- 62) Unknown Shrub Type
- 77) Eucalyptus
- 101) Dryland Grain Crops
- 102) Irrigated Grain Crops
- 103) Irrigated Hayfield
- 104) Irrigated Row and Field Crops
- 105) Rice
- 106) Deciduous Orchard
- 107) Evergreen Orchard
- 108) Vineyard

50 km

Top 10 Commodities by Area, Yolo County



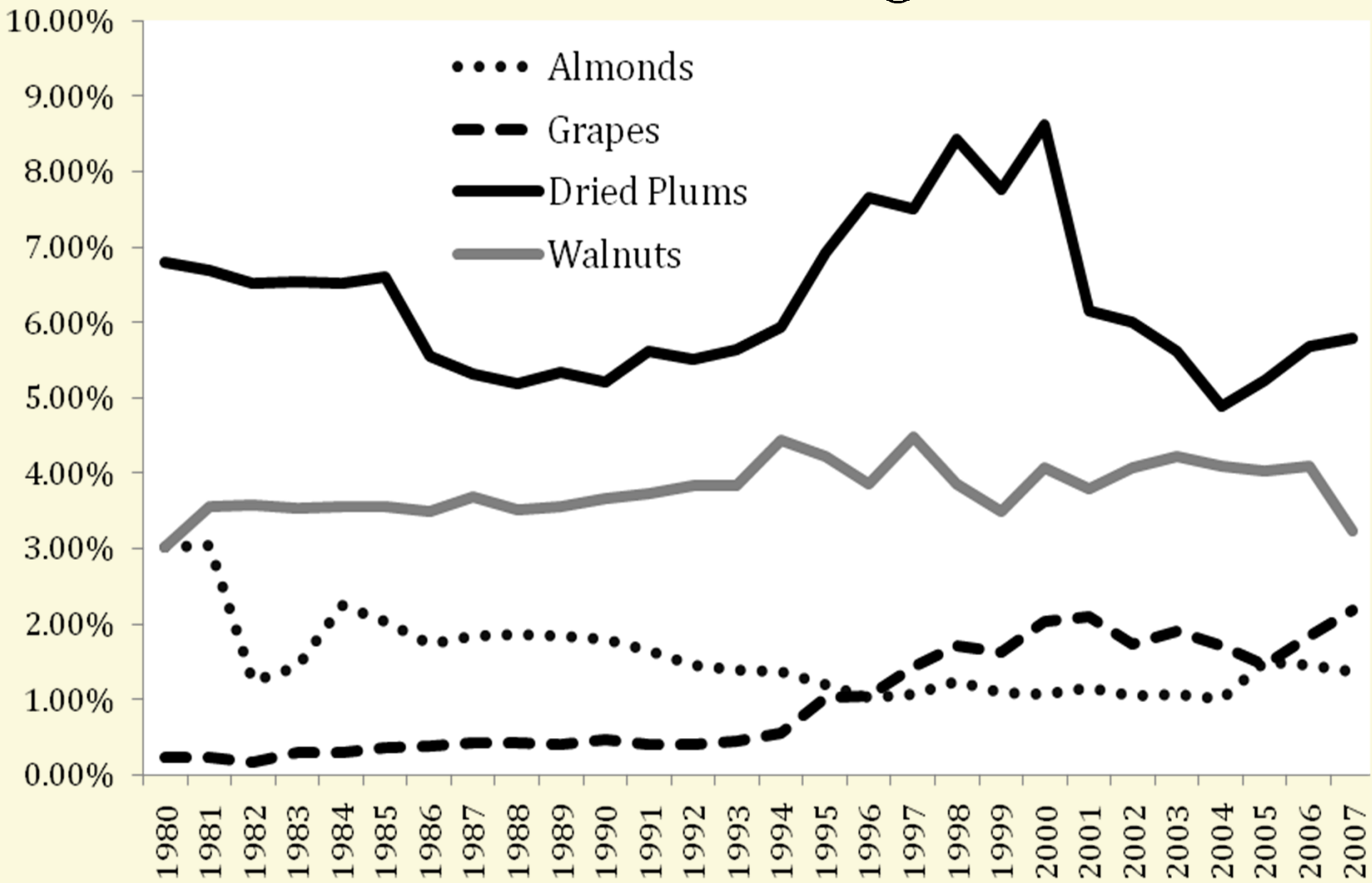
Top Commodities by value, Yolo County



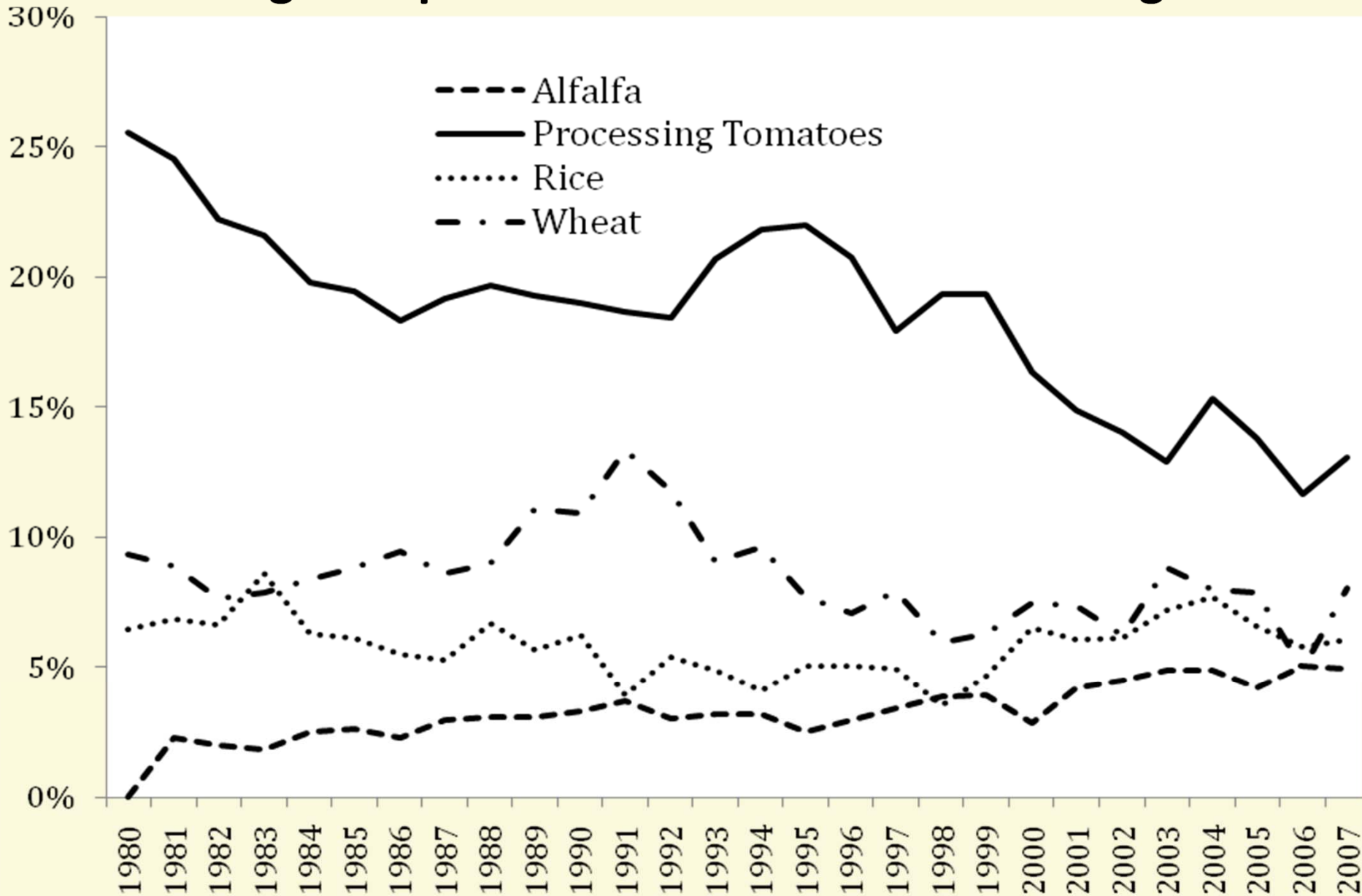
Acres of agricultural production and agricultural value by region, Yolo County, 2008

	Acres		Value (\$ millions)	
	Total Acres	Percent	Total Value	Percent
Clarksburg	31,784	5	102	19
Elkhorn	11,286	2	12	2
Yolo Bypass	60,925	10	35	6
Yolo Basin	12,617	2	17	3
Conway	12,775	2	9	2
Yolo East	69,197	12	111	21
River Garden	39,492	7	55	10
Davis	4,017	1	2	0
Monument Hills	5,692	1	5	1
Dunnigan Hills	51,831	9	22	4
Yolo West	41,925	7	61	11
Colusa Basin	18,980	3	33	6
Hungry Hollow	17,757	3	22	4
Winters	6,427	1	8	2
Blue Ridge	166,178	29	17	3
Capay Valley	27,423	5	23	4
All of Yolo	578,304		535	

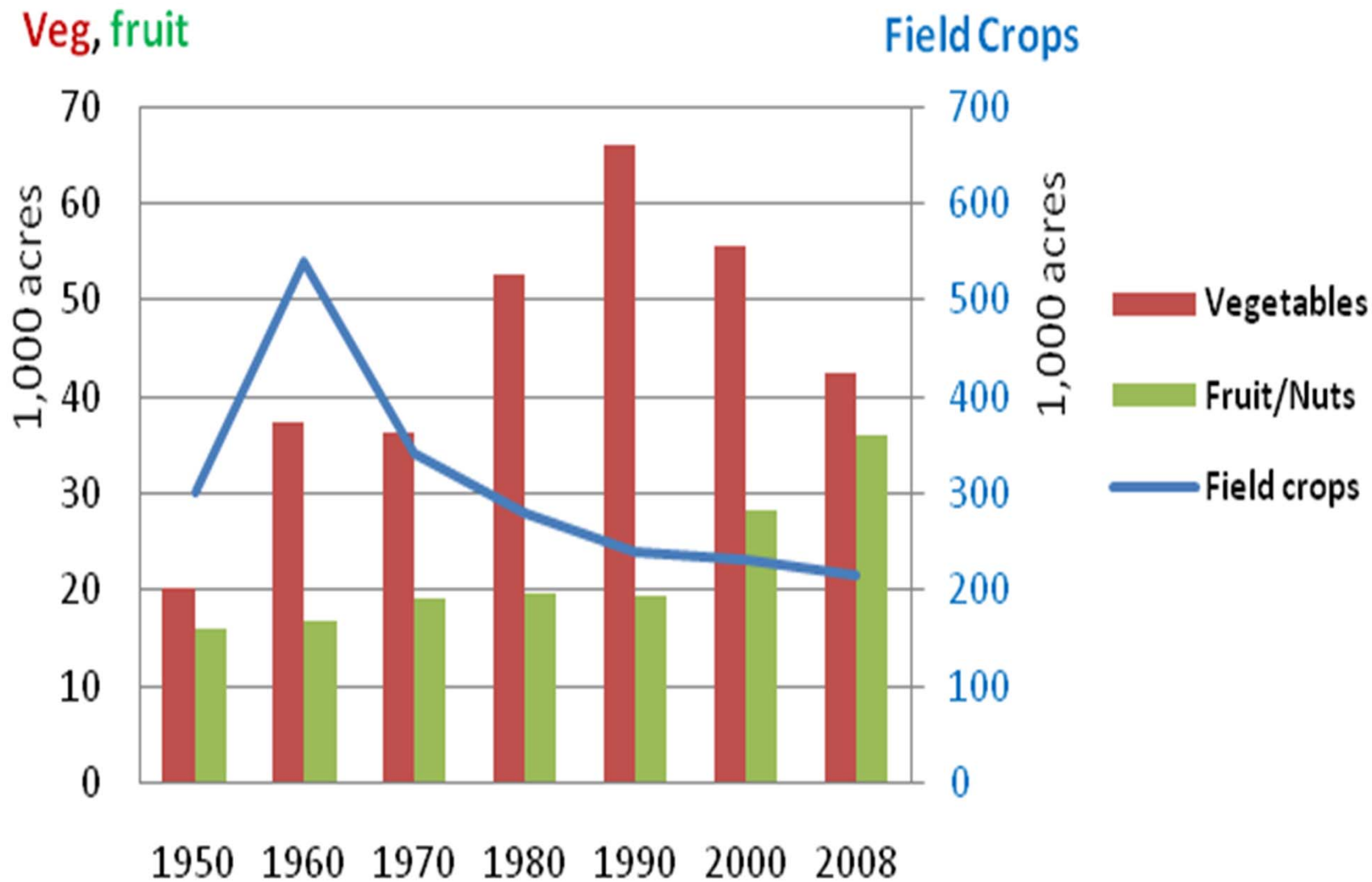
Yolo County Tree and Vine Crop Acreages as Percent of California State Acreages



Yolo County processing tomato, alfalfa, rice and wheat acreages as percent of California state acreages



Historical crop acreage by crop category in Yolo County



Solano Data

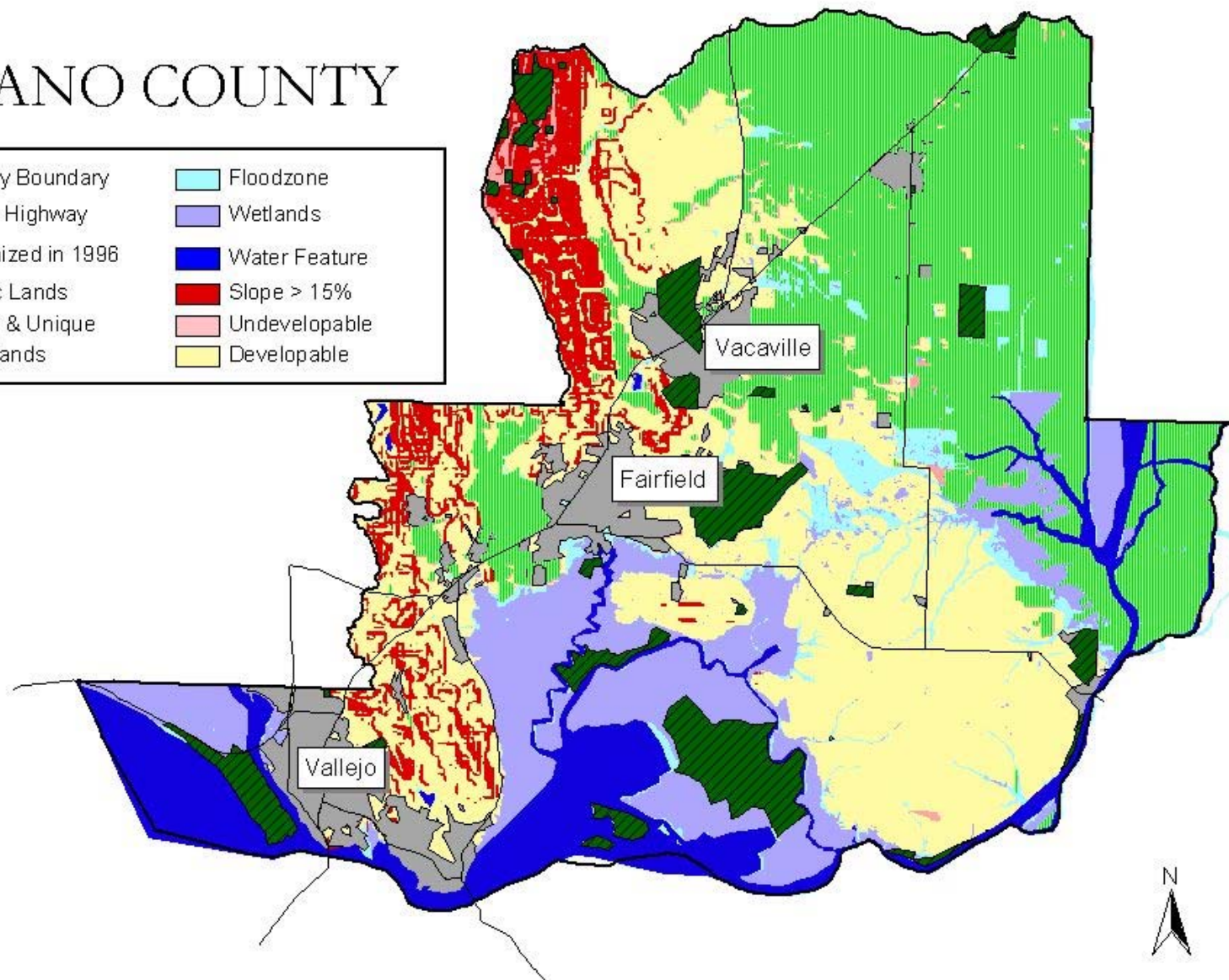
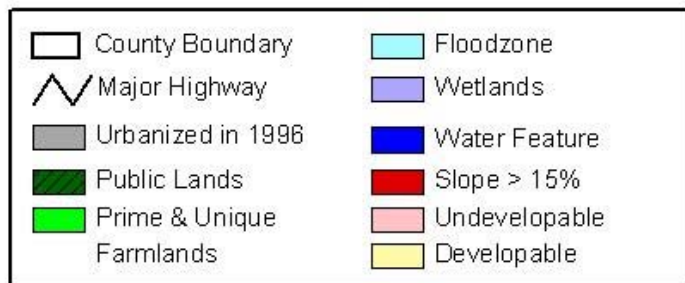
For more information:

Sokolow, Al, Kurt Richter, and Mario Moratorio . 2007. *The Solano Agricultural Futures project*. University of California Agricultural Issues Center

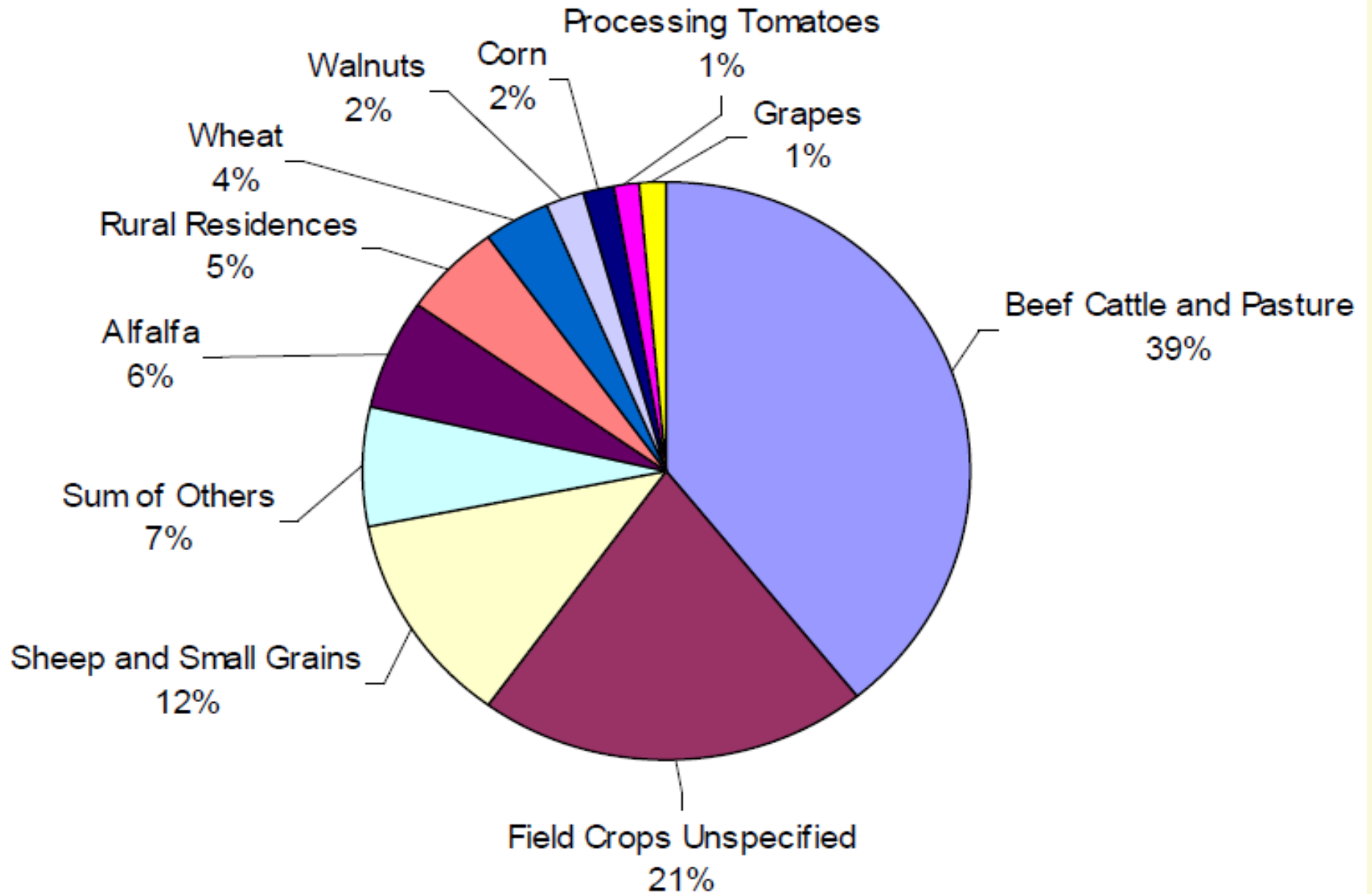
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Map of Solano County, California, showing agricultural land

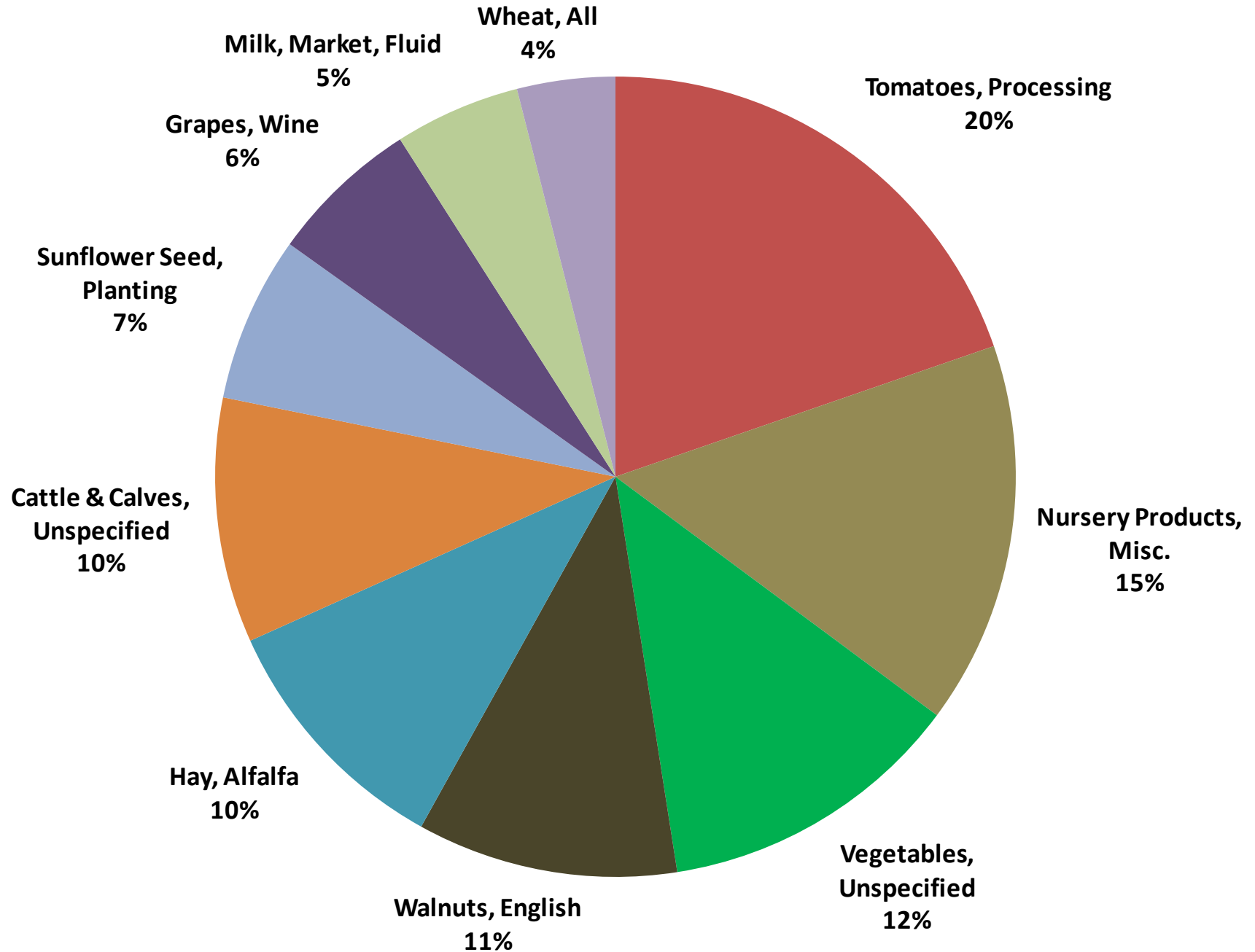
SOLANO COUNTY



Top 10 Commodities by Area, Solano County





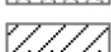





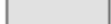


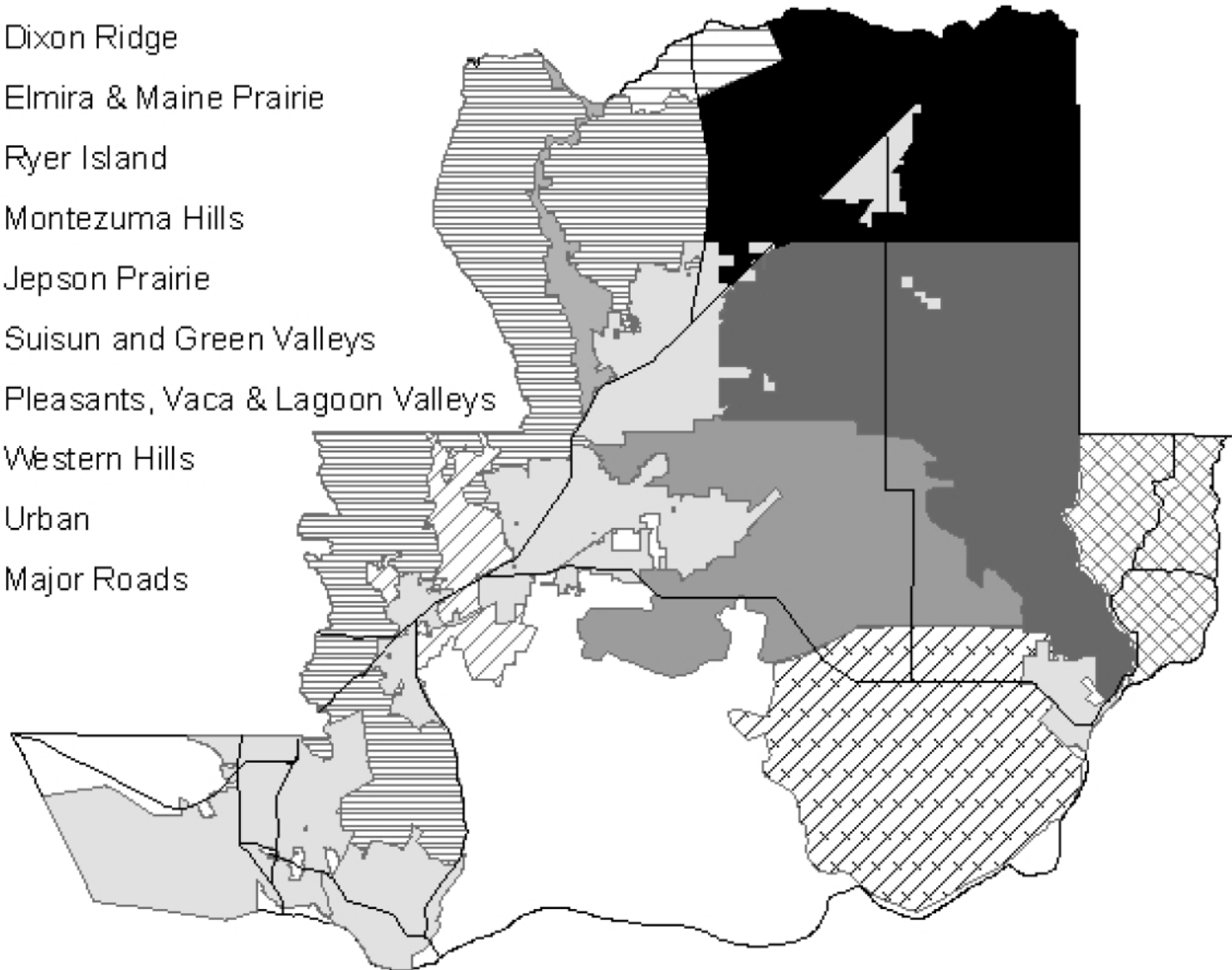
Top Commodities by value, Solano County



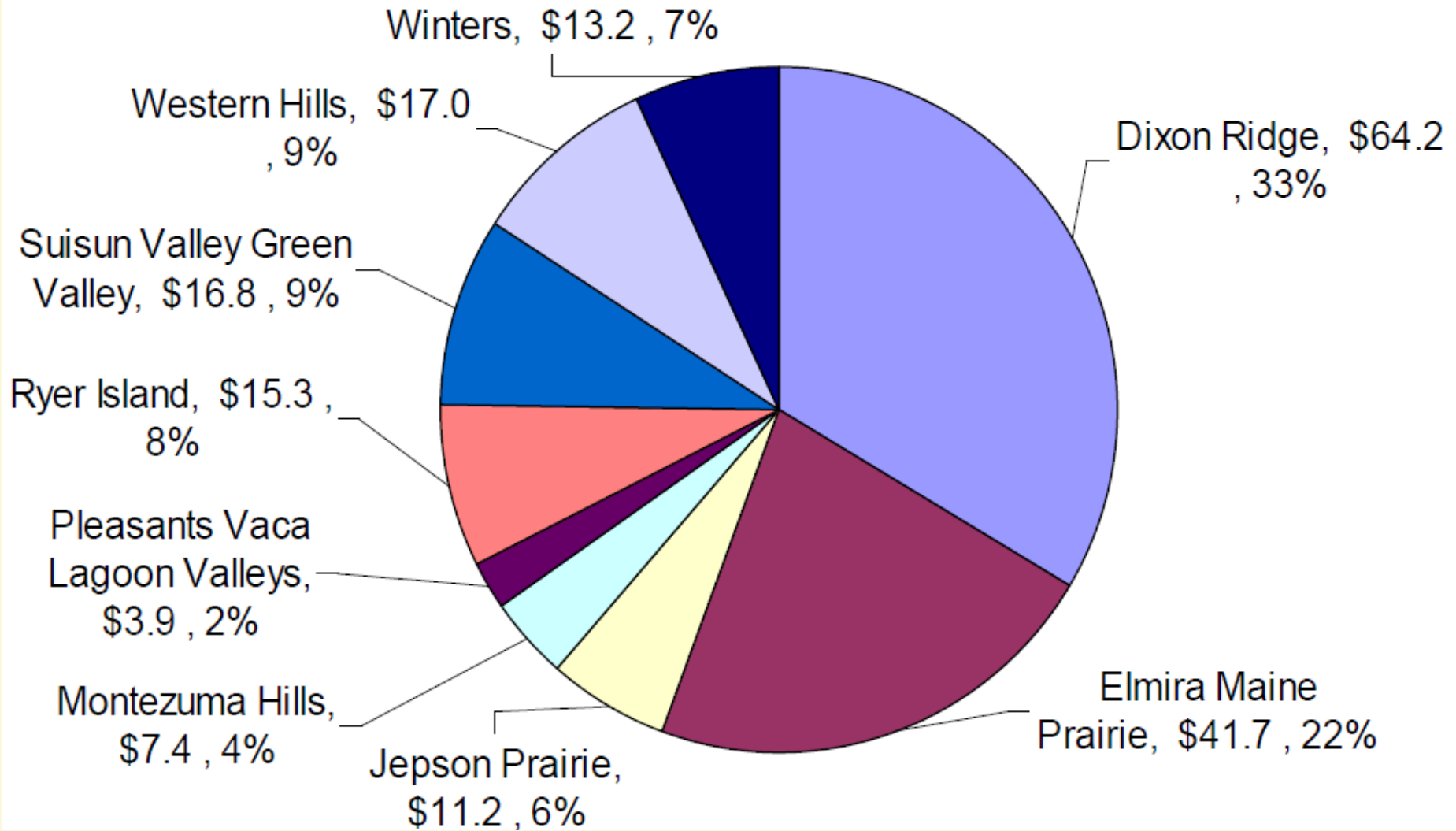
Agricultural Regions of Solano County

Legend

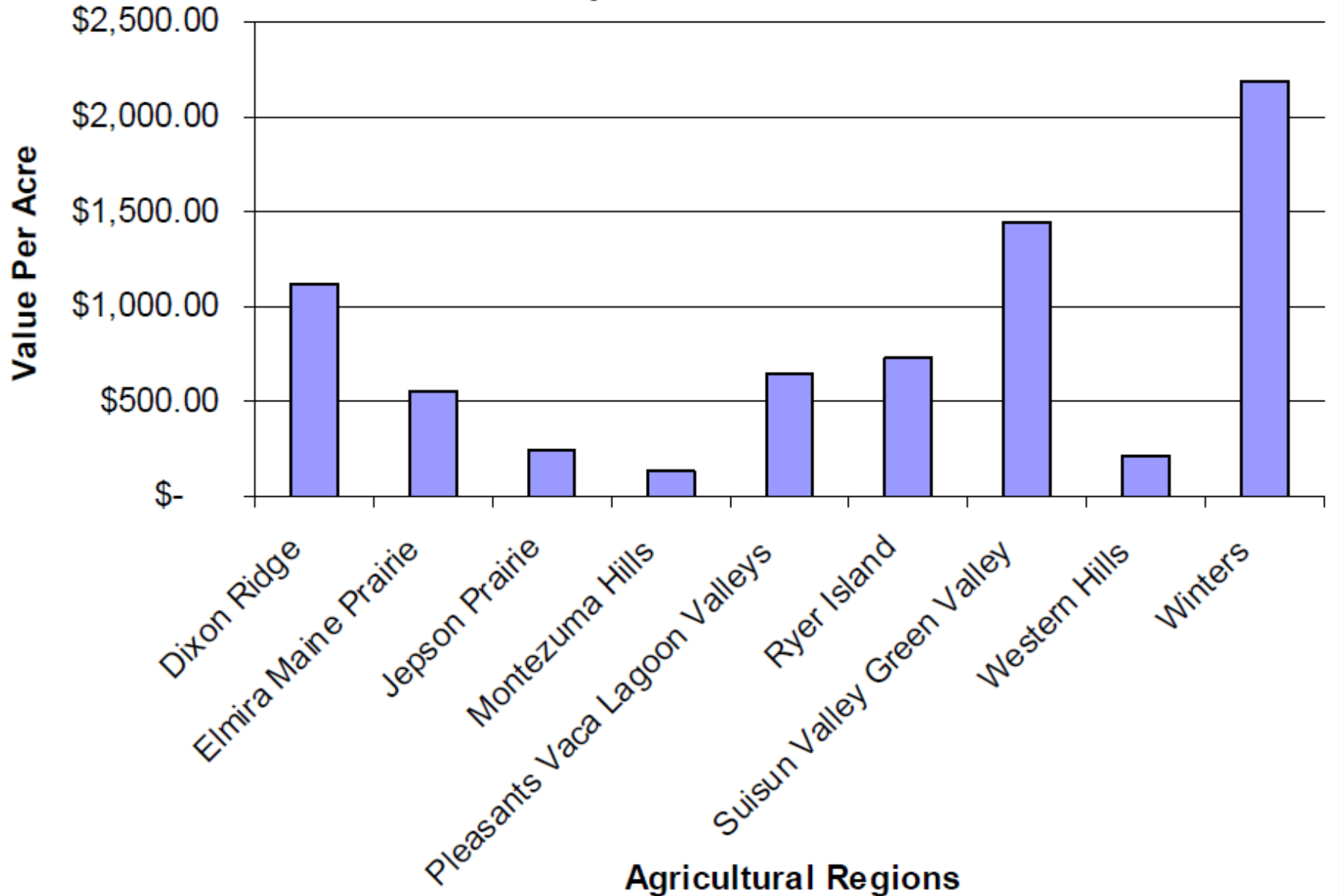
-  Winters
-  Dixon Ridge
-  Elmira & Maine Prairie
-  Ryer Island
-  Montezuma Hills
-  Jepson Prairie
-  Suisun and Green Valleys
-  Pleasants, Vaca & Lagoon Valleys
-  Western Hills
-  Urban
-  Major Roads



Value of Agricultural Production by Region, \$ Millions



Value per Acre of Production



Implications for Agriculture

- **Urban expansion will significantly affect agriculture in the county**
 - Parcelization is a significant issue because it decreases the number and size of fields available for commercial agriculture.
- **Research is needed to quantify the impact on agricultural production of wildlife habitat establishment in row crop areas.**
- **The production of bioenergy feedstock will find it hard to compete for acreage with commodities currently being produced**
- **In Yolo County, areas able to support agricultural tourism are likely to be the Clarksburg and Capay Valley regions**
 - Most Yolo County commodity agricultural producers have little interest in the establishment of tourism within their agricultural operations.
- **In Solano, Suisun Valley, the Delta, and selected I-80 corridor regions could support agricultural tourism**

Implications for Agriculture

- **Present a positive image about the future of local agriculture, both to the general public and to the agricultural community.**
- **Protect the agricultural land base in policies and practices.**
 - **Give priority in zoning and other farmland protection policies to the Dixon Ridge and Winters agricultural regions**
 - **Minimize the negative impact of rural residential development in agriculturally zoned areas.**
- **Advance value-added opportunities for agricultural operators by minimizing regulatory barriers.**
- **Stimulate agricultural processors through county actions.**

Climate Change

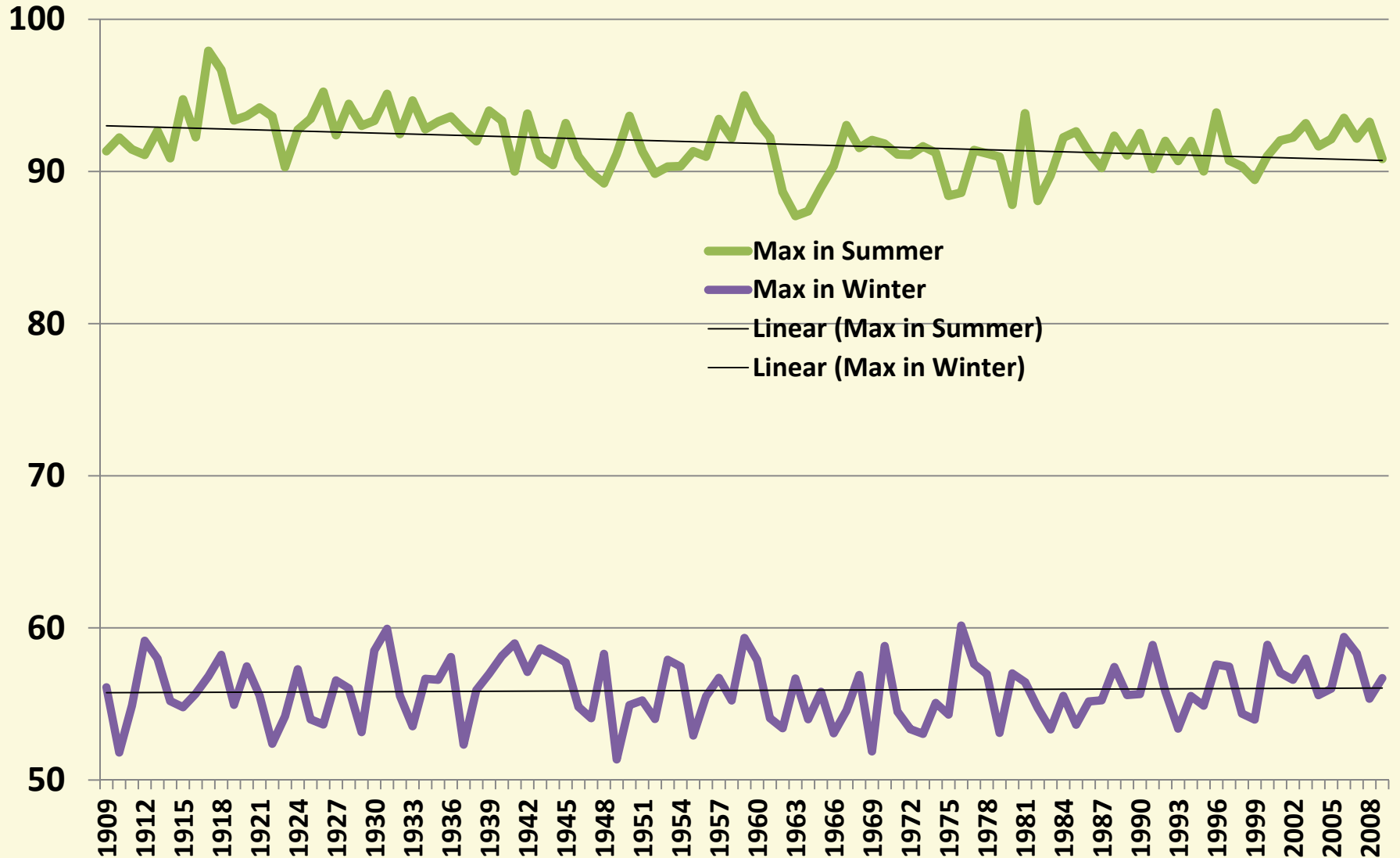
**Project Title: Agricultural Mitigation and Adaptation to
Climate Change in Yolo County, CA
California Energy Commission, 2009-2011**

P.I.: Louise Jackson

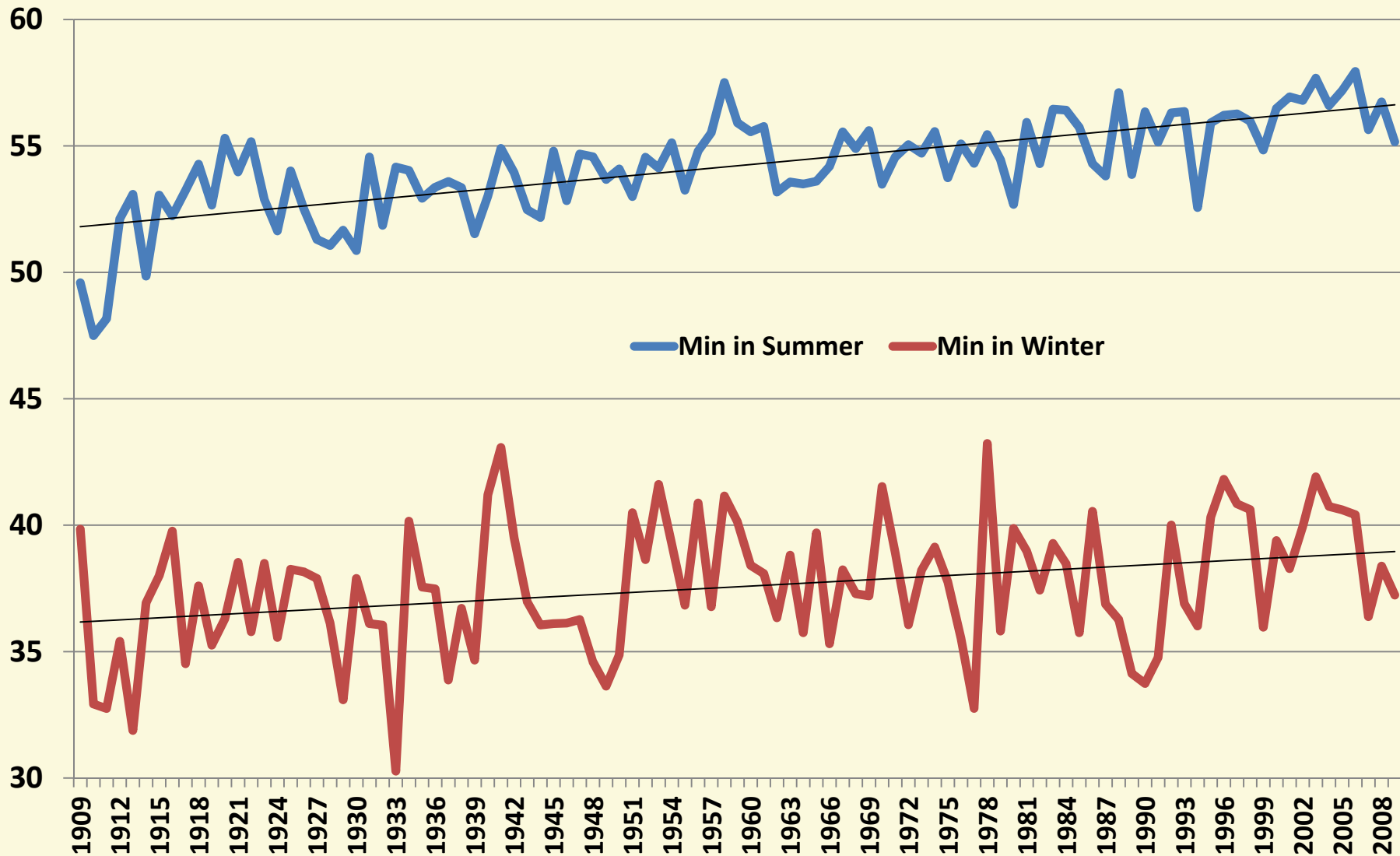
Contributing Authors: Van R. Haden, Allan Hollander, Hyunok Lee, Mark Lubell, Vishal Mehta, Toby O'Geen, Meredith Niles, Josh Perlman, David Purkey, William Salas, Dan Sumner, Mihaela Tomuta, Michael Dempsey, and Stephen Wheeler

Final report under review and available soon.

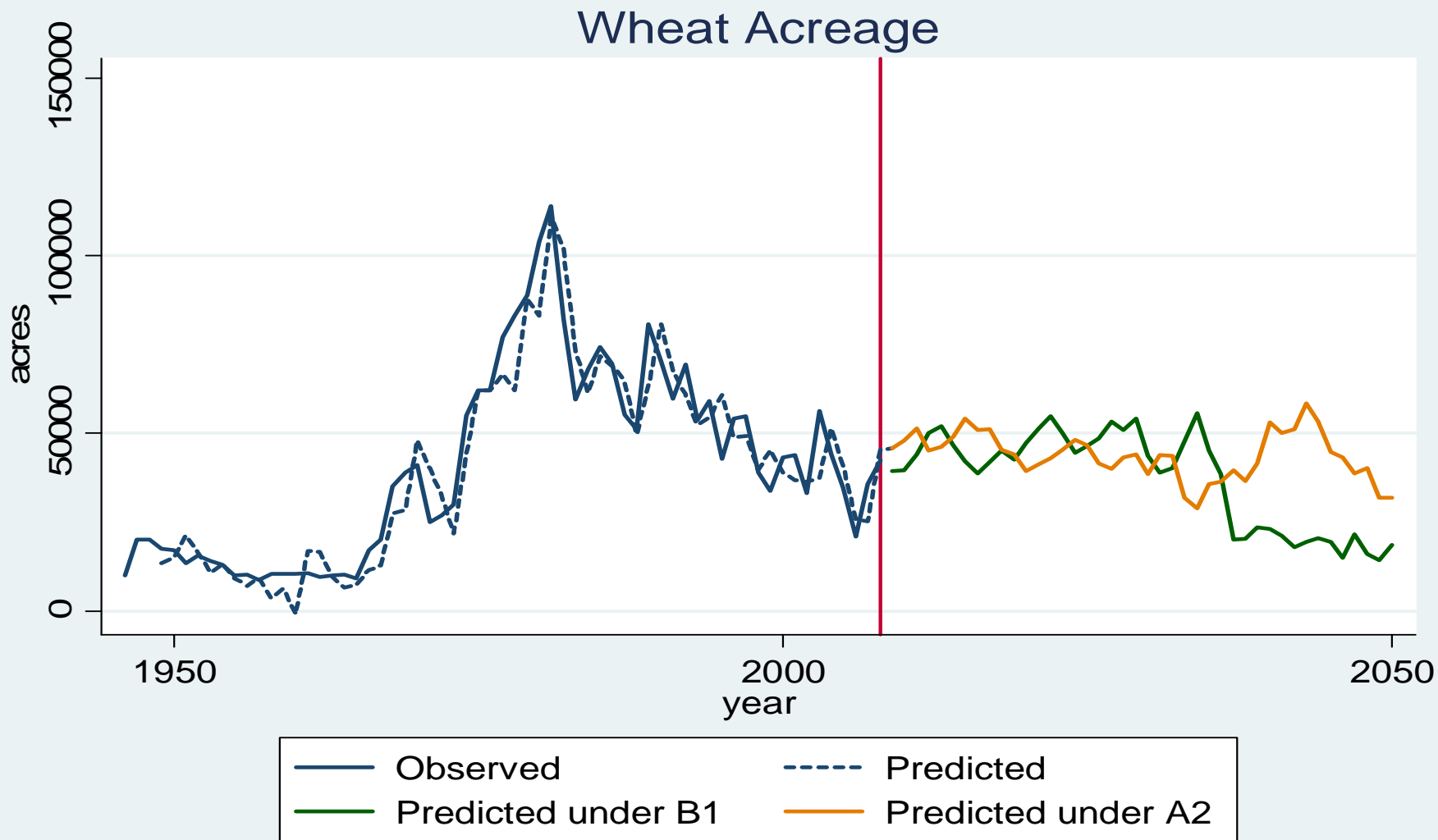
Historical maximum average temperature in summer and winter months for the period of 1909-2008 for Davis, CA



Historical minimum average temperature in summer and winter months for the period of 1909-2008 for Davis, CA



Example: Wheat acreage in Yolo County with projected acreage for the B1 and A2 climate scenarios



Thank you.
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