

California Dairy Statistics Annual

2017 Data



California Dairy Statistics 2017

This publication was prepared in the
Division of Marketing Services,
Dairy Marketing Branch, by:

Dairy Statistics Unit Staff:

Joe Monson, Agricultural Economist
Caroline Chigbu, Research Analyst
Lu Tang, Research Analyst
Sofia Goss, Research Analyst

In Cooperation With:

Dairy Marketing Branch Economics,
Manufacturing Cost, and
Cost of Production Units,
Milk Pooling Branch,
and Milk and Dairy Food Safety Branch

and the

U.S. Department of Agriculture
Washington, D.C.

National Agricultural Statistics Service
Pacific Regional Office
Chris Messer, Director

The California Statistics 2017 Annual is a joint effort of the California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA). Like the previous 72 issues, it contains a summary of statistical data that was originally published by CDFA and USDA. This publication would not be possible without the cooperation of the individuals and firms engaged in the production, manufacture, and distribution of milk and dairy products. Both corrections of errors and revisions based on receipt of more complete information are the basis of changes from previously published data.

► ***Introduction***

- 1 California's Dairy Industry in 2017

► ***Milk Production***

- 2 California Milk Production, Annual Overview
- 3 California Milk Production, Number of Cows, Number of Dairies
- 4 California Milk Production, Five-Year Summary
- 5 California Milk Production, by County
- 6 Average Prices Paid to Producers
- 7 California Milk Production, by Month, by County
- 8 U.S. Milk Production, Number of Cows, Milk per Cow, Number of Dairies

► ***Pooled Milk***

- 9 Pooled Milk Utilization in California

► ***Class 1 Sales***

- 10 Sales of Class 1 Market Milk Products

► ***Dairy Products***

- 13 Manufacture of Dairy Products, Classes 2, 3, 4a, and 4b Five-Year Summaries

► ***Historic Timeline***

- 17 Historical Timeline of California's Dairy Industry



California Department of Food and Agriculture

Karen Ross, Secretary
Dairy Marketing Branch
1220 N Street, Sacramento, CA 95814
(916) 900-5014 / www.cdfa.ca.gov/dairy
Email: dairy@cdfa.ca.gov

California's Dairy Industry in 2017

For California in 2017, compared to the previous year, total milk production was down 1.7 percent, the number of dairy cows declined 0.2 percent, milk per cow dropped 1.5 percent, and the number of dairies decreased by 4.4 percent. The 12-month average price paid to California producers for farm milk in 2017 was \$16.50 per hundredweight (cwt.), which represents an increase of 9.8 percent from the previous year.

Milk Production

California milk production decreased each month through 2017, compared to the same month in the previous year. Total milk production for 2017 was 39.8 billion pounds, which is 669.0 million pounds less than the previous year. The five leading milk producing counties (Tulare, Merced, Kings, Stanislaus, and Kern) accounted for 72.4 percent of the state's total milk production in 2017. Grade B milk production in 2017 increased by 34.4 percent (272.7 million more pounds), when compared to 2016. In 2017, the total number of cows in the state was estimated to be 1.735 million head, and milk production per cow was estimated at 22,916 pounds.

Utilization and Dairy Products

In 2017, pooled milk utilized in the production of butter and dried milk products (Class 4a) increased slightly to 32.5 percent (from 32.3 percent in 2016). The percentage of pooled milk going into the production of cheese and whey products (Class 4b) decreased slightly to 46.2 percent (from 46.4 percent in 2016). In comparison to the previous year, 2017 California butter production decreased by 5.1 percent to 534.4 million pounds, nonfat dry milk (human) production decreased by 0.9 percent to 562.0 million pounds, and the production of other dry milk products decreased by 1.9 percent

to 406.9 million pounds. California's total cheese production decreased by 0.1 percent from a record level in 2016, to 2.513 billion pounds in 2017. For the top three cheeses produced in the state in 2017, compared to 2016, Mozzarella production decreased 1.3 percent to 1.472 billion pounds, Cheddar production increased 3.3 percent to 355.5 million pounds, and Monterey Jack production decreased 9.3 percent to 277.2 million pounds. In 2017, utilization of pooled milk for fluid milk products (Class 1) decreased slightly to 12.8 percent (from 13.0 percent in 2016). Whole milk sales in California increased to 216.9 million gallons in 2017, while year-end sales of reduced fat milk, lowfat milk, and skim milk decreased to 219.2 million gallons, 93.3 million gallons, and 72.1 million gallons, respectively. Half-and-half sales increased 2.5 percent compared to the previous year, to 20.3 million gallons in 2017. As a whole, Class 1 sales continued to decline in 2017, recording an overall decrease of 3.2 percent compared to 2016.

Milk Prices

During each of the first ten months of 2017, milk prices in California exceeded prices realized during the corresponding month of the previous year. However, milk prices began to decline during the fourth quarter of the year, as increased global milk production and excess dairy product inventory levels outweighed the global market demand for dairy products. The average monthly price paid to California producers for farm milk in 2017 reached its highest level in both January and August at \$17.44/cwt., and reached its lowest level in April at \$15.29/cwt. During the final three months of the year, the average milk price decreased by 10.3 percent, from \$17.32/cwt. in October to \$15.53/cwt. in December.



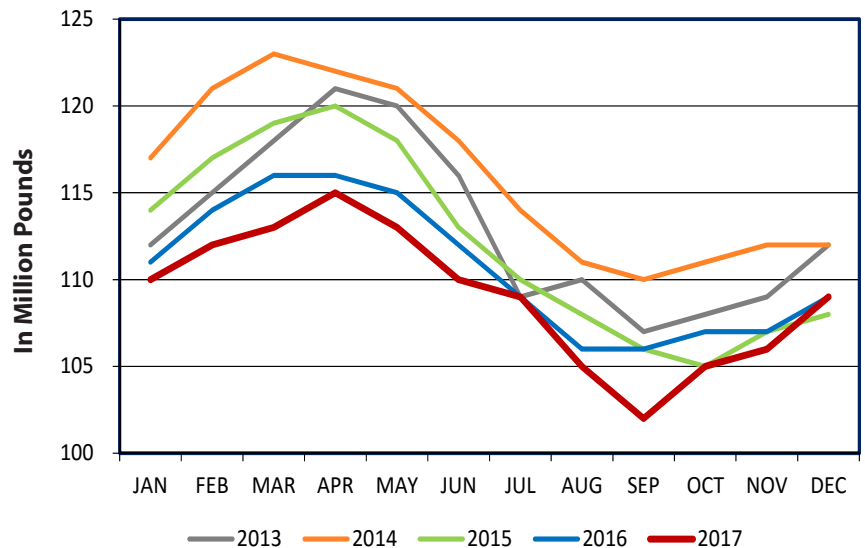
California Milk Production

California total milk production reached 39.8 billion pounds in 2017, which represents a 1.7 percent decrease compared to the previous year. Of the state's total milk production during the year, 97.3 percent was market grade (Grade A), while the remaining 2.7 percent was manufacturing grade (Grade B).

The 24 milk-producing counties of the Northern California region accounted for 94.4 percent of the market milk and nearly 100 percent of the manufacturing milk produced commercially during 2017.

The five leading counties in total milk production for 2017, in ranking order, were: Tulare (27.4 percent), Merced (15.4 percent), Kings (10.4 percent), Stanislaus (9.9 percent), and Kern (9.4 percent). These five counties accounted for 72.4 percent of California's total milk production.

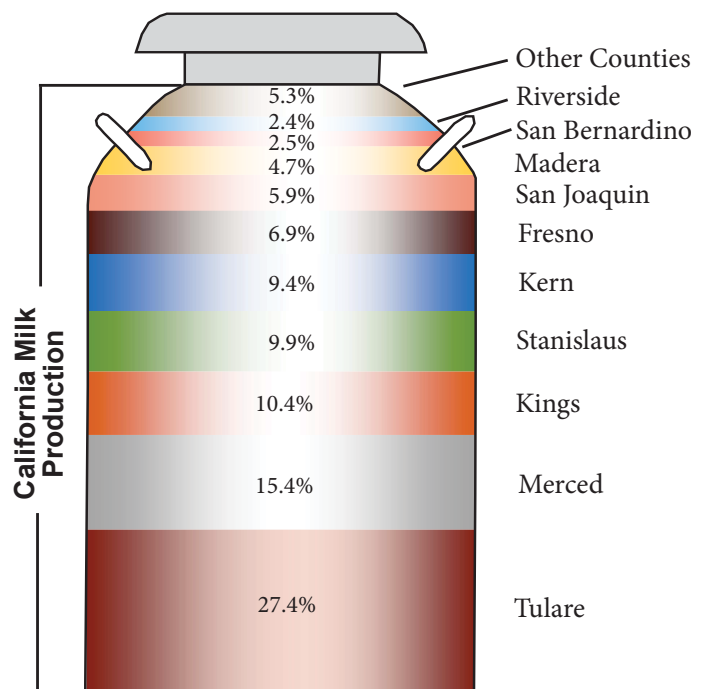
California Milk Production Average Daily Basis, 2013-2017



The chart above shows the average daily production of milk in California on a monthly basis, from January 2013 through December 2017.

Total Milk Production: Top 10 Counties

County by Rank	Milk Production Jan-Dec 2017 (Pounds)	Change from 2016 (Percent)
#1 Tulare	10,898,199,708	-1.3%
#2 Merced	6,118,632,016	-0.8%
#3 Kings	4,118,692,949	-3.6%
#4 Stanislaus	3,931,744,192	-1.5%
#5 Kern	3,718,554,133	-2.8%
#6 Fresno	2,756,349,010	-0.7%
#7 San Joaquin	2,330,365,468	-1.9%
#8 Madera	1,858,949,176	2.0%
#9 San Bernardino	978,098,347	-6.6%
#10 Riverside	948,433,111	-2.2%



Number of Milk Cows on Farms, Number of Dairies, and Average Number of Cows per Dairy in California, by County and Region, 2016 and 2017

County and Region ¹	2016			2017		
	Number of Cows	Number of Dairies ²	Average Number of Cows per Dairy	Number of Cows	Number of Dairies ²	Average Number of Cows per Dairy
Butte ³						
Del Norte	3,339	7	477	3,792	7	542
Fresno	115,832	74	1,565	117,253	70	1,675
Glenn	13,856	28	495	16,353	23	711
Humboldt	14,815	60	247	15,525	57	272
Kern	158,216	48	3,296	156,142	48	3,253
Kings ⁴	179,689	111	1,619	176,625	107	1,651
Madera	76,474	42	1,821	80,816	37	2,184
Marin	7,718	25	309	7,877	25	315
Mendocino ³						
Merced	268,299	217	1,236	268,386	206	1,303
Monterey ³						
Placer ³						
Sacramento	13,784	28	492	13,463	27	499
San Benito ³						
San Joaquin ⁴	100,480	106	948	100,497	101	995
Siskiyou	575	3	192	755	3	252
Solano ³						
Sonoma	30,006	63	476	30,051	62	485
Stanislaus	171,473	191	898	172,328	185	932
Tehama	2,828	8	354	2,515	8	314
Tulare	470,692	269	1,750	471,081	258	1,826
Yolo ³						
Yuba	2,902	4	726	3,185	3	1,062
Northern California	1,640,677	1,297	1,265	1,644,675	1,239	1,327
Imperial	4,682	3	1,561	4,512	3	1,504
Los Angeles ³						
Riverside	41,235	27	1,527	39,407	27	1,460
San Bernardino	45,002	59	763	40,457	56	722
San Diego	1,862	3	621	1,604	3	535
San Luis Obispo ³						
Santa Barbara ³						
Southern California	97,511	95	1,026	90,675	92	986
STATE TOTALS	1,738,188	1,392	1,249	1,735,350	1,331	1,304

¹ Counties omitted have no reported milk production.

² Indicates number of dairies as of December 31, 2017. Source: CDFA Milk and Dairy Food Safety Branch.

³ Not published, but included in totals.

⁴ Includes prison dairies.



California Milk Production, Average Milk Fat and Solids-Not-Fat Test, by Year, 2013-2017 ¹

Year and Month	Bulk Milk Production			Average Milk Fat Test			Average Solids-Not-Fat Test			Change in Total Production from Prior Year
	Market	Manufacturing	Total ²	Market	Manufacturing	Total	Market	Manufacturing	Total	
		<i>Pounds</i>			<i>Percent</i>			<i>Percent</i>		<i>Percent</i>
2013	40,558,111,042	661,991,790	41,220,102,832	3.73	4.69	3.75	8.90	9.30	8.91	-1.3
2014	42,096,690,809	208,408,110	42,305,098,919	3.69	4.45	3.70	8.92	9.20	8.92	2.6
2015	40,407,956,856	457,584,637	40,865,541,493	3.71	4.63	3.72	8.93	9.33	8.93	-3.4
2016	39,643,997,227	792,015,524	40,436,012,751	3.77	4.48	3.79	8.93	9.22	8.94	-1.1
2017	38,702,307,313	1,064,727,040	39,767,034,353	3.83	4.55	3.85	8.96	9.24	8.97	-1.7
2015										
January	3,489,816,736	38,070,207	3,527,886,943	3.81	4.77	3.82	8.96	9.36	8.96	-2.6
February	3,244,730,085	36,337,148	3,281,067,233	3.72	4.66	3.73	8.92	9.32	8.92	-3.4
March	3,655,450,869	41,929,881	3,697,380,750	3.69	4.58	3.70	8.93	9.31	8.93	-2.9
April	3,562,578,424	39,075,096	3,601,653,520	3.66	4.62	3.67	8.94	9.34	8.95	-1.9
May	3,608,227,746	40,600,864	3,648,828,610	3.64	4.56	3.65	8.89	9.29	8.89	-2.7
June	3,350,851,840	42,448,186	3,393,300,026	3.61	4.43	3.62	8.87	9.23	8.88	-4.2
July	3,363,243,510	38,941,638	3,402,185,148	3.58	4.46	3.59	8.85	9.24	8.86	-3.4
August	3,300,595,078	37,362,768	3,337,957,846	3.62	4.52	3.63	8.89	9.30	8.90	-3.2
September	3,134,667,459	35,408,435	3,170,075,894	3.69	4.61	3.70	8.94	9.36	8.94	-3.7
October	3,204,854,101	36,673,595	3,241,527,696	3.75	4.66	3.76	8.94	9.35	8.94	-5.5
November	3,168,745,304	34,752,867	3,203,498,171	3.83	4.86	3.84	9.01	9.43	9.02	-4.4
December	3,324,195,704	35,983,952	3,360,179,656	3.89	4.93	3.90	9.01	9.47	9.02	-3.2
2016										
January	3,361,345,440	68,403,833	3,429,749,273	3.85	4.55	3.86	8.96	9.24	8.97	-2.8
February	3,232,942,324	66,062,915	3,299,005,239	3.80	4.49	3.81	8.92	9.19	8.92	0.5
March	3,534,440,389	68,546,109	3,602,986,498	3.74	4.45	3.75	8.91	9.18	8.92	-2.6
April	3,412,072,627	65,868,217	3,477,940,844	3.72	4.44	3.73	8.90	9.18	8.91	-3.4
May	3,480,555,643	70,091,908	3,550,647,551	3.72	4.41	3.73	8.90	9.18	8.91	-2.7
June	3,290,989,522	65,665,920	3,356,655,442	3.69	4.34	3.70	8.88	9.17	8.89	-1.1
July	3,308,677,714	66,473,313	3,375,151,027	3.66	4.32	3.68	8.86	9.13	8.87	-0.8
August	3,220,237,367	64,498,446	3,284,735,813	3.68	4.37	3.70	8.89	9.17	8.89	-1.6
September	3,107,286,676	61,514,941	3,168,801,617	3.78	4.49	3.80	8.96	9.25	8.97	0.0
October	3,237,800,115	65,906,323	3,303,706,438	3.84	4.58	3.86	8.99	9.28	8.99	1.9
November	3,148,383,441	63,032,358	3,211,415,799	3.87	4.62	3.88	8.99	9.29	9.00	0.2
December	3,309,265,969	65,951,241	3,375,217,210	3.94	4.75	3.96	9.04	9.35	9.04	0.4
2017										
January	3,318,236,446	89,507,226	3,407,743,672	3.95	4.70	3.97	9.02	9.33	9.03	-0.6
February	3,037,785,944	84,685,014	3,122,470,958	3.89	4.60	3.91	8.98	9.26	8.98	-5.4
March	3,405,968,127	93,297,214	3,499,265,341	3.85	4.58	3.87	8.95	9.24	8.96	-2.9
April	3,349,283,415	90,722,189	3,440,005,604	3.80	4.55	3.82	8.95	9.22	8.96	-1.1
May	3,415,254,998	95,703,648	3,510,958,646	3.76	4.47	3.78	8.92	9.18	8.92	-1.1
June	3,198,567,444	88,937,438	3,287,504,882	3.73	4.43	3.75	8.88	9.17	8.89	-2.1
July	3,279,991,891	90,574,758	3,370,566,649	3.68	4.38	3.69	8.87	9.16	8.88	-0.1
August	3,176,294,221	86,542,896	3,262,837,117	3.72	4.41	3.74	8.91	9.19	8.92	-0.7
September	2,983,491,829	82,135,791	3,065,627,620	3.77	4.48	3.79	8.95	9.22	8.96	-3.3
October	3,170,261,753	84,818,001	3,255,079,754	3.93	4.63	3.94	9.04	9.29	9.05	-1.5
November	3,090,631,651	89,443,526	3,180,075,177	3.93	4.60	3.95	9.04	9.28	9.05	-1.0
December	3,276,539,594	88,359,339	3,364,898,933	4.00	4.74	4.02	9.06	9.33	9.07	-0.3

¹ Includes total milk sold. Excludes milk used on ranch.

² Monthly totals may not add up to annual totals due to rounding.



California Milk Production, Average Milk Fat and Solids-Not-Fat Test, by County and Region, 2017 ¹

County and Region ²	Total Milk Production	Average Milk Fat Test ³	Average Solids-Not-Fat Test ³
	<i>Pounds</i>	<i>Percent</i>	<i>Percent</i>
Butte ⁴			
Del Norte	57,566,922	4.57	9.32
Fresno	2,756,349,010	3.76	8.94
Glenn	364,752,095	3.83	8.93
Humboldt	231,926,553	4.23	9.00
Kern	3,718,554,133	3.75	8.90
Kings	4,118,692,949	3.84	8.96
Madera	1,858,949,176	3.88	9.00
Marin	126,322,248	3.77	8.87
Mendocino ⁴			
Merced	6,118,632,016	3.94	9.00
Monterey ⁴			
Placer ⁴			
Sacramento	313,698,212	3.78	8.97
San Benito ⁴			
San Joaquin	2,330,365,468	3.84	8.98
Siskiyou	11,195,870	3.95	8.98
Solano ⁴			
Sonoma	478,273,112	3.83	8.95
Stanislaus	3,931,744,192	3.91	8.98
Tehama	50,697,470	4.29	9.14
Tulare	10,898,199,708	3.86	9.00
Yolo ⁴			
Yuba	65,647,967	4.31	9.03
Northern California	37,591,029,757	3.86	8.98
Imperial	97,102,916	3.78	8.96
Los Angeles ⁴			
Riverside	948,433,111	3.75	8.92
San Bernardino	978,098,347	3.65	8.89
San Diego	38,982,623	3.63	8.83
San Luis Obispo ⁴			
Santa Barbara ⁴			
Southern California	2,176,004,596	3.70	8.90
STATE TOTALS	39,767,034,353	3.85	8.97

¹ Includes total milk sold. Excludes milk used on ranch.

² Counties omitted have no reported milk production.

³ Tests were computed from unrounded data.

⁴ Not published, but included in totals.



Average Prices Paid to Producers in California For All Milk (Grade A and Grade B), By Month, 2013-2017 ^{1,2}

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Average
<i>Dollars Per Hundredweight</i>													
2013	17.90	17.80	17.30	18.22	18.25	17.82	17.53	18.12	18.71	19.41	20.03	20.77	18.49
2014	22.19	22.91	23.62	23.39	22.00	21.89	21.62	22.56	23.60	22.90	20.46	17.85	22.08
2015	15.32	14.80	14.69	14.72	15.05	15.42	15.01	15.47	16.06	16.13	16.65	15.45	15.40
2016	14.83	14.30	13.94	13.60	12.89	13.87	14.90	16.08	15.92	15.39	17.06	17.55	15.03
2017	17.44	17.08	15.54	15.29	15.99	16.56	16.44	17.44	16.60	17.32	16.81	15.53	16.50

¹ Prices are F.O.B. plant, at actual test.

² Includes in-state pool shipments and California milk shipped into Federal Milk Marketing Orders. Excludes bonuses and premiums.

Average Prices Paid to Producers in California For Market Milk (Grade A), By Month, 2013-2017 ^{1,2}

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Average
<i>Dollars Per Hundredweight</i>													
2013	17.89	17.80	17.30	18.19	18.22	17.81	17.53	18.11	18.70	19.40	20.02	20.76	18.48
2014	22.18	22.90	23.61	23.38	21.99	21.89	21.63	22.55	23.59	22.89	20.45	17.85	22.08
2015	15.31	14.78	14.67	14.70	15.03	15.39	14.99	15.44	16.04	16.11	16.63	15.44	15.38
2016	14.81	14.27	13.91	13.57	12.88	13.84	14.86	16.03	15.88	15.36	17.00	17.50	14.99
2017	17.39	17.03	15.51	15.24	15.93	16.51	16.39	17.39	16.56	17.26	16.76	15.49	16.46

¹ Prices are F.O.B. plant, at actual test.

² Includes in-state pool shipments and California milk shipped into Federal Milk Marketing Orders. Excludes bonuses and premiums and exempt production.

Average Prices Paid to Producers in California For Manufacturing Milk (Grade B), By Month, 2013-2017 ¹

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Average
<i>Dollars Per Hundredweight</i>													
2013	18.74	18.23	17.65	19.75	19.76	18.15	17.82	18.50	19.23	19.83	20.57	21.53	19.15
2014	23.76	23.95	25.06	24.66	23.04	22.42	20.89	22.79	25.82	25.78	22.11	17.74	23.17
2015	16.35	16.38	16.41	16.85	16.66	17.64	17.26	18.41	18.46	18.30	18.90	16.97	17.38
2016	15.75	15.58	15.54	15.03	13.58	15.30	17.05	18.80	17.83	17.01	20.46	20.08	16.83
2017	19.45	18.82	16.57	17.02	17.92	18.44	18.27	19.23	17.84	19.53	18.56	17.09	18.23

¹ Prices are F.O.B. plant, at actual test.



California Total Milk Production, by Counties and Regions, 2017¹

County and Region ²	January	February	March	April	May	June	July	August	September	October	November	December	Total
<i>In Pounds</i>													
Butte ³	4,937,603	4,441,711	4,920,052	4,739,874	4,994,426	5,125,901	5,139,352	5,028,944	5,040,294	4,731,469	4,210,766	4,256,530	57,566,922
Del Norte	233,750,275	213,703,374	241,187,079	237,181,968	242,994,125	228,819,863	236,195,010	229,013,695	214,437,665	226,748,321	220,262,071	232,055,564	2,756,349,010
Fresno	28,611,444	26,244,580	33,964,558	32,977,428	32,491,028	29,169,779	29,946,700	28,837,365	27,492,905	30,441,221	31,418,915	33,156,172	364,752,095
Glenn	18,623,129	16,723,333	19,106,829	19,428,189	21,030,863	20,984,552	20,872,101	20,343,200	19,261,490	19,043,314	17,834,839	18,674,714	231,926,553
Humboldt	329,571,621	297,978,187	332,488,851	323,193,747	327,642,956	300,330,715	305,930,643	297,641,836	282,948,171	303,910,564	297,954,017	318,981,825	3,718,554,133
Kern	363,614,526	332,012,798	369,520,596	363,877,872	363,730,690	339,098,847	345,022,063	331,429,157	311,049,970	330,796,144	324,226,610	344,313,676	4,118,692,949
Kings	157,310,309	143,415,992	161,638,526	158,437,614	165,335,257	154,814,466	158,946,232	156,007,507	145,476,016	152,198,336	148,746,613	156,622,308	1,858,949,176
Madera	10,706,829	9,616,857	10,723,953	10,261,864	10,619,781	10,335,679	10,920,763	10,870,956	10,211,695	10,654,689	10,504,157	10,895,025	126,322,248
Marin													
Mendocino ³													
Merced	518,677,250	477,616,724	533,879,902	522,630,646	535,249,214	506,175,263	523,536,541	506,013,223	476,340,821	503,687,736	493,458,758	521,365,938	6,118,632,016
Monterey ³													
Placer ³													
Sacramento	26,714,749	24,237,581	26,829,560	26,057,944	27,058,050	25,897,298	27,157,284	26,942,539	25,292,395	26,145,001	24,993,355	26,372,456	313,698,212
San Benito ³													
San Joaquin	197,456,368	181,412,921	203,099,373	199,502,730	204,905,312	195,092,785	203,271,684	195,248,467	178,952,454	190,036,987	185,018,056	196,368,331	2,330,365,468
Siskiyou	792,838	863,364	1,046,176	1,031,966	1,136,265	994,380	1,042,710	933,129	836,200	818,952	811,825	888,065	11,195,870
Solano ³													
Sonoma	40,537,131	37,366,671	41,052,777	38,800,279	40,420,401	39,264,686	41,362,787	42,230,542	38,645,249	39,974,027	38,550,707	40,067,855	478,273,112
Stanislaus	332,763,466	304,538,830	339,935,488	335,651,902	345,574,259	329,171,652	340,735,750	327,708,493	304,841,661	322,090,278	315,041,098	333,691,315	3,931,744,192
Tehama	4,358,471	3,905,100	4,409,121	4,302,684	4,422,556	4,147,246	4,382,254	4,381,253	4,193,039	4,470,697	3,812,899	3,912,150	50,697,470
Tulare	935,243,494	856,987,869	963,061,762	952,875,710	970,405,617	897,460,914	915,127,689	885,694,807	837,738,041	892,066,800	872,186,716	919,350,289	10,898,199,708
Yolo ³													
Yuba	5,356,203	5,116,006	5,649,989	5,417,625	5,479,443	5,157,861	5,579,902	5,468,537	5,266,668	5,566,066	5,612,977	5,976,690	65,647,967
Northern California	3,225,891,821	2,952,203,570	3,305,391,091	3,248,150,879	3,316,831,530	3,104,807,839	3,188,506,983	3,086,681,404	2,900,008,124	3,075,742,994	3,006,527,071	3,179,286,451	37,591,029,757
Imperial	8,221,260	8,225,006	8,886,000	8,721,340	8,710,960	8,173,700	7,846,120	7,627,660	7,411,420	7,680,070	7,688,840	7,910,540	97,102,916
Los Angeles ³													
Riverside	78,853,995	73,269,502	84,028,664	82,987,297	84,942,330	80,360,682	78,864,217	76,816,866	72,822,269	78,447,517	75,858,268	81,181,504	948,433,111
San Bernardino	82,539,929	77,018,032	87,548,834	86,328,949	87,230,690	81,591,664	82,465,120	79,063,082	73,190,522	80,618,456	77,453,713	83,049,356	978,098,347
San Diego	3,057,745	3,045,770	3,542,707	3,310,680	3,340,839	3,185,706	3,260,628	3,219,931	3,055,385	3,323,081	3,217,183	3,422,968	38,982,623
San Luis Obispo ³													
Santa Barbara ³													
Southern California	181,851,851	170,267,388	193,874,250	190,854,725	194,127,116	182,697,043	182,059,666	176,155,713	165,619,496	179,336,760	173,548,106	185,612,482	2,176,004,596
STATE TOTALS	3,407,743,672	3,122,470,958	3,499,265,341	3,440,005,604	3,510,958,646	3,287,504,882	3,370,566,649	3,262,837,117	3,065,627,620	3,255,079,754	3,180,075,177	3,364,898,933	39,767,034,353

¹ Includes total milk sold. Excludes milk left on ranch.
² Counties omitted have no reported milk production.
³ Not published, but included in total.



U.S. Milk Production on Farms, Number of Milk Cows on Farms, Average Production per Milk Cow, Number of Dairies, by State, 2017 ¹

State	Milk Production on Farms	Change in Milk Production from 2016	Milk Cows on Farms ²	Average Production per Milk Cow	Number of Licensed Dairies	Rank in United States Milk Production	Percent of United States Milk Production
	<i>Million Pounds</i>	<i>Percent</i>	<i>Thousands</i>	<i>Pounds</i>			<i>Percent</i>
Alabama	89.0	-3.3	6.0	14,833	35	46	0.0
Alaska	2.9	-17.1	0.3	9,667	2	50	0.0
Arizona	5,010.0	3.6	203.0	24,680	100	13	2.3
Arkansas	79.0	-1.3	6.0	13,167	55	47	0.0
California	39,798.0	-1.7	1,749.0	22,755	1,390	1	18.5
Colorado	4,189.0	6.7	160.0	26,181	120	15	1.9
Connecticut	420.0	2.7	19.0	22,105	110	34	0.2
Delaware	92.8	-2.8	5.0	18,560	30	45	0.0
Florida	2,496.0	0.0	124.0	20,129	110	20	1.2
Georgia	1,840.0	0.5	84.0	21,905	180	23	0.9
Hawaii	38.9	11.5	2.3	16,913	2	48	0.0
Idaho	14,627.0	-0.3	600.0	24,378	510	4	6.8
Illinois	1,929.0	0.9	93.0	20,742	630	22	0.9
Indiana	4,264.0	2.7	187.0	22,802	1,070	14	2.0
Iowa	5,172.0	2.7	218.0	23,725	1,200	12	2.4
Kansas	3,496.0	5.0	152.0	23,000	290	16	1.6
Kentucky	1,041.0	-0.6	56.0	18,589	600	27	0.5
Louisiana	160.0	-5.3	12.0	13,333	95	40	0.1
Maine	630.0	0.0	30.0	21,000	250	33	0.3
Maryland	953.0	-0.4	48.0	19,854	400	28	0.4
Massachusetts	211.0	-4.5	12.0	17,583	140	39	0.1
Michigan	11,231.0	3.3	427.0	26,302	1,750	6	5.2
Minnesota	9,864.0	2.0	458.0	21,537	3,210	8	4.6
Mississippi	137.0	-4.9	9.0	15,222	70	42	0.1
Missouri	1,240.0	-1.6	85.0	14,588	1,040	26	0.6
Montana	288.0	-2.4	13.0	22,154	65	36	0.1
Nebraska	1,444.0	3.2	60.0	24,067	155	25	0.7
Nevada	709.0	7.4	32.0	22,156	20	31	0.3
New Hampshire	273.0	-4.9	13.0	21,000	110	37	0.1
New Jersey	119.0	-2.5	6.0	19,833	55	44	0.1
New Mexico	8,212.0	6.5	329.0	24,960	150	9	3.8
New York	14,912.0	0.9	623.0	23,936	4,490	3	6.9
North Carolina	952.0	-1.3	45.0	21,156	190	29	0.4
North Dakota	345.0	0.3	16.0	21,563	80	35	0.2
Ohio	5,591.0	0.8	263.0	21,259	2,380	11	2.6
Oklahoma	728.0	5.2	39.0	18,667	160	30	0.3
Oregon	2,529.0	-2.5	124.0	20,395	230	19	1.2
Pennsylvania	10,938.0	1.1	525.0	20,834	6,570	7	5.1
Rhode Island	13.0	-7.8	0.8	16,250	10	49	0.0
South Carolina	247.0	-1.2	15.0	16,467	60	38	0.1
South Dakota	2,618.0	2.8	117.0	22,376	225	18	1.2
Tennessee	693.0	-0.4	40.0	17,325	270	32	0.3
Texas	12,054.0	11.9	511.0	23,589	400	5	5.6
Utah	2,215.0	5.7	95.0	23,316	180	21	1.0
Vermont	2,728.0	0.0	129.0	21,147	820	17	1.3
Virginia	1,736.0	0.8	87.0	19,954	585	24	0.8
Washington	6,526.0	-1.9	274.0	23,818	450	10	3.0
West Virginia	127.0	-5.2	8.0	15,875	75	43	0.1
Wisconsin	30,320.0	0.7	1,278.0	23,725	9,090	2	14.1
Wyoming	138.2	-1.1	6.0	23,033	10	41	0.1
United States ³	215,466.0	1.4	9,392.0	22,941	40,219		

¹ USDA/NASS data.

² Average number during year, heifers that have not freshened excluded.

³ State totals may not add to U.S. totals because of rounding.



Utilization of Pooled Milk Fat and Solids-Not-Fat in California, by Class, by Year, 2013-2017 ^{1, 2, 3}

In 2017, total pounds of pooled milk fat decreased 1.1 percent and total pounds of pooled solids-not-fat (SNF) decreased 2.3 percent, compared to 2016. Additionally, compared to 2016, the volume of total pooled solids utilized for each product classification changed as follows: Class 1 (fluid dairy products) decreased by 3.2 percent, Class 2 (soft dairy products) increased by 0.2 percent, Class 3 (frozen dairy products) increased by 0.5 percent, Class 4a (butter and dried milk products) decreased by 1.4 percent, and Class 4b (cheese and whey products) decreased by 2.4 percent. During the year, 78.7 percent of total pooled solids were utilized in the production of Class 4a and 4b products.

Pooled Milk Fat

Year	Class 1	Class 2	Class 3	Class 4a	Class 4b	Fat Total	Quota	Non-Quota	Fat \$ Value (Actual Dollars)
<i>Pounds</i>									
2013	114,981,900	114,700,669	76,844,516	581,895,681	588,035,708	1,476,458,474	322,327,782	1,154,130,692	\$2,415,021,949
2014	120,262,870	120,979,540	91,860,131	544,886,589	637,512,037	1,515,501,167	322,141,640	1,193,359,527	\$3,513,165,226
2015	118,433,668	125,247,649	80,057,456	514,318,789	616,676,326	1,454,733,888	322,038,876	1,132,695,012	\$3,202,702,444
2016	120,645,684	121,568,667	69,250,149	527,861,511	616,239,602	1,455,565,613	323,352,696	1,132,212,917	\$3,297,268,487
2017	118,970,155	126,311,847	72,090,919	514,095,169	608,309,637	1,439,777,727	322,156,286	1,117,621,441	\$3,645,389,428

Pooled Milk Solids-Not-Fat

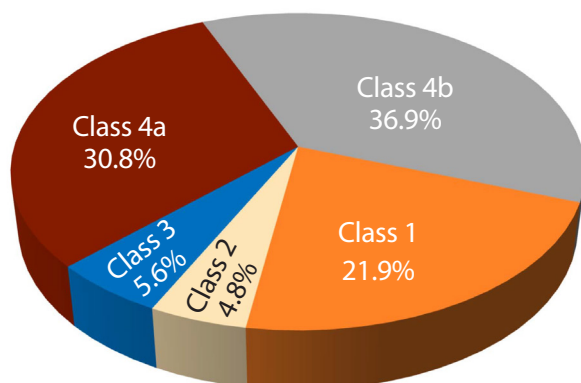
Year	Class 1	Class 2	Class 3	Class 4a	Class 4b	SNF Total	Quota	Non-Quota	SNF \$ Value (Actual Dollars)
<i>Pounds</i>									
2013	540,719,806	139,903,309	83,140,917	1,141,182,793	1,622,847,409	3,527,794,234	785,970,561	2,741,823,673	\$4,924,424,875
2014	540,414,632	140,409,578	84,224,796	1,164,508,839	1,733,649,977	3,663,207,822	785,603,952	2,877,603,870	\$5,585,500,406
2015	528,152,390	146,541,305	77,743,905	1,077,621,738	1,679,974,270	3,510,033,608	785,641,873	2,724,391,735	\$2,854,205,252
2016	516,127,093	143,490,693	72,054,013	1,057,648,399	1,661,463,267	3,450,783,465	788,590,160	2,662,193,305	\$2,503,813,277
2017	497,142,771	139,222,070	69,860,580	1,049,078,722	1,614,967,452	3,370,271,595	785,339,325	2,584,932,270	\$2,549,512,875

¹ Data are subject to revision.

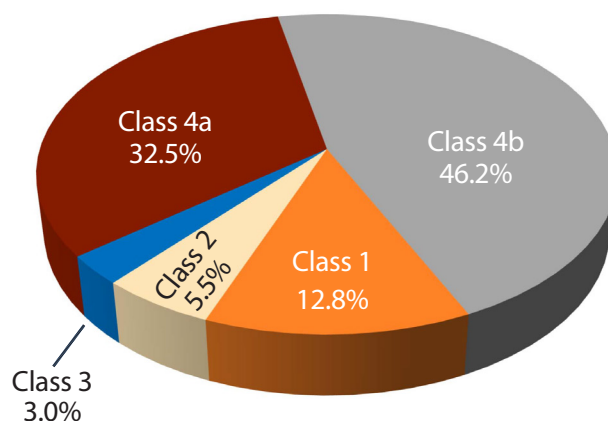
² Includes pooled milk only. Excludes exempt, non-pool, Grade B milk, and bulk milk shipped out-of-California.

³ Class usage has been adjusted for plant gain and inventory variance.

Utilization of California Pooled Milk by Class, 1997



Utilization of California Pooled Milk by Class, 2017

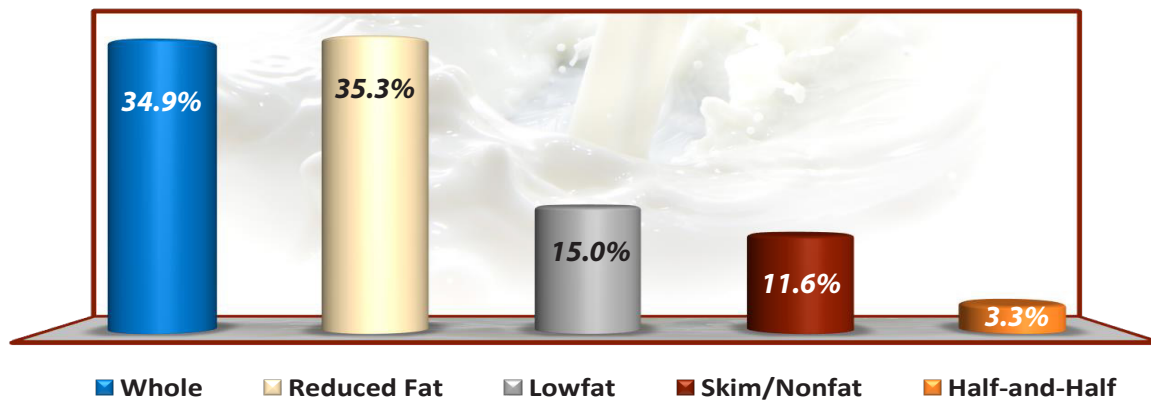


Class 1 Fluid Milk Sales in California ¹

For 2017, total Class 1 sales decreased 3.2 percent compared to 2016. Whole milk showed increased sales, while reduced fat, lowfat, and skim milk experienced decreased sales compared to 2016. Sales of half-and-half increased in 2017, compared to the prior year.

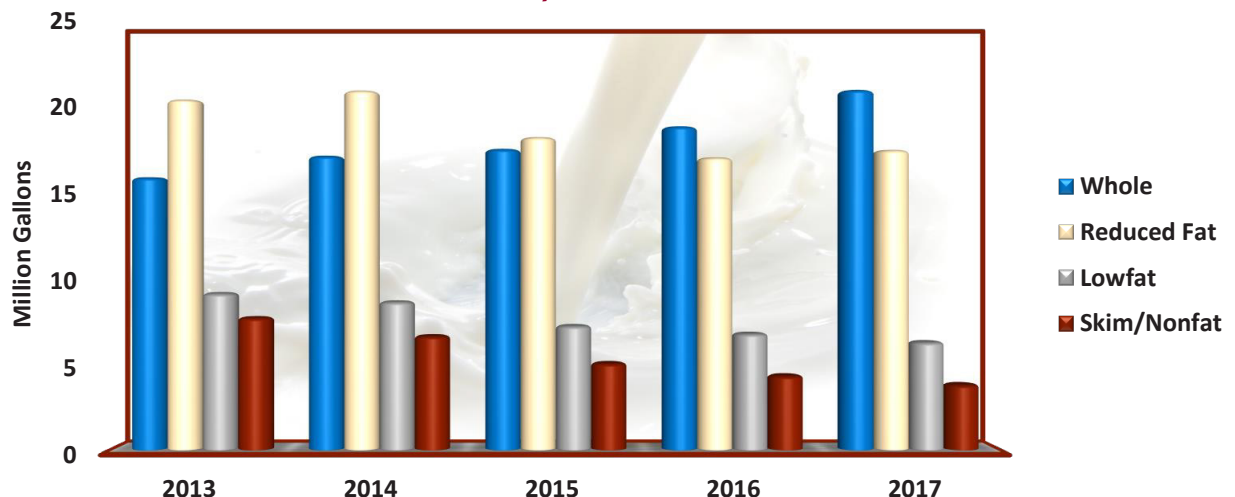
A total of approximately 621.8 million gallons of Class 1 products were packaged and sold in California in 2017. The chart below shows the percent of total Class 1 sales by product type, during the year.

Sales of Fluid Class 1 Market Milk Products Percent of Sales by Type, California, 2017



Compared to 2016, total organic beverage milk sales increased 3.3 percent to 49.0 million gallons. The chart below shows the sales of organic beverage milk, by type, during the past five years. Organic whole milk showed increased sales over the past five years, while lowfat and skim milk showed decreased sales during the same period. Sales of organic reduced fat milk have fluctuated both upward and downward over the past five years.

Sales of Organic Beverage Milk by Type, California, 2013 - 2017



¹ All sales can include Class 1 products made from non-pool milk.



Sales of Class 1 Market Milk Products in California, by Year, 2013-2017 ¹

Year and Month	Whole Milk	Reduced Fat Milk	Lowfat/Light Milk	Skim/Nonfat/Fat Free Milk	Subtotal of All Beverage Milks	Half and Half	Total Class 1	Change in Total Class 1 from Prior Year
	<i>Gallons</i>							<i>Percent</i>
2013	211,349,158	287,672,245	98,758,984	102,719,620	700,500,007	20,884,485	721,384,492	-1.4
2014	208,239,289	271,295,101	101,459,877	93,679,244	674,673,511	20,854,163	695,527,674	-3.6
2015	209,672,149	235,388,543	113,655,181	84,322,733	643,038,606	19,690,770	662,729,376	-4.7
2016	214,451,279	226,188,129	103,848,971	78,409,535	622,897,914	19,769,476	642,667,390	-3.0
2017	216,884,735	219,221,254	93,261,658	72,140,796	601,508,443	20,272,714	621,781,157	-3.2
2015								
January	18,022,153	20,863,495	10,375,173	7,916,783	57,177,604	1,768,286	58,945,890	-3.1
February	16,054,803	18,372,698	9,444,596	7,263,295	51,135,392	1,602,167	52,737,559	-4.0
March	17,594,037	20,011,894	10,336,687	7,927,245	55,869,863	1,780,747	57,650,610	-3.4
April	16,673,749	18,953,821	9,719,386	7,478,509	52,825,465	1,552,741	54,378,206	-8.0
May	17,205,510	19,171,112	9,799,674	7,569,526	53,745,822	1,544,968	55,290,790	-6.3
June	17,045,689	18,908,681	8,354,559	5,590,875	49,899,804	1,531,615	51,431,419	-3.3
July	17,780,582	19,835,026	8,223,849	5,142,382	50,981,839	1,604,398	52,586,237	-4.9
August	17,638,294	19,737,040	9,133,742	6,459,449	52,968,525	1,494,660	54,463,185	-5.5
September	17,146,683	19,246,206	9,718,618	7,612,101	53,723,608	1,474,864	55,198,472	-4.9
October	17,982,901	20,078,573	10,219,024	7,948,904	56,229,402	1,695,450	57,924,852	-5.5
November	17,776,944	19,690,656	9,242,164	6,868,690	53,578,454	1,825,774	55,404,228	-2.2
December	18,750,804	20,519,341	9,087,709	6,544,974	54,902,828	1,815,100	56,717,928	-5.2
2016								
January	17,837,145	19,414,655	9,277,478	7,031,032	53,560,310	1,541,654	55,101,964	-6.5
February	16,789,407	17,976,279	8,857,588	7,066,761	50,690,035	1,618,296	52,308,331	-0.8
March	17,931,009	19,190,555	9,338,438	7,127,375	53,587,377	1,712,984	55,300,361	-4.1
April	17,444,414	18,410,239	9,220,885	7,294,211	52,369,749	1,606,063	53,975,812	-0.7
May	17,719,661	18,410,020	9,258,639	7,313,980	52,702,300	1,678,385	54,380,685	-1.6
June	17,509,418	18,130,786	7,885,722	5,184,549	48,710,475	1,558,357	50,268,832	-2.3
July	17,902,845	18,616,623	7,205,821	4,441,287	48,166,576	1,535,380	49,701,956	-5.5
August	18,567,573	19,509,779	8,681,097	6,275,331	53,033,780	1,635,223	54,669,003	0.4
September	17,669,988	18,787,430	8,959,709	7,179,521	52,596,648	1,641,433	54,238,081	-1.7
October	18,039,177	19,056,648	8,774,384	7,210,845	53,081,054	1,659,430	54,740,484	-5.5
November	18,062,246	18,942,247	8,425,109	6,346,749	51,776,351	1,799,521	53,575,872	-3.3
December	18,978,396	19,742,868	7,964,101	5,937,894	52,623,259	1,782,750	54,406,009	-4.1
2017								
January	18,557,301	19,500,583	8,503,744	6,594,026	53,155,654	1,658,616	54,814,270	-0.5
February	16,469,162	17,051,737	7,718,867	6,179,057	47,418,823	1,506,338	48,925,161	-6.5
March	18,187,431	18,673,946	8,744,470	6,959,870	52,565,717	1,730,882	54,296,599	-1.8
April	17,315,120	17,559,863	7,704,489	5,918,417	48,497,889	1,530,119	50,028,008	-7.3
May	18,281,728	18,352,882	8,500,236	6,999,844	52,134,690	1,586,239	53,720,929	-1.2
June	17,886,178	17,844,482	6,937,871	4,542,517	47,211,048	1,580,286	48,791,334	-2.9
July	18,004,550	17,909,941	6,587,239	3,959,703	46,461,433	1,458,074	47,919,507	-3.6
August	18,553,190	18,728,554	7,736,952	5,936,665	50,955,361	1,639,022	52,594,383	-3.8
September	17,658,519	17,865,805	7,841,907	6,610,555	49,976,786	1,721,333	51,698,119	-4.7
October	18,344,714	18,396,615	8,176,458	6,930,216	51,848,003	1,944,049	53,792,052	-1.7
November	18,616,908	18,552,867	7,593,210	6,062,393	50,825,378	2,028,977	52,854,355	-1.3
December	19,009,934	18,783,979	7,216,215	5,447,533	50,457,661	1,888,779	52,346,440	-3.8

¹ Monthly totals may not add up to annual totals due to rounding.



Sales of Selected Class 1 Products in California, by Marketing Area, 2013-2017

Products & Marketing Areas	2013	2014	SALES	2016	2017
			2015		
			<i>Gallons</i>		
Whole Milk					
Northern California	88,535,295	90,371,033	92,832,039	97,441,207	102,884,580
Southern California	122,813,863	117,868,256	116,840,110	117,010,072	114,000,155
State Total	211,349,158	208,239,289	209,672,149	214,451,279	216,884,735
Reduced Fat Milk					
Northern California	124,345,793	121,246,905	107,418,928	105,498,569	104,141,249
Southern California	163,326,452	150,048,196	127,969,615	120,689,560	115,080,005
State Total	287,672,245	271,295,101	235,388,543	226,188,129	219,221,254
Lowfat/Light Milk					
Northern California	43,630,346	43,866,834	48,336,747	44,782,231	41,829,798
Southern California	55,128,638	57,593,043	65,318,434	59,066,740	51,431,860
State Total	98,758,984	101,459,877	113,655,181	103,848,971	93,261,658
Skim/Nonfat/Fat Free Milk					
Northern California	47,265,215	43,933,354	38,704,044	35,624,983	32,861,479
Southern California	55,454,405	49,745,890	45,618,689	42,784,552	39,279,317
State Total	102,719,620	93,679,244	84,322,733	78,409,535	72,140,796
Beverage Milks Subtotal					
Northern California	303,776,649	299,418,126	287,291,758	283,346,990	281,717,106
Southern California	396,723,358	375,255,385	355,746,848	339,550,924	319,791,337
State Total	700,500,007	674,673,511	643,038,606	622,897,914	601,508,443
Half-and-Half					
Northern California	9,774,709	9,202,144	9,256,834	10,068,758	10,331,031
Southern California	11,109,776	11,652,019	10,433,936	9,700,718	9,941,683
State Total	20,884,485	20,854,163	19,690,770	19,769,476	20,272,714
TOTAL CLASS 1					
Northern California	313,551,358	308,620,270	296,548,592	293,415,748	292,048,137
Southern California	407,833,134	386,907,404	366,180,784	349,251,642	329,733,020
STATE TOTALS	721,384,492	695,527,674	662,729,376	642,667,390	621,781,157



Class 2 Production (Soft Dairy Products):

Comparing 2017 to 2016, total cottage cheese production decreased 4.0 percent, yogurt production increased 12.0 percent, sour cream and sour cream dressing production decreased 2.0 percent, buttermilk production increased 2.1 percent, other cream production increased 3.3 percent, and manufacturing cream production increased 18.1 percent.

Production of Class 2 Products in California, 2013-2017

Month	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Total Cottage Cheese						Buttermilk				
	Pounds					Gallons				
Jan	9,308,174	7,863,593	7,735,136	9,984,471	8,633,259	755,286	722,913	1,000,419	943,677	929,175
Feb	7,516,283	7,424,512	8,414,939	10,099,918	8,514,607	654,852	718,708	1,139,828	980,140	884,500
Mar	8,246,531	9,591,789	10,007,183	10,930,430	9,983,393	774,534	799,083	1,079,002	982,627	1,053,731
Apr	7,702,970	8,302,817	8,590,964	9,975,765	10,442,086	737,777	793,782	989,299	828,660	921,807
May	8,490,668	7,206,264	8,342,681	9,701,231	8,964,216	756,305	788,572	855,238	845,653	1,049,297
Jun	8,250,170	11,072,534	10,325,653	9,137,279	8,611,385	675,941	759,217	910,904	957,351	942,019
Jul	8,177,149	8,123,382	10,055,341	9,605,650	9,258,653	756,633	818,105	870,369	886,853	919,282
Aug	8,241,327	8,382,925	9,627,107	8,741,310	9,255,448	715,463	760,045	837,141	995,774	1,029,510
Sep	8,762,081	9,635,666	10,473,285	8,703,805	8,569,832	711,993	717,311	899,713	938,207	887,786
Oct	8,420,758	8,661,770	9,158,117	9,304,476	9,427,684	769,261	785,115	854,868	928,704	968,938
Nov	7,538,045	7,624,434	8,645,048	8,509,730	8,341,103	770,754	809,495	892,823	985,401	985,734
Dec	8,011,628	9,127,061	10,370,361	8,092,403	8,317,966	768,513	921,962	1,023,197	952,690	886,503
Total	98,665,784	103,016,747	111,745,815	112,786,468	108,319,632	8,847,312	9,394,308	11,352,801	11,225,737	11,458,282
Manufacturing Cream						Yogurt				
	Gallons					Pounds				
Jan	3,064,123	2,784,828	2,683,089	2,475,645	2,837,606	50,709,539	48,343,519	45,492,801	27,837,137	38,673,018
Feb	2,829,526	2,724,737	2,670,598	2,311,303	2,789,680	47,941,200	47,588,091	45,925,390	29,071,669	35,330,926
Mar	3,343,278	3,240,491	3,015,890	2,422,955	2,947,747	50,723,698	52,232,285	46,176,670	31,617,039	38,793,187
Apr	2,824,748	3,348,667	2,745,187	2,462,531	3,182,464	48,166,006	46,401,063	43,796,249	30,402,962	38,043,880
May	3,218,758	3,322,856	2,631,611	2,628,667	3,543,129	51,863,231	44,695,759	37,693,109	29,573,692	38,690,748
Jun	3,184,383	3,487,854	2,546,898	2,600,714	3,671,205	47,608,252	46,160,810	39,452,795	30,435,189	39,878,614
Jul	3,333,018	3,831,961	2,818,117	2,722,760	3,595,558	50,783,146	42,916,201	37,402,876	24,442,632	35,412,153
Aug	3,345,125	3,167,565	2,840,171	2,720,456	3,351,919	56,677,824	46,599,181	37,899,704	44,334,443	40,320,264
Sep	3,408,621	3,445,804	2,647,530	2,583,022	2,983,553	52,576,634	48,364,211	36,669,587	41,114,432	36,451,016
Oct	3,077,314	2,930,246	2,512,542	2,780,296	2,930,720	48,728,044	42,409,117	31,070,378	37,400,353	36,355,127
Nov	3,238,006	3,192,954	2,711,786	3,020,500	2,704,616	43,643,791	37,364,244	39,261,595	33,964,571	33,588,463
Dec	2,871,396	2,950,946	2,407,721	2,639,507	2,523,264	41,290,292	40,910,793	24,823,461	34,705,257	30,886,146
Total	37,738,296	38,428,909	32,231,140	31,368,356	37,061,461	590,711,657	543,985,274	465,664,615	394,899,376	442,423,542
Sour Cream & Sour Cream Dressing						Other Cream				
	Gallons					Gallons				
Jan	1,905,444	1,837,633	1,722,599	1,949,416	1,989,298	2,117,833	2,347,235	2,354,784	2,703,301	2,899,212
Feb	1,571,981	1,539,591	1,615,363	1,872,496	1,668,069	1,973,400	2,516,642	2,758,628	2,613,141	2,713,832
Mar	1,819,343	1,910,514	2,109,097	2,038,889	1,957,555	2,403,864	3,625,242	3,087,097	3,142,882	3,096,194
Apr	1,741,350	1,705,869	1,832,633	1,872,580	1,897,393	2,637,049	2,807,052	2,968,611	2,866,284	3,097,675
May	1,907,258	1,767,144	1,816,124	1,960,061	2,008,151	2,895,058	2,857,434	2,729,993	2,927,724	3,104,938
Jun	1,784,286	1,837,764	1,934,552	2,011,894	1,891,483	2,177,180	2,960,327	3,186,469	3,133,111	2,934,828
Jul	1,742,496	1,724,650	1,920,163	1,896,788	1,916,439	2,260,603	2,939,520	3,223,563	3,096,262	2,947,292
Aug	1,873,983	1,724,741	1,840,202	1,938,793	1,855,947	2,530,201	2,758,670	2,922,500	3,004,557	3,227,620
Sep	1,734,450	1,746,685	2,083,418	1,798,799	1,779,947	2,434,773	2,561,908	3,027,503	2,956,164	2,989,962
Oct	1,906,446	1,793,139	1,972,001	2,030,831	2,068,936	2,631,891	2,693,110	3,387,837	3,203,286	3,397,084
Nov	1,852,336	1,868,023	2,141,783	2,077,281	1,988,913	2,912,552	2,829,312	3,272,424	2,913,589	3,276,036
Dec	1,886,454	2,008,542	2,230,120	1,998,523	1,951,661	2,593,037	2,994,355	3,152,113	3,211,981	3,252,083
Total	21,725,827	21,464,295	23,218,055	23,446,351	22,973,792	29,567,441	33,890,807	36,071,522	35,772,282	36,936,756



Class 3 Production (Frozen Dairy Products):

In 2017 compared to 2016, ice cream production decreased 10.4 percent, ice milk production increased 0.3 percent, and there was no change in sherbet production. Collectively, the production of total frozen products decreased 7.0 percent during the year to 150 million gallons.

Production of Class 3 Products in California, 2013-2017

Month	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Ice Cream					Ice Milk ¹					
	Gallons					Gallons				
Jan	5,750,603	9,861,308	6,023,643	8,371,919	9,482,936	1,397,143	1,479,796	1,420,189	1,549,099	1,520,905
Feb	9,642,259	9,324,576	7,155,646	8,975,516	8,748,864	1,530,870	1,497,594	1,662,531	2,031,451	1,772,951
Mar	12,157,464	11,285,521	11,471,445	12,450,309	10,761,646	1,943,811	1,878,649	2,314,499	2,398,084	2,433,659
Apr	12,561,719	11,414,827	11,856,248	12,755,309	10,201,127	2,106,204	1,973,518	2,192,745	2,382,092	2,106,417
May	13,370,774	11,358,285	12,744,601	12,262,186	10,826,316	2,202,537	2,076,556	1,955,602	2,477,100	2,372,298
Jun	12,868,660	12,965,803	12,601,040	12,518,992	10,929,037	2,175,624	2,099,215	2,246,941	2,591,246	2,550,688
Jul	13,139,873	12,352,584	13,734,575	10,262,699	10,118,700	2,487,050	2,221,916	2,441,146	2,462,764	2,746,683
Aug	12,430,704	11,597,605	12,562,744	10,436,883	11,098,131	2,026,939	1,870,355	2,308,958	2,663,197	2,684,873
Sep	11,234,608	10,625,734	11,810,569	9,132,983	8,258,579	1,766,288	1,719,527	1,973,060	2,064,057	2,056,740
Oct	11,451,680	11,620,304	11,213,775	8,040,132	6,602,565	1,616,599	1,710,234	1,865,551	1,750,623	2,007,852
Nov	8,475,371	9,713,359	8,275,593	6,655,439	5,238,498	1,383,680	1,329,396	1,692,686	1,635,011	1,646,946
Dec	4,423,337	6,880,939	6,642,941	6,224,707	3,553,044	1,262,218	1,281,010	1,573,181	1,281,438	1,467,573
Total	127,507,052	129,000,845	126,092,820	118,087,074	105,819,443	21,898,963	21,137,766	23,647,089	25,286,162	25,367,585
Sherbet					Total Frozen Products					
	Gallons					Gallons				
Jan	209,783	254,462	84,108	165,184	434,556	8,161,400	12,979,496	8,342,237	11,223,012	12,610,607
Feb	271,646	252,577	262,353	326,862	293,929	12,711,594	12,530,927	10,234,714	12,744,722	12,160,574
Mar	494,382	408,618	289,974	414,454	341,424	15,999,608	15,227,172	15,626,843	16,733,149	14,944,982
Apr	567,027	466,593	379,927	325,365	339,136	16,876,619	15,581,759	16,077,999	16,733,860	14,032,715
May	695,893	454,307	338,194	466,040	397,712	18,026,109	15,365,502	16,431,582	16,594,417	15,008,879
Jun	626,436	446,431	351,387	403,406	381,461	17,367,820	17,277,831	16,824,399	17,154,147	15,495,263
Jul	577,973	488,467	399,829	357,897	332,012	18,040,729	16,963,708	18,373,258	14,151,294	14,766,023
Aug	433,237	277,637	330,730	284,988	420,172	16,367,294	15,363,612	16,541,192	14,617,766	15,893,474
Sep	230,817	336,432	445,344	248,398	154,838	14,513,269	13,834,878	15,439,691	12,547,257	11,798,384
Oct	442,800	331,813	302,786	300,678	223,669	14,484,070	15,109,380	14,486,939	11,224,698	9,835,775
Nov	144,938	322,584	280,227	148,880	148,386	10,803,308	12,509,438	11,182,327	9,352,329	7,812,228
Dec	101,617	149,123	161,098	129,467	104,672	6,495,758	9,128,978	9,211,523	8,264,277	5,651,496
Total	4,796,549	4,189,044	3,625,957	3,571,619	3,571,967	169,847,578	171,872,681	168,772,704	161,340,928	150,010,400

¹ Includes Light Dairy Dessert and Nonfat Ice Cream.



Class 4a Production (Butter and Dried Milk Products):

In 2017 compared to 2016, other dry milk products (including skim milk powders, dry whole milk, dry buttermilk, milk protein concentrates and isolates, casein, and caseinates) showed a 1.9 percent decrease in production, and nonfat dry milk for human consumption showed a 0.9 percent decrease in production. Butter production decreased 5.1 percent in 2017, compared to the previous year.

Production of Class 4a and 4b Products in California, 2013-2017

Month	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Class 4a Production										
Butter					Nonfat Dry Milk (Human) ¹					
	Pounds					Pounds				
Jan	59,190,224	59,168,420	57,421,495	52,775,726	51,552,040	56,866,540	54,910,013	63,823,492	46,948,139	53,489,864
Feb	53,810,601	56,070,919	50,893,610	50,993,111	48,611,404	55,281,397	68,463,863	59,748,246	52,555,834	49,295,295
Mar	59,666,246	59,047,710	57,003,472	55,449,529	50,685,931	63,245,040	78,354,159	76,297,211	65,948,141	49,039,779
Apr	56,822,337	57,607,554	56,965,056	51,573,985	48,026,718	70,166,820	65,993,486	76,689,115	60,262,040	56,497,286
May	56,789,072	57,599,975	54,588,714	49,548,856	45,828,042	58,498,370	62,327,186	69,965,288	50,565,610	41,682,800
Jun	50,933,614	48,937,287	44,899,708	46,035,491	40,596,071	49,932,117	56,362,058	58,645,930	38,003,851	44,548,855
Jul	46,977,199	44,071,713	40,719,451	43,445,385	38,165,109	41,206,082	78,180,380	57,045,607	44,664,285	43,346,912
Aug	46,983,405	44,192,690	40,833,050	38,223,444	38,671,151	39,478,638	42,425,066	44,767,333	30,551,942	36,207,543
Sep	45,116,335	41,325,913	38,519,552	39,971,458	36,098,835	32,136,135	43,720,641	48,691,283	41,800,951	37,040,276
Oct	50,872,618	45,859,541	41,750,195	42,246,467	43,782,746	33,336,023	47,353,677	45,530,171	43,891,431	53,005,007
Nov	49,465,728	47,361,978	45,514,030	42,373,652	42,078,502	35,558,334	61,144,650	47,908,702	38,589,723	41,963,007
Dec	57,769,920	51,413,274	51,442,854	50,429,011	50,281,026	47,400,538	59,809,482	53,053,064	53,414,945	55,899,701
Total	634,397,299	612,656,974	580,551,187	563,066,115	534,377,575	583,106,034	719,044,661	702,165,442	567,196,892	562,016,325
Dry Buttermilk					Condensed & Evaporated Milk Products ²					
	Pounds					Pounds				
Jan	5,459,704	4,933,048	4,685,423	4,593,317	4,494,029	82,920,814	93,470,423	76,248,878	74,846,217	52,313,882
Feb	5,012,540	4,919,333	4,299,783	4,719,700	4,537,334	75,126,047	93,419,504	76,308,237	76,109,628	59,368,788
Mar	5,104,247	4,707,854	4,796,371	4,452,296	4,467,671	91,577,365	102,144,181	91,607,803	81,234,858	67,132,096
Apr	4,985,783	5,134,852	4,244,439	4,726,476	4,089,728	93,496,107	99,164,746	89,544,313	74,607,065	68,055,129
May	4,707,502	4,926,614	4,810,540	4,311,798	4,270,795	103,969,761	92,574,155	87,741,228	79,175,339	73,857,074
Jun	4,099,720	4,101,494	3,799,554	3,891,276	3,555,891	96,185,860	91,768,240	84,378,158	81,907,428	69,780,913
Jul	4,229,556	3,999,599	3,059,249	3,933,578	3,203,148	99,033,254	90,514,005	83,276,888	77,186,415	76,438,058
Aug	4,080,788	3,801,576	3,488,667	3,559,733	3,343,827	94,014,338	88,926,449	91,543,753	81,765,788	65,521,142
Sep	3,516,326	3,685,446	2,980,020	3,511,692	3,052,793	89,305,063	86,122,346	83,051,341	76,293,776	65,506,728
Oct	4,491,007	3,697,266	3,140,786	3,607,643	3,940,707	89,187,191	92,764,836	81,862,729	78,466,715	62,061,656
Nov	3,943,907	4,098,632	3,472,085	3,799,357	3,709,627	75,489,693	85,916,572	71,979,463	77,082,886	62,774,470
Dec	4,967,669	4,424,655	4,297,143	4,308,224	4,276,632	76,435,393	80,897,281	71,242,530	49,666,036	49,306,986
Total	54,598,749	52,430,369	47,074,060	49,415,090	46,942,182	1,066,740,886	1,097,682,738	988,785,321	908,342,151	772,116,922
Class 4b Production										
Whey Protein Concentrates & Isolates (Human)					Lactose Powder (Human and Animal)					
	Pounds					Pounds				
Jan	12,003,826	14,505,014	10,575,417	10,519,353	10,974,961	29,216,314	31,651,206	29,562,287	28,886,703	27,130,896
Feb	11,541,404	13,041,830	9,101,045	9,656,232	10,025,820	26,012,777	29,192,883	26,887,675	27,075,263	25,264,809
Mar	12,316,228	14,536,977	10,645,712	10,544,393	11,336,976	30,409,225	28,875,398	30,225,805	30,181,235	28,305,284
Apr	12,102,635	15,170,544	10,288,817	8,595,157	10,841,819	28,776,251	28,415,014	29,328,373	27,745,309	27,205,690
May	13,644,287	15,025,724	10,774,446	9,843,274	11,196,471	29,710,034	30,371,078	30,525,485	29,785,429	29,479,410
Jun	12,430,626	13,502,687	9,657,293	9,644,723	9,700,502	28,940,840	30,205,502	28,868,202	27,602,518	27,417,983
Jul	12,693,666	14,221,322	10,484,876	9,150,684	9,588,910	28,582,233	30,760,320	29,436,966	30,603,601	28,082,898
Aug	12,359,970	15,049,233	9,879,027	9,453,862	9,675,422	28,781,432	29,887,287	28,415,287	29,159,656	28,064,195
Sep	12,702,231	13,186,243	9,328,680	9,997,651	9,213,961	27,797,329	29,394,938	26,934,980	27,655,518	26,758,658
Oct	16,363,080	15,262,444	9,317,598	10,596,435	9,448,321	28,693,664	30,809,171	26,330,417	27,202,563	26,643,787
Nov	15,730,866	14,879,465	9,621,819	10,952,993	9,344,954	28,273,802	29,812,895	25,379,585	27,425,429	25,915,663
Dec	16,680,708	14,952,586	10,819,828	11,638,541	9,411,176	30,720,486	30,171,237	29,761,135	26,911,574	27,741,574
Total	160,569,527	173,334,069	120,494,558	120,593,298	120,759,293	345,914,387	359,546,929	341,656,197	340,234,798	328,010,847

¹ These totals do not include production of Skim Milk Powder (30-40% protein) and Skim Milk Powder Blends (previously referred to as Fat-Filled Powder, i.e. fortified with vitamins, minerals, or oils) as they do not meet the USDA definition of NFDM.

² Includes Condensed Skim Milk and Whole (Sweetened and Unsweetened); Condensed Evaporated Buttermilk; Evaporated Skim and Whole; Condensed Premix Skim and Cream; Other Condensed and Evaporated Milk, Ultrafiltered Milk.



Class 4b Production (Cheese and Whey products):

In 2017 compared to 2016, total cheese production decreased by 0.1 percent to 2.51 billion pounds. Of the state's total cheese production, Mozzarella accounted for 58.6 percent, Cheddar accounted for 14.1 percent, Monterey accounted for 11.0 percent, Hispanic cheese accounted for 5.4 percent, and all other cheese accounted for the remaining 10.9 percent.

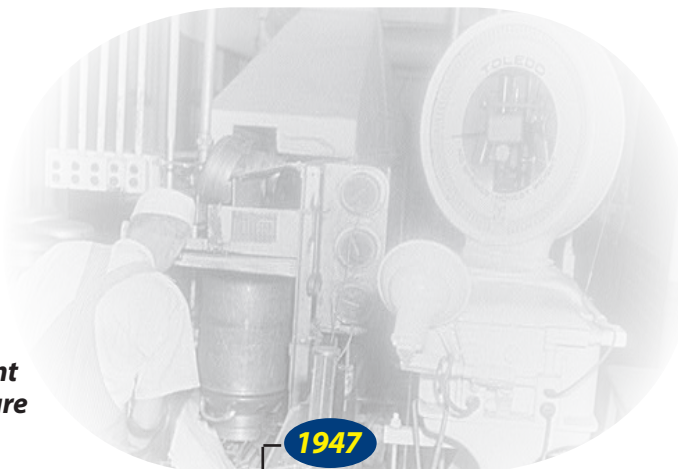
Production of Class 4b Products in California, 2013-2017

Month	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Monterey Jack Cheese						Cheddar Cheese				
	<i>Pounds</i>					<i>Pounds</i>				
Jan	21,370,557	22,745,554	23,685,777	23,752,182	21,841,378	31,639,473	35,882,307	31,954,824	32,151,190	32,235,468
Feb	22,064,582	19,160,833	20,771,343	29,892,381	21,408,230	25,551,287	30,996,426	29,931,741	22,119,702	29,144,134
Mar	22,761,531	21,888,879	26,383,609	27,948,040	23,708,409	28,786,583	33,859,319	29,777,585	28,587,361	29,415,578
Apr	22,063,897	19,675,802	25,300,830	21,034,918	21,434,697	30,356,863	35,181,458	30,981,178	30,151,806	29,808,031
May	21,948,971	24,263,380	26,383,543	25,367,006	25,074,045	30,283,458	30,510,360	30,373,398	28,365,534	30,928,640
Jun	22,492,849	22,384,426	22,391,023	25,742,687	24,506,331	28,496,640	30,680,061	32,242,652	27,548,350	27,129,678
Jul	19,254,655	22,661,583	23,583,346	26,293,761	23,313,468	31,231,234	30,745,957	31,278,361	27,233,432	29,757,416
Aug	22,865,001	23,976,201	26,985,988	25,341,115	23,689,848	29,691,417	28,589,908	27,288,331	30,290,267	30,880,589
Sep	24,560,990	24,102,774	24,576,477	25,253,477	19,438,414	24,412,903	28,334,057	28,035,484	27,935,836	29,716,322
Oct	23,191,599	22,700,628	26,366,536	26,171,686	24,368,725	28,500,076	32,061,830	27,011,855	27,850,789	28,148,167
Nov	21,176,596	25,329,639	23,454,887	24,977,061	23,951,349	28,667,095	27,056,195	28,484,840	28,234,013	26,672,146
Dec	22,367,118	22,350,973	23,596,838	23,767,329	24,425,611	33,219,687	31,928,754	31,911,885	33,594,820	31,682,139
Total	266,118,346	271,240,672	293,480,197	305,541,643	277,160,505	350,836,716	375,826,632	359,272,134	344,063,100	355,518,308
Mozzarella Cheese						Hispanic Cheese				
	<i>Pounds</i>					<i>Pounds</i>				
Jan	112,600,510	118,810,728	125,732,750	128,613,570	125,107,103	10,562,035	10,750,609	10,387,987	9,496,038	10,616,672
Feb	98,818,845	111,573,447	111,730,993	118,569,256	111,573,157	9,538,227	8,850,749	9,942,690	10,447,124	10,307,814
Mar	111,341,409	119,862,223	122,371,835	128,639,415	128,713,042	8,979,658	11,973,461	11,099,114	10,838,792	12,878,839
Apr	109,835,816	123,214,449	119,869,971	119,384,082	124,452,683	10,144,482	9,860,633	10,159,550	9,376,809	11,251,940
May	115,725,306	123,968,073	124,956,034	129,100,766	130,084,974	10,087,187	11,032,457	10,243,687	10,266,128	11,371,259
Jun	113,836,150	116,543,712	117,554,838	122,209,058	121,275,674	9,484,144	11,172,173	10,223,130	10,835,152	11,527,602
Jul	110,138,133	119,640,258	121,994,714	126,735,410	124,980,075	10,173,491	11,849,602	9,898,647	10,186,710	11,191,470
Aug	110,027,196	115,563,597	108,267,540	119,181,672	120,534,606	10,826,910	11,851,768	10,013,256	10,563,092	11,891,216
Sep	106,101,540	116,298,051	110,257,598	118,325,162	112,836,824	10,751,665	10,965,601	10,228,323	11,116,114	10,289,624
Oct	115,200,265	124,251,711	115,675,147	125,146,408	121,102,610	10,933,838	11,957,629	9,744,720	10,543,793	12,818,684
Nov	117,654,678	122,543,843	118,268,807	125,233,826	125,114,166	10,213,126	9,791,715	9,777,453	11,146,622	11,394,677
Dec	119,853,455	129,530,725	130,139,962	130,476,889	125,943,905	9,686,993	10,452,331	10,088,675	10,240,093	10,357,475
Total	1,341,133,303	1,441,800,817	1,426,820,189	1,491,615,514	1,471,718,819	121,381,756	130,508,728	121,807,232	125,056,467	135,897,272
Other Cheese						Total Cheese				
	<i>Pounds</i>					<i>Pounds</i>				
Jan	18,833,550	19,862,523	18,292,714	21,122,511	21,195,711	195,006,125	208,051,721	210,054,052	215,135,491	210,996,332
Feb	19,203,756	17,555,335	17,868,038	18,143,753	19,657,167	175,176,697	188,136,790	190,244,805	199,172,216	192,090,502
Mar	19,433,611	21,445,462	22,321,640	18,924,088	21,840,801	191,302,792	209,029,344	211,953,783	214,937,696	216,556,669
Apr	19,268,595	18,526,776	18,243,648	21,590,528	23,515,076	191,669,653	206,459,118	204,555,177	201,538,143	210,462,427
May	20,473,048	18,099,198	20,426,179	20,551,640	22,159,291	198,517,970	207,873,468	212,382,841	213,651,074	219,618,209
Jun	20,911,756	18,382,062	20,417,552	21,253,161	22,754,591	195,221,539	199,162,434	202,829,195	207,588,408	207,193,876
Jul	17,890,865	17,790,738	18,272,848	23,183,757	23,817,270	188,688,378	202,688,138	205,027,916	213,633,070	213,059,699
Aug	17,932,307	17,306,806	18,334,075	20,222,216	21,694,556	191,342,831	197,288,280	190,889,190	205,598,362	208,690,815
Sep	19,900,296	19,025,566	19,962,530	20,574,758	21,719,070	185,727,394	198,726,049	193,060,412	203,205,347	194,000,254
Oct	19,578,141	17,800,581	19,583,532	23,738,551	25,632,078	197,403,919	208,772,379	198,381,790	213,451,227	212,070,264
Nov	19,629,338	19,378,458	19,761,367	20,242,778	23,978,749	197,340,833	204,099,850	199,747,354	209,834,300	211,111,087
Dec	20,999,010	20,184,608	20,947,988	19,178,599	25,048,128	206,126,263	214,447,391	216,685,348	217,257,730	217,457,258
Total	234,054,273	225,358,113	234,432,111	248,726,340	273,012,488	2,313,524,394	2,444,734,962	2,435,811,863	2,515,003,064	2,513,307,392





California Historic Timeline



1919

California Department of Food and Agriculture established

Milk and Dairy Foods Control Branch established

Dairy Products Promotion Act - establishes the Dairy Council of California to foster education and promotional programs

1945

1947

Unfair Practices Act - regulates unfair dairy business practices, prohibits sales below cost

1978

Desmond Act repealed - end of minimum wholesale and retail pricing

1973

Quality assurance dating was extended to most dairy products

1970

California Manufacturing Milk Advisory Board established (merged with CMAB in 2016)

1919

1930

1940

1950

1960

1970

1980

Federal license (order) established - immediately enjoined by federal courts (repealed after passage of Young)

1933

Federal Price Support for dairy industry established

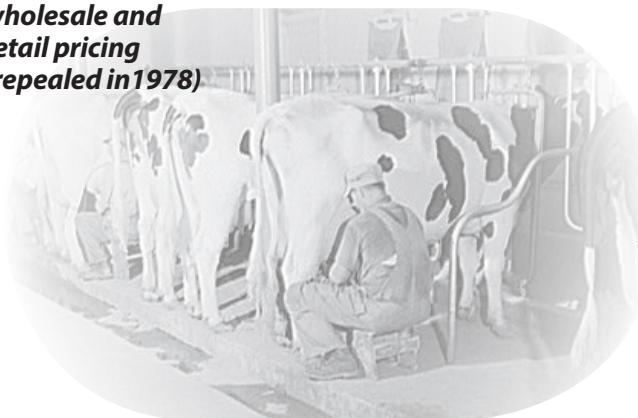
1949

1935

Young Act - establishes minimum producer pricing - Dairy Marketing Branch

Desmond Act - establishes minimum wholesale and retail pricing (repealed in 1978)

1937



Component pricing for fluid milk products

1962

Component pricing for manufactured products begins

1965

Gonsalves Milk Pooling Act - Statewide pooling, using a system of quota, base and overbase became effective

1969

California Milk Advisory Board (CMAB) established

Fluid milk usage goes below 50 percent of total milk production on an annual basis

1980

Implementation of \$0.15 per hundredweight national promotion assessment

1984

Milk Producers Security Trust Fund established

1987





California Historic Timeline (Continued)



1996

Eliminated producers' ability to de-pool their milk on a monthly basis by giving up their Grade A permit (became permanent in 1998)

1993

Milk Pooling Statutes revised to provide a fixed differential of \$1.70 per hundredweight, between quota and overbase (became permanent in 1995 through AB 1285)

Quota allocation now based on Class 1 and 2 SNF growth

California Milk Processors Board established

2014

Introduction of Margin Protection Program (MPP), a voluntary risk management program for dairy producers

2009

Temporary 3-month increase to all class prices

2007

Introduction of the whey factor in the Class 1 pricing formula

Changed the whey factor in the Class 4b pricing formula from a variable to a fixed value

2013

Temporary 12-month price increase to all class prices

1990

2000

2010

Introduction of Federal Milk Income Loss Contract (MILC) program to supplement price support system (repealed in 2014)

2002

Changed the whey factor in the Class 4b pricing formula from fixed value to sliding scale calculation

2011

Temporary 4-month increase to all class prices

2012

Increased the cap on the whey factor in the Class 4b pricing formula

2015

Temporary 12-month increase to the Class 4b whey scale

USDA initiated process to consider promulgation of a Federal Milk Marketing Order in California (final outcome pending)

2016

Increased the steps and values in the Class 4b whey scale

Eliminated processors' ability to de-pool their milk on a monthly basis

2004

