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2012–2013 Minerals Yearbook

CALIFORNIA [ADVANCE RELEASE]

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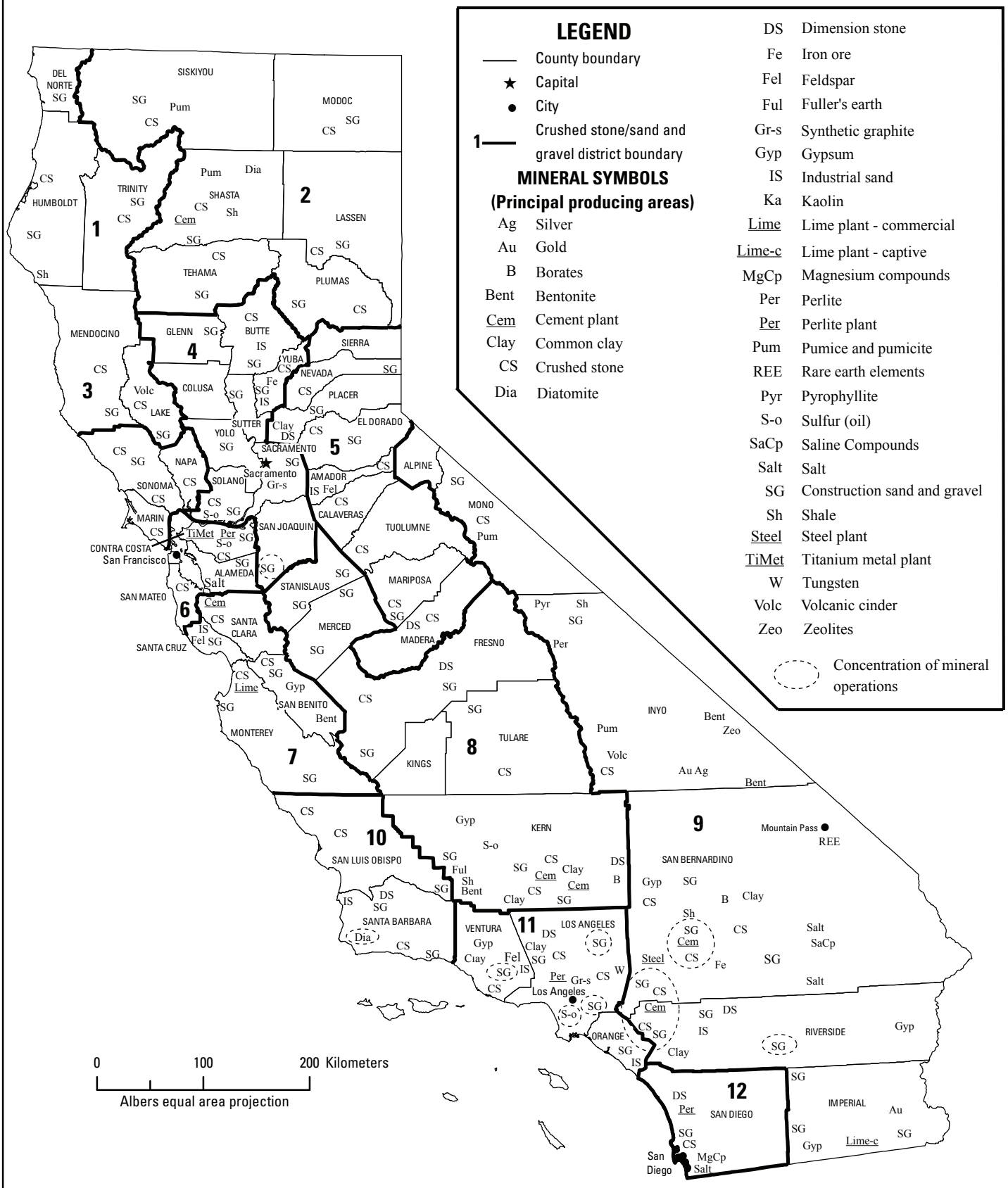
CALIFORNIA



Source: California Geological Survey/ U.S. Geological Survey (2012–13).

The Mineral Industry of California

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the California Geological Survey for collecting information on all nonfuel minerals.

In 2013, the value of the nonfuel mineral production[1] in the State of California was $3.29 billion (excluding steel), about 4.4% of the total U.S. nonfuel mineral production, ranking it eighth in the country. In 2012, the corresponding value was $3.28 billion, about 4.3% of the Nation's total nonfuel mineral production, again ranking it eighth among the 50 States. In 2013, on a per capita basis, nonfuel mineral production in California had a value of $86, owing to its large population, compared with the national average of $238. In 2012, the per capita value was again $86, compared with the national average of $241.

The value of nonfuel mineral production in California for the years 2006 through 2013 was as follows (in billions of dollars): $4.78 (2006), $4.42 (2007), $4.20 (2008), $2.89 (2009), $2.89 (2010), $3.24 (2011), $3.28 (2012), and $3.29 (2013).

In 2013, there were 4,119 employees in nonfuel mineral mines in California and 2,479 in mills and preparation plants (excluding steel). In 2012, the corresponding numbers were 4,202 in nonfuel mineral mines and 2,313 in mills and preparation plants (U.S. Mine Safety and Health Administration, 2013, p. 7; 2014, p. 7). In 2013, the average annual wage in California for all mining was $74,227 compared with $56,590 for all industries. In 2012, the corresponding figures were $71,858 and $56,293, respectively (National Mining Association, unpub. data, February 4, 2016).

In 2013, on the basis of production quantity, California continued to be the only State producing boron compounds and rare earths, and was the leading State in the production of construction sand and gravel out of 50 producing States. California ranked second in portland cement, diatomite, natural gemstones (on the basis of value), and soda ash out of 34, 4, 50, and 2 producing States, respectively. It was third in the production of feldspar and pumice and pumicite out of seven and six producing States, respectively. California ranked fourth in magnesium compounds out of four producing States. It ranked fifth in masonry cement, bentonite, montmorillonite, and zeolites out of 26, 10, 10, and 6 producing States, respectively. In 2013, California also produced common clay, crude gypsum, crushed stone, dimension stone, gold, industrial sand and gravel, kaolin, lime, perlite, salt, and silver.

In 2012, on the basis of production quantity, California was the only producing State for boron compounds and rare earths, and was the leading producer of soda ash out of two producing States. It was second in the production of portland cement, diatomite, construction sand and gravel, out of 35, 4, and 50 producing States, respectively. California was third in the production of pumice and pumicite out of five producing States. California was fourth in the production of feldspar, natural gemstones (on the basis of value), crude gypsum, and magnesium compounds out of 7, 50, 16, and 6 producing States, respectively. It was fifth in the production of gold out of 10 producing States. In 2012, the State also produced bentonite clay, along with the other minerals listed for 2013 above (table 1).

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All USGS mineral production data published in this chapter are those available as of February 2016. Data in this report are rounded to three significant digits and percentages are calculated from unrounded data. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at http://minerals.usgs.gov/minerals.

Commodity Review

The California Geological Survey[2] (CGS) provided a report for the mineral industry of the State covering activities in 2012 and 2013 from which the following data have been extracted. These data may differ from U.S. Geological Survey (USGS) data, which are based on company responses to USGS surveys and estimation for nonrespondents. The USGS withheld some data to avoid disclosing company proprietary data.

There were about 700 active mines in California producing nonfuel minerals based on California Office of Mine Reclamation data. This number was essentially unchanged from that of 2012. The CGS's Mineral Land Classification Project, a mandate of the Surface Mining Control and Reclamation Act of 1977 (Public Resources Code Section 2710, et seq.), continued to provide major State agencies with mineral resource maps that have proved to be of great value in land-use planning and mineral-resource conservation.

Metals

Mineral industry activity in 2012 and 2013 with respect to metals was as follows:

- Gold dominated California's primary metal production in 2013, accounting for over 99% of the value of the State's metals production (excluding steel). The State's largest gold producers were the New Gold Inc.-operated Mesquite Gold Mine in Imperial County and the Atna Resources Ltd.-operated Briggs Mine in Inyo County. California also has several small lode mines that sporadically produce gold, including specimen gold and gold in quartz for use in jewelry. In addition to the lode mines, placer gold was produced from one active dredge and, as a byproduct, from many sand and gravel mines in the northern and central parts of the State and near the Oro Grande cement plant.
- Silver production decreased in 2013. Silver is produced

[2]John Clinkenbeard, Supervising Engineering Geologist, and Joshua Smith, Engineering Geologist, California Geological Survey, provided the State nonfuel mineral industry information.

as a byproduct of gold production and makes up less than one-tenth of 1% of California's total metal production by value.
- Only a small amount of iron ore was produced. Much of the iron ore currently produced in California is considered to be an industrial mineral and used in the production of portland cement.

Industrial Minerals

Mineral industry activity with respect to industrial minerals was as follows:

- Construction sand and gravel was California's leading mineral commodity in terms of both dollar value and quantity. Construction materials, including aggregates (sand and gravel and crushed stone) and cement, accounted for about 58% of the value of California's annual nonfuel mineral production. The average statewide production of construction aggregates over the last 30 years (1983–2013) has been about 178 million short tons (161 million metric tons) per year, owing to a construction boom in the late 1990s and early 2000s in California, where aggregates peaked in 2006. The production of aggregates has been gradually increasing since the 2007–8 recession.
- Cement imports through California ports remained at low levels.
- The Mountain Pass Mine in San Bernardino County, operated by Molycorp Minerals LLC, continued to be the only domestic producer of rare-earth elements (REEs). A new multistage cracking plant, part of the process to recover REEs, became operational in 2013 and work on a new chloralkali plant was completed; the plant was expected to be operational in 2014.
- August 2012—The proposed Carmelita Mine in Fresno County received approval from the Fresno County Planning Commission and from the County Board of Supervisors in October. In November, Friends of the Kings River sued the County to halt the proposed mine.
- August 2012—The proposed Newman Ridge Quarry in Amador County received approval from the Amador County Planning Commission in August and from the County Board of Supervisors in October. In November, the Ione Valley Land, Air & Water Defense Alliance sued the County and project proponents to halt the proposed mine.
- May 2012—The Fresno County Planning Commission rejected CEMEX's proposal to open a quarry at Jessie Morrow Mountain.
- May 2012—The proposed expansion of the Harris Quarry in Mendocino County received approval from the Mendocino County Planning Commission and from the County Board of Supervisors in June. In May, Keep the Code, a nonprofit corporation protecting Mendocino County rangeland, sued the County claiming that the Environmental Impact Report approved by the County was inadequate.
- February 2012—The Riverside County Board of Supervisors denied the permit for Granite Construction's proposed Liberty Quarry located in southwestern Riverside County. The project had faced strong opposition. Granite Construction submitted a proposal for a scaled-down quarry operation in July. In November, it was announced that Granite Construction and the Pechanga Band of Luiseño Indians had reached an agreement for the sale of the property to the Tribe, ending plans for a quarry at the site.

References Cited

U.S. Mine Safety and Health Administration, [2013], Mine injury and worktime, quarterly, January–December 2012, Final, closeout edition, 33 p. (Accessed February 4, 2016, at http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20125.pdf.)

U.S. Mine Safety and Health Administration, [2014], Mine injury and worktime, quarterly, January–December 2013, Final, closeout edition, 34 p. (Accessed February 4, 2016, at http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20135.pdf.)

TABLE 1
NONFUEL MINERAL PRODUCTION IN CALIFORNIA[1, 2]

(Thousand metric tons and thousand dollars)

Mineral	2011		2012		2013	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement:						
Masonry	170	18,600 e	152	15,900 e	178	19,600 e
Portland	7,730	582,000 e	8,400	621,000 e	9,260	714,000 e
Clays:						
Bentonite	44 r	3,500 r	50	4,290	W	W
Common	398	6,990	W	W	W	W
Gemstones, natural	NA	759	NA	966	NA	1,220
Gypsum, crude	992	12,000	1,380	9,640	1,160	17,700
Pumice and pumicite	W	W	48,900	2,520	54,100	2,620
Rare earths, oxide basis	--	--	3,000	W	5,500	W
Sand and gravel:						
Construction	81,900 r	905,000 r	80,100	875,000	87,900	890,000
Industrial	1,320 r	43,500 r	1,010	37,600	863	42,500
Stone:						
Crushed	32,600 r	295,000	33,000	319,000	34,600	325,000
Dimension	25	9,590	23	9,200	24	9,210
Combined values of boron minerals, clays (fuller's earth, kaolin), diatomite, feldspar, gold, iron ore [usable shipped (2011)], lime, magnesium compounds, perlite [crude (2011, 2013)], salt, silver, soda ash, tungsten, zeolites, and values indicated by symbol W	XX	1,360,000	XX	1,390,000	XX	1,270,000
Total	XX	3,240,000 r	XX	3,280,000	XX	3,290,000

eEstimated. rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data; included in "Combined values" data. XX Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
[2]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 2
CALIFORNIA: CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE[1]

Type	2012				2013			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone[2]	26	14,100	$123,000	$8.71	29	14,800	$116,000	$7.80
Dolomite	4	132	873	6.63	4	162	1,040	6.38
Shell	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Granite	29	9,230	93,700	10.15	27	10,300	101,000	9.83
Traprock	22	4,340	43,100	9.93	24	5,320	56,000	10.53
Sandstone and quartzite[4]	11	1,110	11,900	10.67	10	708	12,900	18.17
Slate	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Volcanic cinder and scoria	9	144	1,700	11.79	9	158	1,880	11.88
Miscellaneous stone	46	3,920	44,400	11.35	43	3,110	36,400	11.73
Total or average	XX	33,000	319,000	9.66	XX	34,600	325,000	9.40

XX Not applicable.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes limestone-dolomite reported with no distinction between the two kinds of stone.
[3]Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone."
[4]Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

TABLE 3
CALIFORNIA: CRUSHED STONE SOLD OR USED BY PRODUCERS BY USE[1]

Use	2012			2013		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	--	--	--	30	$191	$6.34
Riprap and jetty stone	457	$7,630	$16.69	264	4,490	17.01
Filter stone	19	332	17.46	41	977	23.76
Unspecified coarse aggregate	26	351	13.50	125	1,650	13.17
Coarse aggregate, graded:						
Concrete aggregate, coarse	548	5,410	9.87	517	6,230	12.04
Bituminous aggregate, coarse	241	2,890	11.97	219	5,470	25.01
Bituminous surface-treatment aggregate	W	W	W	--	--	--
Railroad ballast	W	W	W	W	W	W
Unspecified graded coarse aggregate	1,290	14,100	10.95	2,970	35,200	11.87
Fine aggregate (-⅜ inch):						
Stone sand, concrete	11	147	13.36	30	511	17.22
Stone sand, bituminous mix or seal	101	1,340	13.31	W	W	W
Screening, undesignated	135	986	7.30	113	1,390	12.26
Unspecified fine aggregate	823	9,540	11.60	391	4,470	11.42
Coarse and fine aggregates:						
Graded road base or subbase	1,690	18,400	10.85	1,410	13,600	9.70
Unpaved road surface	34	334	9.81	68	433	6.39
Terrazzo and exposed aggregate	30	815	27.16	28	817	29.51
Crusher run or fill or waste	140	2,310	16.48	71	666	9.35
Unspecified coarse and fine aggregates	3,790	33,700	8.89	1,640	8,740	5.33
Unspecified and other construction materials	1,150	7,990	6.98	74	1,180	15.98
Agricultural:						
Agricultural Limestone	W	W	W	199	5,360	26.92
Poultry grit and mineral food	W	W	W	W	W	W
Unspecified and other agricultural uses	W	W	W	W	W	W
Chemical and metallurgical:						
Cement manufacture	5,590	15,000	2.68	5,780	9,810	1.70
Lime manufacture	40	354	8.85	W	W	W
Flux stone	--	--	--	3	34	10.42
Glass manufacture	--	--	--	129	3,400	26.46
Sulfur oxide removal	W	W	W	W	W	W
Special:						
Asphalt fillers or extenders	37	571	15.43	27	2,270	83.71
Whiting or whiting substitute	3	16	5.41	--	--	--
Other fillers or extenders	W	W	W	790	30,300	38.31
Other miscellaneous uses and specified uses not listed	7	130	18.64	10	91	8.93
Unspecified:[2]						
Reported	4,560	40,500	8.89	5,400	53,600	9.93
Estimated	10,600	138,000	12.93	13,400	125,000	9.29
Total or average	33,000	319,000	9.66	34,600	325,000	9.40

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Reported and estimated production without a breakdown by end use.

TABLE 4
CALIFORNIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2012, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3		District 4	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	W	W	W	W	W	W	13	253
Coarse aggregate, graded[3]	--	--	W	W	W	W	W	W
Fine aggregate (-⅜ inch)[4]	W	W	W	W	W	W	W	W
Coarse and fine aggregates[5]	W	W	190	1,660	W	W	W	W
Other construction materials	10	112	--	--	--	--	--	--
Agricultural[6]	--	--	W	W	--	--	--	--
Chemical and metallurgical[7]	--	--	394	1,120	--	--	--	--
Special[8]	--	--	--	--	--	--	W	W
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--	--	--	--	--
Unspecified:[10]								
Reported	220	2,230	9	83	497	5,030	456	4,620
Estimated	371	3,980	288	2,870	1,170	15,300	183	1,900
Total	650	7,120	1,250	9,510	2,880	35,600	1,350	13,300

Use	District 5		District 6		District 7		District 8	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	340	5,280	--	--	5	105	--	--
Coarse aggregate, graded[3]	27	296	W	W	5	54	--	--
Fine aggregate (-⅜ inch)[4]	13	110	102	1,130	237	2,550	--	--
Coarse and fine aggregates[5]	158	1,580	W	W	W	W	69	294
Other construction materials	335	3,100	11	57	W	W	--	--
Agricultural[6]	--	--	W	W	32	818	--	--
Chemical and metallurgical[7]	--	--	--	--	40	354	--	--
Special[8]	--	--	--	--	40	587	--	--
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--	--	--	--	--
Unspecified:[10]								
Reported	--	--	--	--	667	6,750	1,410	8,680
Estimated	1,040	16,300	363	3,670	448	4,540	78	788
Total	1,910	26,600	1,590	16,000	4,590	44,200	1,560	9,760

Use	District 9		District 10		District 11			
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	W	W	W	W	W	W	--	--
Coarse aggregate, graded[3]	W	W	W	W	W	W	W	W
Fine aggregate (-⅜ inch)[4]	W	W	W	W	W	W	W	W
Coarse and fine aggregates[5]	W	W	W	W	W	W	W	W
Other construction materials	1	21	W	W	--	--	--	--
Agricultural[6]	W	W	--	--	--	--	--	--
Chemical and metallurgical[7]	W	W	--	--	850	2,430	--	--
Special[8]	W	W	--	--	W	W	W	W
Other miscellaneous uses and specified uses not listed[9]	7	130	--	--	--	--	--	--
Unspecified:[10]								
Reported	328	3,320	219	2,220	--	--	752	7,610
Estimated	4,180	62,300	144	1,970	2,070	20,900	313	3,060
Total	11,000	97,000	635	7,360	3,650	31,000	1,940	21,100

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes macadam, riprap and jetty stone, filter stone, and unspecified coarse aggregate.

[3]Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and unspecified graded coarse aggregate.

[4]Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and unspecified fine aggregate.

[5]Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, and unspecified coarse and fine aggregates.

[6]Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

TABLE 4—Continued
CALIFORNIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2012, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

[7]Includes cement manufacture, lime manufacture, and sulfur oxide removal.
[8]Includes asphalt fillers or extenders, whiting or whitening substance, and other fillers or extenders.
[9]Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.
[10]Reported and estimated production without a breakdown by end use.

TABLE 5
CALIFORNIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2013, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3		District 4	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	W	W	W	W	W	W	76	1,180
Coarse aggregate, graded[3]	--	--	W	W	1	27	W	W
Fine aggregate (-⅜ inch)[4]	--	--	149	1,770	W	W	W	W
Coarse and fine aggregates[5]	W	W	219	2,030	W	W	W	W
Other construction materials	11	206	--	--	--	--	--	--
Agricultural[6]	--	--	W	W	--	--	--	--
Chemical and metallurgical[7]	--	--	W	W	--	--	--	--
Special[8]	--	--	--	--	--	--	W	W
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--	--	--	W	W
Unspecified:[10]								
Reported	W	W	11	101	W	W	385	3,910
Estimated	104	1,060	221	2,080	2,140	27,400	81	854
Total	503	7,190	1,140	7,540	3,390	44,500	1,190	12,800

Use	District 5		District 6		District 7		District 8	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	96	1,350	W	W	4	69	W	W
Coarse aggregate, graded[3]	39	464	637	10,500	W	W	W	W
Fine aggregate (-⅜ inch)[4]	W	W	W	W	W	W	W	W
Coarse and fine aggregates[5]	103	991	W	W	W	W	W	W
Other construction materials	--	--	--	--	8	179	--	--
Agricultural[6]	294	5,540	W	W	--	--	--	--
Chemical and metallurgical[7]	160	4,190	--	--	--	--	W	W
Special[8]	5	411	--	--	22	1,860	--	--
Other miscellaneous uses and specified uses not listed[9]	8	75	--	--	--	--	--	--
Unspecified:[10]								
Reported	85	867	--	--	W	W	439	4,430
Estimated	576	5,400	368	3,450	3,120	30,000	47	200
Total	1,400	19,600	1,680	21,800	4,790	43,700	1,920	8,960

Use	District 9		District 10		District 11		District 12	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	118	1,650	W	W	W	W	W	W
Coarse aggregate, graded[3]	W	W	181	2,150	--	--	W	W
Fine aggregate (-⅜ inch)[4]	W	W	W	W	W	W	W	W
Coarse and fine aggregates[5]	W	W	201	2,070	--	--	W	W
Other construction materials	55	797	--	--	--	--	--	--
Agricultural[6]	W	W	W	W	--	--	--	--
Chemical and metallurgical[7]	W	W	--	--	W	W	--	--
Special[8]	W	W	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed[9]	2	16	--	--	--	--	--	--
Unspecified:[10]								
Reported	326	3,300	332	2,680	--	--	1,300	13,000
Estimated	4,580	33,700	--	--	1,900	17,800	306	2,870
Total	12,000	100,000	760	8,930	3,070	22,300	2,570	27,300

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes macadam, riprap and jetty stone, filter stone, and unspecified coarse aggregate.

[3]Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and unspecified graded coarse aggregate.

[4]Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and unspecified fine aggregate.

[5]Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, and unspecified coarse and fine aggregates.

[6]Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

TABLE 5—Continued
CALIFORNIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2013, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

[7]Includes cement manufacture, lime manufacture, and sulfur oxide removal.
[8]Includes asphalt fillers or extenders, whiting or whitening substance, and other fillers or extenders.
[9]Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.
[10]Reported and estimated production without a breakdown by end use.

TABLE 6
CALIFORNIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	13,300	$154,000	$11.58
Plaster and gunite sands	1,490	19,300	12.95
Concrete products (blocks, bricks, pipe, decorative, and so forth)	69	1,170	16.96
Asphaltic concrete aggregates and other bituminous mixtures	7,410	98,800	13.33
Road base and coverings[2]	5,720	51,300	8.97
Fill	4,560	38,200	8.38
Other miscellaneous uses[3]	1,490	16,400	11.01
Unspecified:[4]			
Reported	22,200	234,000	10.54
Estimated	23,900	262,000	10.96
Total or average	80,100	875,000	10.92

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes road and other stabilization (cement).
[3]Includes filtration, railroad ballast, and snow and ice control.
[4]Reported and estimated production without a breakdown by end use.

TABLE 7
CALIFORNIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	15,500	$191,000	$12.26
Plaster and gunite sands	670	8,830	13.18
Concrete products (blocks, bricks, pipe, decorative, and so forth)	172	2,020	11.77
Asphaltic concrete aggregates and other bituminous mixtures	7,690	90,700	11.79
Road base and coverings[2]	5,800	51,500	8.88
Fill	4,790	44,700	9.32
Other miscellaneous uses[3]	917	10,500	11.44
Unspecified:[4]			
Reported	22,300	216,000	9.70
Estimated	30,000	275,000	9.15
Total or average	87,900	890,000	10.12

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes road and other stabilization (cement and lime).
[3]Includes railroad ballast, roofing granules, and snow and ice control.
[4]Reported and estimated production without a breakdown by end use.

TABLE 8
CALIFORNIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	5	41	--	--	12	104
Other miscellaneous uses[4]	--	--	67	1,390	1	17
Unspecified:[5]						
Reported	74	651	--	--	225	2,560
Estimated	1,060	11,500	796	8,710	--	--
Total	1,300	14,300	1,760	19,400	290	3,240

Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	1,230	6,230	69	600	1,360	18,800
Other miscellaneous uses[4]	7	121	11	137	22	243
Unspecified:[5]						
Reported	7,920	79,400	333	3,120	1,710	18,800
Estimated	1,230	13,400	937	10,300	1,710	18,800
Total	13,600	134,000	1,530	16,000	5,900	71,100

Use	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	3,230	35,100	3,510	39,500
Asphaltic concrete aggregates and road base materials[3]	W	W	3,360	31,600	3,640	41,700
Fill	111	966	181	1,880	584	3,430
Other miscellaneous uses[4]	4	44	108	1,080	954	10,200
Unspecified:[5]						
Reported	2	19	2,630	29,900	2,300	26,600
Estimated	571	6,250	1,970	21,600	11,000	120,000
Total	1,100	12,200	11,500	121,000	21,900	241,000

Use	District 10		District 11		District 12	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	99	798	598	4,080	314	1,180
Other miscellaneous uses[4]	3	43	311	3,080	--	--
Unspecified:[5]						
Reported	1,200	13,800	3,170	36,700	152	1,760
Estimated	336	3,680	2,960	32,400	1,390	15,200
Total	2,230	25,100	13,800	167,000	2,710	30,400

Use	Unspecified districts	
	Quantity	Value
Concrete aggregate and concrete products[2]	--	--
Asphaltic concrete aggregates and road base materials[3]	--	--
Fill	--	--
Other miscellaneous uses[4]	--	--
Unspecified:[5]		
Reported	2,440	20,900
Estimated	--	--
Total	2,440	20,900

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes plaster and gunite sands.

[3]Includes road and other stabilization (cement).

[4]Includes filtration, railroad ballast, and snow and ice control.

[5]Reported and estimated production without a breakdown by end use.

TABLE 9
CALIFORNIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	2	8	5	40	12	113
Other miscellaneous uses[4]	--	--	40	505	--	--
Unspecified:[5]						
Reported	6	69	(6)	2	164	1,870
Estimated	1,340	11,400	1,040	9,050	6	51
Total	1,700	15,000	1,770	16,900	217	2,430

Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	1,600	10,800	63	603	495	6,660
Other miscellaneous uses[4]	138	1,430	1	10	--	--
Unspecified:[5]						
Reported	7,960	79,400	320	2,990	364	3,340
Estimated	2,560	26,700	974	8,400	2,300	19,900
Total	16,000	155,000	1,410	12,600	6,420	74,800

Use	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	3,160	35,800
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	4,430	45,800
Fill	178	1,700	770	9,050	256	2,100
Other miscellaneous uses[4]	--	--	143	1,430	88	1,950
Unspecified:[5]						
Reported	30	244	2,380	26,000	2,310	23,100
Estimated	861	8,540	2,270	21,400	12,700	111,000
Total	1,320	13,500	12,000	124,000	23,000	220,000

Use	District 10		District 11		District 12	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	5,060	67,500	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	1,130	15,600	W	W
Fill	104	801	928	9,940	378	2,820
Other miscellaneous uses[4]	24	378	483	4,790	--	--
Unspecified:[5]						
Reported	1,050	12,000	3,740	42,200	285	2,960
Estimated	360	3,060	4,080	42,000	1,510	12,900
Total	2,380	24,700	15,400	182,000	2,710	26,300

Use	Unspecified districts	
	Quantity	Value
Concrete aggregate and concrete products[2]	--	--
Asphaltic concrete aggregates and road base materials[3]	--	--
Fill	--	--
Other miscellaneous uses[4]	--	--
Unspecified:[5]		
Reported	3,700	22,300
Estimated	--	--
Total	3,700	22,300

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses." -- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes plaster and gunite sands.
[3]Includes road and other stabilization (cement and lime).
[4]Includes railroad ballast, roofing granules, and snow and ice control.
[5]Reported and estimated production without a breakdown by end use.
[6]Less than ½ unit.