Background Material Specific to Milk Movement Incentives

March 21, 2013 Workshop
In Preparation for the April 4, 2013 Hearing

Incentives to Supply Class 1 Markets 2

Table 1: Summary of Changes in Area Differentials and Transportation Credits: Plant-to-Plant 4

Table 2: Summary of Changes in Transportation Allowances: Ranch-to-Plant 5

Figure 1: Crude Oil Prices 6

Figure 2: Diesel Prices 7

Figure 3: California Annual Bulk Milk Imports and Exports for all Uses 8

Figure 4: Annual Sources of Fluid Milk Processed in California 9

Figure 5: Northern California Ranches to Southern California Plants for all Uses 10

Figure 6: Southern California Milk Sources and Processing for all Uses (Pounds) 11

Figure 7: Southern California Milk Sources and Processing for all Uses (Percent) 12

Figure 8: Sources and Uses of Milk in Southern California 13

Incentives to Supply Class 1 Markets

Producer price regulation established in the mid-1930's brought stability to the dairy industry, but did not guarantee all producers the same price. The price they received depended on the utilization of the plant they shipped to under a plant pooling and contract system. Thus, producers shipping to a plant with high Class 1 usage received more than producers shipping to a plant with high Class 4 usage. There was competition for Class 1 contracts among producers. Also, there was an imbalance of market power between a large number of small and disorganized producers and a small number of large fluid processors. These factors tended to lead to market instability and price inequity.

Passage of the Gonsalves Milk Pooling Act in 1967, with its implementation in 1969, corrected many of these problems. However, it removed the existing incentive that existed under the old contract system for producers to ship their milk to a Class 1 plant. Instead, producers had an incentive to ship to a local plant, which for most producers is a manufacturing plant. The incentive to ship to a Class 1 plant still exists for exempt producer-distributors, option exempt producer-distributors, and out-of-state milk.

To address the problem of getting sufficient milk supplies to Class 1 plants, location differentials were established to encourage the movement of only quota milk to Class 1 plants. Over time, overbase milk became a larger and larger share of the milk produced and therefore, location differentials based solely on quota milk were no longer able to ensure that adequate milk was made available to Class 1 plants.

In 1982, location differentials were replaced by transportation allowances and regional quota adjusters (RQA's). The RQA's do not encourage milk movement to Class 1 plants. They were developed to deal with equity issues arising out of the elimination of the location differentials.

In addition to the transportation allowances, two other methods to encourage the movement of milk to Class 1 plants were established: call provisions (1979) and transportation credits (1981). At one time Class 1 area differentials were large enough to cover the cost of moving milk plant-to-plant; Class 1 area differentials are the differences in the hundredweight prices between marketing areas. However, with marketing area consolidation and improvements in relative costs of moving milk ranch-to-plant, Class 1 area differentials were no longer sufficient to cover the cost of plant-to-plant milk movement. These conditions resulted in the establishment of transportation credits. All three methods of encouraging milk movement are detailed below:

1. Call provisions -- Can require that manufacturing plants release milk to Class 1 plants when insufficient milk supplies are available to meet the demand for fluid milk.

2. Transportation credits -- A reduction in the obligation handlers pay for Class 1 milk that partially compensates for the cost of hauling milk assigned to Class 1 usage from plants in designated supply counties to plants in designated deficit counties. If the supply counties and deficit counties are in different marketing areas, the Class 1 area differentials are added to the transportation credit.

Transportation credits have historically been designed to include a "shortfall" so that there is an incentive for bottling plants to purchase milk within the local area.

3. Transportation allowances -- These allowances partially compensate for the cost of hauling milk from a producer's ranch to qualified plants in designated receiving areas. They are funded from the producer pool.

Transportation allowances apply to some market milk moving from the dairy farm to processing plants. This occurs when the receiving plant is located in certain deficit areas and processes more than 50 percent of its production into Class 1, Class 2, and/or Class 3 products. The allowances are set: (1) to reflect distance considerations; (2) to reflect local alternative hauling costs; and (3) to encourage close-in milk to be shipped first.

In addition, cooperative members receive transportation allowances on shipments to their cooperative plant, which is located in a deficit area, if that plant supplies 40 percent of its receipts for Class 1 usage.

Table 1 - **SUMMARY OF CHANGES IN AREA DIFFERENTIALS AND TRANSPORTATION CREDITS:** *Plant-to-Plant*

The incentives to move milk for Class 1 usage on a plant-to-plant basis are the sum of any transportation credits and area differentials (i.e., any difference in the Class 1 pool obligation between the two plants). For various supply counties and deficit counties, this table shows both the area differentials from c1950 to the latest change in September 2008, and the transportation credits from their inception in 1981 to the latest change in September 2008. Transportation credits have always covered bulk milk, and since November 2003 it has also covered condensed skim. Data source: CDFA-DMB current and historic Stabilization Plans.

		MAXIMUM DEDUCTION PER HUNDREDWEIGHT																		
HEARING DATE		c1950	c1960	c1970	c1980	Aug. 1981	Mar. 1982	Jun. 1982	Apr. 1983	Oct. 1984	May 1988	Oct. 1989	Apr. 1991	Jul. 1994	Oct. 1996	Jun.-Jul. 2001	Jun. 2003	Jan. 2006	Jul. 2006	Jul. 2008
ORDER DATE						Oct. 1981	Apr. 1982	Aug. 1982[5/]	Jun. 1982	Dec. 1984	Jul. 1988	Dec. 1989	Jun, 1991	Sep. 1994	Dec. 1996[6/]	Sep. 2001	Aug. 2003	Apr. 2006	Sept. 2006	Sept. 2008
SUPPLY COUNTIES DEFICIT COUNTIES																				
Los Angeles																				
Orange, Riverside,	Differential	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Bernardino,[1/]	Credit															0.24	0.34	0.26	0.37	0.45
San Diego and Ventura	**Total**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.24**	**$0.34**	**$0.26**	**$0.37**	**$0.45**
Tulare																				
Los Angeles, Orange,	Differential	0.60	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27	0.27	0.27	0.27
and Ventura[2/]	Credit					0.06	0.06	0.22	0.20	0.22	0.24	0.26	0.27	0.33	0.50	0.50	0.60	0.69	0.73	0.89
	Total	**$0.60**	**$0.28**	**$0.38**	**$0.55**	**$0.61**	**$0.61**	**$0.62**	**$0.60**	**$0.62**	**$0.64**	**$0.66**	**$0.67**	**$0.73**	**$0.77**	**$0.77**	**$0.87**	**$0.96**	**$1.00**	**$1.16**
Riverside,	Differential	0.60	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27	0.27	0.27	0.27
and San Diego	Credit					0.06	0.06	0.22	0.20	0.22	0.24	0.26	0.27	0.33	0.50	0.50	0.68	0.77	0.81	0.97
	Total	**$0.60**	**$0.28**	**$0.38**	**$0.55**	**$0.61**	**$0.61**	**$0.62**	**$0.60**	**$0.62**	**$0.64**	**$0.66**	**$0.67**	**$0.73**	**$0.77**	**$0.77**	**$0.95**	**$1.04**	**$1.08**	**$1.24**
Fresno and Kings																				
Los Angeles, Orange,	Differential	0.52	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27	0.27	0.27	0.27
and Ventura [2/]	Credit					0.09	0.09	0.25	0.23	0.25	0.27	0.29	0.30	0.36	0.53	0.53	0.63	0.72	0.76	0.89
	Total	**$0.52**	**$0.28**	**$0.38**	**$0.55**	**$0.64**	**$0.64**	**$0.65**	**$0.63**	**$0.65**	**$0.67**	**$0.69**	**$0.70**	**$0.76**	**$0.80**	**$0.80**	**$0.90**	**$0.99**	**$1.03**	**$1.16**
Riverside,	Differential	0.52	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27	0.27	0.27	0.27
and San Diego	Credit					0.09	0.09	0.25	0.23	0.25	0.27	0.29	0.30	0.36	0.53	0.53	0.71	0.80	0.84	0.97
	Total	**$0.52**	**$0.28**	**$0.38**	**$0.55**	**$0.64**	**$0.64**	**$0.65**	**$0.63**	**$0.65**	**$0.67**	**$0.69**	**$0.70**	**$0.76**	**$0.80**	**$0.80**	**$0.98**	**$1.07**	**$1.11**	**$1.24**
Sonoma[3/]																				
Alameda, San Francisco	Differential	0.16	0.09	0.18	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
and Santa Clara	Credit					0.16	0.26	0.26	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.45
	Total	**$0.16**	**$0.09**	**$0.18**	**$0.14**	**$0.16**	**$0.26**	**$0.26**	**$0.26**	**$0.26**	**$0.26**	**$0.26**	**$0.27**	**$0.27**	**$0.27**	**$0.27**	**$0.27**	**$0.27**	**$0.27**	**$0.45**
Merced and Stanislaus[4/]																				
Alameda, San Francisco	Differential	0.33	0.35	0.28					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
and Santa Clara	Credit					0.16	0.16	0.16	0.32	0.32	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.75
	Total	**$0.33**	**$0.35**	**$0.28**	**$0.00**	**$0.16**	**$0.16**	**$0.16**	**$0.32**	**$0.32**	**$0.37**	**$0.37**	**$0.38**	**$0.38**	**$0.38**	**$0.38**	**$0.38**	**$0.38**	**$0.38**	**$0.75**
Sacramento[7/]	Differential																		0.00	0.00
	Credit																		0.20	0.68
	Total																		**$0.20**	**$0.68**
Solano and Sonoma[8/]	Differential																			0.00
	Credit																			0.74
	Total																			**$0.74**

[1/] San Bernardino County added effective April 2006.
[2/] Ventura County added effective December 1989.
[3/] Transportation Credits for milk coming from Sonoma County have not been used since mid-1995.
[4/] Part of Stanislaus County added effective April 1982; the part of Stanislaus County included modified effective July 1988; entire County of Stanislaus included effective September 2008.
[5/] South Valley - Southern California Class 1 price differential reduced $0.16 per hundredweight.
[6/] South Valley merged with Northern California, differential with Southern California Class 1 price reduced $0.17 per hundredweight.
[7/] Sacramento County added effective September 2006.
[8/] Solano and Sonoma counties added effective September 2008.

Table 2 - **SUMMARY OF CHANGES IN TRANSPORTATION ALLOWANCES:** *Ranch-to-Plant*

With a statewide pool, the incentives to move milk to Class 1 plants on a ranch-to-plant basis are the transportation allowances. For various receiving areas (deficit counties), this table shows the transportation allowances from their inception in 1982 to the latest changes made in 2008. The allowances vary based on the mileage from the ranch to the plant.

	Constructive Miles	Dollars Per Hundredweight					Constructive Miles	Dollars Per Hundredweight		Constructive Miles	Dollars Per Hundredweight		Constructive Miles	Dollars Per Hundredweight		Constructive Miles	Dollars Per Hundredweight	Constructive Miles [11/]	Dollars Per Hundredweight
HEARING DATE		Sep. 82	Oct. 83	Oct. 84	May 88	Oct. 89		Apr. 91	Jul. 94		Jun-July 01	Jun. 03		Aug. 04	Jan. 06		Jul. 06		July 08
ORDER DATE		Dec. 82	Nov. 83	Dec. 84	Jul. 88	Dec. 89		Jun. 91	Sep. 94		Sep. 01	Aug. 03		Oct. 04	Apr. 06		Sep. 06		Sep. 08
Bay Area Receiving Area [1/]	0 to 44	$0.00	$0.00	$0.00	$0.00	$0.00	0 to 99	$0.20	$0.20	0 to 99	$0.24	$0.24	0 to 99	$0.25	$0.26	0 to 99	$0.27	0 to 78	$0.36
	44 to 74	0.17	0.17	0.17	0.17	0.17	99 to 199	0.24	0.24	99 to 199	0.28	0.28	99 to 199	0.29	0.31	99 to 199	0.34	78 to 199	0.45
	74 to 100	0.20	0.20	0.20	0.20	0.20	199 +	0.30	0.30	199 +	0.30	0.30	199 +	0.30	0.32	199 +	0.36	199 +	0.47
	100 +	0.21	0.21	0.21	0.21	0.21													
North Bay Receiving Area [2/]	0 to 9	0.00	0.00	0.00	0.00	0.00	0 to 44	0.11	0.11	0 to 44	0.15	0.15	0 to 44	0.18	0.19	0 to 44	0.19	0 to 45	0.23
	9 to 75	0.06	0.06	0.06	0.06	0.06	44 to 99	0.16	0.16	44 to 99	0.20	0.20	44 to 99	0.25	0.26	44 to 99	0.29	45 to 96	0.35
	75 +	0.09	0.09	0.09	0.09	0.09	99 +	0.21	0.21	99 +	0.25	0.25	99 +	0.29	0.31	99 +	0.34	96 +	0.44
Sacramento Receiving Area [2/]	See above North Bay Receiving Area [2/]						0 to 59	0.09	0.09	0 to 59	0.09	0.09	0 to 59	0.13	0.14	0 to 59	0.15	0 to 59	0.15
							59 +	0.12	0.12	59 +	0.12	0.12	59 +	0.16	0.17	59 +	0.20	59 +	0.23
Shasta Receiving Area [3/]	0 to 19	0.00	0.00	0.00	0.00	0.00	0 to 29	0.13	0.13	0 to 29	0.13	0.13	0 to 29	0.13	0.13	0 to 29	0.13	0 to 29	0.13
	19 to 30	0.13	0.13	0.13	0.13	0.13	29 to 49	0.16	0.16	29 to 49	0.16	0.16	29 to 49	0.16	0.16	29 to 49	0.16	29 to 49	0.16
	30 to 50	0.16	0.16	0.16	0.16	0.16	49 +	0.19	0.19	49 +	0.19	0.19	49 +	0.19	0.19	49 +	0.19	49 +	0.19
	50 +	0.19	0.19	0.19	0.19	0.19													
San Diego Receiving Area										0 to 89	0.00	0.09	0 to 89	0.10	0.10	0 to 89	0.11	0 to 79	0.15
										89 to 139	0.43	0.43	89 to 139	0.43	0.43	89 to 139	0.43	79 to 119	0.46
										139 +	0.58	0.58	139 +	0.58	0.65	139 +	0.70	119 +	0.84
Southern California Receiving Area [4/]																			
From Barstow Area [5/]	See below from 1982 to 2001									0 to 89	0.00	0.09	0 to 89	0.10	0.10	0 to 89	0.11	0 to 93	0.15
										89 to 139	0.43	0.43	89 to 122 [10/]	0.29	0.20	89 to +	0.37	93 +	0.46
													122 to 139 [10/]	0.48	0.52				
													139 +	0.62	0.65				
From All Other										as above			0 to 89	as above		0 to 89	0.11	0 to 79	0.15
													89 to 122 [10/]			89 to 109	0.37	79 to 99	0.46
													122 to 139 [10/]			109 to 139	0.56	99 to 119	0.67
													139 +			139 +	0.70	119 +	0.84
Southern California Receiving Area [6/]																			
From Southern California [7/]	0 +	0.00	0.00	0.00	0.00	0.00	0 +	0.00	0.00	See above from 2001 to Present									
From South Valley [8/]	0 to 75	0.00	0.00	0.00	0.00	0.00	0 to 74	0.00	0.00										
	75 +	0.21	0.34	0.36	0.38	0.49	74 to 149	0.31	0.32										
							149 +	0.56	0.58										
From All Other [9/]	0 to 75	0.00	0.00	0.00	0.00	0.00	0 to 74	0.00	0.00										
	75 +	0.21	0.21	0.21	0.23	0.23	74 +	0.30	0.30										

[1/] Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara, and Santa Cruz counties.
[2/] From 1982 to 1991, Sacramento and Solano counties. From 1991 to 2004, Solano County only. Since 2004, Marin, Solano and Sonoma counties.
[3/] Transportation Allowances for the Shasta Receiving Area have not been used since mid-1996.
[4/] Los Angeles, Orange and Ventura counties. Effective 2003 Riverside County added. Effective 2006 San Bernardino County added.
[5/] Riverside and San Bernardino counties.
[6/] Los Angeles and Orange counties. Effective December 1989 Ventura County added.
[7/] Imperial, Inyo, Los Angeles, Mono, Orange, Riverside, San Bernardino, and San Diego counties.
[8/] Part of "All Other" from December 1982 to November 1983. Created November 1983 to include Fresno, Kings and Tulare counties. Effective June 1991 Kern County added.
[9/] Effective June 1991, Kern County was moved from "All Other" to "South Valley."
[10/] From 2004 to 2006, the mileage brackets were 89 to 120 and 120 to 139.
[11/] Effective September 2008, PC Miler® Program for calculating distances for transportation allowances was implemented.

Figure 1 - U.S. Weekly Average Crude Oil Prices

West Texas Intermediate Crude

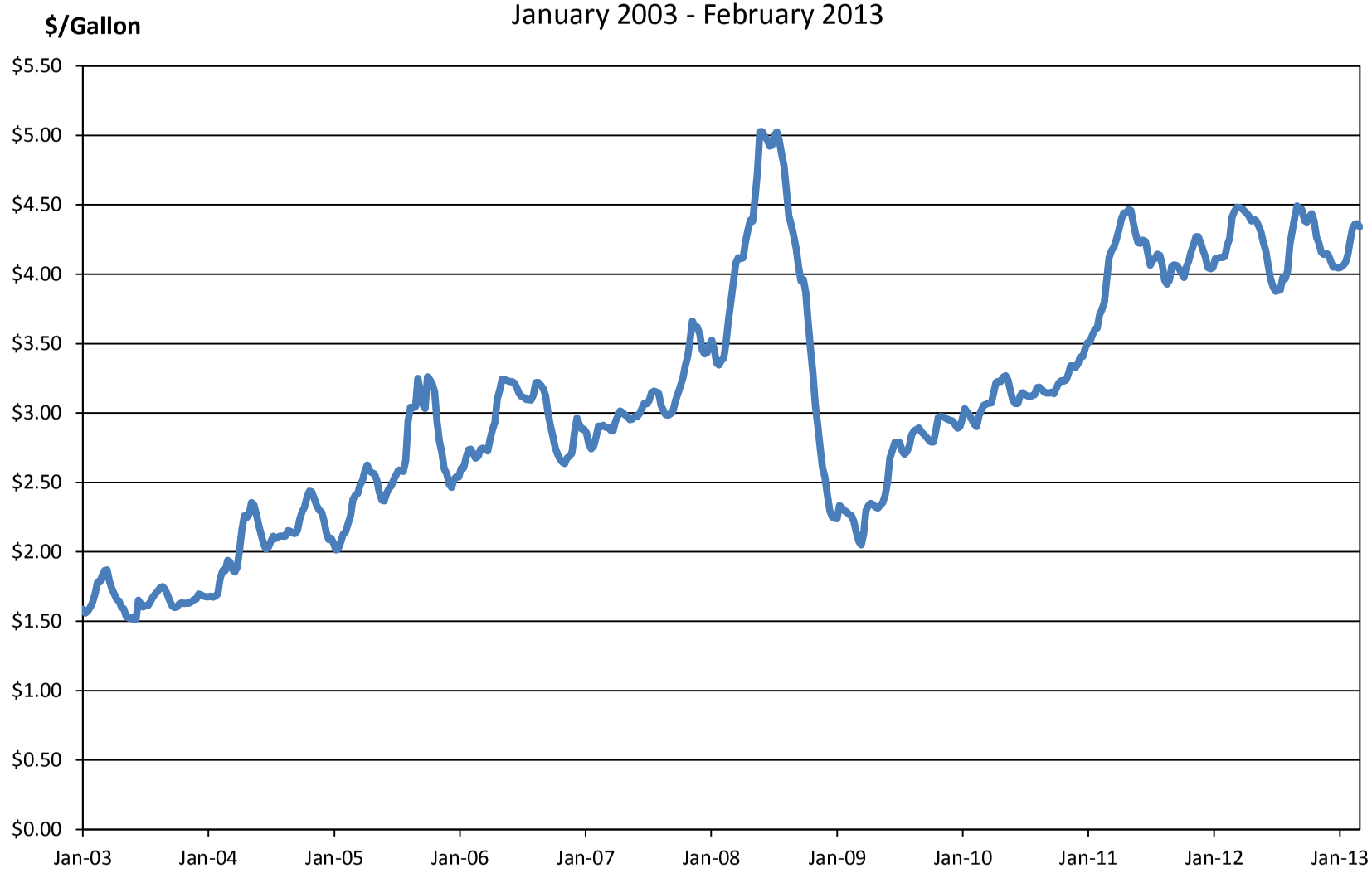
January 2003 - February 2013

Source: U.S. Department of Energy
http://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm

Figure 2 - California Weekly Average Diesel Prices

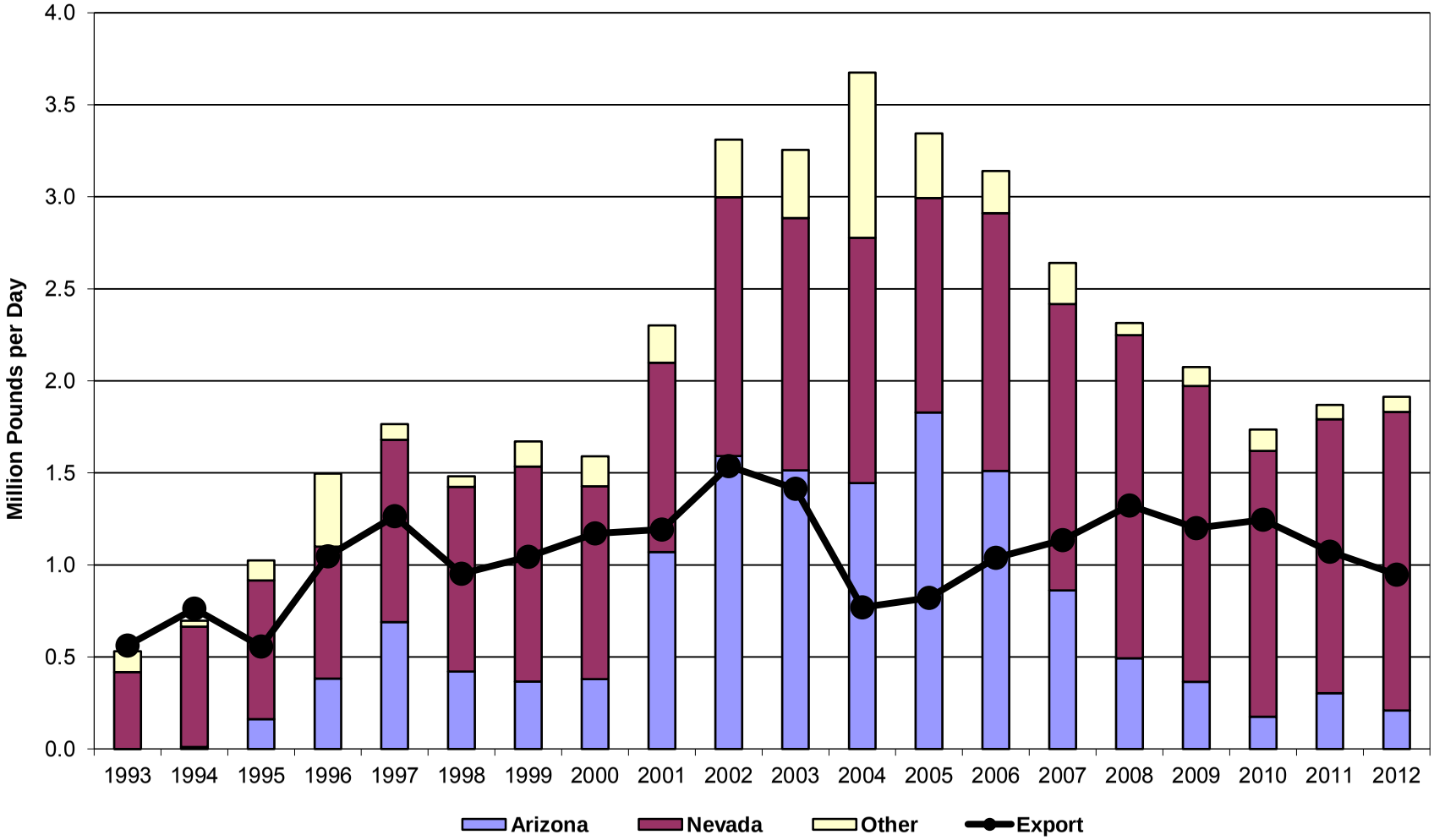
California Retail On-Highway

January 2003 - February 2013



Source: U.S. Department of Energy
http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_w.htm

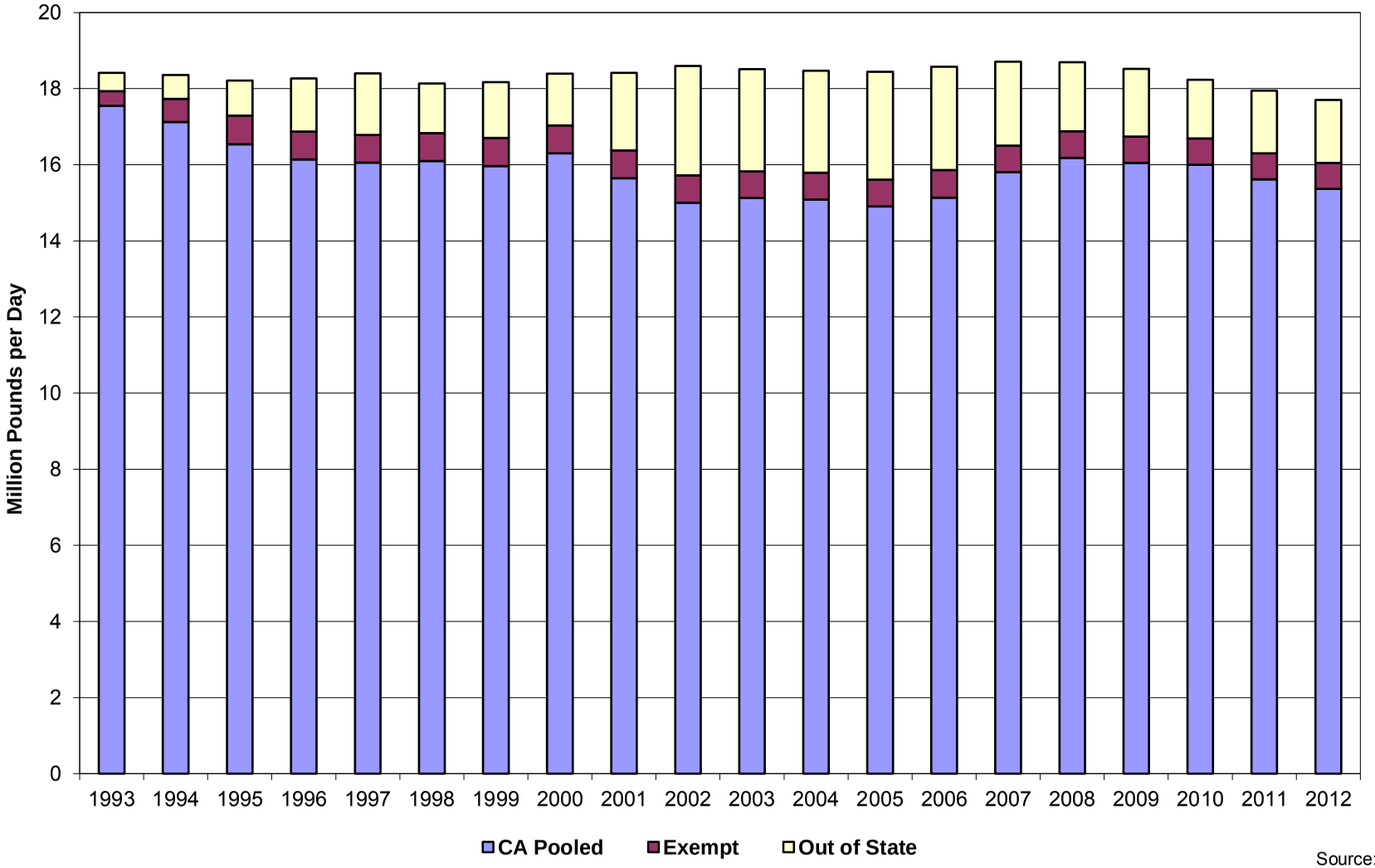
Figure 3 **- CALIFORNIA ANNUAL BULK MILK IMPORTS AND EXPORTS FOR ALL USES 1993 - 2012**



Note: "Other" is states other than Arizona and Nevada, but may include mislabeled milk from Arizona and Nevada.

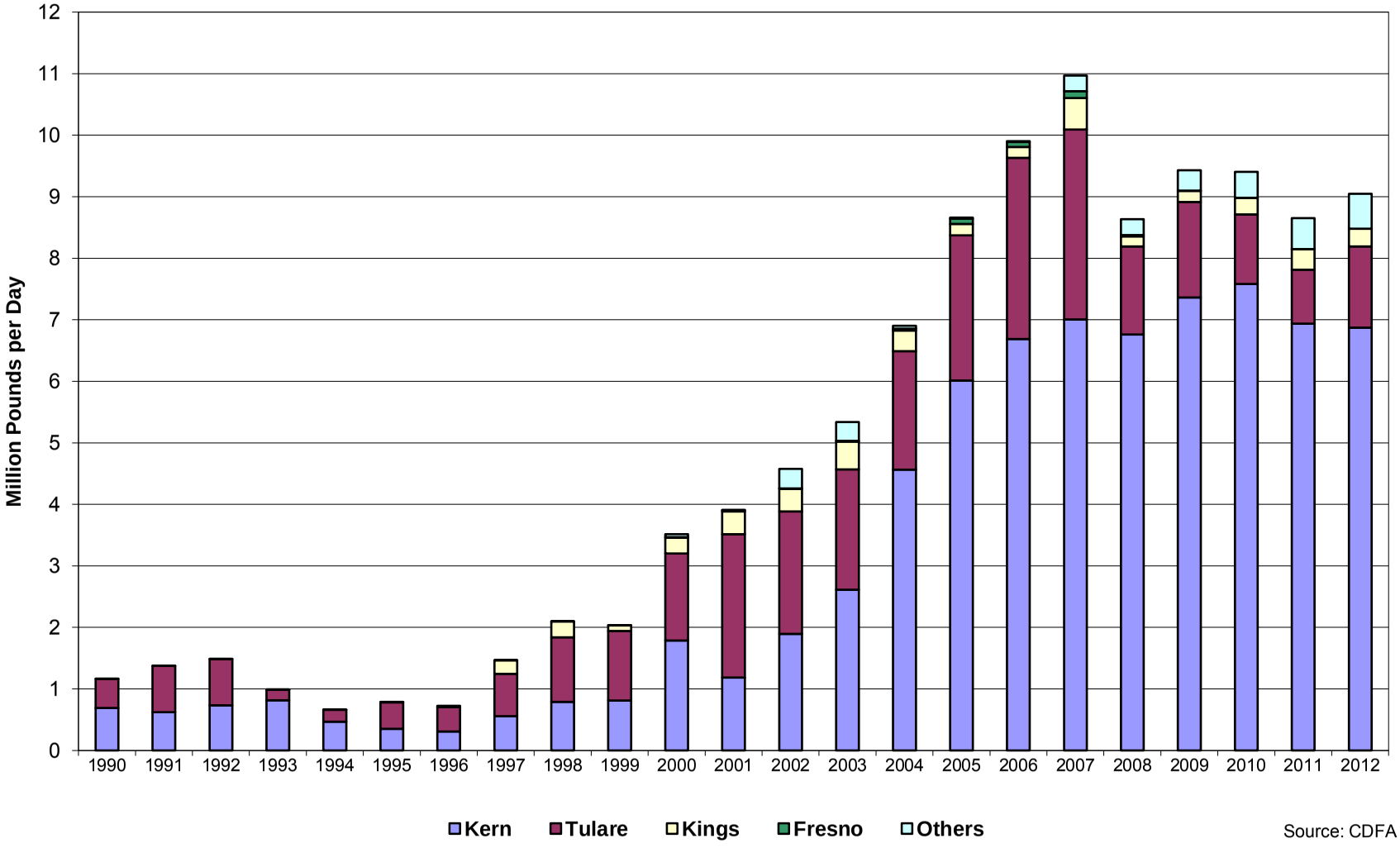
Source: CDFA

Figure 4 **- ANNUAL SOURCES OF FLUID MILK PROCESSED IN CALIFORINA 1993 - 2012**



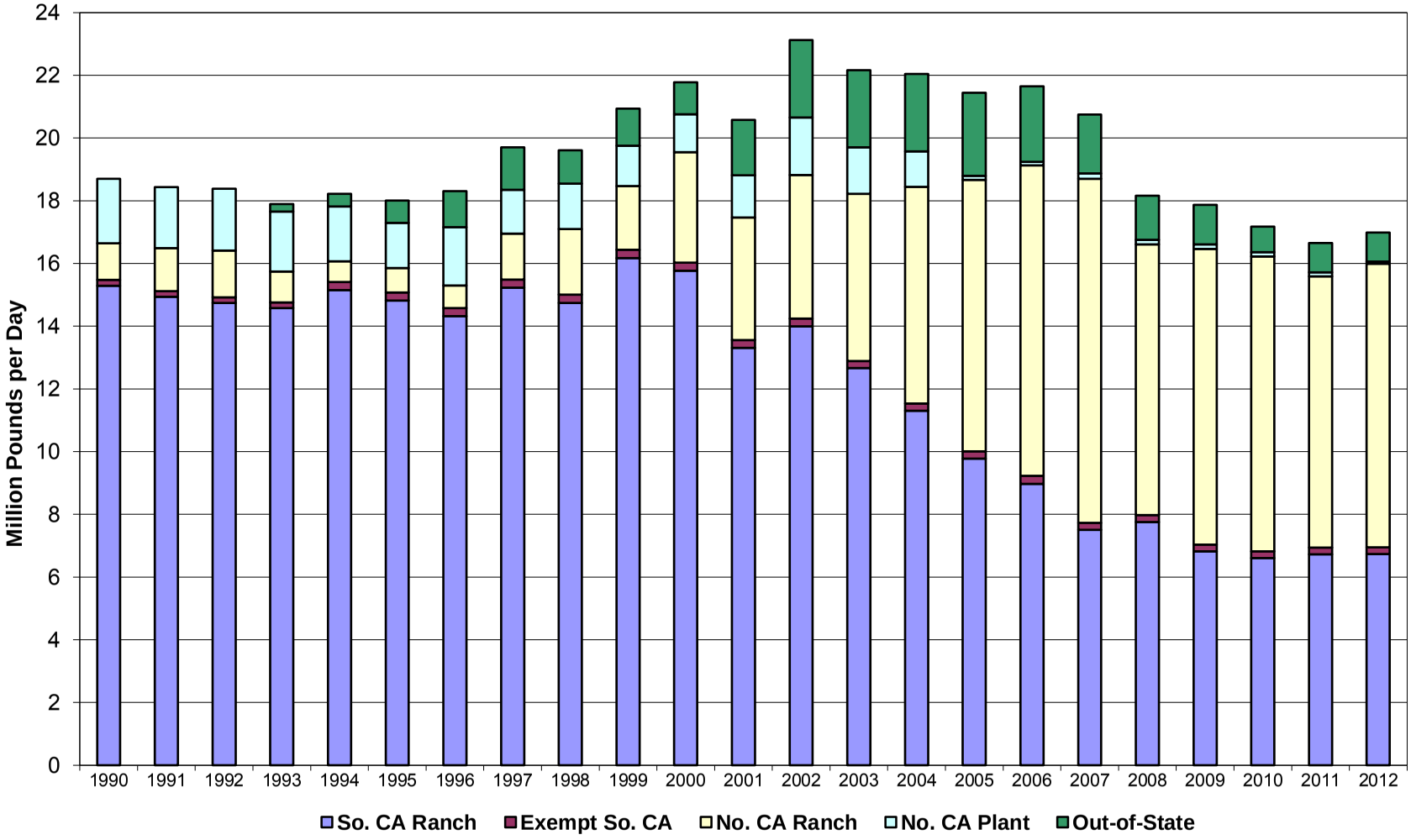
Source: CDFA

Figure 5 - **NORTHERN CALIFORNIA MARKETING AREA RANCHES TO SOUTHERN CALIFORNIA MARKETING AREA PLANTS**
Annual Milk Movement for All Uses, Million Pounds per Day, 1990 through 2012



Source: CDFA

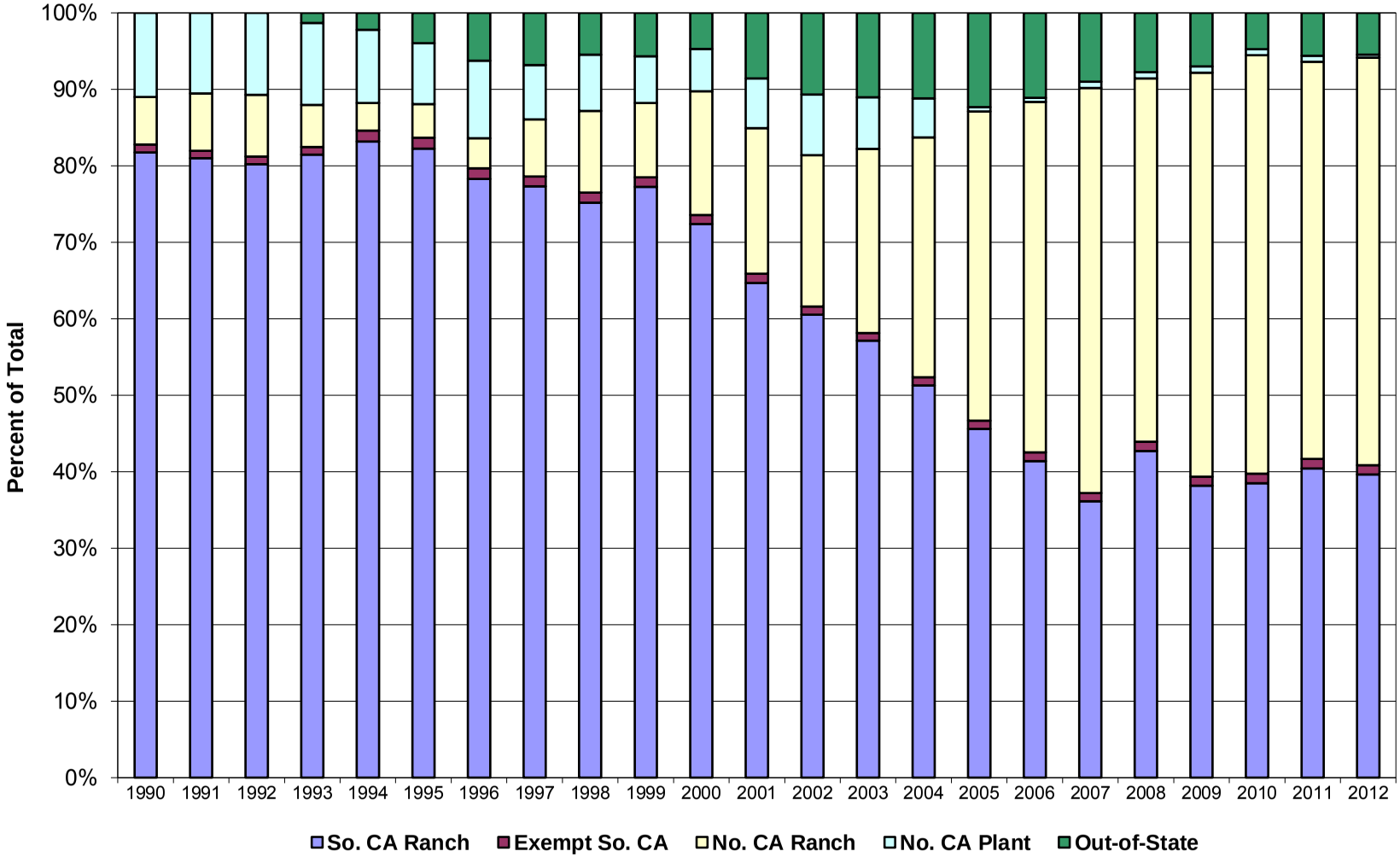
Figure 6 **- ANNUAL SOURCES OF MILK FOR ALL USES**
SOUTHERN CALIFORNIA MARKETING AREA
Million Pounds per Day, 1990 through 2012



Note: Out-of-State data only available starting 1993.

Source: CDFA

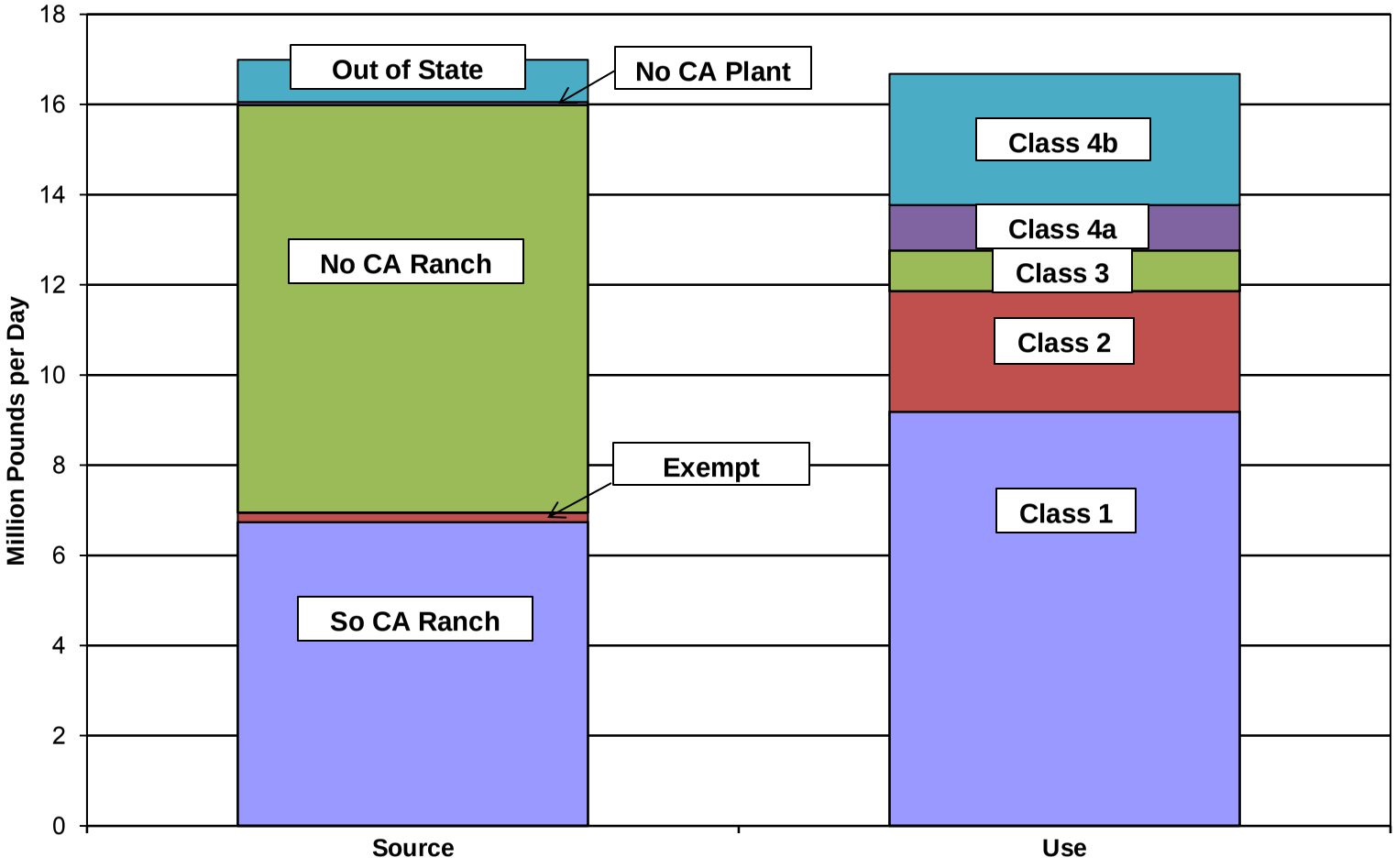
Figure 7 **- ANNUAL SOURCES OF MILK FOR ALL USES**
SOUTHERN CALIFORNIA MARKETING AREA
Percent of Total, 1990 through 2012



Note: Out-of-State data only available starting 1993.

Source: CDFA

Figure 8 **- SOURCES AND USES OF MILK IN SOUTHERN CALIFORNIA**
January 2012 through December 2012



Source: CDFA