



**2013 AGRICULTURAL CROP REPORT**  
**MADERA COUNTY DEPARTMENT OF AGRICULTURE**



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# **MADERA COUNTY STAFF**

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## **Madera County Board of Supervisors**

**Manuel Nevarez**  
District 1

**David Rogers**  
District 2

**Rick Farinelli**  
District 3

**Max Rodriguez**  
District 4

**Tom Wheeler**  
District 5/Chairman

**County Administrative Officer**  
Eric Fleming

**Agricultural Commissioner/  
Sealer of Weights & Measures**  
Stephanie "Stevie" McNeill

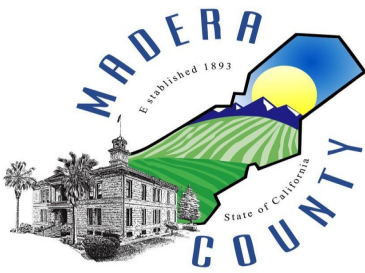
**Deputy Agricultural Commissioner/Sealer**  
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Bruce Derry      Molly Glover  
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# Madera County Department of Agriculture Weights and Measures

Stephanie “Stevie” McNeill, Agricultural Commissioner  
Sealer of Weight and Measures

Karen Ross, Secretary  
California Department of Food and Agriculture

and

The Honorable Board of Supervisors  
County of Madera, California

Tom Wheeler	Chairman, District 5
Manuel Nevarez	District 1
David Rogers	District 2
Rick Farinelli	District 3
Max Rodriquez	District 4

It is my pleasure to present the 2013 Madera County Agricultural Crop and Livestock Report. This annual statistical report is compiled in accordance with Sections 2271 and 2279 of the California Food and Agricultural Code, and contains data on the acreage, yield, and gross values of Madera County Agricultural commodities. The values in this report are gross values, and do not represent net income or loss to producers.

The last four years have seen a steady increase in total commodity values, and in nine of the last ten years, Madera County commodity production has exceeded one billion dollars. Even as ongoing drought conditions in 2013 impacted growing conditions, Madera County reached a record high agricultural production level of \$1,896,544,000; this is an increase of \$157,133,000 (9.03%) over 2012 production.

Crop values can vary from year to year due to the variables of production, market, and weather conditions. Most increases can be attributed to strong market prices and increased production. Almonds (nut meat & hulls) retained the top crop rank for the fourth year in a row, with a value of \$623,483,000, an increase of \$136,125,000 (27.93%), mainly due to strong prices and increased bearing acreage. Grapes remained in second place, with a value of \$373,835,000 (3.64% increase), and milk kept the third spot with a value of \$323,112,000 (11.89% increase).

In overall categories, increases were seen in apiary (9.83%) primarily due to increases in price; fruit and nut crops (11.54%) due mainly to stronger almond market prices; forest products (16.06%) attributed to an increase in sawlog prices; livestock and poultry products (11.57%) due to improving prices; nursery products (10.51%) from recovering prices; and vegetable crops (16.79%) mainly reflecting increased acreage of processing tomatoes and strong prices for miscellaneous vegetables. Decreases were seen in field crops (-16.10%) with decreases in acreages and depressed prices of alfalfa, corn, oats, wheat and forage; and livestock and poultry (-2.13%) due to reductions in flock size.

I wish to extend my appreciation to our Madera County farmers, ranchers, agricultural industries, and agencies. Without their efforts and contributions of information, this report would not be possible. Additionally, I would like to express my thanks to my staff that contributed to compiling and preparing this report, and especially to Senior Agricultural and Standards Inspector Cha Vang and his dedication to producing the annual report.

To view the 2013 Madera County Agricultural and Livestock Report, or previous reports, please visit our website online at <http://madera-county.com/index.php/publications/crop-reports>

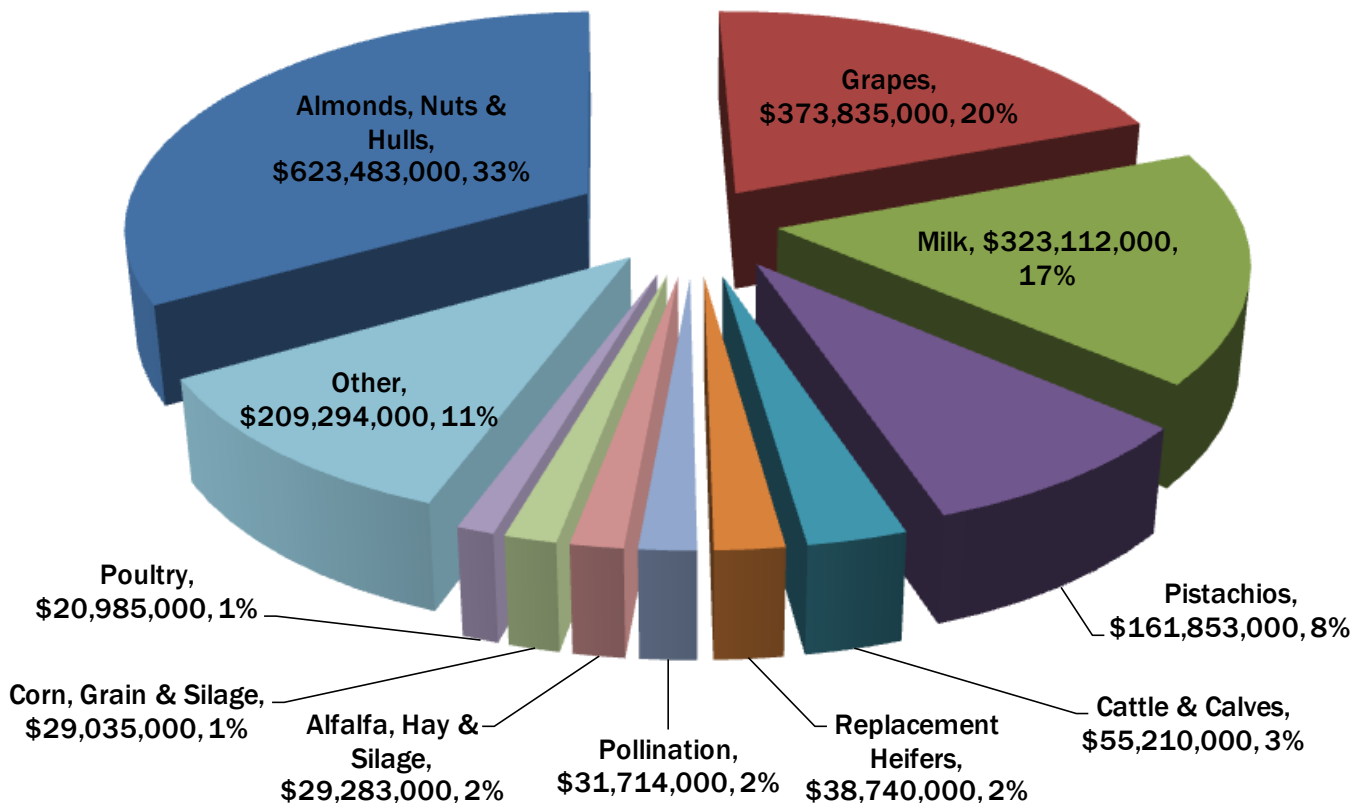
Respectfully submitted,

Stevie McNeill  
Agricultural Commissioner/Sealer

# TEN LEADING CROPS MADERA COUNTY 2013

Commodity	2013 Rank	2013 Dollar Value	2012 Rank
Almonds, Nuts & Hulls	1	\$623,483,000	1
Grapes	2	\$373,835,000	2
Milk	3	\$323,112,000	3
Pistachios	4	\$161,853,000	4
Cattle & Calves	5	\$55,210,000	5
Replacement Heifers	6	\$38,740,000	6
Pollination	7	\$31,714,000	9
Alfalfa, Hay & Silage	8	\$29,283,000	7
Corn, Grain & Silage	9	\$29,035,000	8
Poultry	10	\$20,985,000	10

Diversity, which serves to strengthen the agricultural economy of Madera County, is evident in this listing of our Ten Leading Crops, which include fruit and nut crops, milk, field crops, poultry, dairy and beef cattle. The wide range of commodities produced in our county is further underscored by that segment on the chart entitled "Other," which includes such diverse products as cotton, figs, citrus fruits, olives, beeswax, timber and walnuts.



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# Field Crops

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
<b>Alfalfa</b>							
Hay	2013	17,300	7.63	131,999	Ton	\$210.00	\$27,720,000
	2012	22,200	7.24	160,728	Ton	227.00	36,485,000
	2011	20,200	7.64	154,328	Ton	236.00	36,421,000
Silage <sup>a</sup>	2013			23,684	Ton	66.00	1,563,000
	2012			43,060	Ton	63.00	2,713,000
	2011			52,764	Ton	53.00	2,796,000
Total	2013	17,300					29,283,000
	2012	22,200					39,198,000
	2011	20,200					39,217,000
<b>Corn</b>							
Grain	2013	940	6.19	5,819	Ton	220.00	1,280,000
	2012	1,700	5.74	9,758	Ton	265.00	2,586,000
	2011	1,300	6.89	8,957	Ton	244.00	2,186,000
Silage	2013	22,700	26.58	603,366	Ton	46.00	27,755,000
	2012	22,800	25.95	591,660	Ton	46.00	27,216,000
	2011	24,400	27.00	658,800	Ton	40.00	26,352,000
Total	2013	23,640					29,035,000
	2012	24,500					29,802,000
	2011	25,700					28,538,000
<b>Cotton</b>							
Lint	2013	1,700	1,646 <sup>b</sup>	5,830	Bale <sup>c</sup>	1.08 <sup>d</sup>	3,022,000
	2012	1,200	1,527	3,818	Bale	0.87	1,594,000
	2011	5,500	1,554	17,806	Bale	1.11	9,487,000
Seed	2013			2,387	Ton	335.00	800,000
	2012			1,527	Ton	317.00	484,000
	2011			7,124	Ton	289.00	2,059,000
Total	2013	1,700					3,893,000
	2012	1,200					2,078,000
	2011	5,500					11,546,000
<b>Oat</b>							
Hay	2013	1,700	2.87	4,879	Ton	148.00	722,000
	2012	3,400	2.72	9,248	Ton	155.00	1,433,000
	2011	3,600	2.38	8,568	Ton	124.00	1,062,000
<b>Pasture</b>							
Irrigated	2013	1,600			Acre	150.00	240,000
	2012	1,500			Acre	150.00	225,000
	2011	2,700			Acre	150.00	405,000
Rangeland	2013	392,900			Acre	7.50	2,947,000
	2012	400,600 <sup>ef</sup>			Acre	13.22 <sup>f</sup>	5,295,000
	2011	400,600 <sup>ef</sup>			Acre	13.22 <sup>f</sup>	5,295,000

## Field Crops

		PRODUCTION			VALUE		
Item	Year	Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
<b>Wheat</b>							
Grain	2013	4,500	2.93	13,185	Ton	\$262.00	\$3,454,000
	2012	6,700	2.22	14,874	Ton	250.00	3,719,000
	2011	7,600	2.84	21,584	Ton	244.00	5,266,000
Silage	2013	24,600	14.79	363,834	Ton	37.00	13,462,000
	2012	21,000	14.52	304,920	Ton	37.00	11,282,000
	2011	22,400	13.93	312,032	Ton	31.00	9,673,000
Total	2013	29,100					16,916,000
	2012	27,700					15,001,000
	2011	30,000					14,939,000
Winter Forage	2013	1,800	13.98	25,164	Ton	36.00	906,000
	2012	3,400	12.65	43,010	Ton	41.00	1,763,000
	2011	2,500	14.13	35,325	Ton	33.00	1,166,000
Miscellaneous <sup>e</sup>	2013	2,300					3,721,000
	2012	5,900					9,611,000
	2011	6,800					9,088,000
<b>TOTAL</b>	2013	472,040					\$87,592,000
	2012	490,400 <sup>f</sup>					104,406,000
	2011	497,600 <sup>f</sup>					111,256,000

a/ Alfalfa acreage yields both hay and silage

b/ Pounds

c/ Bale: 480 pounds

d/ Price per pound

e/ Biennial survey cycle

f/ Revised

g/ Includes ryegrass hay, seed crops, Sudangrass, wheat hay, field and stubble straw.

## Vegetable Crops

		PRODUCTION			VALUE		
Item	Year	Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
<b>Tomatoes</b>							
Fresh	2013	400	17.33	6,932	Ton	\$443.00	\$3,071,000
	2012	400	23.29	9,316	Ton	448.00	4,174,000
	2011	400	16.06	6,424	Ton	440.00	2,827,000
Processed	2013	4,200	56.49	237,258	Ton	69.00	16,371,000
	2012	3,000	67.36	202,080	Ton	68.00	13,741,000
	2011	2,100	55.92	117,432	Ton	65.00	7,633,000
Miscellaneous <sup>a</sup>	2013	1,800					21,239,000
	2012	1,900					16,917,000
	2011	1,630					23,601,000
<b>TOTAL</b>	2013	6,400					\$40,681,000
	2012	5,300					34,832,000
	2011	4,130					34,061,000

a/ Includes artichokes, carrots, all cabbage, eggplant, herbs, melons, onions, all peppers, potatoes, all squash and miscellaneous truck crops

# FRUIT & NUT CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Almonds <sup>a</sup>	2013	99,000	1.07	105,930 <sup>b</sup>	Ton	\$5,631.00	\$596,492,000
	2012	92,000	1.08	99,360	Ton	4,614.00	458,447,000
	2011	89,000	1.23	109,470	Ton	3,497.00	382,817,000
Almond Hulls	2013			207,623	Ton	130.00	26,991,000
	2012			212,584	Ton	136.00	28,911,000
	2011			234,215	Ton	135.00	31,619,000
Cherries	2013	600	2.90	1,740	Ton	4,978.00	8,662,000
	2012	460	3.91	1,799	Ton	5,319.00	9,569,000
	2011	440	3.72	1,637	Ton	3,456.00	5,657,000
Figs	2013	4,700	1.84	8,648	Ton	1,867.00	16,146,000
	2012	5,400	1.59	8,586	Ton	1,690.00	14,510,000
	2011	5,700	1.80	10,260	Ton	1,471.00	15,092,000
<b>Grapes</b>							
<b>Raisin Varieties</b>							
Crushed	2013	10,300	10.74	110,622	Ton	245.00	27,102,000
	2012	11,000	8.56	94,160	Ton	312.00	29,378,000
	2011	10,500	10.66	111,930	Ton	260.00	29,102,000
Dried	2013	21,300	3.14	66,882	Ton	1,654.00	110,623,000
	2012	22,800	2.59	59,052	Ton	1,720.00	101,569,000
	2011	22,300	2.58	57,534	Ton	1,530.00	88,027,000
Fresh	2013	1,000	10.07	10,070	Ton	1,583.00	15,941,000
	2012	1,300	5.66	7,358	Ton	1,474.00	10,846,000
	2011	1,000	10.90	10,900	Ton	1,417.00	15,445,000
Table Varieties	2013	2,600	12.24	31,824	Ton	1,589.00	50,568,000
	2012	1,800	12.87	23,166	Ton	1,756.00	40,679,000
	2011	2,250	9.72	21,870	Ton	1,578.00	34,511,000
<b>Wine Varieties<sup>c</sup></b>							
Red Varieties	2013	22,800	10.15	231,420	Ton	419.00	96,965,000
	2012	23,000	11.19	257,370	Ton	402.00	103,463,000
	2011	23,400	10.44	244,296	Ton	335.00	81,839,000
White Varieties	2013	17,400	12.10	210,540	Ton	345.00	72,636,000
	2012	17,100	11.82	202,122	Ton	370.00	74,785,000
	2011	15,000	11.54	173,100	Ton	299.00	51,757,000
Total Grapes	2013	75,400					373,835,000
	2012	77,000					360,720,000
	2011	74,450					300,681,000



# FRUIT & NUT CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Olives, Fresh & Oil	2013	620	4.63	2,871	Ton	\$562.00	\$1,614,000
	2012	900	5.61	5,049	Ton	713.00	3,600,000
	2011	1,100	1.76	1,936	Ton	618.00	1,196,000
Oranges	2013	2,800	18.52	51,856	Ton	191.00	9,904,000
	2012	3,000	18.41	55,230	Ton	178.00	9,831,000
	2011	3,400	18.40	62,560	Ton	215.00	13,450,000
<b>Peaches</b>							
Cling	2013	270	20.58	5,557	Ton	313.00	1,739,000
	2012	310	20.64	6,398	Ton	306.00	1,958,000
	2011	260	15.30	3,978	Ton	291.00	1,158,000
Freestone	2013	460	15.96	7,342	Ton	833.00	6,116,000
	2012	450	14.56	6,552	Ton	932.00	6,106,000
	2011	630	15.99	10,074	Ton	621.00	6,256,000
Total	2013	730					7,855,000
	2012	760					8,064,000
	2011	890					7,414,000
Pistachios	2013	29,200	1.10	32,120 <sup>b</sup>	Ton	5,039.00	161,853,000
	2012	29,000	1.44	41,760	Ton	4,354.00	181,238,000
	2011	28,300	0.97	27,451	Ton	4,120.00	113,098,000
Plums, Dried	2013	1,040	2.92	3,037	Ton	1,601.00	4,862,000
	2012	1,100	2.92	3,212	Ton	1,395.00	4,481,000
	2011	1,200	3.71	4,452	Ton	1,383.00	6,157,000
Walnuts	2013	1,420	1.78	2,528	Ton	3,709.00	9,376,000
	2012	1,300	2.04	2,652	Ton	2,911.00	7,720,000
	2011	1,340	1.54	2,064	Ton	2,749.00	5,674,000
<b>Miscellaneous</b>							
Fruits & Nuts <sup>d</sup>	2013	8,900					49,947,000
	2012	9,300					49,104,000
	2011	9,100					39,919,000
Orchard Firewood	2013			5,500	Cord <sup>e</sup>		825,000
	2012			6,000	Cord		900,000
	2011			6,500	Cord		975,000
<b>TOTAL</b>	2013	<b>224,410</b>					<b>\$1,268,362,000</b>
	2012	220,220					1,137,095,000
	2011	214,920					923,749,000

a/ Meat basis

b/ Reflects total production, including imperfect stock; price weighted accordingly

c/ Includes table grape crushed

d/ Includes apples, apricots, berries, kiwis, nectarines, pears, pecans, persimmons, plums, pomegranates, tangelos, tangerines, almond and walnut shells

e/ Cord: 128 Cubic feet

## FOREST PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Production	Unit		Total
Timber	2013	5,769	MBF <sup>a</sup>		\$459,000
	2012	9,900	MBF		810,000
	2011	3,839	MBF		282,000
Firewood <sup>b</sup>	2013	14,656	Cord <sup>c</sup>		806,000
	2012	1,509	Cord		280,000
	2011	1,745	Cord		204,000
<b>TOTAL</b>	<b>2013</b>				<b>\$1,265,000</b>
	2012				1,090,000
	2011				486,000

a/ MBF: Thousand board feet

c/ Cord: 128 Cubic feet

b/ Includes Christmas trees, greenery, pinecones and saw logs

## NURSERY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Field Acres	House Sq. Foot		Total
Nursery Stock <sup>a</sup>	2013	320	161,000		\$18,908,000
	2012	330	160,000		17,109,000
	2011	440	532,000		19,057,000

a/ Includes grapevines, fruit trees, nut trees and ornamentals

## APIARY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Total	Unit	Per Unit	Total
<b>Apiary Products</b>					
Beeswax	2013	52,510	Pound	\$3.25	\$171,000
	2012	56,029	Pound	2.35	132,000
	2011	41,500	Pound	1.18	49,000
Honey	2013	955,600	Pound	2.08	1,988,000
	2012	958,000	Pound	1.87	1,791,000
	2011	515,000	Pound	1.50	773,000
Pollination	2013	202,000	Colony	157.00	31,714,000
	2012	189,000	Colony	153.00	28,917,000
	2011	194,000	Colony	144.00	27,936,000
<b>TOTAL</b>	<b>2013</b>				<b>\$33,873,000</b>
	2012				30,840,000
	2011				28,758,000

# LIVESTOCK AND POULTRY

Item	Year	PRODUCTION			VALUE	
		Head	Liveweight	Unit	Per Unit	Total
Cattle and Calves <sup>a</sup>	2013	79,000	557,674	CWT <sup>b</sup>	\$99.00	\$55,210,000
	2012	78,200	565,000	CWT	91.00	51,415,000
	2011	78,500	567,800	CWT	80.00	45,424,000
Replacement Heifers <sup>c</sup>	2013	29,800			1,300.00	38,740,000
	2012	30,000			1,330.00	39,900,000
	2011	30,000			1,340.00	40,200,000
Poultry	2013					20,985,000
	2012					26,125,000
	2011					22,097,000
TOTAL	2013					\$114,935,000
	2012					117,440,000
	2011					107,721,000

a/ Range and dairy cattle sold for beef

b/ Hundredweight: 100 pounds

c/ Milk cows

# LIVESTOCK AND POULTRY PRODUCTS

Item	Year	PRODUCTION			VALUE	
		Production	Unit	Per Unit	Total	
Milk Market <sup>a</sup>	2013	17,691,981	CWT	\$18.23	\$322,525,000	
	2012	17,732,572	CWT	16.26	288,346,000	
	2011	17,780,987	CWT	18.33	325,946,000	
Milk Manufacturing <sup>a</sup>	2013	31,082	CWT	18.89	587,000	
	2012	24,955	CWT	16.91	422,000	
	2011	65,222	CWT	18.84	1,229,000	
Other Products <sup>b</sup>	2013				7,816,000	
	2012				7,831,000	
	2011				17,258,000	
TOTAL	2013				\$330,928,000	
	2012				296,599,000	
	2011				344,433,000	

a/ Madera County has 44 dairies, with 67,622 lactating cows

b/ Includes aquaculture, market eggs, hogs, manure, sheep, lambs and wool

# AGRICULTURAL CROP REPORT SUMMARY

## MADERA COUNTY 2013

Item	Year	Harvested Acres	Total Value
Apiary	2013		\$33,873,000
	2012		30,840,000
	2011		28,758,000
Field Crops	2013	472,040	87,592,000
	2012	490,400*	104,406,000
	2011	497,600*	111,256,000
Fruit and Nut Crops	2013	224,410	1,268,362,000
	2012	220,220	1,137,095,000
	2011	214,920	923,749,000
Forest Products	2013		1,265,000
	2012		1,090,000
	2011		486,000
Livestock and Poultry	2013		114,935,000
	2012		117,440,000
	2011		107,721,000
Livestock and Poultry Products	2013		330,928,000
	2012		296,599,000
	2011		344,433,000
Nursery Products	2013	320	18,908,000
	2012	330	17,109,000
	2011	440	19,057,000
Vegetable Crops	2013	6,400	40,681,000
	2012	5,300	34,832,000
	2011	4,130	34,061,000
<b>TOTAL</b>	<b>2013</b>		<b>\$1,896,544,000</b>
	<b>2012</b>		<b>1,739,411,000</b>
	<b>2011</b>		<b>1,569,521,000</b>

\* Revised

# MADERA COUNTY HIGHLIGHTS

County Established	March 11, 1893
County Seat	Madera (city)
Population <sup>a</sup>	152,389

<b>Total County Acreage</b>	<b>1,366,925</b>
2013 Harvested Acreage	703,170
Field Crop Acreage	79,140
Fruit and Nut Acreage	224,410
Nursery Acreage	320
Vegetable Acreage	6,400
Rangeland Acreage	392,900

Forest Acreage	414,300
U. S. Parkland Acreage	83,000

**Bordering Counties**

Merced County	Northwest
Mariposa County	North
Mono County	East
Fresno County	South and West

**Ranking of Madera County Among Counties of California**

Population <sup>a</sup>	33
Total Acreage	24
Total Agricultural Production <sup>b</sup>	12
Commodity, by Value	
Figs	1
Grapes, Raisin Variety	2
Pistachios	4
Almonds	5
Grapes, Table Variety	5
Grapes, Wine Variety	6
Cattle & Calves	7
Corn, Silage	7
Olives	7
Milk, Market	8

**Ranking of Madera County Among Counties of the United States**

Total Agricultural Production <sup>c</sup>	21
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- a/ US Bureau of Census, 2013 Estimate
- b/ County Agricultural Commissioner's Data, 2012
- c/ USDA Ag Census, 2007

Madera County Crop Reports from 2001 to 2013 are available at:  
<http://www.madera-county.com/index.php/publications/crop-reports>



# 2013 Sustainable Agriculture Report 1

## Pest Prevention

Pest prevention programs are mandated by the California Food and Agricultural Code to prevent the introduction and spread of pests in California. Pest prevention involves three strata: pest exclusion, pest detection and integrated pest management.

The **Pest Exclusion Program** prevents the introduction of injurious pests that are not of common occurrence in the county.

During 2013, three nursery locations were inspected to ensure pest cleanliness.

Over 40 beehive shipments were received from Red Imported Fire Ants (RIFA) infested states, with over 20,000 beehives inspected for RIFA.

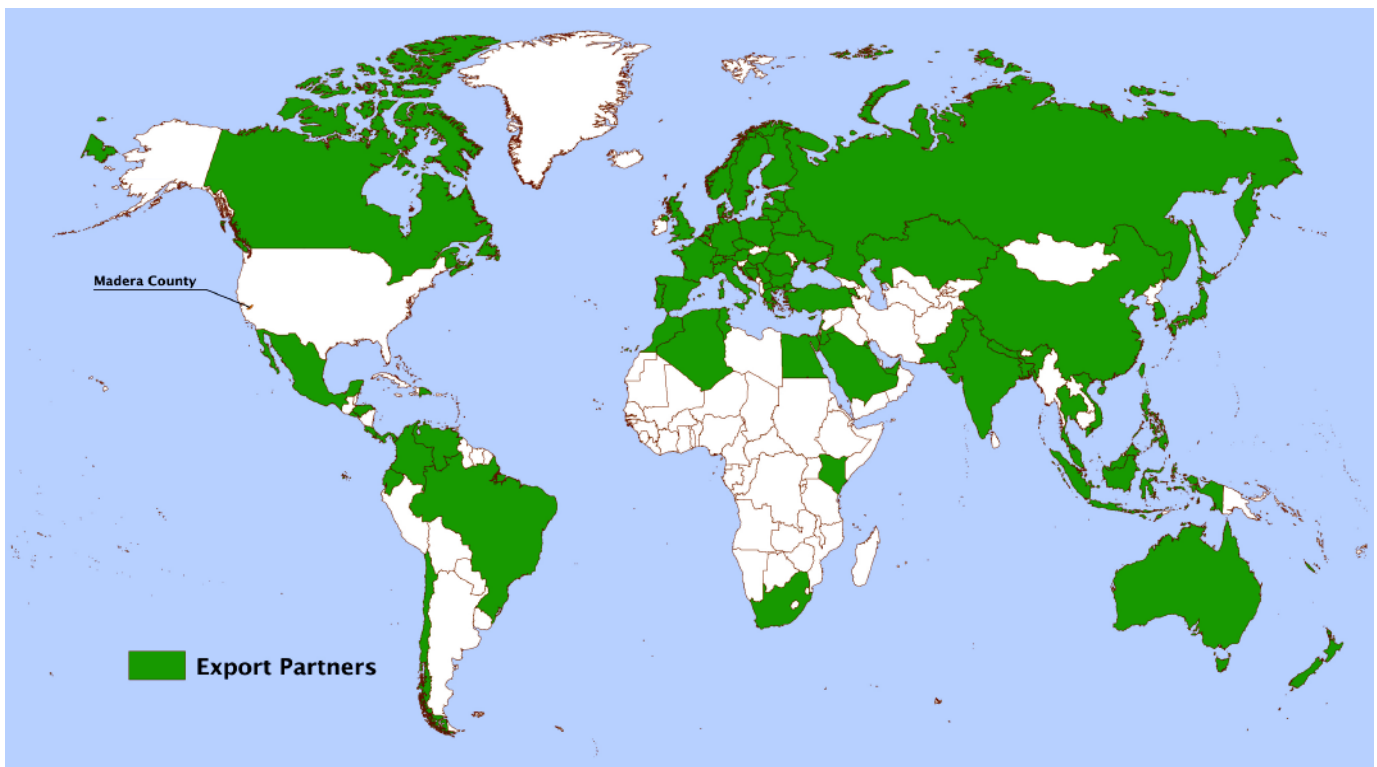
Countries receiving agricultural commodities require certification that the commodities are free from potentially injurious pests. Over 4,900 phytosanitary inspections were performed on Madera County commodities, which were exported to over 70 countries.

The **Pest Detection Program** utilizes insect traps and surveys for the detection of foreign pests which may have eluded exclusion efforts. Over 1,000 traps were deployed in the county, with over 9,500 trap servicings performed during the 2013 season.

The trapping program in Madera County targeted multiple pests, including the following:

Caribbean Fruit Fly ( <i>Anastrepha suspens</i> )	European Corn Borer ( <i>Ostrinia nubilalis</i> )
Gypsy Moth ( <i>Lymentria dispar</i> )	Japanese Beetle ( <i>Popillia japonica</i> )
Light Brown Apple Moth ( <i>Epiphyas postvittana</i> )	Mediterranean Fruit Fly ( <i>Ceratitidis capitata</i> )
Melon Fruit Fly ( <i>Dacus cucurbitae</i> )	Mexican Fruit Fly ( <i>Anastrepha ludens</i> )
Oriental Fruit Fly ( <i>Bactrocera dorsalis</i> )	

The **Integrated Pest Control Program** strives to eradicate infestations of new pests before they become widespread. Pink Bollworm (*Pectinophora gossypiella*) a non-established and economically significant pest of cotton, is controlled by post-season plowdown of cotton plants. Pink Bollworm was controlled by post-season plowdown of over 1,400 acres of cotton plantings.



**Countries Receiving Madera County Commodities:**

- |                          |                      |                      |                        |
|--------------------------|----------------------|----------------------|------------------------|
| * Algeria                | * Denmark            | * Kenya              | * Portugal             |
| * Armenia                | * Dominican Republic | * Korea, Republic of | * Romania              |
| * Austria                | * Ecuador            | * Kuwait             | * Russian Federation   |
| * Australia              | * Egypt              | * Latvia             | * Saudi Arabia         |
| * Bahrian                | * El Salvador        | * Lebanon            | * Serbia               |
| * Bangladesh             | * Estonia            | * Lithuania          | * Singapore            |
| * Belarus                | * Finland            | * Macedonia, Former  | * South Africa         |
| * Belgium                | * France             | Yugoslav Republic of | * Spain                |
| * Bosnia and Herzegovina | * Germany            | * Malaysia           | * Sweden               |
| * Brazil                 | * Greece             | * Mexico             | * Switzerland          |
| * Bulgaria               | * Honduras           | * Morocco            | * Thailand             |
| * Canada                 | * Hong Kong          | * Nepal              | * Taiwan               |
| * Chile                  | * Hungary            | * Netherlands        | * Tunisia              |
| * China                  | * India              | * New Caledonia      | * Turkey               |
| * Colombia               | * Indonesia          | * New Zealand        | * United Arab Emirates |
| * Costa Rica             | * Israel             | * Norway             | * Ukraine              |
| * Croatia                | * Italy              | * Pakistan           | * United Kingdom       |
| * Cyprus                 | * Japan              | * Panama             | * Venezuela            |
| * Czech Republic         | * Jordan             | * Philippines        | * Vietnam              |
|                          | * Kazakhstan         | * Poland             |                        |

**Madera County Commodities Exported:**

- |                   |                     |
|-------------------|---------------------|
| Almonds           | Plums               |
| Figs              | Prunes              |
| Grapes            | Raisins             |
| Kiwis             | Tillandsia (Plants) |
| Masa (Corn Flour) | Walnuts             |
| Pistachios        |                     |

# 2013 Sustainable Agriculture Report 2

## Pest Management

The Glassy-winged Sharpshooter Program serves to detect and control the vector of Pierce's Disease, a potentially catastrophic disease of vineyards. This program involved the placement of 317 traps, with over 4,300 subsequent trap servicings. In addition, incoming shipments of host material and susceptible county plantings were inspected. Multiple Glassy-winged Sharpshooters were found in Madera County, which lead to an additional placement of 65 delimitation traps and 570 subsequent trap servicings. Additionally, the California Department of Food and Agriculture (CDFA) released two parasitic wasps (*Gonatocerus triguttatus* and *G. morrilli*) in 2013 to aid in the control of the Glassy-winged Sharpshooters. Over 500 parasitoids were released in the Wildwood and Rolling Hills areas.

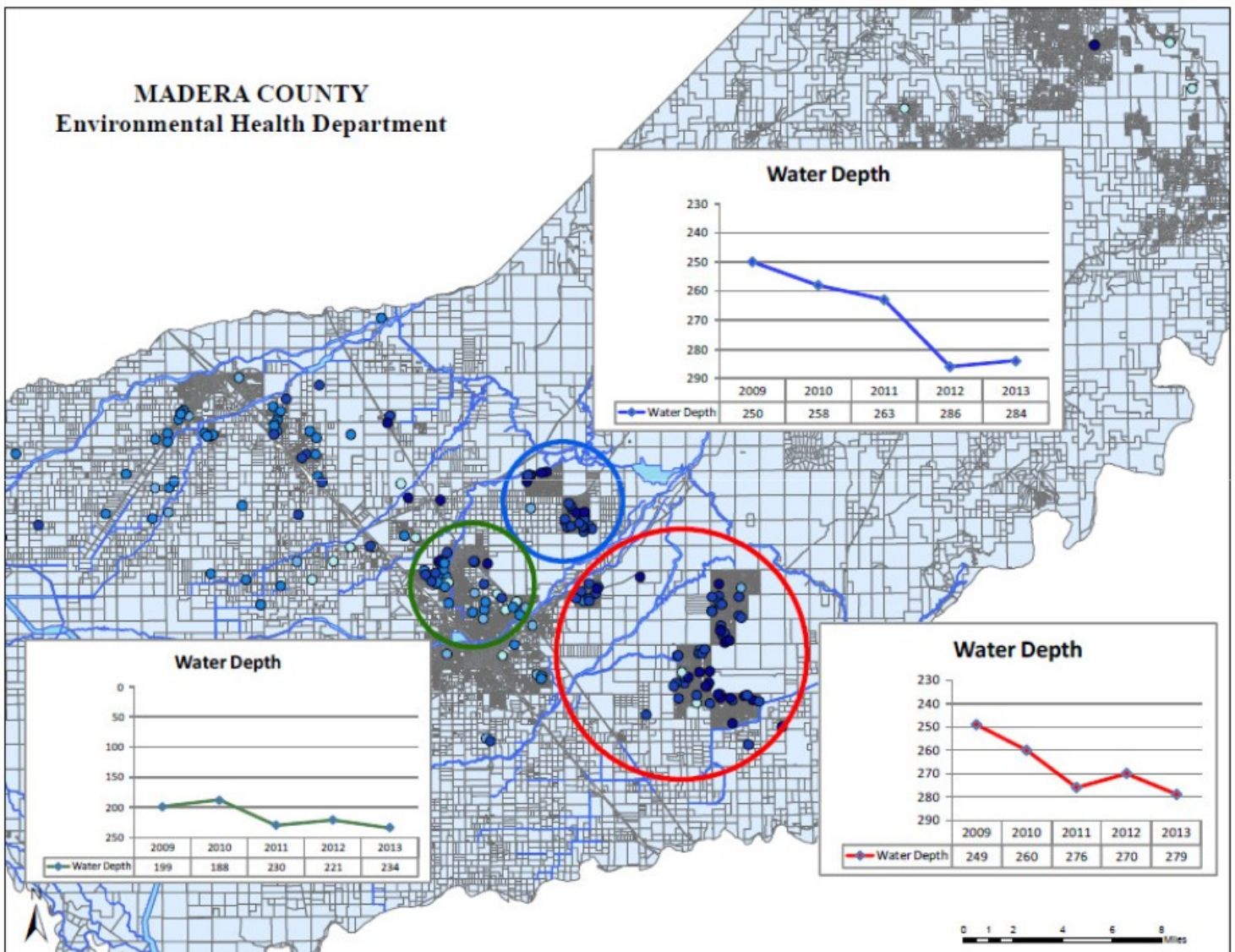
Fifty-three Organic Farms, totaling over 6,000 acres, and 8 handlers were registered in Madera County in 2013. Utilizing organic principles defined in the California Organic Products Act of 2003, these farms produce a wide array of commodities, such as:

*alfalfa, almonds, apples, apricots, artichokes, arugula, avocado, basil, dried beans, green beans, beets, berries, broccoli, cabbage, cantaloupe, carrots, cauliflower, chard, cherries, cilantro, collards, sweet corn, cucumbers, eggplants, endive, fennel, figs, garlic, grapes (table, raisin, wine), hay, herbs, honeydew, kale, kohlrabi, leeks, lemons, lettuce, livestock, oats, okra, olives, onions, oranges, parsnip, pasture, peaches, peanuts, peas, peppers, persimmons, pistachios, plums, pomegranates, potatoes, poultry, prunes, radish, seed crops, spinach, sprouts, squash, sunflower, tomatillo, tomatoes, turnips, watermelons, wheat.*

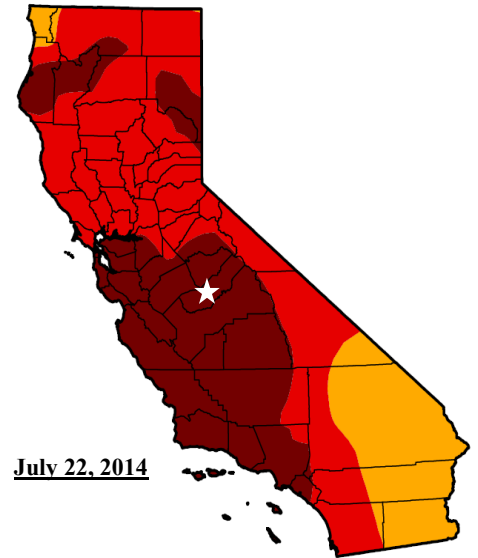
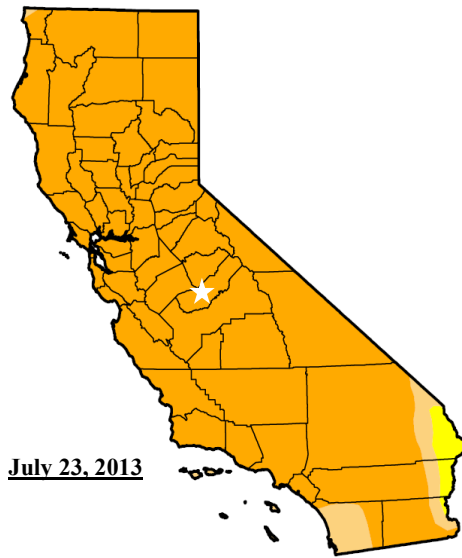
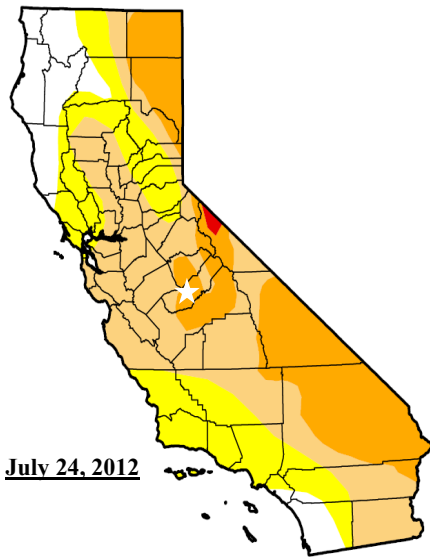
The value of organic production in Madera County in 2013 was **\$34,455,000**.

# DROUGHT CONDITIONS IN MADERA COUNTY...

The State of California is experiencing it's third straight year (2012-2014) of drought, Madera County included. 2014 will be one on the driest years on record. The Madera County Board of Supervisors declared a drought emergency in February of 2014 urging all residents to conserve water. Increasing demands and lack of surface water storage and allocations leads to a reliance on groundwater for both urban and agricultural water needs. This leads to the amount of water pumped from wells exceeding the present amount that is recharging our aquifers. The water balance will have far reaching effects for years to come. The graphs and pictures on these two pages detail the current drought conditions in Madera County.



# DROUGHT CONDITIONS IN MADERA COUNTY...



Intensity:



Intensity:

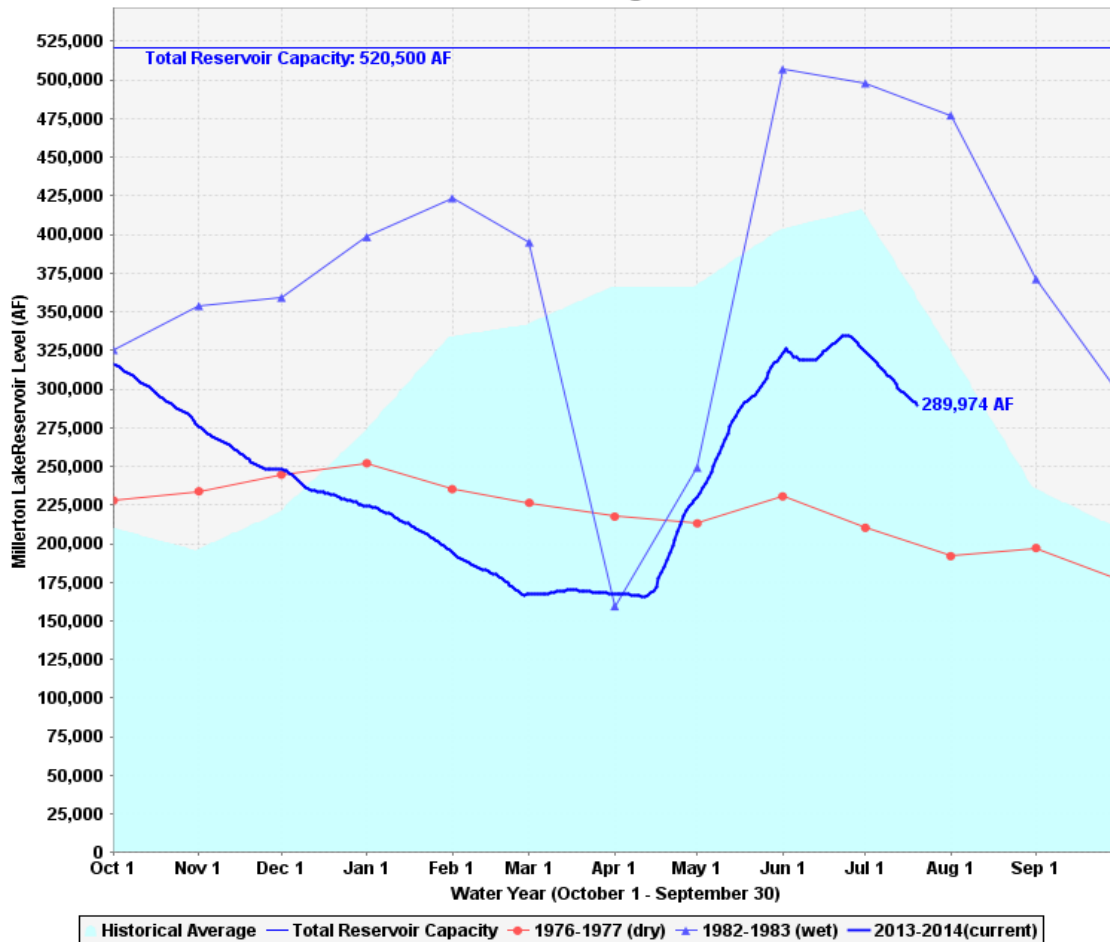


Intensity:



Maps: United States Drought Monitor (<http://droughtmonitor.unl.edu/>)  
 Star: Madera County

## Millerton Lake Storage Levels



Graph: State of California Department of Water Resources



## RAINFALL - MADERA, CALIFORNIA (1963 - 2013)

YEAR	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1963-64	0.00	0.00	0.23	1.45	2.38	0.24	0.61	0.01	1.50	0.70	0.42	0.27	7.81
1964-65	0.00	0.12	0.00	1.08	1.75	3.23	1.14	0.52	0.64	1.59	0.00	0.00	10.07
1965-66	0.00	0.07	0.00	0.17	4.25	1.83	0.81	0.94	0.06	0.17	0.29	0.01	8.60
1966-67	0.07	0.00	0.09	0.00	1.90	3.29	3.51	0.02	1.72	5.47	0.20	0.45	16.72
1967-68	0.00	0.00	0.10	0.02	1.37	1.45	0.84	1.57	1.58	1.02	0.31	0.00	8.26
1968-69	0.00	0.03	0.00	1.22	2.26	3.24	5.69	4.37	1.60	1.74	0.02	0.00	20.17
1969-70	0.07	0.00	0.13	0.52	1.01	1.45	3.42	0.84	2.09	0.21	0.00	0.19	9.93
1970-71	0.00	0.00	0.00	0.24	1.97	2.85	0.45	0.22	1.01	0.83	1.77	0.00	9.34
1971-72	0.00	0.00	0.02	0.04	0.58	1.72	0.19	0.70	0.00	0.56	0.03	0.05	3.89
1972-73	0.02	0.00	0.14	0.49	4.07	1.40	2.23	3.71	2.98	0.39	0.00	0.02	15.45
1973-74	0.00	0.00	0.00	1.55	1.15	2.36	2.26	0.42	2.32	0.72	0.00	0.00	10.78
1974-75	0.00	0.00	0.00	1.10	0.52	1.54	0.43	1.56	2.17	1.81	0.00	0.00	9.13
1975-76	0.00	0.15	0.19	1.26	0.34	0.10	0.10	3.64	0.64	1.60	0.00	0.00	8.02
1976-77	0.05	0.27	0.94	0.66	0.87	1.18	0.60	0.22	1.05	0.00	0.77	0.00	6.61
1977-78	0.00	0.00	0.00	0.00	0.58	2.36	3.14	4.27	5.04	2.90	0.00	0.00	18.29
1978-79	0.02	0.00	1.61	0.03	3.04	0.54	3.97	3.18	2.14	0.11	0.12	0.00	14.76
1979-80	0.00	0.00	0.00	0.66	1.00	1.50	3.61	3.81	1.50	0.63	0.25	0.00	12.96
1980-81	0.00	0.00	0.00	0.12	0.26	0.58	2.74	0.76	3.42	1.03	0.00	0.00	8.91
1981-82	0.00	0.00	0.00	1.36	1.99	0.81	1.97	1.42	3.44	2.94	0.00	0.20	14.13
1982-83	0.00	0.00	0.84	1.29	3.16	1.78	4.97	3.40	5.12	1.90	0.83	0.00	23.29
1983-84	0.00	0.00	0.22	0.66	2.58	2.45	0.35	1.48	0.59	0.18	0.00	0.00	8.51
1984-85	0.00	0.00	0.00	0.87	2.37	2.12	0.59	0.71	1.65	0.52	0.00	0.34	9.17
1985-86	0.00	0.12	0.11	0.54	2.76	1.03	1.37	5.22	3.16	0.51	0.15	0.00	14.97
1986-87	0.00	0.00	0.43	0.00	0.00	0.97	1.60	2.26	2.91	0.36	0.03	0.02	8.58
1987-88	0.00	0.00	0.00	1.96	0.48	1.52	0.90	0.50	0.59	2.03	0.29	0.03	8.30
1988-89	0.00	0.00	0.00	0.00	1.42	2.04	0.40	1.20	2.13	0.17	0.11	0.00	7.47
1989-90	0.00	0.03	0.94	0.55	0.54	0.00	2.32	1.38	0.71	1.41	2.36	0.00	10.24
1990-91	0.00	0.00	0.04	0.03	0.53	0.64	0.15	1.25	7.11	0.17	0.05	0.01	9.98
1991-92	0.00	0.02	0.00	0.87	0.23	1.08	1.43	2.88	2.13	0.02	0.00	0.00	8.66
1992-93	0.09	0.00	0.00	1.33	0.04	3.08	5.16	2.69	2.92	0.32	0.71	0.43	16.77
1993-94	0.00	0.00	0.00	0.06	0.77	1.39	1.85	1.77	0.43	1.89	2.61	0.00	10.77
1994-95	0.00	0.00	0.13	1.41	1.61	1.36	5.18	0.71	4.82	1.21	0.79	0.48	17.70
1995-96	0.00	0.00	0.00	0.00	0.00	2.42	2.62	3.98	2.34	0.84	0.52	0.32	13.04
1996-97	0.00	0.00	0.00	1.83	2.55	5.02	5.05	0.19	0.00	0.00	0.00	0.00	14.64
1997-98	0.00	0.01	0.13	0.00	2.55	1.65	4.22	5.69	4.26	2.03	1.38	0.74	22.66
1998-99	0.00	0.00	0.88	0.19	0.34	0.95	2.18	1.67	0.63	1.62	0.06	0.05	8.57
1999-00	0.00	0.00	0.00	0.00	0.61	0.08	3.59	6.13	1.35	1.26	0.16	0.46	13.64
2000-01	0.00	0.00	0.27	2.82	0.07	0.13	2.33	1.98	1.71	1.08	0.00	0.00	10.39
2001-02	0.02	0.00	0.02	0.51	1.89	2.42	1.40	0.34	1.14	0.23	0.33	0.22	8.52
2002-03	0.00	0.00	0.00	0.00	2.80	2.85	0.51	1.51	0.64	1.74	0.87	0.00	10.92
2003-04	0.00	0.06	0.00	0.00	0.34	2.88	0.95	2.20	0.56	0.00	0.00	0.00	6.99
2004-05	0.00	0.00	0.00	3.89	1.07	3.67	2.10	3.04	2.59	0.60	3.32	0.00	20.28
2005-06	0.00	0.04	0.01	0.00	0.00	2.49	3.10	0.65	3.80	2.55	0.00	0.00	12.64
2006-07	0.00	0.00	0.00	0.40	0.56	1.40	0.65	1.86	0.57	0.35	0.05	0.00	5.84
2007-08	0.00	0.00	0.15	0.32	0.09	2.13	2.78	2.21	0.00	0.00	0.26	0.00	7.94
2008-09	0.00	0.00	0.00	0.00	1.19	1.27	1.95	3.24	0.83	0.00	0.00	0.00	8.48
2009-10	0.00	0.00	0.06	1.14	0.17	2.69	2.48	2.77	2.04	2.69	0.22	0.00	14.26
2010-11	0.00	0.00	0.00	0.21	2.31	5.40	1.88	1.50	4.17	0.24	0.45	1.41	17.57
2011-12	0.00	0.00	0.00	0.72	0.89	0.08	0.89	0.46	2.92	2.61	0.00	0.12	8.69
2012-13	0.00	0.00	0.00	0.07	1.84	3.42	1.33	0.74	0.12	0.98	0.06	0.00	8.56
2013-14	0.00	0.00	0.02	0.07	0.25	0.23	0.32	2.16	0.48	0.49	0.00	0.00	4.02
<b>Average</b>	<b>0.01</b>	<b>0.02</b>	<b>0.15</b>	<b>0.67</b>	<b>1.35</b>	<b>1.85</b>	<b>2.09</b>	<b>2.00</b>	<b>1.99</b>	<b>1.09</b>	<b>0.40</b>	<b>0.12</b>	<b>11.72</b>

50 YEAR AVERAGE RAINFALL



## **Madera County**

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