## 2025 STANDING ACREAGE - FINAL ESTIMATE

In cooperation with the Almond Board of California

Released: November 19, 2025

#### **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 orchards that are less than 3 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 2025 estimate is 98.8% accurate.

As a result, the 2025 acreage estimate is:

- 104,900 non-bearing acres
   (defined as those orchards planted in 2023, 2024, and 2025)
- 1,401,097 bearing acres
   (defined as those orchards planted in 2022 and earlier)
- 1,505,997 total acres (defined as total standing acres during the growing season of 2025)
- 19,927 potentially abandoned acres
   (defined as orchards experiencing high levels of stress but included in the bearing and total acres above)

There is variation in the number of bearing acres between the initial and final estimates. This is the result of additional acreage (planted in 2021 or before) identified between the initial and final analyses. Additionally, the final total removed acreage was less than originally estimated. These two values account for most of the difference in final bearing acreage compared to the initial estimate.

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:

- 7 percent of California's almond orchards were 1-3 years old,
- 46 percent were between 4 and 10 years old,
- 34 percent were between 11 and 20 years old,
- 8 percent were between 21 and 25 years old, and
- 5 percent were over 25 years old.





### **APPROACH**

Land IQ draws upon 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 as the basis for 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.

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	3,713	14	67	150	152	175	267	65	163	254	118	246
Calaveras	3	0	0	0	0	0	0	0	0	5	0	0
Colusa	536	6	50	24	16	13	192	42	19	55	211	110
Contra Costa	3	0	0	0	0	0	0	0	0	0	0	0
Fresno	140	0	0	1	78	108	162	117	106	63	193	38
Glenn	815	0	58	12	6	170	136	62	130	401	357	120
Kern	21	2	0	0	0	77	0	46	56	75	79	0
Kings	0	0	0	0	0	0	0	0	0	0	0	0
Lake	0	0	0	0	0	0	12	0	0	32	0	0
Madera	1,423	2	76	4	12	27	39	105	23	337	407	302
Merced	5,079	192	124	244	305	462	685	363	503	634	357	513
Placer	4	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	21	0	0	0	0	2	0	0	0	0	0	0
San Diego	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	3,108	195	64	112	154	221	189	93	186	329	152	223
San Luis Obispo	329	19	15	24	27	31	49	6	35	5	1,587	120
Santa Barbara	0	0	0	0	0	0	0	0	0	0	0	0
Shasta	3	0	0	0	0	0	0	0	0	0	0	0
Solano	190	0	0	0	11	3	35	0	28	86	0	18
Stanislaus	6,665	180	147	224	254	144	560	506	339	967	1,010	606
Sutter	196	36	2	0	0	14	65	20	1	43	104	0
Tehama	345	7	23	0	0	11	21	0	0	0	4	0
Tulare	151	0	0	0	0	0	2	78	25	78	152	78
Yolo	105	0	0	0	29	18	114	0	3	267	0	12
Yuba	0	0	0	0	0	0	0	0	0	36	2	0
Grand Total	22,852	652	626	795	1,044	1,475	2,528	1,503	1,617	3,669	4,734	2,386

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alameda	0	0	0	0	0	0	0	0	0	0	0	0
Butte	94	143	647	370	378	248	326	270	720	893	474	670
Calaveras	0	0	0	0	0	0	0	0	0	0	0	0
Colusa	154	824	313	1,189	838	1,210	798	1,455	4,831	3,317	3,093	2,076
Contra Costa	0	0	6	0	0	0	0	0	0	0	0	0
Fresno	195	1,052	287	566	1,594	1,466	3,457	2,781	5,549	9,088	10,020	6,874
Glenn	172	327	77	248	188	325	508	1,100	1,520	2,096	1,777	1,226
Kern	414	182	1,065	611	239	120	1,003	745	3,570	8,317	8,139	4,687
Kings	0	1	540	292	0	0	484	0	467	158	674	433
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	418	466	760	677	859	748	1,241	2,269	4,513	4,132	6,416	5,698
Merced	785	967	784	1,033	1,162	1,401	1,421	2,372	4,917	4,921	5,403	6,801
Placer	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	6	0
Sacramento	0	0	2	0	0	0	0	2	0	0	0	0
San Diego	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	698	575	500	1,020	632	987	877	1,100	2,179	1,715	1,755	1,697
San Luis Obispo	3	0	0	0	0	0	0	9	1	0	0	0
Santa Barbara	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	5	127	58	112	146	34	85	129	426	313	80
Stanislaus	752	1,079	2,099	1,503	1,484	1,206	2,406	2,124	8,626	6,033	4,796	5,019
Sutter	24	514	88	95	74	83	0	126	665	198	494	605
Tehama	128	97	108	145	213	238	221	106	489	224	510	1,107
Tulare	94	35	23	540	0	19	180	357	1,064	1,140	1,378	1,527
Yolo	0	2	87	250	106	180	79	317	776	708	1,345	1,044
Yuba	0	0	0	0	47	0	0	89	21	25	212	3
<b>Grand Total</b>	3,931	6,270	7,513	8,598	7,926	8,376	13,035	15,309	40,036	43,390	46,804	39,547

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Alameda	0	0	0	0	0	0	146	375	166	0	185	540
Butte	2,864	1,186	1,179	646	331	553	726	811	2,128	1,445	2,146	1,046
Calaveras	0	33	0	0	0	0	0	100	24	0	0	0
Colusa	2,832	2,402	2,063	2,055	1,219	1,883	1,299	2,208	5,510	3,406	3,761	4,074
Contra Costa	0	0	0	0	0	0	0	0	55	235	18	133
Fresno	5,250	4,984	5,210	7,744	8,639	11,947	16,296	19,281	24,662	23,855	21,774	14,785
Glenn	2,957	1,136	610	2,215	1,565	1,886	2,432	467	5,565	4,637	4,420	2,566
Kern	4,668	5,428	4,252	8,134	6,221	7,769	9,293	10,896	19,143	12,163	18,689	12,034
Kings	286	352	727	336	1,312	1,969	2,338	3,643	6,728	2,331	2,976	1,799
Lake	0	0	0	0	0	0	0	0	0	0	0	0
Madera	10,617	5,299	2,803	8,673	4,208	7,563	11,834	7,632	11,260	11,524	7,182	7,943
Merced	2,311	3,005	2,369	3,623	3,092	4,847	10,527	7,150	10,600	8,295	13,967	12,386
Placer	0	0	0	0	0	0	0	0	1,024	0	882	306
Riverside	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	0	0	2	0	0	0	68	185	915	202	1,393	284
San Diego	4	0	0	0	0	0	0	0	0	0	0	0
San Joaquin	1,505	1,232	1,271	2,931	2,946	4,028	6,990	4,361	7,529	7,197	9,233	8,567
San Luis Obispo	0	0	0	0	17	0	14	0	0	0	20	0
Santa Barbara	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	25	121	38	126	13	177	2,669	4,866	4,530	2,543	1,869	1,859
Stanislaus	5,245	4,167	3,426	8,378	6,379	9,684	12,422	8,685	12,304	9,170	13,420	11,532
Sutter	161	377	183	355	61	349	380	465	2,565	400	2,074	1,995
Tehama	1,102	341	90	298	508	1,227	1,437	540	3,393	817	2,066	1,197
Tulare	1,244	1,756	2,191	2,773	1,880	1,071	7,464	7,441	11,221	4,762	10,165	3,549
Yolo	939	1,624	397	1,743	718	2,630	3,947	4,085	5,482	3,598	3,537	1,431
Yuba	9	0	7	31	0	223	164	215	343	56	532	731
Grand Total	42,018	33,443	26,818	50,061	39,109	57,806	90,447	83,407	135,147	96,636	120,311	88,758

	2020	2021	2022	2023*	2024-2025**	Bearing	Non-Bearing	
	2020	2021		2023	2024-2023	Grand Total***	Estimate	Grand Total***
Alameda	132	0	0	0		1,544		1,544
Butte	1,417	1,172	1,298	853		29,566		30,418
Calaveras	0	45	0	0		211		211
Colusa	3,705	2,044	2,186	917		62,022		62,940
Contra Costa	1,039	239	455	8		2,182		2,190
Fresno	19,213	15,053	5,937	4,050		248,563		252,613
Glenn	5,708	4,614	4,520	1,952		57,129		59,081
Kern	11,362	7,884	7,195	2,464		174,579		177,042
Kings	2,504	1,595	1,234	97		33,181		33,279
Lake	0	0	0	0		45		45
Madera	7,223	5,942	3,416	1,366		144,074		145,440
Merced	12,036	8,409	6,412	2,994		150,457		153,452
Placer	1,705	321	62	24		4,305		4,329
Riverside	0	0	0	0		6		6
Sacramento	557	154	978	104		4,765		4,868
San Diego	0	0	0	0		4		4
San Joaquin	15,974	6,229	5,389	4,742		104,144		108,886
San Luis Obispo	0	0	0	0		2,311		2,311
Santa Barbara	0	0	0	0		0		0
Shasta	0	0	0	0		3		3
Solano	2,104	1,567	829	734		25,223		25,958
Stanislaus	11,988	7,404	12,157	4,805		185,089		189,893
Sutter	2,955	1,741	2,813	863		20,319		21,182
Tehama	2,880	1,134	1,263	777		22,295		23,072
Tulare	9,891	6,179	2,671	617		81,179		81,796
Yolo	3,788	3,196	1,159	1,079		43,717		44,796
Yuba	432	914	93	79		4,184		4,263
<b>Grand Total</b>	116,613	75,839	60,067	28,527		1,401,097	104,900	1,505,997

<sup>\*</sup>The county level, non-bearing acreages for 2023 are approximately 75% spatially mapped and age-verified orchards. The remaining 2023 acreages are numerically estimated according to the spatially mapped acreage and ground truthing during 2025. 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.

<sup>\*\*</sup>The estimated non-bearing acreages for 2024 and 2025 are numeric estimates only and are 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.

<sup>\*\*\*</sup> The Bearing Grand Total and Grand Total include standing acreage that is considered stressed or abandoned and may not be in full production. Please refer to the Removals Report for more information.

# 2025 REMOVALS, STRESSED, & ABANDONED UPDATE

In cooperation with the Almond Board of California

Released: November 19, 2025

#### **RESULTS**

Each year Land IQ produces an initial bearing acreage estimate in April, which includes a removals analysis as of March 31, 2025. In addition to the spatial analysis, a numerical estimate of orchards to be removed between April 1, 2025 and August 31, 2025 was provided based on actual ground truthing, historical analyses, and current conditions.

Beginning in 2021, due to extreme drought and significant water supply issues, Land IQ began performing an additional analysis to determine how many acres were removed during the crop year or in various degrees of abandonment.

As a result, the 2025 removals estimate was updated:

- 37,149 Acres removed: September 1, 2024 March 31, 2025
- 12,048 Acres removed: April 1, 2025 August 31, 2025
- 49,197 Total acres removed in 2025 crop year

The average age of removed orchards in the 2025 crop year was 22 years old.

Considering abandoned orchards may have the ability to recover dependent on conditions, the number of acres in various degrees of abandonment was also analyzed. These orchards are included in the standing acreage numbers provided, as they have not been removed.

- 16,093 acres Tier 1A
- 4,771 acres Tier 2
- 2,634 acres Tier 1B
- 15,156 acres Tier 3



# California almonds\* Almond Board of California

#### DEFINITIONS

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

#### **Removed Orchards**

Orchards that were removed between September 1, 2024 and August 31, 2025.

#### **Potentially Abandoned Orchards**

Orchards that were in various levels of abandonment:

- Tier 1A Orchards show new level of low to moderate stress in the current water year, as compared to previous year.
- Tier 1B Orchards show low to moderate levels of stress in two or more consecutive water years.
- Tier 2 Orchards show moderate to high levels of stress in the current water year.
- Tier 3 Orchards show moderate to high levels of stress in two or more consecutive water years.

County	Removed Acreage	Potentially Abandoned Acreage	County	Removed Acreage	Potentially Abandoned Acreage	County	Removed Acreage	Potentially Abandoned Acreage
Butte	2,347	256	Lake	0	45	Solano	465	137
Calaveras	0	5	Madera	3,411	1,250	Stanislaus	6,336	1,203
Colusa	2,332	315	Merced	4,941	3,158	Sutter	282	173
Contra Costa	554	9	Placer	131	0	Tehama	293	41
Fresno	7,148	4,275	Riverside	0	6	Tulare	3,423	717
Glenn	1,852	223	Sacramento	106	4	Yolo	841	893
Kern	10,890	2,766	San Joaquin	2,260	807	Yuba	2	2
Kings	1,585	1,356	San Luis Obispo	0	2,285	Total	49,197	19,927

	Total Crop Year 2024 - 2025											
	Removed	Tier 1A	Tier 1B	Tier 2	Tier 3							
Alameda	0	0	0	0	0							
Butte	2,347	22	195	51	204							
Calaveras	0	0	8	0	5							
Colusa	2,332	1,938	40	253	62							
Contra Costa	554	0	0	0	9							
Fresno	7,148	6,206	760	1,610	2,666							
Glenn	1,852	819	57	144	78							
Kern	10,890	897	44	414	2,352							
Kings	1,585	36	0	23	1,333							
Lake	0	0	0	0	45							
Madera	3,411	2,534	220	693	558							
Merced	4,941	732	221	240	2,918							
Placer	131	0	0	0	0							
Riverside	0	0	0	0	6							
Sacramento	106	0	0	0	4							
San Diego	0	0	0	0	0							
San Joaquin	2,260	879	319	428	379							
San Luis Obispo	0	0	25	0	2,285							
Santa Barbara	0	0	0	0	0							
Shasta	0	0	0	0	0							
Solano	465	74	10	11	126							
Stanislaus	6,336	1,147	423	262	940							
Sutter	282	6	6	103	71							
Tehama	293	0	46	0	41							
Tulare	3,423	649	155	511	206							
Yolo	841	150	102	27	867							
Yuba	2	4	3	0	2							
Total	49,197	16,093	2,634	4,771	15,156							

Tier 1A: Low to moderate stress observed in current water year.

Tier 1B: Low to moderate stress observed in two or more consecutive water years.

Tier 2: Moderate to high stress observed in current water year.

Tier 3: Moderate to high stress observed in two or more consecutive water years.