

2021 STANDING ACREAGE - FINAL ESTIMATE

In cooperation with the Almond Board of California

Released: November 15, 2021



RESULTS

Each year Land IQ produces an in-year, statewide almond acreage estimate. This estimate is the result of extensive ground truthing and advanced remote sensing analytics allowing Land IQ to differentiate almond orchards from other tree and annual crops.

The result is a highly accurate mapping of almonds that are a minimum of three years old. Almond trees that are one and two years old cannot be consistently differentiated from other similarly aged tree crops using remotely sensed methods. The ground truthing data, proportionality of almonds to other tree crops, and other lines of evidence are used to numerically estimate acreage for orchards that are one and two years old. Both the remotely sensed and numerical estimates are combined for a total statewide acreage estimate. The 2021 estimate is 98.8% accurate.

As a result, the 2021 acreage estimate is:

- **352,875 non-bearing acres**
(defined as those orchards planted in 2019, 2020, and 2021)
- **1,309,759 bearing acres**
(defined as anything planted in 2018 and earlier)
- **1,662,633 total acres**
(defined as total standing acres during the growing season of 2021)

Each mapping year, Land IQ not only maps all almond orchards within the state, but also applies a separate algorithm to quantify the age of each individual orchard. The accuracy of this estimate is greater than 95% at +/- 1 year. Based on that analysis, Land IQ determined that :

- 21 percent of California's almond orchards were 1-3 years old,
- 38 percent were between 4 and 10 years old,
- 30 percent were between 11 to 20 years old,
- 6 percent were between 21 to 25 years old, and
- 5 percent were over 25 years old.

INTRODUCTION

Beginning in 2019, the ABC began an annual mapping process with two acreage summaries, one delivered in April and one delivered in November, of the same production year. The Land IQ April delivery aligns with the United States Department of Agriculture (USDA) – National Agricultural Statistics Service (NASS) California Almond Forecast, which is an initial subjective forecast for acreage and yield.

APPROACH

Land IQ draws upon on multiple lines of evidence including agronomic and remote sensing knowledge, unique field boundaries, robust on-the-ground verification, customized image analysis, artificial intelligence and machine learning algorithms to classify almond orchards.

For each mapped year, the following steps are taken. This is the basis for the determination of bearing acreage and the numerical estimate of non-bearing acreage.

Imagery Acquisition

Evaluate and acquire imagery from various sources based upon cost and spectral, spatial and temporal resolution suitability. New imagery sources allow for annual mapping of almonds.

Field Boundary Delineation

Utilize imagery and other resources to delineate individual fields defined as a homogenous crop. These boundaries are not legal boundaries of the property and do not include roads, homes or farmsteads. Irrigated field boundary positional accuracies are +/- 6 feet at a 95% confidence interval.

Ground Truthing

Identify and geo-reference crops through thousands of miles of actual verified orchards from Tehama to Kern County. These data provide necessary training data for algorithms as well as validation data for the classification.

Remote Sensing Analysis

Utilize custom image analysis, artificial intelligence, and machine learning algorithms to determine crop type. This allows for the differentiation of almond orchards from other tree and annual crops. Accuracy assessments are performed using statistical probability and validated against ground truth information.

Change Analysis and Update

Determine which orchards have been removed or added using a change analysis as part of the overall remote sensing efforts.

Non-Bearing Estimate

During the second mapping event, an estimate of non-bearing acreage is conducted, taking into account the data collected with ground truthing in the summer months.

2021 Standing Almond Acreage by County, Year Planted

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Alameda	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butte	6,408	52	202	242	143	177	347	178	490	589	201	574	135	439
Calaveras	12	0	0	0	0	0	0	0	0	5	0	0	0	0
Colusa	741	10	50	54	54	47	404	104	101	321	594	631	487	1,813
Contra Costa	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	257	74	0	1	85	157	588	163	504	343	447	337	933	2,842
Glenn	1,124	47	58	77	83	286	163	178	265	545	480	368	475	1,294
Kern	347	35	0	0	125	249	57	287	175	254	293	217	1,209	1,510
Kings	0	0	0	0	0	0	0	0	2	0	0	0	0	242
Lake	0	0	0	0	0	0	12	0	0	26	0	0	0	0
Madera	1,773	9	190	108	127	255	251	105	121	786	1,029	580	1,136	1,936
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Merced	7,740	280	142	386	485	617	1,033	658	980	1,891	1,089	1,204	2,520	2,462
Placer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	8	0	0	0	0	0	0	0	0	1	0	0	0	0
San Joaquin	4,842	219	83	142	261	291	326	140	269	512	209	399	1,151	813
San Luis Obispo	89	19	21	24	9	31	63	6	45	12	1,723	138	3	0
Shasta	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Solano	190	0	36	0	49	8	43	0	53	112	31	117	0	5
Stanislaus	10,402	280	334	516	688	288	810	822	735	1,480	2,108	1,559	1,947	2,519
Sutter	424	36	2	51	42	36	139	56	71	43	128	1	80	603
Tehama	403	7	23	0	0	11	21	26	0	0	47	66	180	344
Tulare	187	0	0	0	0	0	3	78	75	208	152	215	200	354
Yolo	130	0	1	5	38	16	291	1	76	352	184	173	243	454
Yuba	0	0	0	0	0	0	0	4	0	24	2	0	0	138
Grand Total	35,081	1,068	1,143	1,606	2,189	2,469	4,550	2,806	3,961	7,505	8,717	6,580	10,700	17,769

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

2021 Standing Almond Acreage by County, Year Planted

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Alameda	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butte	985	490	573	364	621	559	1,292	1,140	680	799	3,574	1,288	1,205	639
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0	33	0
Colusa	992	2,238	1,343	1,594	1,142	2,155	5,356	3,700	3,559	2,084	3,140	2,505	2,075	2,058
Contra Costa	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Fresno	2,815	3,802	5,322	4,132	6,553	6,364	12,197	15,890	16,534	11,562	6,549	5,544	5,729	8,472
Glenn	764	1,303	517	1,071	562	1,597	1,945	2,490	1,755	1,737	5,138	1,137	610	2,215
Kern	3,558	3,581	1,970	1,901	3,246	6,362	13,977	19,094	16,714	7,682	5,436	5,793	4,606	8,840
Kings	727	393	288	299	1,272	136	928	1,567	1,485	1,121	791	823	768	404
Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Madera	1,358	1,065	2,253	1,395	2,270	3,908	6,354	6,642	8,527	7,677	11,696	5,778	2,943	9,078
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Merced	1,750	2,517	2,103	2,326	2,119	3,049	6,950	6,722	6,372	8,282	2,686	3,145	2,602	3,384
Placer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	6	0	0	0	0	0
Sacramento	2	0	0	0	0	0	0	0	0	0	14	0	0	0
San Joaquin	984	1,409	1,110	1,327	1,196	1,419	2,613	2,243	1,898	2,122	1,765	1,194	1,328	2,998
San Luis Obispo	0	0	0	0	0	9	0	0	0	0	0	0	0	0
Shasta	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Solano	229	87	114	146	34	148	153	476	361	112	86	121	41	128
Stanislaus	4,069	3,263	3,049	1,715	3,356	3,117	10,650	7,595	6,419	7,034	5,904	5,067	3,531	8,515
Sutter	172	186	74	114	0	272	744	201	611	622	213	435	156	372
Tehama	108	146	346	301	299	239	590	269	513	1,157	1,402	341	109	327
Tulare	503	758	366	194	567	1,155	2,212	2,326	3,367	2,719	1,670	2,348	2,361	3,074
Yolo	207	575	194	285	175	749	1,436	1,480	1,809	1,229	1,228	1,962	486	1,808
Yuba	0	48	47	0	0	0	95	47	214	34	9	0	7	31
Grand Total	19,227	21,861	19,668	17,168	23,413	31,238	67,492	71,879	70,825	55,972	51,301	37,481	28,592	52,342

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

2021 Standing Almond Acreage by County, Year Planted

	2012	2013	2014	2015	2016	2017	2018	2019*	2020-2021**	Bearing Grand Total	Non-Bearing Estimate	Grand Total
Alameda	0	0	146	377	165	0	0	722		688		1,410
Butte	435	585	692	938	2,094	1,541	1,753	436		32,422		32,858
Calaveras	0	0	0	100	22	0	0	0		172		172
Colusa	1,219	1,887	1,446	2,226	5,539	3,416	3,766	3,058		58,849		61,906
Contra Costa	0	0	0	0	55	235	18	28		314		342
Fresno	9,294	12,277	17,073	20,346	25,902	24,171	22,019	10,569		249,279		259,848
Glenn	1,596	2,016	2,434	467	5,443	4,530	4,254	747		49,027		49,774
Kern	6,436	8,854	9,564	11,500	19,360	12,247	18,825	11,168		194,303		205,471
Kings	1,448	2,209	2,540	4,021	6,958	2,429	3,246	2,365		34,099		36,464
Lake	0	0	0	0	0	0	0	0		37		37
Madera	4,532	7,731	12,093	7,720	11,329	11,625	7,183	5,494		141,565		147,058
Mariposa	0	0	0	0	0	0	0	0		4		4
Merced	3,487	4,935	10,502	7,312	11,056	8,341	13,628	9,384		134,754		144,138
Placer	0	0	21	0	1,032	0	713	250		1,765		2,015
Riverside	0	0	0	0	0	0	0	0		6		6
Sacramento	0	0	68	185	750	172	794	4		1,992		1,996
San Joaquin	3,130	4,042	7,306	4,427	7,665	7,126	9,227	3,649		76,185		79,834
San Luis Obispo	0	0	31	0	0	3	0	0		2,226		2,226
Shasta	0	0	0	0	0	0	0	0		5		5
Solano	13	181	2,657	4,863	4,542	2,530	1,884	564		19,551		20,116
Stanislaus	6,743	9,857	12,554	9,197	12,512	9,277	12,989	8,961		170,900		179,860
Sutter	60	366	380	437	2,552	404	2,022	1,414		12,107		13,521
Tehama	510	1,211	1,438	655	3,506	772	1,684	420		17,051		17,472
Tulare	1,964	1,081	7,991	7,681	11,712	5,434	10,404	3,120		71,359		74,480
Yolo	537	2,657	3,990	4,203	5,451	3,909	2,833	951		39,165		40,116
Yuba	0	224	164	216	345	40	245	169		1,934		2,103
Grand Total	41,405	60,112	93,089	86,872	137,990	98,201	117,488	63,473		1,309,759	352,875	1,662,633

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

*The county level, non-bearing acreages for 2019 are approximately 75% spatially mapped and age-verified orchards. The remaining 2019 acreages are numerically estimated and partitioned across counties according to the spatially mapped acreage and ground truthing during 2021. While bearing acreage mapping has been validated with an accuracy of 98.8%, non-bearing numerical acreage estimates should be understood to have an estimated +/-10% potential variability.

**The estimated non-bearing acreages for 2020 and 2021 are numeric estimates only, however based on extensive ground truthing, image analysis, and other lines of evidence. While bearing acreage mapping has been validated with an accuracy of 98.8%, non-bearing numerical acreage estimates should be understood to have an estimated +/-10% potential variability.

2021 REMOVALS UPDATE

In cooperation with the Almond Board of California

Released: November 15, 2021



RESULTS

Each year Land IQ produces an initial bearing acreage estimate in April, which includes a removals analysis as of March 31, 2021. In addition to the spatial analysis, a numerical estimate of orchards to be removed between April 1, 2021 and August 31, 2021 was provided based on actual ground truthing, historical analyses, and current conditions.

The months following brought extreme drought and significant water supply issues, forcing growers to make decisions related to reducing water usage and accelerating planned removals. As a result, Land IQ has performed an additional analysis to determine how many acres were removed between March 31, 2021 and August 31, 2021. Land IQ also identified orchards that were in various degrees of abandonment.

As a result, the 2021 removals estimate was updated:

- 44,303 - Acres removed: September 1, 2020 - March 31, 2021
- 12,646 - Acres removed: April 1, 2021 - August 31, 2021
- 56,949 - Total Acres removed in 2021 crop year

Considering abandoned orchards may have the ability to recover dependent on conditions, the number of acres in various degrees of abandonment was also conducted:

- 25,383 - Stressed in WY2021
- 7,111 - Abandoned in WY2021
- 3,769 - Long Term Abandoned

Table 1. Removed and Abandoned Acreage by County

County	Removed Acreage	Abandoned Acreage	County	Removed Acreage	Abandoned Acreage
Alameda	0	0	Placer	0	0
Butte	1,532	283	Riverside	0	6
Calaveras	0	17	Sacramento	97	1
Colusa	2,035	220	San Joaquin	1,960	306
Contra Costa	0	5	San Luis Obispo	0	2,205
Fresno	11,423	12,052	Shasta	0	2
Glenn	3,913	139	Solano	100	300
Kern	12,851	8,316	Stanislaus	6,384	1,868
Kings	789	3,006	Sutter	267	41
Lake	0	37	Tehama	508	23
Madera	6,541	2,751	Tulare	2,035	1,247
Mariposa	0	0	Yolo	510	898
Merced	6,065	2,500	Yuba	30	9

DEFINITIONS

The spatial analyses of removed and abandoned orchards resulted in varied conditions among orchards. As a result, Land IQ has defined these different conditions:

Removed Orchards

Orchards that were removed between September 1, 2020 and August 31, 2021.

Abandoned Orchards

Orchards that were in various levels of abandonment:

- **Stressed - WY2021** - These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in Normalized Difference Vegetative Index (NDVI) in the late summer or early fall, but have likely been irrigated for most of the year. This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment. Although not always true, it is assumed that most of these orchards will produce in future years, however will be monitored
- **Abandoned - WY2021** - These orchards are clearly abandoned within the 2021 crop year and appear not to have been irrigated for most or all of the year.
- **Long Term Abandoned** - These orchards have been abandoned prior to the 2021 water year, but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	1984				1985				1986			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	504	16	183	4	0	0	0	0	0	0	0	0
Calaveras	0	8	0	5	0	0	0	0	0	0	0	0
Colusa	453	0	0	0	0	0	0	0	0	0	0	0
Contra Costa	0	0	0	3	0	0	0	0	0	0	0	0
Fresno	139	4	46	0	10	0	0	0	0	0	0	0
Glenn	41	6	0	4	0	0	0	0	0	0	0	0
Kern	126	76	0	0	77	0	0	0	0	0	0	0
Kings	0	0	0	0	0	0	0	0	0	0	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	157	0	19	0	37	0	0	0	0	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	1,077	236	2	34	29	0	0	0	67	0	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	1	0	0	0	0	0	0	0	0
San Joaquin	476	0	4	4	28	0	0	0	0	0	0	0
San Luis Obispo	0	45	0	30	0	0	0	19	0	21	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	19	11	0	12	0	0	0	0	0	0	0	0
Stanislaus	648	66	0	79	35	0	0	0	48	0	10	6
Sutter	97	0	0	0	26	0	0	0	0	0	0	0
Tehama	180	0	0	0	0	0	0	0	0	0	0	0
Tulare	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	8	41	0	33	0	0	0	0	0	1	0	0
Yuba	25	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3,950	509	254	208	243	0	0	19	115	22	10	6

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year. This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	1987				1988				1989			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	28	0	0	0	28	0	4	0	6	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	0	0	0	0	0	0	0	0	9	0	0	5
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	0	0	0	0	21	0	65	1	292	31	0	0
Glenn	0	0	0	0	2	0	0	6	0	0	0	0
Kern	0	0	0	0	0	0	0	0	15	0	0	0
Kings	0	0	0	0	0	0	0	0	0	0	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	74	0	0	0	13	0	0	0	0	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	11	0	0	0	96	21	0	0	149	0	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	43	0	0	0	55	0	0	0	9	0	0	0
San Luis Obispo	0	0	0	24	0	0	0	9	0	0	0	31
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	0	4	0	7	0	0	0	5
Stanislaus	112	0	0	6	77	0	0	38	75	0	0	74
Sutter	0	0	0	0	0	0	0	0	0	0	0	0
Tehama	0	0	0	0	0	0	0	0	0	0	0	0
Tulare	0	0	0	0	0	0	0	0	26	0	0	0
Yolo	0	0	0	0	0	0	0	3	7	0	0	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	268	0	0	30	291	25	70	63	587	31	0	114

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year. This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	1990				1991				1992			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	51	0	0	0	32	0	0	0	0	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	159	0	0	12	16	0	0	0	65	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	44	1	20	0	35	0	0	0	40	311	0	4
Glenn	60	0	0	4	50	0	0	0	62	0	0	0
Kern	0	0	0	0	0	48	0	0	0	78	0	2
Kings	0	0	0	0	0	0	0	0	0	0	0	0
Lake	0	5	0	7	0	0	0	0	0	0	0	0
Madera	46	86	0	0	90	0	0	0	92	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	465	25	0	3	141	0	0	0	103	0	0	18
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	12	0	0	0	43	2	7	0	164	0	0	0
San Luis Obispo	0	0	0	59	0	0	0	6	0	0	0	45
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	17	0	25	6	0	0	0	0	0	0	0
Stanislaus	205	0	0	3	118	82	0	4	325	0	0	5
Sutter	10	0	0	13	0	0	0	0	0	0	0	0
Tehama	0	0	0	0	0	0	0	0	0	0	0	0
Tulare	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	0	0	0	11	0	0	0	0	36	0	0	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1,054	134	20	138	531	132	7	10	886	389	0	73

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	1993				1994				1995			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	0	0	3	0	0	0	0	0	90	0	0	0
Calaveras	0	5	0	0	0	0	0	0	0	0	0	0
Colusa	44	0	0	0	175	37	0	0	0	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	144	163	0	0	138	236	17	0	178	0	0	0
Glenn	0	0	0	0	356	0	0	0	189	0	0	17
Kern	0	24	77	0	1,547	2	0	3	22	0	0	0
Kings	0	0	0	0	0	0	0	0	0	0	0	0
Lake	0	9	0	16	0	0	0	0	0	0	0	0
Madera	551	0	75	0	405	0	0	1	667	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	322	7	0	0	448	42	0	0	60	90	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	1	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	95	0	0	0	121	0	0	0	141	2	0	0
San Luis Obispo	0	0	0	12	0	0	0	1,723	0	0	0	138
Shasta	0	2	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	0	0	0	0	0	0	0	0
Stanislaus	971	233	28	0	328	0	0	35	245	0	0	43
Sutter	0	0	0	0	0	0	0	0	49	0	0	0
Tehama	0	0	0	0	96	0	0	0	19	0	0	0
Tulare	54	0	0	0	0	0	0	0	0	0	0	0
Yolo	0	94	0	162	0	0	0	0	0	0	0	1
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2,182	536	183	190	3,614	316	17	1,763	1,660	92	0	199

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year. This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	1996				1997				1998			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	37	0	0	0	239	0	0	2	106	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	155	0	0	0	303	0	0	0	181	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	940	19	28	5	960	538	32	0	1,210	847	0	0
Glenn	89	0	0	0	127	0	0	0	2	0	0	0
Kern	803	74	0	0	817	0	57	0	2,661	260	65	0
Kings	0	0	0	0	0	87	0	0	0	30	529	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	397	52	0	41	999	24	51	0	797	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	522	14	0	0	453	0	0	0	637	138	4	1
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	188	0	0	0	60	0	0	0	17	2	0	10
San Luis Obispo	0	0	0	3	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	0	0	0	0	0	0	0	0
Stanislaus	597	0	7	1	484	15	0	9	398	4	148	0
Sutter	0	0	0	0	11	0	0	0	0	0	0	2
Tehama	18	3	4	0	0	0	0	0	51	0	0	0
Tulare	151	0	0	0	77	0	0	0	85	149	26	0
Yolo	13	0	0	0	70	0	13	0	0	0	7	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3,911	162	38	50	4,599	664	153	11	6,145	1,431	779	13

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	1999				2000				2001			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	156	0	0	0	0	0	0	0	5	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	322	0	0	0	0	0	0	0	18	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	2
Fresno	1,577	392	150	0	885	473	150	57	473	214	127	0
Glenn	755	0	0	0	35	0	0	0	235	0	0	0
Kern	2,757	39	97	0	688	0	14	0	594	114	0	0
Kings	0	75	293	0	0	0	0	0	0	138	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	152	115	0	0	75	623	0	3	28	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	198	28	0	0	115	0	0	0	161	0	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	43	0	0	15	89	0	0	0	26	0	0	0
San Luis Obispo	0	0	0	0	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	0	0	0	0	0	0	0	0
Stanislaus	565	4	267	7	275	30	0	0	69	0	0	0
Sutter	0	0	1	0	0	0	0	0	0	0	0	0
Tehama	0	0	0	0	0	0	0	0	0	0	0	0
Tulare	54	0	0	0	524	151	0	0	0	35	0	0
Yolo	26	0	30	0	6	0	0	12	40	0	0	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	6,605	653	838	22	2,691	1,278	164	71	1,649	501	127	2

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	2002				2003				2004			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	0	0	0	0	0	0	0	0	72	8	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	0	0	0	0	3	0	0	0	85	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	205	1,574	108	0	59	566	0	0	441	1,224	0	33
Glenn	0	0	0	0	55	0	0	0	2	0	0	0
Kern	179	164	459	0	197	671	310	0	125	181	395	0
Kings	9	83	9	0	19	0	0	0	263	18	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	161	17	0	0	311	92	0	0	57	149	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	103	0	0	18	212	0	0	0	25	7	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	73	0	0	0	5	0	0	0	1	0	0	8
San Luis Obispo	0	0	0	0	0	0	0	9	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	36	0	0	0	0	39	0	0	30	0	0	0
Stanislaus	216	0	0	0	47	0	0	0	68	39	0	38
Sutter	0	0	0	0	0	0	0	0	26	0	0	0
Tehama	0	0	0	0	0	0	0	8	0	0	0	0
Tulare	96	12	0	0	25	0	0	0	232	0	0	0
Yolo	13	0	0	23	13	0	0	0	122	0	0	25
Yuba	0	0	0	0	0	0	0	0	5	9	0	0
Grand Total	1,092	1,852	576	40	945	1,368	310	17	1,555	1,635	395	104

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	2005				2006				2007			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	0	0	0	0	7	0	0	0	0	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	18	0	0	0	0	0	0	0	0	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	214	1,245	0	0	501	1,232	0	0	108	241	30	1
Glenn	515	0	0	0	790	0	0	0	4	0	0	0
Kern	271	151	705	0	504	338	545	2	795	0	1,242	0
Kings	84	0	0	0	201	240	187	0	0	252	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	420	0	9	0	227	76	4	0	192	0	21	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	59	186	0	0	47	16	13	0	73	47	21	16
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	6	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	95	0	0	0
San Joaquin	43	0	0	0	25	0	0	6	15	39	0	0
San Luis Obispo	0	0	0	0	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	15	0	0	0	48	0	0	0	0	0	0
Stanislaus	166	64	0	0	19	109	0	0	1	0	0	0
Sutter	0	0	0	0	3	0	0	0	35	0	0	0
Tehama	0	0	0	0	0	0	0	0	0	0	0	0
Tulare	216	60	0	0	387	233	0	0	3	99	0	0
Yolo	82	0	0	4	0	0	0	0	10	13	0	4
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2,088	1,723	714	4	2,711	2,298	748	8	1,330	692	1,314	21

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	2008				2009				2010			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	60	1	14	44	0	0	0	0	14	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	9	0	0	8	7	0	0	7	0	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	18	132	0	1	10	0	0	0	44	0	0	0
Glenn	516	84	0	0	0	0	0	0	0	0	0	1
Kern	99	112	81	0	273	56	0	0	32	57	0	0
Kings	64	167	0	0	97	187	0	0	39	24	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	320	185	0	0	0	0	0	0	0	118	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	31	16	2	0	14	202	0	0	24	11	0	3
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	0	0	0	0	2	0	0	0	38	0	0	0
San Luis Obispo	0	0	0	0	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	0	0	0	0	0	0	0	0
Stanislaus	21	0	0	0	9	0	0	0	10	17	0	18
Sutter	5	0	0	0	0	0	0	9	0	0	0	0
Tehama	106	5	0	3	0	0	0	0	0	0	0	0
Tulare	0	0	0	0	0	77	0	0	0	0	0	0
Yolo	0	52	0	222	0	0	0	3	0	0	0	18
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1,248	752	97	278	414	522	0	20	202	228	0	39

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	2011				2012				2013			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	2	0	0	0	0	0	0	0	9	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	0	0	0	0	0	0	0	0	9	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	152	140	0	0	0	132	0	0	99	212	0	0
Glenn	0	0	0	0	4	0	0	0	0	0	0	0
Kern	205	315	0	0	0	0	0	0	0	0	0	0
Kings	0	67	0	0	0	20	0	0	0	0	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	48	164	93	35	118	62	0	0	1	375	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	0	168	0	4	0	13	0	0	37	50	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	1	0	0	0	1	0	0	4	36	0	0	0
San Luis Obispo	0	0	0	0	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	0	0	0	0	0	0	0	0
Stanislaus	0	38	0	0	44	4	0	2	0	4	0	18
Sutter	0	0	0	0	0	0	0	0	0	0	17	0
Tehama	0	0	0	0	0	0	0	0	0	0	0	0
Tulare	0	0	0	0	0	39	0	0	0	54	0	0
Yolo	56	36	0	20	0	0	0	0	0	0	0	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	463	927	93	59	168	271	0	6	192	695	17	18

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	2014				2015				2016			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	0	0	0	0	14	0	0	0	3	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	1	71	0	70	1	0	0	0	2	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	450	359	0	0	830	304	0	0	403	241	0	14
Glenn	0	0	0	0	1	0	0	0	10	0	0	0
Kern	1	51	58	0	36	178	0	0	8	427	23	0
Kings	1	0	0	0	5	285	0	0	0	233	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	0	45	0	0	1	0	0	0	4	65	0	1
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	65	39	0	0	5	174	0	0	309	224	0	0
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	17	43	0	0	10	38	0	0	2	18	0	0
San Luis Obispo	0	14	0	17	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	0	0	0	0	5	0	0	0	0	145	0	0
Stanislaus	98	6	12	0	20	24	0	15	49	5	0	0
Sutter	0	0	0	0	0	0	0	0	5	0	0	0
Tehama	0	0	0	0	0	0	0	0	38	0	0	0
Tulare	62	123	0	0	1	121	19	0	20	14	0	0
Yolo	0	0	0	0	0	0	0	0	0	65	0	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	695	750	70	87	929	1,125	19	15	853	1,436	23	14

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

Stressed WY 2021: These orchards show visual stress, but do not appear fully abandoned. Many orchards have shown a drop in NDVI in the late summer or early fall, but have been watered for most of the year.

This also includes relatively young orchards that have shown a drop in vigor, but do not have high enough canopy coverage to clearly identify abandonment.

Abandoned WY 2021: These orchards are clearly abandoned and not appear to have been watered for most of the 2021 crop year.

Abandoned Long Term: These orchards look to have been abandoned prior to the 2021 water year but have not yet been removed.

2021 Removed and Abandoned Acreage Estimates by Year Planted

	2017				2018				2019			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	37	0	0	2	0	0	0	0	0	0	0	0
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	2	11	0	0	0	0	0	0	0	0	0	0
Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0
Fresno	86	21	0	0	716	0	0	0	0	0	0	0
Glenn	1	0	0	17	0	0	0	0	0	0	0	0
Kern	10	527	0	0	0	235	0	0	2	0	0	0
Kings	0	0	0	0	6	81	0	0	4	0	0	0
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	6	19	0	0	1	58	0	0	0	0	0	0
Mariposa	0	0	0	0	0	0	0	0	0	0	0	0
Merced	3	394	0	0	1	116	0	0	0	95	0	3
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	19	32	0	0	60	0	70	0	2	0	0	0
San Luis Obispo	0	0	0	0	0	0	0	0	0	0	0	0
Shasta	0	0	0	0	0	0	0	0	0	0	0	0
Solano	4	0	0	0	0	0	0	0	0	0	4	0
Stanislaus	5	60	0	0	26	92	0	7	0	62	0	26
Sutter	0	0	0	0	0	0	0	0	0	0	0	0
Tehama	0	0	0	0	0	0	0	0	0	0	0	0
Tulare	0	16	0	0	22	18	0	0	0	0	0	0
Yolo	2	5	0	0	1	0	0	0	0	0	0	0
Yuba	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	175	1,085	0	19	833	600	70	7	8	157	4	28

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

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2021 Removed and Abandoned Acreage Estimates by Year Planted

	2020				Total			
	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term	Removed	Stressed WY 2021	Abandoned WY 2021	Abandoned Long Term
Alameda	0	0	0	0	0	0	0	0
Butte	32	0	1	0	1,532	25	206	52
Calaveras	0	0	0	0	0	13	0	5
Colusa	0	0	0	0	2,035	118	0	102
Contra Costa	0	0	0	0	0	0	0	5
Fresno	0	311	0	0	11,423	11,164	772	115
Glenn	12	0	0	0	3,913	90	0	50
Kern	6	0	0	0	12,851	4,180	4,128	7
Kings	0	0	0	0	789	1,987	1,018	0
Lake	0	0	0	0	0	14	0	23
Madera	1	73	0	0	6,451	2,399	271	81
Mariposa	0	0	0	0	0	0	0	0
Merced	0	0	0	0	6,065	2,358	42	101
Placer	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	6	0	0
Sacramento	0	0	0	0	97	0	0	1
San Joaquin	0	0	0	0	1,960	177	81	47
San Luis Obispo	0	0	0	0	0	81	0	2,124
Shasta	0	0	0	0	0	2	0	0
Solano	0	0	0	0	100	279	4	48
Stanislaus	9	7	0	0	6,384	964	472	431
Sutter	0	0	0	0	267	0	17	24
Tehama	0	0	0	0	508	8	4	10
Tulare	0	0	0	0	2,035	1,201	46	0
Yolo	6	0	0	0	510	307	50	541
Yuba	0	0	0	0	30	9	0	0
Grand Total	65	391	1	0	56,949	25,383	7,111	3,768

Source: Land IQ. California Statewide Almond Mapping - 2021. Based on data from USDA National Agricultural Imaging Program (NAIP), USGS Landsat, and other private imagery resources.

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