

CONSENT AGENDA

1. Minutes approval from December 10, 2024 meeting

CALIFORNIA CITRUS PEST AND DISEASE PREVENTION COMMITTEE MEETING

Meeting Minutes
Tuesday, December 10, 2024

Committee Members Present:

Kevin Ball	John C. Gless	Roger Smith
Franco Bernardi	Kurt Metheny	Ram Uckoo
Aaron Dillon	Dr. Etienne Rabe	Keith Watkins

Committee Members Absent:

Brad Carmen	Jim Gorden	Mark McBroom
Rod Radtke		

California Department of Food and Agriculture (CDFA) Staff:

Carl Baum	Anmol Joshi	David Phong
David Gutierrez	Lauren Murphy	Michael Soltero
Victoria Hornbaker	Keith Okasaki	Nilan Watmore

Guests:

Price Adams	Lisa Finke	Torun Nilwfer
Jim Cranney	Dr. Subhas Hajeri	Paige Shewmaker
Natalie DeAngelo Neal	Dan Kass	Ron Whitehurst
Jan Dietrick		

OPENING COMMENTS

Keith Watkins called the Citrus Pest and Disease Prevention Committee (CPDPC) meeting to order at 9:00 a.m. Keith Watkins welcomed the committee, staff, and members of the public participating. There was a quorum for the meeting.

PUBLIC COMMENTS

Roger Smith shared remarks on behalf of Mark McBroom, noting the success of the program as an original committee member, but encouraged the committee to evaluate what has worked and what has been accomplished to guide their discussions, considering resources and investments needed.

Lisa Finke of the Canine Detection Services shared that her dogs are available for ACP scouting throughout the winter.

Ron Whitehurst of Rincon-Vitova Insectaries shared remarks regarding the ability for HLB to be cured/reversed, encouraging the use of a holistic, whole-systems approach that builds upon integrated pest management and biocontrol to control HLB and the ACP, as laid out in the Roadmap for Sustainable Pest Management, and passed out studies to consider as the committee fleshed out the strategic plan.

Nilufer Torun shared a letter on behalf of Patty Pagaling, executive director of Transition to Organics, encouraging the division to explore additional research in biocontrol strategies.

Jan Dietrick of Rincon-Vitova Insectaries echoed Ron's sentiment about prioritizing biocontrol as a method of controlling the spread of the ACP and HLB.

APPROVAL OF CONSENT AGENDA ITEMS

The consent agenda contained the following items:

1. Minutes from the August 20, 2024 Committee meeting.

Motion: To approve the minutes on the Consent Agenda as presented.

First: Dr. Etienne Rabe

Second: Roger Smith

Motion Carries: The motion passed unanimously.

EXECUTIVE COMMITTEE REPORT

Service certificates for Bob Felts, Jr. and Craig Armstrong were provided for both their outstanding work and service on the CPDPC.

STRATEGIC PLANNING FACILITATED DISCUSSION

Strategic Plan Development and Input Review

Nuffer, Smith, Tucker (NST) presented a SWOT analysis of the division based on interviews with Committee members and additional stakeholders to fuel discussion of the division's strategic priorities. NST led the group in a review of elements of the division's current strategic plan, including the mission, vision, and strategic priorities. Discussion was held on recommended updates to be made to the mission, vision and strategic priorities for NST to utilize in the development of a new strategic plan. CDFA will then create specific work plans for each recommendation once the strategic plan is finalized.

Draft Mission

The division's mission was revised to reflect the following draft: To protect California's commercial citrus industry from invasive pests and diseases through the development and implementation of effective policies and regulations.

Draft Vision

The division's vision was revised to reflect the following draft: To keep California commercial citrus thriving in the face of emerging pest and disease threats.

Draft "North Star" for Huanglongbing

A "North Star" for Huanglongbing was determined as follows: Keep HLB from spreading in commercial groves.

Draft Strategic Priorities

Acknowledging each region in California has unique circumstances that can influence the division's ability to achieve its vision, the committee recommended the following strategic priorities and that they be approached from a regional perspective, with recommendations on long- and short-term plans.

Strategic Priority: Suppress ACP Populations

Short-Term Recommendations:

- a. Develop a strategic ACP suppression plan tailored to each region.
 - o Considerations should include:
 - a. ACP-infested vs. non-infested regions
 - b. Regional nuances (weather conditions, commodities grown, etc.)
 - c. Proximity to large commercial growing areas or dense residential areas
 - o The suppression plan should clearly lay out specific actions and operational activities per region, including:
 - o Tarping protocols and potential adjustments
 - o If surveying/trapping activities should be adjusted in certain regions
 - o Residential proximity to commercial citrus areas
 - o Develop a clear definition and/or map of each "region"
 - o The current ACP quarantine map may help serve as a guide for this development

Longer-Term Recommendations:

- b. Submit a request with Dr. Bodil Cass and work to identify organic ACP treatment options for effective suppression within HLB quarantine zones.

Strategic Priority: Detect and eradicate HLB-diseased trees

Commercial Groves:

Short-Term Recommendations:

- a. Collaborating with USDA, develop a commercial HLB response plan with a regional approach, including:
 - o A clear definition of what the "tipping point" looks like for HLB infestation in commercial groves
 - o Approaches should include recommendations for treatments, tree removal, delimitation surveys and sampling, etc.
- b. Develop recommendations for non-regulatory sampling opportunities for industry members to consider.

- c. Determine the implications of what a statewide HLB quarantine may look like for California and evaluate the pros and cons, including:
 - Impacts on the import of nursery stock and/or fruit into California from other states under a statewide quarantine.

Longer-Term Recommendations:

- d. Collaborate with USDA to determine opportunities around changes to existing federal requirements, including:
 - Mandatory tree removal in commercial groves (see “tipping point” definition above)
 - Reduction of quarantine area (less than 5-mi.)
 - Defining metrics for the expiration of HLB- and ACP-quarantine areas (see Priority C)
- e. Review the recent adjustments made to the commercial risk-based survey and evaluate what areas may need to be adjusted to accurately reflect the current HLB environment in California and other considerations mentioned above (i.e., regional HLB response plan approach).
 - Consider outreach implications if growers are identified to be in high-risk areas (align with Strategic Priority D)
- f. Evaluate opportunities for PCDs to support survey/trapping or other activities.

Residential Areas:

Short-Term Recommendations:

- a. Develop a strategic HLB response plan tailored to unique residential scenarios/geographies, taking into consideration proximity to commercial groves and “hot spots” of HLB infections.
 - Work to define:
 - What is considered “near” a commercial grove?
 - How a “hot spot” would be quantified?
 - How would a “buffer area” around a commercial grove be measured?
 - Plans should consider a strategic IPM approach (particularly in “hot spot” areas), and varying delimitation areas

Longer-Term Recommendations:

- b. Review the recent adjustments made to the residential risk-based survey and evaluate what areas may need to be adjusted to accurately reflect the current HLB environment in California and other considerations mentioned above (i.e., regional HLB response plan approach).
 - The following definitions determined above should be considered: proximity to commercial groves, hot spot areas and buffer area measurements

Strategic Priority: Control movement of psyllids around the state; enforce regulations

Short-Term Actions

- a. Evaluate current mitigations for bulk citrus movement and determine opportunities for regional adjustments to allow for ease of fruit movement while accounting for regional risk factors (i.e., moving from a low-risk area to a high-risk area, and vice versa).
- b. Develop a list of pros and cons for a regionalized approach for tarping mitigations regarding bulk citrus movement across the state, considering the following:
 - What enforcement challenges will be presented?
 - Merits of post-processing/packed fruit and tarping
 - Cost analysis

Longer-Term Actions

- c. In collaboration with USDA, define metrics for expiration of ACP-quarantine areas (see Priority B).
- d. Evaluate the current nursery regulations within an HLB-quarantine zone (i.e., tree sales to residents) and discuss the implications of lessening or adjusting.

Strategic Priority: Outreach and Collaboration

Short-Term Actions

- a. Develop an approach for the reorganization of regional Grower Liaisons and how current Grower Liaison responsibilities may be transferred to other entities, including:
 - Movement of responsibilities to CDFA staff
 - Movement of regional grower communications to PCDs, task forces, packinghouses and other industry partners
 - Movement of regional Grower Liaison responsibilities to one statewide Grower Liaison (following a similar format to Pierce's Disease)

Longer-Term Actions

- b. Align the Division's outreach plan and contractor activities to mirror the outcomes of the other Strategic Priorities, as needed.
 - Explore additional tactics for engaging with ag-focused organizations, including nurseries, Ag in the Classroom and others.

Strategic Priority: Operational Excellence

Short-Term Actions

- a. Evaluate the implications of moving back to a "program" and no longer operating as a "division," including:
 - A cost analysis/economic evaluation
 - Impacts to how being a "program" would affect or change the Division's current operations, including:
 - What would it look like if the division was absorbed under the Plant Health and Pest Prevention Services Division? PDEP?

- b. Identify new options and/or improve accounting systems to monitor fiscal spending.
- c. Continue efforts to improve communications with Committee members, including clarity on what staff needs from the committee, providing access to key program data via dashboards and other updates.
- d. Create an official onboarding process and responsibilities document for new Committee members, which may include:
 - Committee meeting responsibilities
 - Managing expectations for state operations and processes
 - Division staff may work with the outreach contractor for support in the development

Longer-Term Actions

- e. Once the Strategic Plan is finalized, evaluate the structure, membership and governance of the Committee in full to ensure operational efficiencies.
- f. Identify what the “tipping point” for the ACP and HLB may be for when the division’s current regulatory authority is no longer needed, and a full restructure of the division’s Action Plan and/or Committee structure may occur.
 - Consider: What would be the implications of becoming a non-governmental, quasi-marketing order (similar to Citrus Research Board) and what milestones would need to be met to realize a benefit?

It was agreed upon by the group that CDFA staff will incorporate the Science Subcommittee Technical Review Team Action Items into the strategic plan and make key action items ladder up to the strategic priorities. Staff will identify anything that doesn’t neatly fit in or overflows and will circle back on how to incorporate it.

The plans, as recommended by the Committee, will be distributed via email by NST for additional feedback and input from committee members.

OTHER ITEMS, CLOSING COMMENTS AND ADJOURNMENT


The meeting adjourned at 2:30 p.m.



CPDPC
January 2025
Results

CPDPC Finance Subcommittee

February 18, 2025

A large metal trailer is filled to the brim with ripe, bright orange oranges. The oranges are piled high, filling the entire length of the trailer. The trailer is parked on a dirt road in a dry, hilly landscape. In the background, there are rolling hills, scattered trees, and a range of mountains under a clear sky. The scene suggests a harvest or transport of citrus fruit in a rural, arid region.

FY 23-24 Expenditures

FY 23-24* October, Nov, & Dec 2024 Expenditures Close

#	Group	Region	Activity	Committee Approved 2023- 24 Budget	Remaining 2023- 24 Budget	Oct., Nov., Dec. 2024 Expenditures per FI\$Cal*	Year to Date Expenditures per FI\$Cal	Oct. & Nov. 2024 Encumbrance Changes	Year to Date Encumbrances
1	ACP Mgmt	Central	Survey	\$3,688,353	\$ 411,868	\$ (96,343)	\$ 3,276,485	\$ (171,825)	\$ -
2	ACP Mgmt	Central	Treatment	\$1,881,438	\$ 1,696,042	\$ -	\$ 185,397	\$ -	\$ -
3	ACP Mgmt	Northern	Survey	\$1,759,845	\$ (168,615)	\$ (8,954)	\$ 1,928,461	\$ (2,227)	\$ -
4	ACP Mgmt	Northern	Treatment	\$53,107	\$ 25,622	\$ -	\$ 27,485	\$ -	\$ -
5	ACP Mgmt	Statewide	Biocontrol	\$1,720,409	\$ (51,435)	\$ (4,382)	\$ 1,771,843	\$ (17,438)	\$ -
6	ACP Mgmt	Statewide	Survey	\$1,000,000	\$ (324,623)	\$ -	\$ 1,324,623	\$ (8,442)	\$ -
7	ACP Mgmt	Statewide	Regulatory	\$3,257,844	\$ (383,148)	\$ 160,755	\$ 3,640,993	\$ (129,961)	\$ -
8	HLB Det	Southern	Survey	\$2,199,453	\$ (577,730)	\$ (62,481)	\$ 2,777,183	\$ -	\$ -
9	HLB Det	Statewide	Survey	\$5,887,471	\$ 1,452,784	\$ (87,575)	\$ 4,434,687	\$ (43)	\$ -
10	HLB Det	Statewide	Diagnostics	\$3,556,269	\$ 871,449	\$ (1,180)	\$ 2,684,821	\$ (342)	\$ -
11	HLB Erad	Southern	Treatment	\$6,179,634	\$ 7,606	\$ -	\$ 6,172,028	\$ (43)	\$ -
12	HLB Erad	Statewide	Regulatory	\$770,273	\$ 72,625	\$ (16,711)	\$ 697,649	\$ -	\$ -
13	ACP/HLB	Statewide	Admin	\$2,073,024	\$ 448,404	\$ (74,094)	\$ 1,624,619	\$ (1,091)	\$ -
14	ACP/HLB	Statewide	Outreach	\$1,552,478	\$ 474,087	\$ (14,619)	\$ 1,078,392	\$ (120,313)	\$ -
15	ACP/HLB	Statewide	Data Analysis	\$1,245,934	\$ 256,169	\$ (10)	\$ 989,766	\$ -	\$ -
16	ACP Mgmt	Statewide	Diagnostics	\$209,462	\$ 118,205	\$ 81	\$ 91,258	\$ -	\$ -
17	Indirect	Statewide	Indirect	\$4,465,004	\$ 1,069,812	\$ (660,075)	\$ 3,395,192	\$ -	\$ -
-	-	-	Totals	\$41,500,000	\$5,399,119	\$(865,587)	\$36,100,881**	\$(451,724)	\$0

*2023 Charges realized at the close of July 2024 – December 2024

**Updated expenditures due to redirect from PDCP for tracking error

FY 23-24 Revenue Summary

Revenue Received	
Revenue Received To Date (October 2023 to December 2024)	\$18,036,377*
Last Meeting (November 12, 2024) Revenue Received to Date	\$17,999,530
Increased from last meeting to current	\$36,847


*Final revenue amount for 23-24 Crop Year

FY 23-24 Carton Comparison

FY23/24 Projected Cartons	FY23/24 Projected Cartons (NASS)	FY22/23 Projected Cartons (CPDPC)
180,000,000 Cartons	180,400,000 Cartons	188,400,000 Cartons
\$0.09/per carton \$16,200,000	\$0.09/per carton \$16,236,000	\$0.07/per carton \$13,188,000

Year to Date Revenue Received	Revenue Amount	Cartons
Current YTD (\$0.09/per carton)	\$18,036,377	200,404,189
Prior Year FY22-23 YTD (\$0.07/per carton)	\$13,022,888	186,041,257

Converted assessment amounts to cartons for comparison

A large metal trailer is filled to the brim with ripe, bright orange oranges. The oranges are piled high, filling the entire length of the trailer. The trailer is parked on a dirt road in a dry, hilly landscape. In the background, there are rolling hills, scattered trees, and a range of mountains under a clear sky. The scene suggests a harvest or transport of citrus fruit in a rural, arid region.

FY 24-25 Expenditures

FY 24-25 October 2024 Expenditures

#	Group	Region	Activity	Committee Approved 2024- 25 Budget	Remaining 2024-25 Budget	October 2024 Expenditures per FI\$Cal	Year to Date Expenditures per FI\$Cal	Prior year FY23- 24 Year to date Expenditures	October 2024 Encumbrance Changes	Year to Date Encumbrances
1	ACP Mgmt	Central	Survey	\$3,175,538	\$ 2,362,331	\$ 367,352	\$ 813,207	\$ 763,038	\$ 961,355	\$ 1,363,658
2	ACP Mgmt	Central	Treatment	\$1,130,803	\$ 1,056,125	\$ 18,610	\$ 74,678	\$ 69,564	\$ (2,003)	\$ 937,997
3	ACP Mgmt	Northern	Survey	\$1,626,805	\$ 1,413,991	\$ 108,907	\$ 212,814	\$ 268,825	\$ 852,940	\$ 975,207
4	ACP Mgmt	Northern	Treatment	\$77,981	\$ 57,951	\$ 16,968	\$ 20,030	\$ 2,117	\$ -	\$ -
5	ACP Mgmt	Statewide	Biocontrol	\$1,711,920	\$ 1,102,341	\$ 279,835	\$ 609,579	\$ 391,156	\$ (76,739)	\$ 1,042,033
6	ACP Mgmt	Statewide	Survey	\$800,000	\$ 565,162	\$ 86,478	\$ 234,838	\$ 446,355	\$ (63,463)	\$ 3,761,215
7	ACP Mgmt	Statewide	Regulatory	\$3,337,000	\$ 3,083,202	\$ 90,399	\$ 253,798	\$ 373,687	\$ 1,135,689	\$ 1,150,770
8	HLB Det	Southern	Survey	\$2,553,349	\$ 1,589,491	\$ 293,229	\$ 963,858	\$ 972,748	\$ 995	\$ 3,134
9	HLB Det	Statewide	Survey	\$5,646,476	\$ 4,101,520	\$ 388,025	\$ 1,544,956	\$ 1,425,901	\$ (1,866)	\$ 9,690
10	HLB Det	Statewide	Diagnostics	\$3,298,801	\$ 2,672,830	\$ 202,530	\$ 625,971	\$ 639,692	\$ 235,616	\$ 1,218,032
11	HLB Erad	Southern	Treatment	\$4,698,145	\$ 3,253,367	\$ 599,662	\$ 1,444,778	\$ 1,735,665	\$ (199,357)	\$ 4,740,507
12	HLB Erad	Statewide	Regulatory	\$859,630	\$ 565,152	\$ 98,881	\$ 294,478	\$ 179,917	\$ -	\$ -
13	ACP/HLB	Statewide	Admin	\$2,102,629	\$ 1,611,737	\$ 91,378	\$ 490,892	\$ 426,724	\$ 9,260	\$ 15,218
14	ACP/HLB	Statewide	Outreach	\$1,087,797	\$ 637,481	\$ 342,456	\$ 450,316	\$ 365,450	\$ (308,400)	\$ 2,120,642
15	ACP/HLB	Statewide	Data Analysis	\$1,144,458	\$ 860,490	\$ 83,913	\$ 283,968	\$ 251,217	\$ 220,918	\$ 315,433
16	ACP Mgmt	Statewide	Diagnostics	\$168,027	\$ 154,266	\$ 274	\$ 13,761	\$ 20,363	\$ -	\$ -
17	Indirect	Statewide	Indirect	\$4,236,662	\$ 2,882,724	\$ 214,653	\$ 1,353,938	\$ 1,702,818	\$ (113,908)	\$ 21,501
18	HLB Det	Central	Survey	\$292,826	\$ 291,688	\$ 627	\$ 1,138	\$ 12,261	\$ (500,000)	\$ -
19	HLB Erad	Central	Treatment	\$405,958	\$ 405,958	\$ -	\$ -	\$ 4,926	\$ 459,952	\$ 459,952
-	-	-	Totals	\$38,354,805	\$28,667,807	\$3,284,177	\$9,686,998	\$10,052,424	\$2,610,989	\$18,134,987

FY 24-25 November 2024 Expenditures

#	Group	Region	Activity	Committee Approved 2024- 25 Budget	Remaining 2024-25 Budget	November 2024 Expenditures per FI\$Cal	Year to Date Expenditures per FI\$Cal	Prior year FY23- 24 Year to date Expenditures	November 2024 Encumbrance Changes	Year to Date Encumbrances
1	ACP Mgmt	Central	Survey	\$3,175,538	\$ 2,148,100	\$ 214,231	\$ 1,027,438	\$ 963,414	\$ (105,905)	\$ 1,257,753
2	ACP Mgmt	Central	Treatment	\$1,130,803	\$ 1,027,350	\$ 28,775	\$ 103,453	\$ 91,713	\$ 825	\$ 938,821
3	ACP Mgmt	Northern	Survey	\$1,626,805	\$ 1,319,466	\$ 94,526	\$ 307,339	\$ 336,368	\$ 217,346	\$ 1,192,552
4	ACP Mgmt	Northern	Treatment	\$77,981	\$ 57,876	\$ 75	\$ 20,105	\$ 3,445	\$ -	\$ -
5	ACP Mgmt	Statewide	Biocontrol	\$1,711,920	\$ 942,394	\$ 159,947	\$ 769,526	\$ 576,526	\$ (128,573)	\$ 913,461
6	ACP Mgmt	Statewide	Survey	\$800,000	\$ 475,416	\$ 89,746	\$ 324,584	\$ 631,433	\$ (131,197)	\$ 3,630,017
7	ACP Mgmt	Statewide	Regulatory	\$3,337,000	\$ 3,002,271	\$ 80,931	\$ 334,729	\$ 526,784	\$ (93,169)	\$ 1,057,601
8	HLB Det	Southern	Survey	\$2,553,349	\$ 1,332,263	\$ 257,228	\$ 1,221,086	\$ 1,197,256	\$ 47,180	\$ 50,314
9	HLB Det	Statewide	Survey	\$5,646,476	\$ 3,715,697	\$ 385,822	\$ 1,930,779	\$ 1,688,899	\$ 1,413	\$ 11,103
10	HLB Det	Statewide	Diagnostics	\$3,298,801	\$ 2,287,304	\$ 385,526	\$ 1,011,497	\$ 1,065,702	\$ (3,531)	\$ 1,214,500
11	HLB Erad	Southern	Treatment	\$4,698,145	\$ 2,667,297	\$ 586,069	\$ 2,030,848	\$ 2,372,747	\$ (733,802)	\$ 4,006,704
12	HLB Erad	Statewide	Regulatory	\$859,630	\$ 489,328	\$ 75,824	\$ 370,302	\$ 225,432	\$ -	\$ -
13	ACP/HLB	Statewide	Admin	\$2,102,629	\$ 1,498,213	\$ 113,524	\$ 604,416	\$ 585,499	\$ -	\$ 15,218
14	ACP/HLB	Statewide	Outreach	\$1,087,797	\$ 594,214	\$ 43,268	\$ 493,583	\$ 402,594	\$ (114,881)	\$ 2,005,761
15	ACP/HLB	Statewide	Data Analysis	\$1,144,458	\$ 769,682	\$ 90,808	\$ 374,776	\$ 366,420	\$ -	\$ 315,433
16	ACP Mgmt	Statewide	Diagnostics	\$168,027	\$ 153,919	\$ 347	\$ 14,108	\$ 20,457	\$ -	\$ -
17	Indirect	Statewide	Indirect	\$4,236,662	\$ 2,521,553	\$ 361,171	\$ 1,715,109	\$ 2,239,605	\$ (19,715)	\$ 1,786
18	HLB Det	Central	Survey	\$292,826	\$ 291,584	\$ 104	\$ 1,242	\$ 17,292	\$ -	\$ -
19	HLB Erad	Central	Treatment	\$405,958	\$ 405,958	\$ -	\$ -	\$ 49,569	\$ (42,393)	\$ 417,559
-	-	-	Totals	\$38,354,805	\$25,699,883	\$2,967,923	\$12,654,922	\$ 13,361,155	\$(1,106,404)	\$17,028,582

FY 24-25 December 2024 Expenditures

#	Group	Region	Activity	Committee Approved 2024- 25 Budget	Remaining 2024-25 Budget	December 2024 Expenditures per FI\$Cal	Year to Date Expenditures per FI\$Cal	Prior year FY23- 24 Year to date Expenditures	December 2024 Encumbrance Changes	Year to Date Encumbrances
1	ACP Mgmt	Central	Survey	\$3,175,538	\$ 1,860,950	\$ 287,149	\$ 1,314,588	\$ 1,118,182	\$ 128,674	\$ 1,386,428
2	ACP Mgmt	Central	Treatment	\$1,130,803	\$ 980,002	\$ 47,348	\$ 150,801	\$ 92,832	\$ (25,053)	\$ 913,768
3	ACP Mgmt	Northern	Survey	\$1,626,805	\$ 1,183,175	\$ 136,290	\$ 443,630	\$ 488,557	\$ (196,077)	\$ 996,476
4	ACP Mgmt	Northern	Treatment	\$77,981	\$ 56,865	\$ 1,010	\$ 21,116	\$ 3,445	\$ -	\$ -
5	ACP Mgmt	Statewide	Biocontrol	\$1,711,920	\$ 777,828	\$ 164,565	\$ 934,092	\$ 728,467	\$ (11,832)	\$ 901,629
6	ACP Mgmt	Statewide	Survey	\$800,000	\$ 409,739	\$ 65,677	\$ 390,261	\$ 789,592	\$ (24,226)	\$ 3,605,792
7	ACP Mgmt	Statewide	Regulatory	\$3,337,000	\$ 2,738,532	\$ 263,739	\$ 598,468	\$ 709,663	\$ (5,624)	\$ 1,051,977
8	HLB Det	Southern	Survey	\$2,553,349	\$ 1,081,179	\$ 251,084	\$ 1,472,170	\$ 1,418,488	\$ 269	\$ 6,284
9	HLB Det	Statewide	Survey	\$5,646,476	\$ 3,270,948	\$ 444,749	\$ 2,375,528	\$ 1,913,405	\$ (5,996)	\$ 5,106
10	HLB Det	Statewide	Diagnostics	\$3,298,801	\$ 1,982,442	\$ 304,862	\$ 1,316,359	\$ 1,259,852	\$ (641,333)	\$ 573,167
11	HLB Erad	Southern	Treatment	\$4,698,145	\$ 2,235,492	\$ 431,805	\$ 2,462,653	\$ 2,829,844	\$ (1,068,959)	\$ 2,982,044
12	HLB Erad	Statewide	Regulatory	\$859,630	\$ 399,895	\$ 89,432	\$ 459,735	\$ 289,330	\$ -	\$ -
13	ACP/HLB	Statewide	Admin	\$2,102,629	\$ 1,377,048	\$ 121,165	\$ 725,581	\$ 750,174	\$ (6,927)	\$ 8,291
14	ACP/HLB	Statewide	Outreach	\$1,087,797	\$ 418,433	\$ 175,781	\$ 669,364	\$ 232,675	\$ (208,318)	\$ 1,797,442
15	ACP/HLB	Statewide	Data Analysis	\$1,144,458	\$ 691,731	\$ 77,951	\$ 452,727	\$ 435,988	\$ (112,859)	\$ 202,573
16	ACP Mgmt	Statewide	Diagnostics	\$168,027	\$ 129,888	\$ 24,031	\$ 38,139	\$ 38,174	\$ -	\$ -
17	Indirect	Statewide	Indirect	\$4,236,662	\$ 2,162,305	\$ 359,248	\$ 2,074,357	\$ 2,826,643	\$ 17,283	\$ 19,069
18	HLB Det	Central	Survey	\$292,826	\$ 291,192	\$ 392	\$ 1,634	\$ 26,980	\$ -	\$ -
19	HLB Erad	Central	Treatment	\$405,958	\$ 405,958	\$ -	\$ -	\$ 100,284	\$ -	\$ 417,559
-	-	-	Totals	\$38,354,805	\$22,453,603	\$3,246,280	\$15,901,202	\$16,052,576	\$(2,160,977)	\$14,867,605

FY 24-25 HLB E-Fund & LA-CYVCV Summary

Program	Expenditures to Date	Budget	Remaining Balance
HLB E-Fund- Ventura	\$304,454	\$1,436,200	\$1,131,746
CYVCV- LA	\$224,358	\$250,000	\$25,642
Outreach	\$90,319	\$147,244	\$56,925

FY 24-25 Revenue Summary

Revenue Received	
Revenue Received To Date (January 2025)	\$3,936,750
Last Meeting (November 12, 2024) Revenue Received to Date	\$891,327
Increased from last meeting to current	\$3,045,423

FY 24-25 Clean Citrus Nursery Stock Program Summary

Budget Summary	
Budget Authority	\$255,155
Expenditures to Date (July 2024 to Jan 2025)	\$21,191
Available Budget Authority	\$233,964

FY24-25 Revenue	
Revenue Received To Date (July 2024 to Jan 2025)	\$156,890



QUESTIONS?



California Department of Food & Agriculture Plant Pest Diagnostics Center HLB Testing Program 2025

Total number of plant and ACP samples per month – Fig. 1a, Fig1b

Number of samples tested for HLB per year from 2008 –2023 – Fig. 2

Tally of positive detections by county and city – Tables 1a-1d.

Number of detections yearly from 2012-2024– Table 2

If you have any questions, please call or email me at 916-738-6710 lucita.kumagai@cdfa.ca.gov.

Fig 1a. 2025 -
Total number of plant and ACP samples submitted per month.

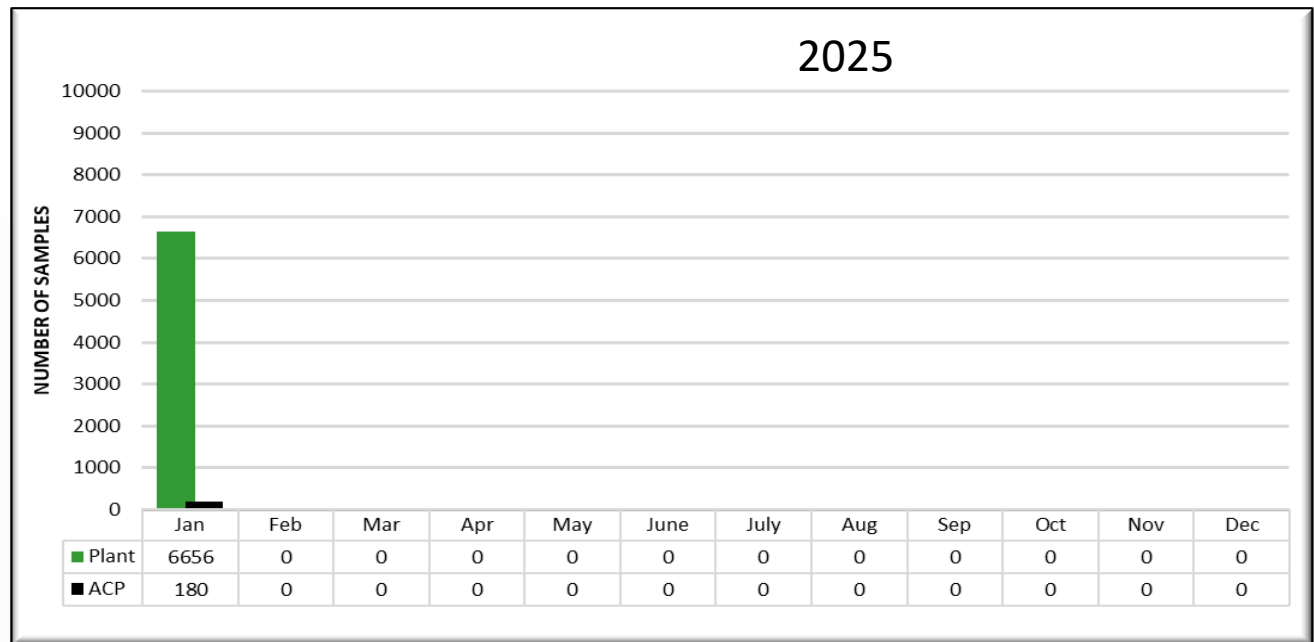


Fig 1b. 2024 -
Total number of plant and ACP samples submitted per month.

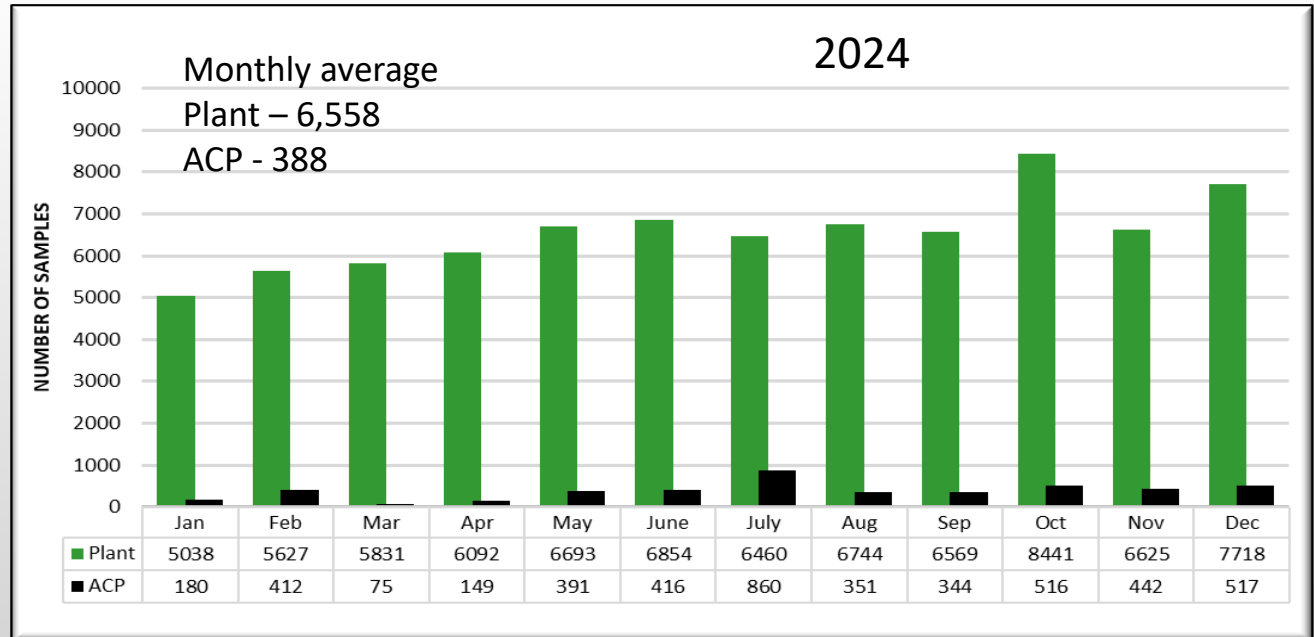
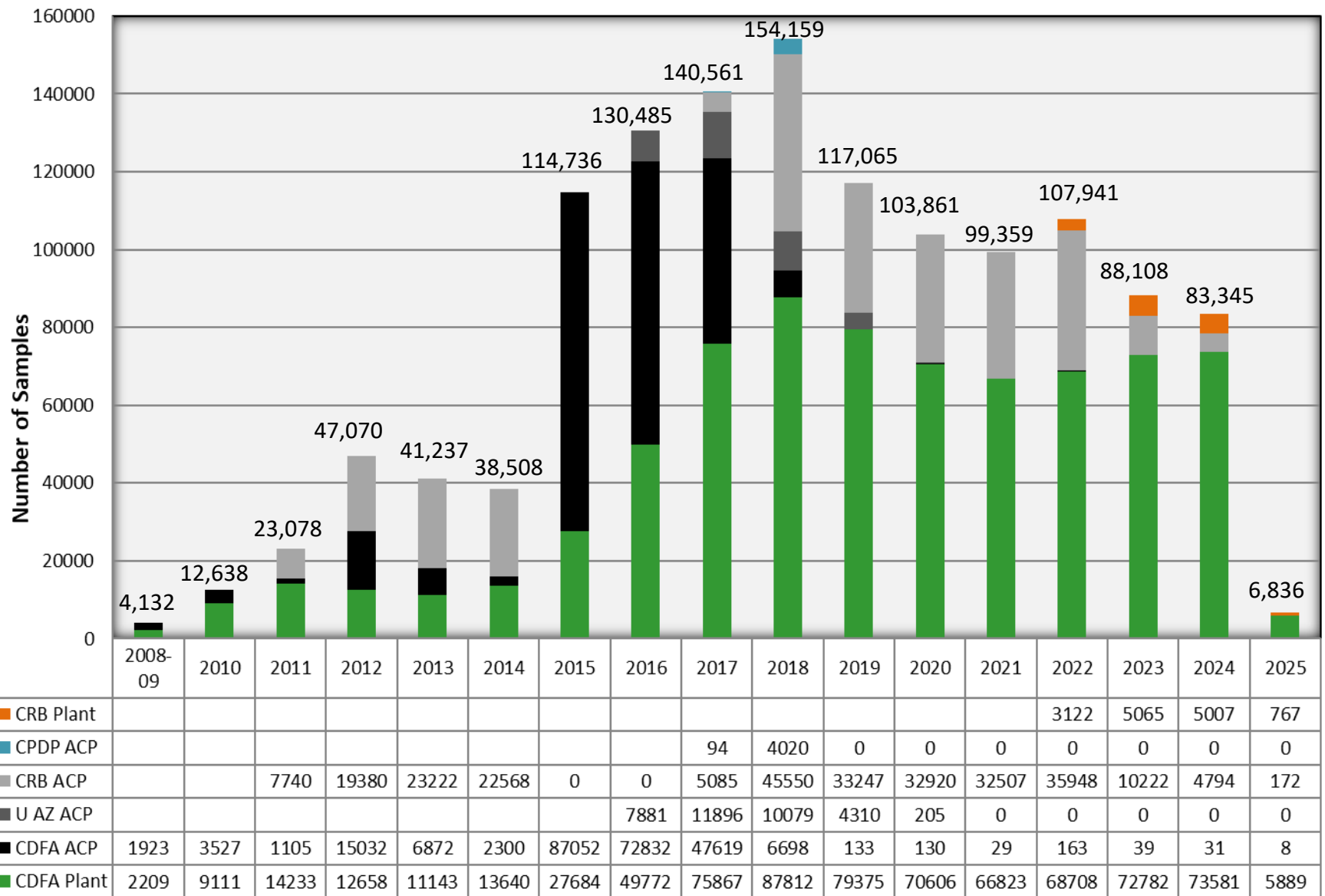


Fig 2. Number of samples tested for HLB per year from 2008 – 2025.



Combined total of plant and ACP samples tested from 2008 – 2025 is 1,313,187

Tables 1a-1d. Tally of positive sites, positive trees, and CLas+ ACP samples by city and county as of 2/14/2025.

2012-2025	# Sites	# Trees	# ACP samples
Grand Total	6092	9589	885

Orange County Positives			
City	# Sites	# Trees	# ACP samples
Garden Grove	744	1295	124
Santa Ana	738	1214	98
Anaheim	1045	1811	174
Westminster	367	628	22
Orange	341	505	45
Tustin	50	64	10
Fountain Valley	15	22	3
Huntington Beach	27	30	2
Placentia	93	128	15
La Habra	12	18	1
Fullerton	19	23	10
Yorba Linda	83	213	17
Irvine	159	206	5
Costa Mesa	105	151	4
Brea	34	51	1
Buena Park	9	16	2
Cypress	5	1	5
Stanton	5	6	1
Midway City	12	26	0
Los Alamitos	1	0	1
Villa Park	3	6	0
Newport Beach	4	4	0
Mission Viejo	9	10	4
Total	3880	6428	544

Riverside County Positives			
City	# Sites	# Trees	# ACP samples
Corona	264	386	37
Riverside	33	35	10
Eastvale	2	2	0
Jurupa Valley	40	66	4
Moreno Valley	1	1	0
Norco	4	9	0
Hemet	1	0	1
Total	345	499	52
San Bernardino County Positives			
Rancho Cucamonga	6	7	5
Montclair	21	21	9
Colton	6	11	3
San Bernardino	2	1	1
Ontario	318	496	22
Fontana	30	47	9
Chino	20	30	3
Total	403	613	52
San Diego County Positives			
Fallbrook	2	1	1
Oceanside	4	9	4
Pauma Valley	1	0	1
Vista	1	0	1
San Diego	47	75	0
Valley Center	5	19	2
Total	60	104	9
Ventura County Positives			
Santa Paula	48	82	5
Total	48	82	5

Los Angeles County Positives			
City	# Sites	# Trees	# ACP samples
Whittier	228	279	52
Pico Rivera	296	448	73
Montebello	82	113	2
San Gabriel	93	125	9
Rosemead	50	69	7
Paramount	28	35	5
La Mirada	53	72	6
La Puente	57	69	9
Norwalk	16	13	5
Cerritos	7	9	5
Hacienda Heights	5	5	1
Lakewood	5	6	0
Duarte	173	265	7
El Monte	73	106	8
South El Monte	22	43	4
Alhambra	6	7	0
Temple City	12	11	2
Compton	1	1	0
Glendora	1	0	1
South Gate	10	10	6
Long Beach	13	21	3
Los Angeles	8	6	2
Downey	28	35	5
Carson	4	3	1
Monrovia	41	60	0
Rowland Heights	2	0	2
Pomona	10	13	2
Artesia	7	8	0
Bellflower	5	5	0
Monterey Park	1	1	0
West Covina	1	0	1
City of Industry	1	2	0
Claremont	1	0	1
Santa Fe Springs	2	1	1
Azusa	8	16	2
Covina	2	1	1
Commerce	3	4	0
San Dimas	1	1	0
Total	1356	1863	223

Table 2. Positive detections by year as of 2/14/2025

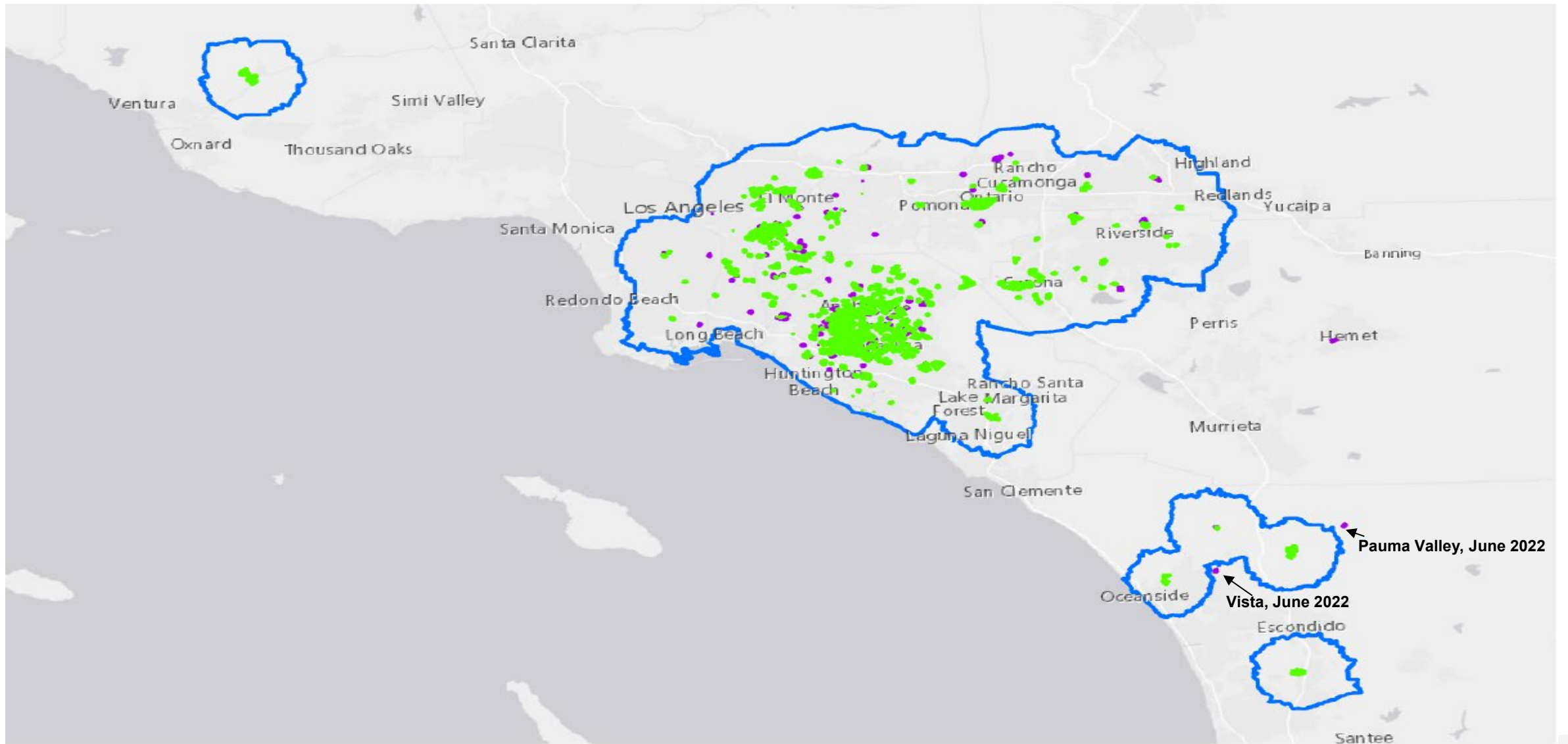
Positive C Las Detections by Year				ACP Survey Type	
Year	# Sites	# Trees	# ACP samples	RS	HLBR
2012	1	1	1	1	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	10	10	3	0	3
2016	13	19	3	3	0
2017	295	269	116	39	77
2018	422	699	82	29	53
2019	532	756	75	50	25
2020	362	488	44	29	15
2021	385	598	59	20	39
2022	884	1342	166	115	51
2023	1817	2965	229	202	27
2024	1226	2189	90	42	48
2025	145	253	17	3	14
Total	6092	9589	885		



Operational Update





CPDPC Meeting

Feb 26, 2025



HLB Quarantine and Treatment Area

2/7/2025

-  HLB Quarantine Area
-  HLB Treatment Area
-  Mandatory
-  Non-mandatory

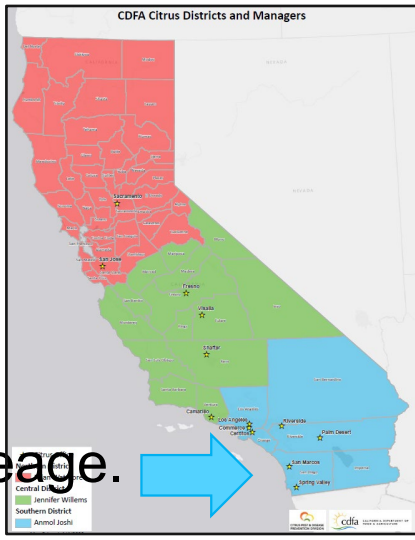
0 5 10
Miles


CITRUS PEST & DISEASE
PREVENTION DIVISION


cdfa
CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Southern District

HLB Detection Updates



➤ Detection in Yorba Linda

- First-ever detection of HLB-positive trees in a non-residential citrus acreage.
 - The Orange County Flood Control District owns this parcel of 21 acres.
 - The entire grove was treated and removed. Will restore land to its natural habitat.
 - 2,893 citrus trees were removed.

➤ Detection in Mission Viejo

- Detected an HLB-positive tree on a residential property in late November.
 - The delimitation survey led to the detection of 9 additional trees.
 - 8 trees have been removed, and one is pending removal.
 - The HLB quarantine boundary has extended further south to include an 85 sq. mile area.

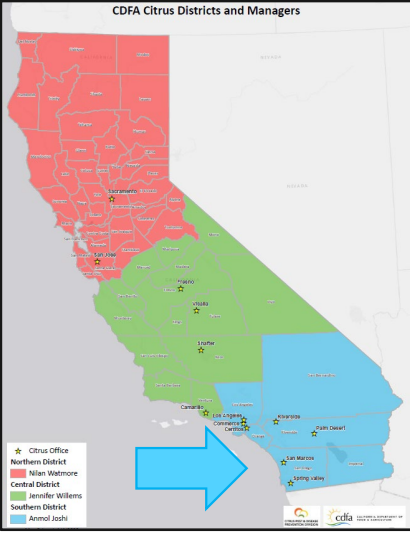


Southern District



Delimitation Survey and Treatments (December- January)

County	Areas
Los Angeles	Duarte, Montebello, Pico Rivera, San Gabriel, Los Angeles, and Whittier
Orange	Mission Viejo, Yorba Linda, Irvine, Costa Mesa, and Anaheim Hills
Riverside	Corona and Jurupa Valley
San Bernardino	Montclair and Ontario
San Diego	Fallbrook and Rancho Bernardo

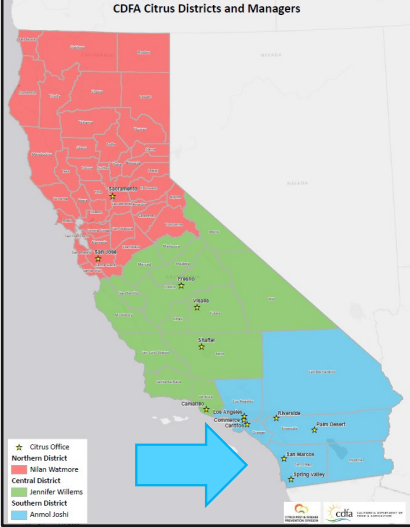


- Monthly public meetings were conducted to treat delimitation areas in Los Angeles, Orange, Riverside, and San Bernardino Counties.

Southern District

   HLB Positive Trees

County	Trees Detected (Dec - Jan)	Trees Removed (Dec - Jan)	Cumulative Pending Trees
Los Angeles	55	114	58
Orange	199	154	161
Riverside	23	37	43
San Bernardino	53	47	44
San Diego	1	1	0
Total	331	353	306



Central District



➤ County ACP Detections

- Kern and Tulare Counties had ACP detections since the last full committee meeting in May.
 - Kern had 8 residential detections and one commercial detection.
 - Tulare had 1 residential detection and four commercial detections.
 - Treatment was completed for all residential detections.

➤ Trapping Activities

- ACP delimitation, detection, grove trapping activities are on-going.

➤ Biocontrol

- *Tamarixia* releases in Ventura and Kern Counties continue.

➤ Survey Activities

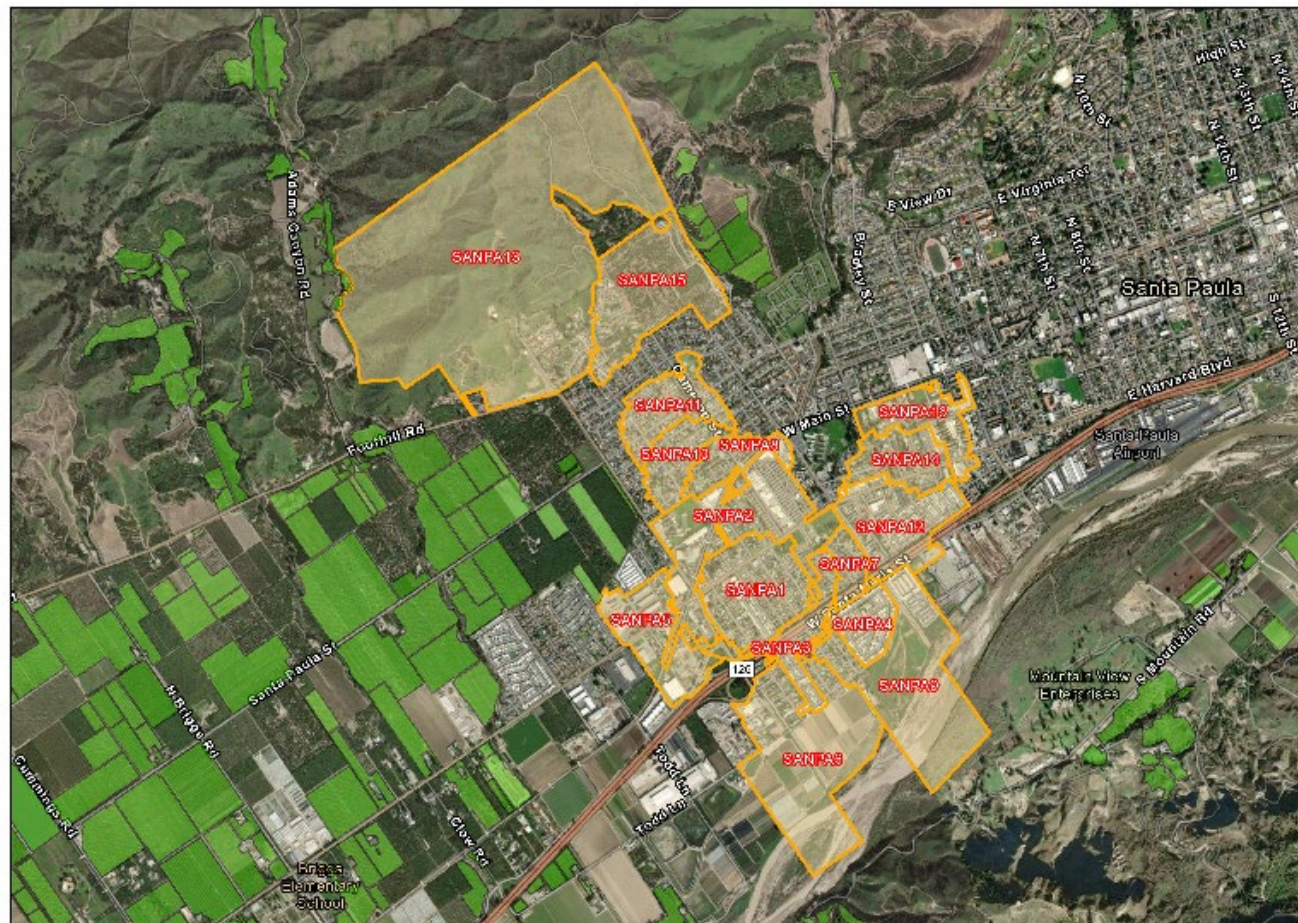
- Citrus commodity and multi-pest surveys are on-going.





Santa Paula, Ventura County

- The last reported positive HLB tree was on October 8, 2024.
- Warrants scheduled for February 25, 2025.



HLB+ Delimitation Area
Santa Paula, Ventura County



CDFA Activity Areas

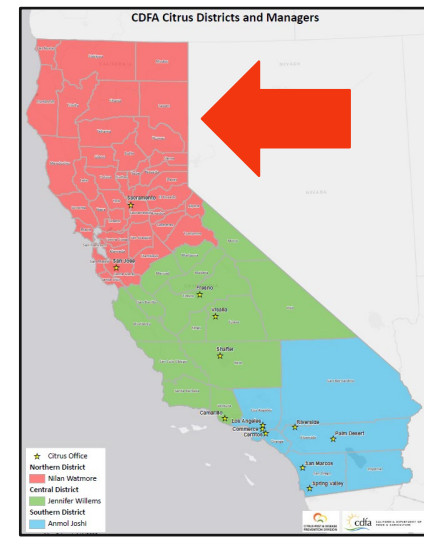
Commercial Citrus

0 200 400
Meters



Total Properties Surveyed	Total Survey Refusals	Total Properties Treated	Total Treatment Refusals	Total HLB+ Trees	Total HLB+ Trees Removed	Total Tree Removal Refusals
2,513	21	967	19	82	81	1

Northern District



➤ **ACP Detection Trapping**

- Ongoing trapping activities being conducted by 15 counties
- CDFA staff conducting trapping activities in 5 counties

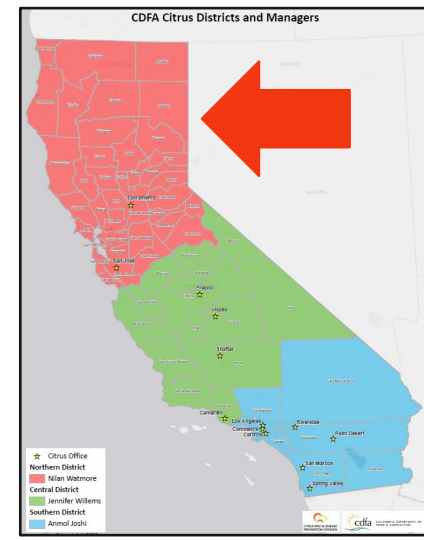
➤ **ACP Delimitation Trapping**

- Santa Clara County – reduced delimitation trapping in core area, while retaining delimitation traps around the border
 - 1,015 traps to 522 traps
 - 50% completed in delimitation trap removal

➤ **County ACP Detections**

- Santa Clara County
 - 22 new detections since December 10, 2024

Northern District



➤ ACP Treatment

- No new treatments since finishing Santa Clara hotspot treatments in October 2024

➤ Biocontrol

- *Tamarixia* releases ongoing in San Jose, Santa Clara County.
- Average 5,000 to 6,000 releases monthly

➤ HLB Risk-Basketed / Multi-Pest Survey

- Risk Survey 2024 Cycle 2
 - Currently at 64% total completion with 7 of 14 counties remaining



HLB Quarantine Retail Nurseries

CPDPC Meeting
February 26, 2025



CITRUS PEST & DISEASE
PREVENTION PROGRAM

Current Status in the HLB Quarantine

- HLBQ – 6 counties and 2,507 square miles
- No outdoor citrus nursery stock (CNS)
- Must have an approved insect-resistant structure
 - Inspected every 30 days
 - Tested every 6 months

County	Number of Nurseries in HLBQ with a Structure
Los Angeles	2
Orange	2
Riverside	3
San Bernardino	3
San Diego	1
Ventura	0
Total	11

Issues and Proposal

Issues

- Growing void of available CNS leads to illegal importation, propagation, and sale.
- Significant staff hours and resources spent addressing each illegal nursery.
- Replacing HLB-infected and removed trees.

Proposal

- Implement HLB retail nursery program as a systematic approach to supply certified, clean CNS with limited shelf life.
- Timing coincides with direction established at the 12/2024 CPDPC Strategic Planning Meeting.

HLB Retail Nursery Program

Origin Shipping Nursery

- Originates from USDA-approved structure
- Treat CNS with systemic and foliar products
- Tag with appropriate quarantine and program tags
- Tree is eligible for sale in HLB for 90 days from date of treatment

HLB Retail Nursery

- Signs compliance agreement with CDFA
- Solid wall building or structure to protect CNS from exposure
- Maintain trees >30 feet from doorway
- No more than 500 trees at one time
- Cannot be sold out of HLBQ
- Destroy tree(s) after 90 days from treatment
 - 1 re-treatment is allowed, if capable

Assumptions and Factors Considered

- Demand for CNS will not diminish
- Retail purchases, especially plants, are made close to home
- Program will be implemented seasonally
- CNS will be added to HLB quarantines and is better as certified clean plants rather than home grown
 - If plants are illegally moved from the HLBQ, the risk is lowered if initially certified clean
- Illegal propagation and sale won't be eliminated but should be significantly reduced
- TRT reviewed and reported systems approach should mitigate risk and not jeopardize areas around retail locations

Pros/Cons

Pro

- Systematic option for certified, clean plants in an HLBO
- Pilot project reviewed by UCR confirmed the efficacy of treatments
- Allows economic viability of nurseries that have made substantial good-faith investments to safeguard California citrus
- Major reduction in CDFA staff time and resources

Con

- Added risk with trees introduced to HLBO
- Resources spent to remove trees to be replaced

The background of the slide features a close-up photograph of several ripe oranges hanging from a tree branch, surrounded by green leaves. The entire image is covered with a semi-transparent orange overlay, creating a warm, monochromatic aesthetic.

Discussion

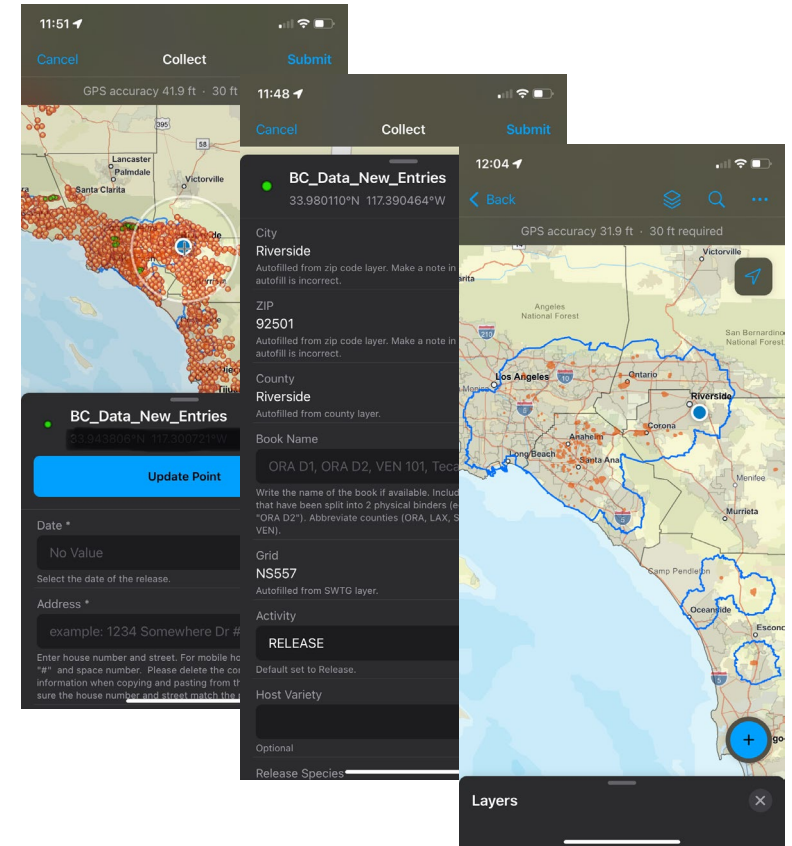


Asian Citrus Psyllid Biocontrol Update

February 2025

2024 Biocontrol Activities

- Releases
 - Data migrated to ArcGIS
 - Increased Accuracy
 - Easier site location for release crew
 - Easier to avoid active treatment areas
- Production
 - Increased production at Cal Poly
 - Thrips control – regular nematode treatments
 - Lighting
 - Banker / Trap plants
 - Efficient breakdown protocol

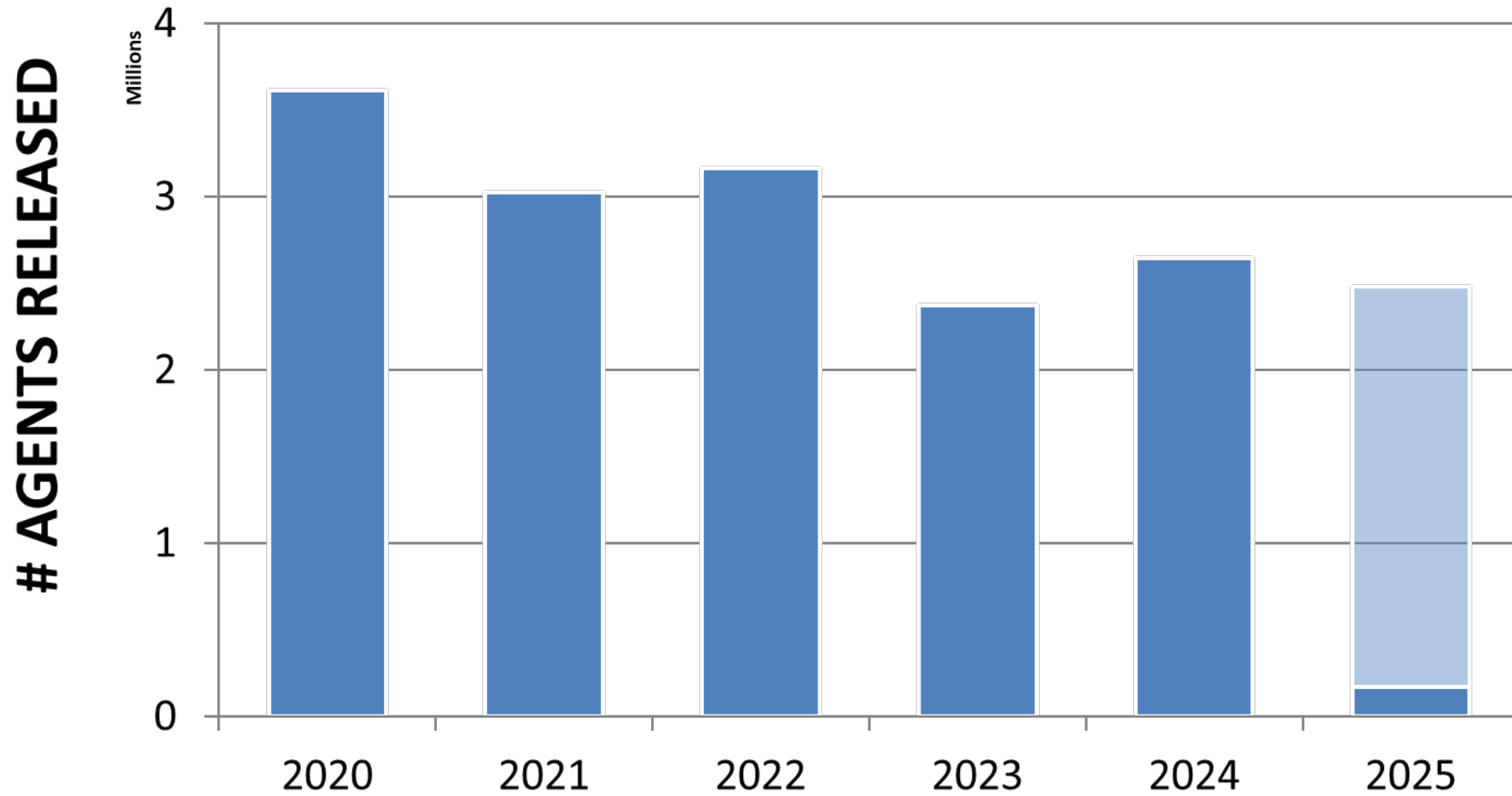


Biological Control Agent Releases

County	Releases Previous Month	Releases, 2024	Releases 2011-2025	
	January 2025	<i>T. radiata</i> Released	<i>T. radiata</i> Released	<i>D. aligarhensis</i> Released
Imperial	4,000	57,800	717,343	10,295
Los Angeles	48,300	780,560	8,859,384	107,734
Orange	46,800	639,400	6,997,516	71,179
Riverside	19,400	260,100	4,379,102	127,739
San Bernardino	12,400	254,400	2,527,515	57,252
San Diego	16,400	282,400	3,493,664	86,403
Ventura	9,300	216,800	2,645,806	16,830
Santa Barbara	2,000	47,000	455,182	12,012
Kern	3,200	12,800	420,464	0
Santa Clara	5,000	73,000	368,037	0
Placer	0	0	3,400	0
San Luis Obispo	0	3,000	142,200	0
Tulare	0	8,400	71,800	0
Fresno	0	8,000	35,000	0
Monterey	0	0	29,000	0
Madera	0	0	5,600	0
Arizona	0	0	253,500	0
Mexico	0	0	306,000	0
TOTAL	166,800	2,643,660	31,710,513	489,444
	TOTAL (2011-2025):			32,199,957



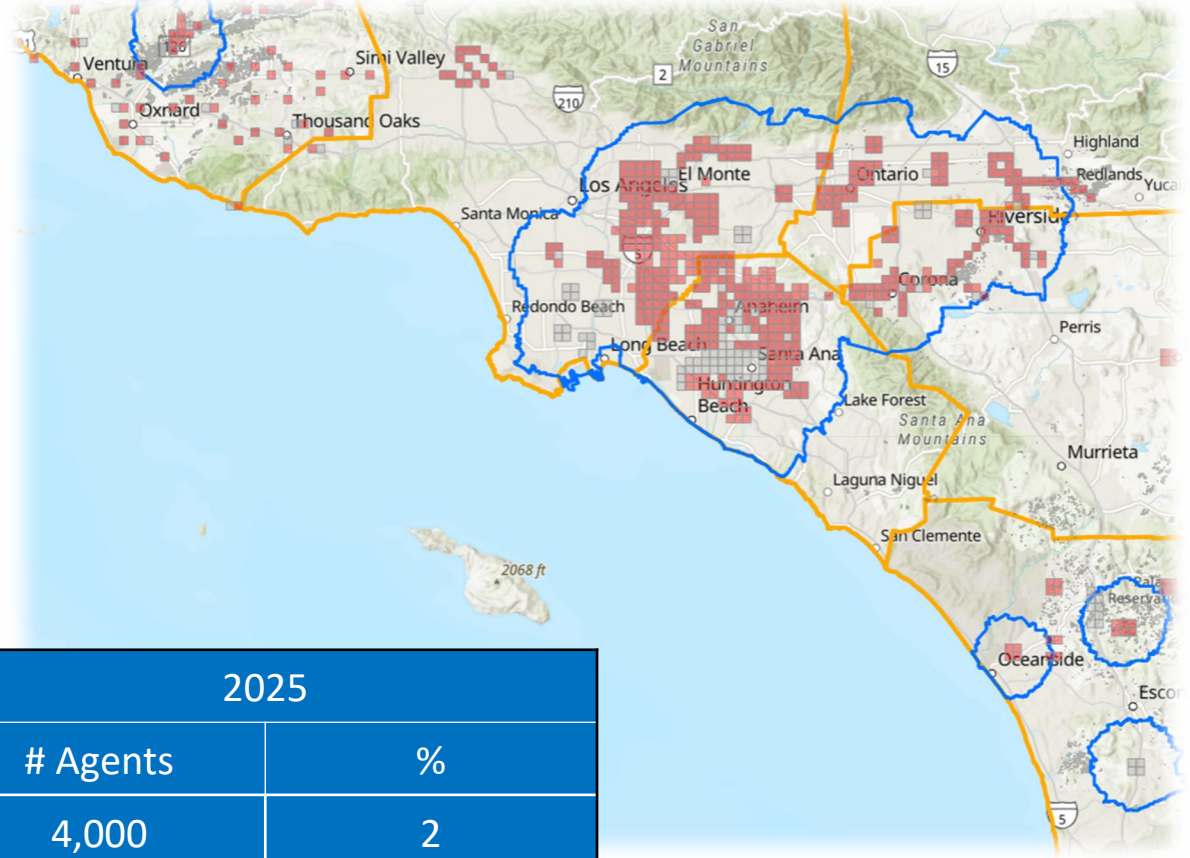
Biological Control Agent Releases



Biological Control Agent Release Areas

Releases in:

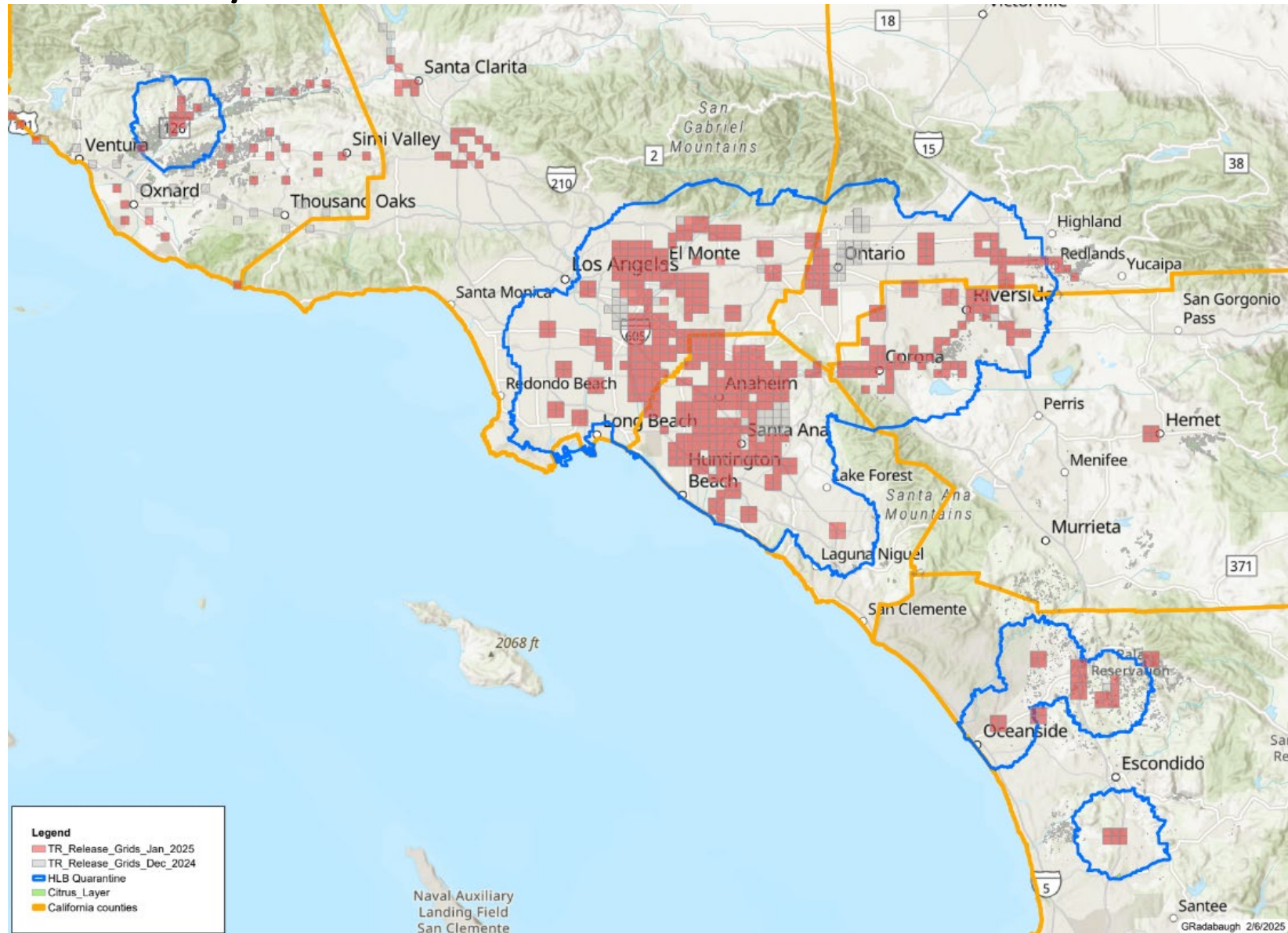
- HLB Quarantine areas
- Borders
- Trade routes
- Area-wide management
- Newly established ACP



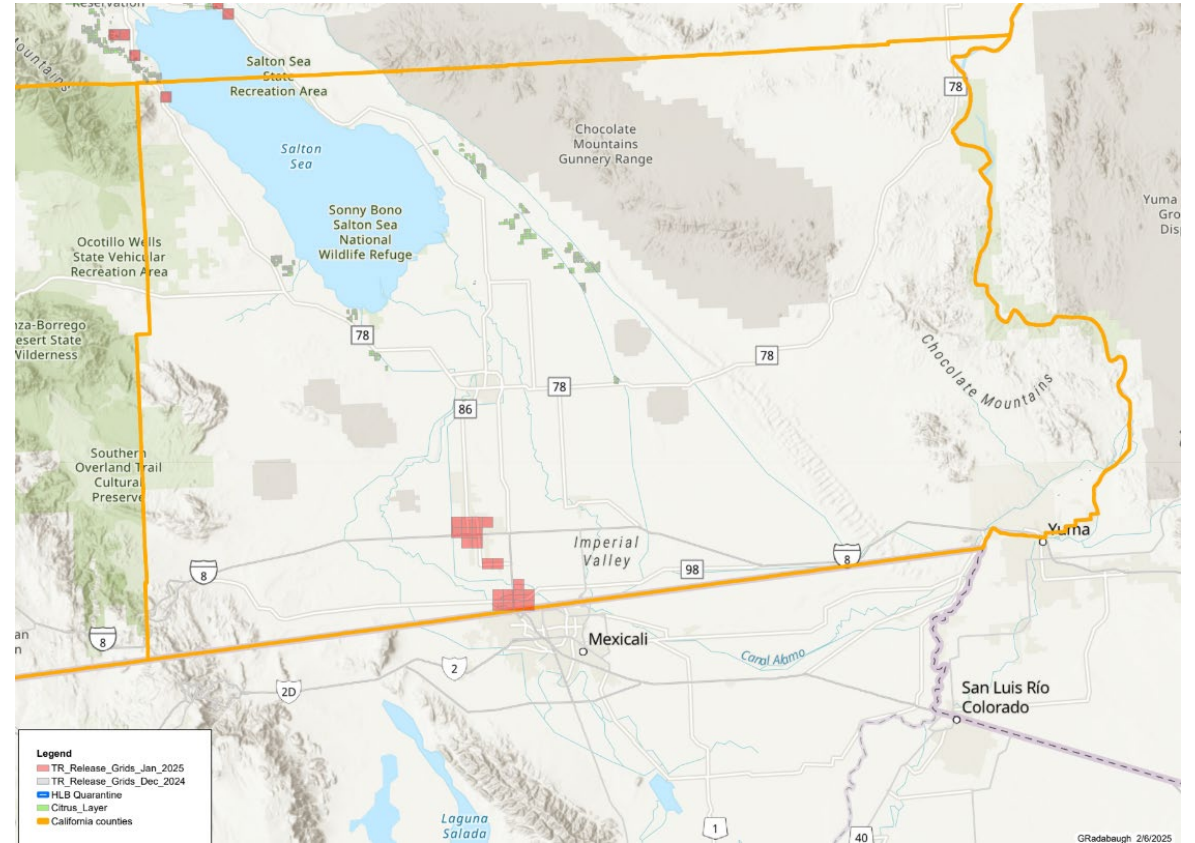
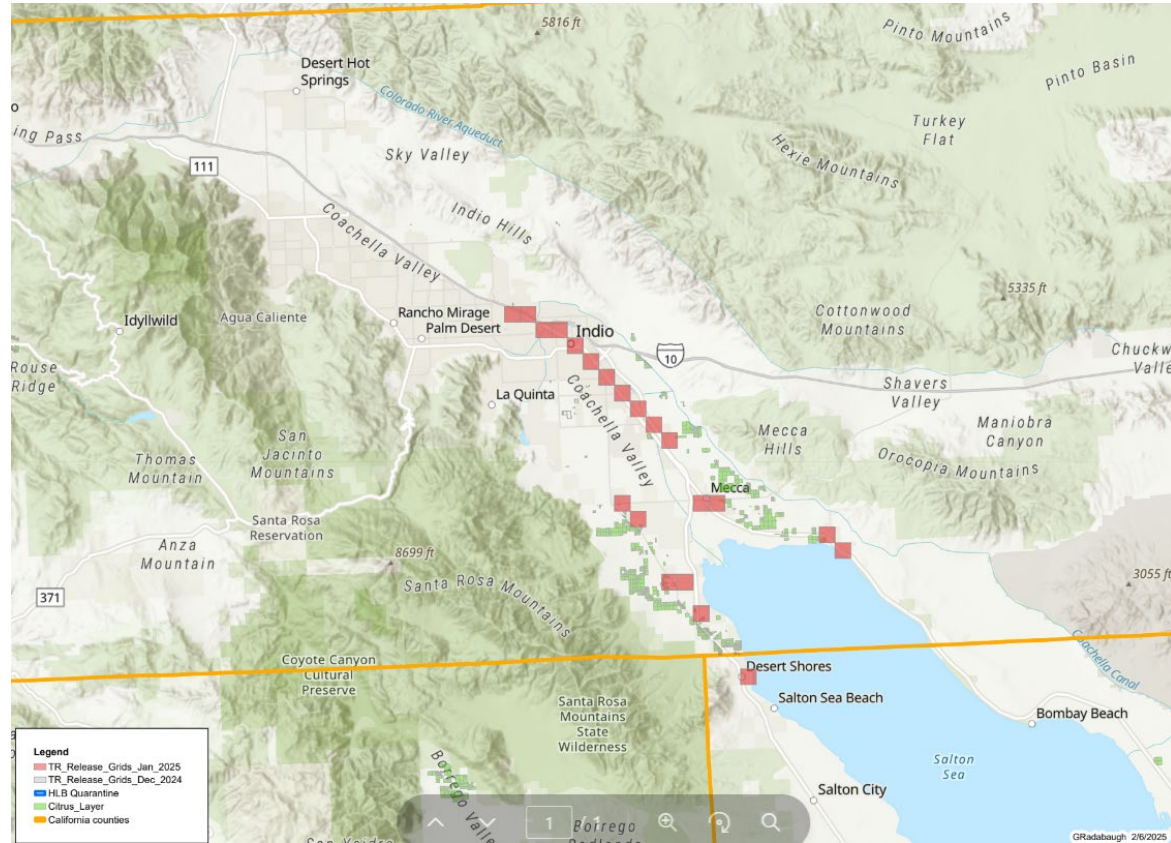
Release Type	2024		2025	
	# Agents	%	# Agents	%
Borders	57,800	2	4,000	2
HLB	2,216,860	84	143,300	86
New	105,200	4	8,200	5
Routes	263,800	10	11,300	7



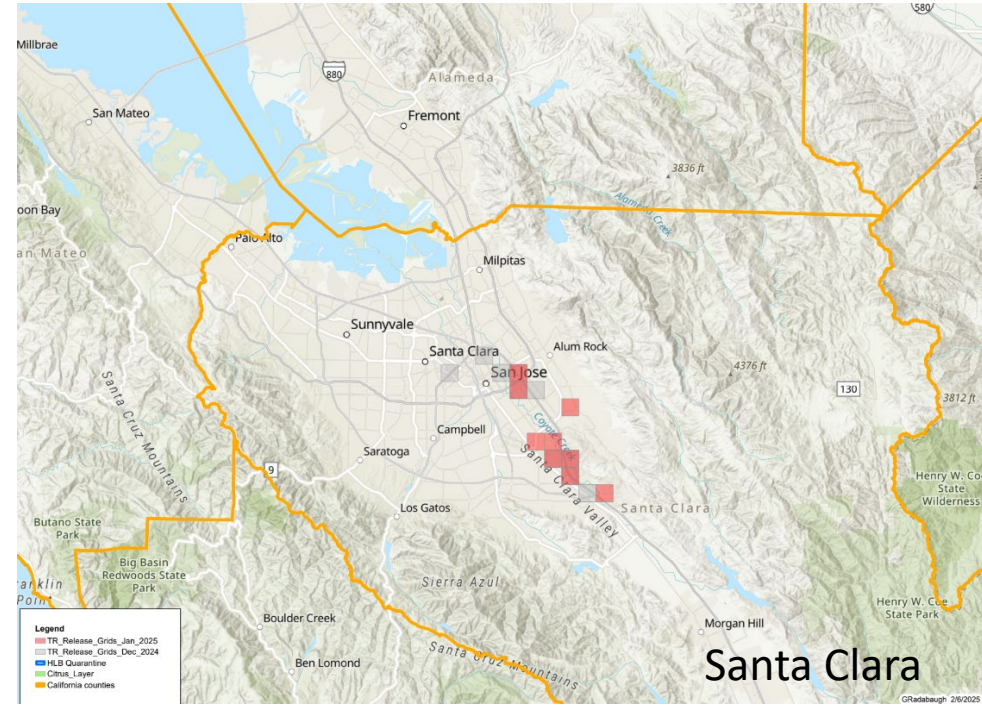
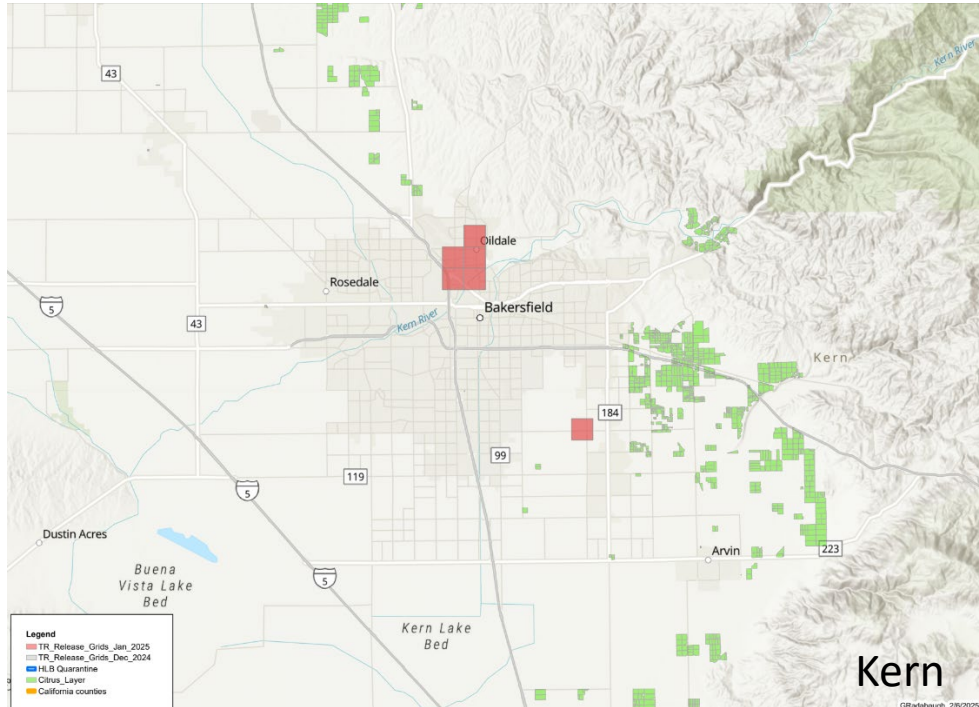
Releases within / around HLB Quarantine areas



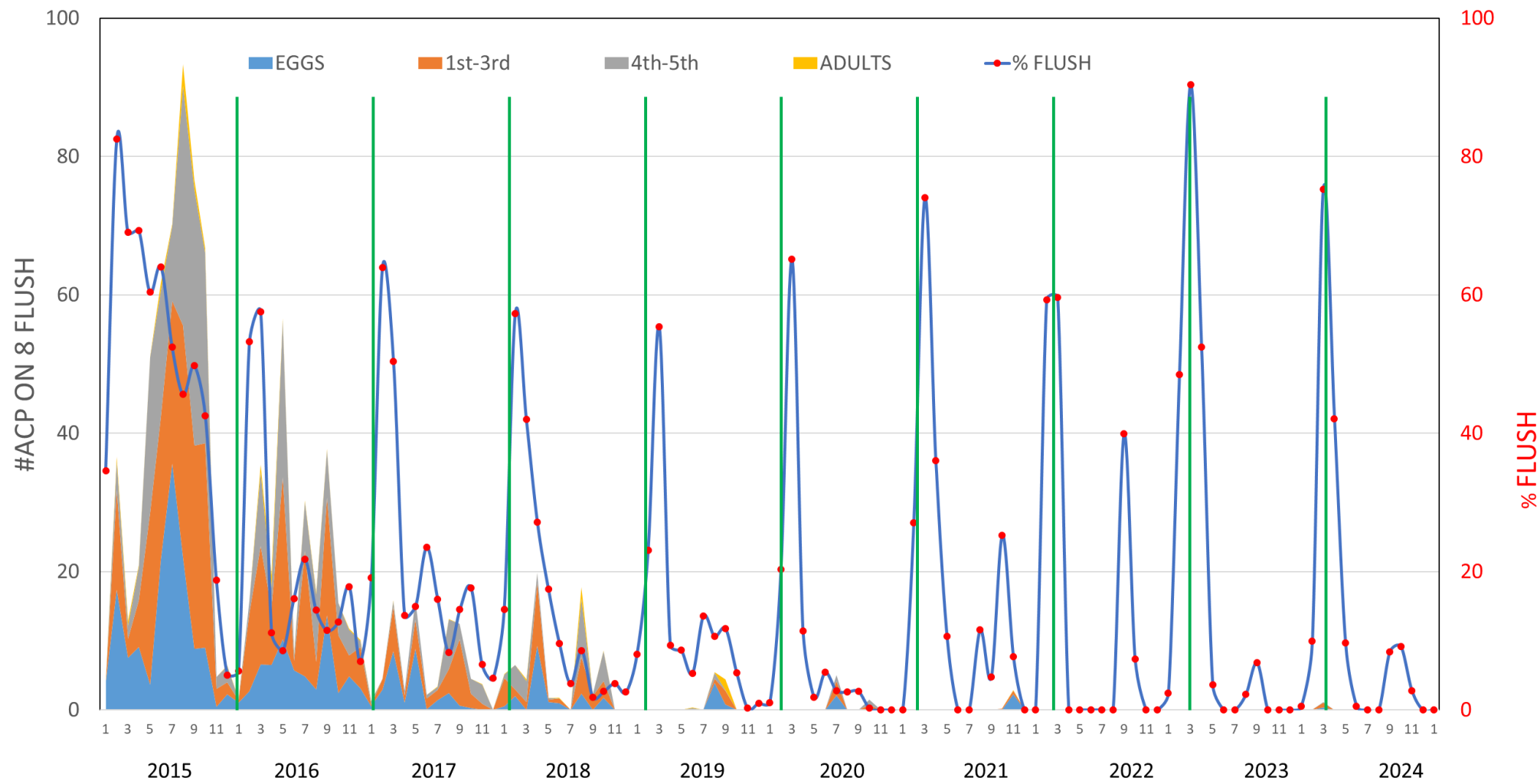
Releases around Salton Sea



Releases Beyond HLB Quarantine Areas



Region-Wide Urban Monitoring 2015 - Present



Outreach Update

February 26, 2025



CITRUS PEST & DISEASE
PREVENTION PROGRAM



Recent Outreach Activities

Recent Outreach Activities

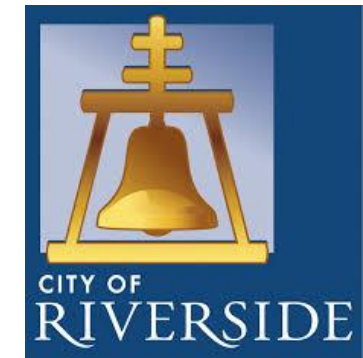
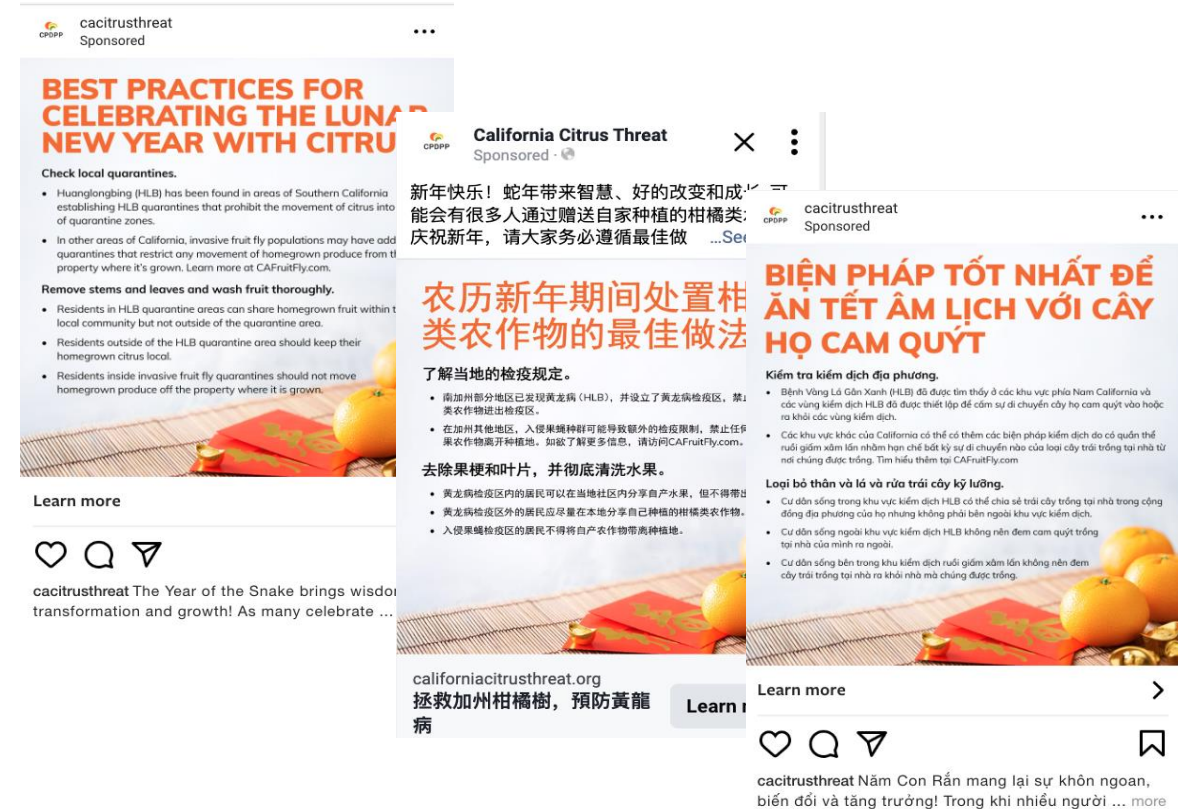
Tapping into Multicultural Audiences and Connecting with Residents In-Person

Reaching Residents In-Language

- Targeted social media ads centered around Lunar New Year, encouraging residents to follow best practices when celebrating the holiday with citrus.
- English, Chinese and Vietnamese outreach
- Estimated touchpoints: 872,170

Securing Event Attendance

- Highland Citrus Harvest Festival – March 2025
- CA Citrus Park Citrus Festival – April 2025



Recent Outreach Activities

Raising Awareness and Urgency Following HLB and ACP Detections

Mission Viejo HLB Detection Outreach

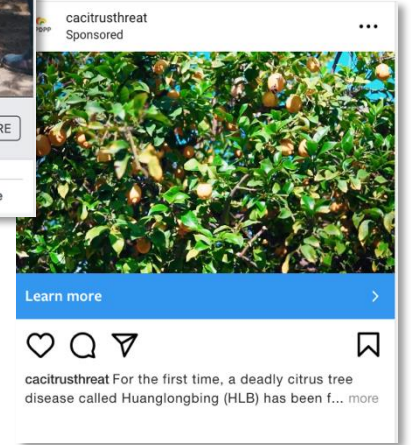
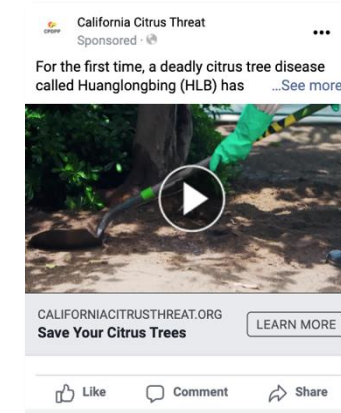
Residential outreach following the first HLB detection in Mission Viejo, including:

- Outreach to local news outlets sharing the news about the detection and expanded HLB quarantine
- Targeted social media ads
- Estimated Touchpoints: 70,296

Kern County ACP Detections Outreach

Residential outreach following a spike in ACP detections in Kern County, including:

- Targeted social media ads with a focus on not bringing citrus trees into the area from active quarantine zones
- Estimated Touchpoints: 84,279



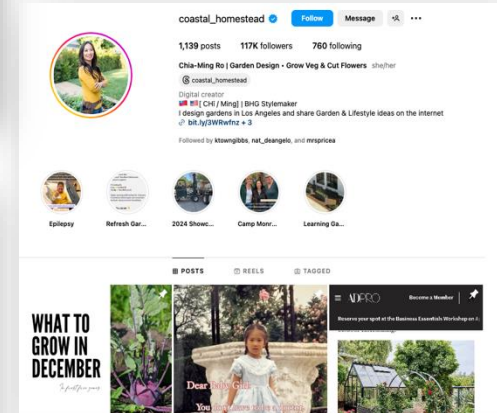
Reinforcing Residential Messages with Refreshed Visuals and New Tools

CaliforniaCitrusThreat.Org Refresh

- Continued development of CaliforniaCitrusThreat.org to optimize the website's functionality, including:
 - New visual banner on the homepage in a video reel format
 - New introductory video on the homepage educating viewers on HLB and the ACP
 - Refreshed design of website

Highlighting Biocontrol

- Social media content development with gardening influencer Coastal Homestead
- Media-ready video package on the Division's biocontrol efforts, how biocontrol supports California citrus and general HLB and ACP awareness messaging for residents



Industry Outreach Activities

Sharing Relevant News and Updates

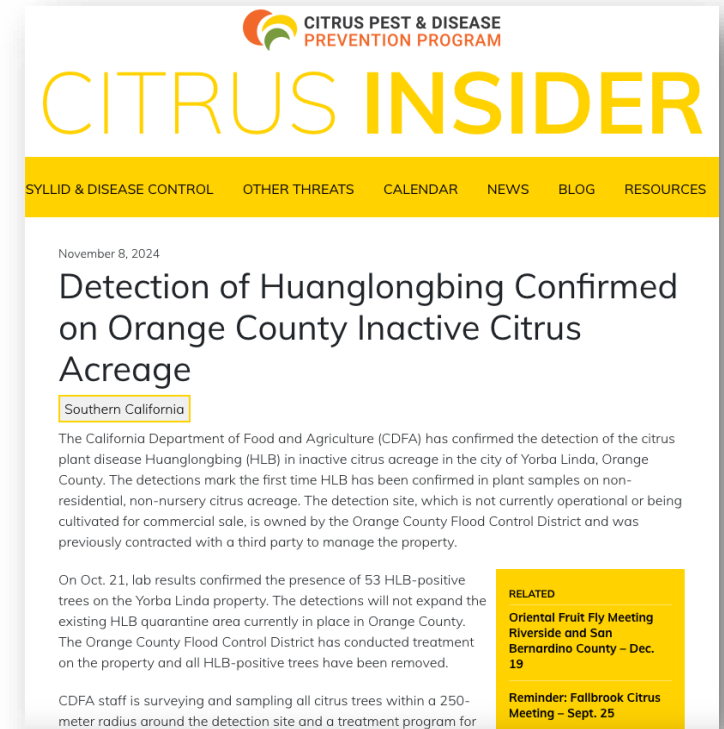
Yorba Linda HLB Detections

- Industry outreach following HLB detections found on inactive citrus acreage in Yorba Linda, Orange County:
 - CitrusInsider.org e-blast
 - Industry outreach to key stakeholders

Digital Outreach Updates – Citrus Industry's Go-To Resource

Citrus Insider Updates (Average Open Rate – 52%)

- CDFA Announces Four Vacancies on the Citrus Pest and Disease Prevention Committee
- Detection of Huanglongbing Confirmed on Orange County Inactive Citrus Acreage
- Oriental Fruit Fly Meeting Riverside and San Bernardino County



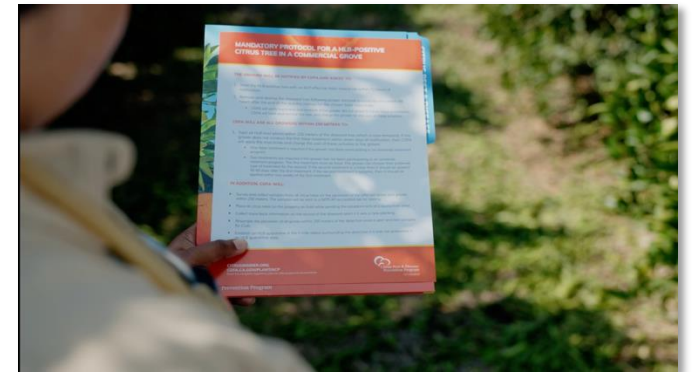
Industry Outreach Activities

Engaging with Industry Members Throughout the State

- CAPCA Annual Conference in Anaheim, CA:
 - Staffed the two-day conference and attended the citrus breakout session, featuring updates from California Citrus Mutual and UC Davis
- Securing opportunities for CPDPP to have a presence at various industry trade shows or conferences, including:
 - CCM Citrus Showcase in March 2025 (Visalia)
 - CAPCA Spring Summit in April 2025 (San Diego)

Communicating Key Industry Messages

- Developed two articles for *Citrograph Magazine's* Spring & Summer issues
- “HLB in a Grove” Video
 - Showcasing key actions industry members should take in the event HLB is found inside a grove



Elected Official Outreach Activities

Keeping Community Representatives Informed

HLB Detection Outreach

- Outreach support following Yorba Linda HLB Detections:
 - Developed an elected official briefing slide deck
 - Developed outreach materials for the Orange County Board of Supervisors and Yorba Linda city officials
- Outreach notifications to Mission Viejo city officials in response to the city's first HLB detection and the extension of the HLB quarantine in the area

Social Media Content Creation

- Citrus Hero Award compilation video on CPDPP social accounts
 - Round-up of past citrus heroes from the last two years thanking them and highlighting the value of the award for county and city officials to share with their constituents



Elected Official Outreach Activities

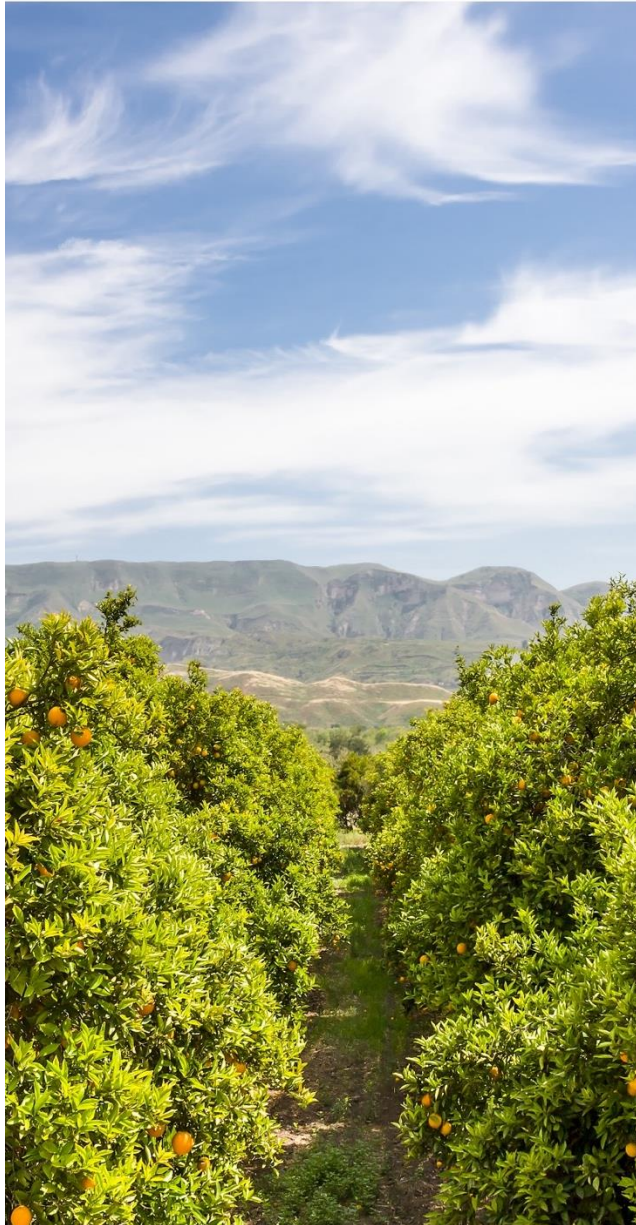
Trade Show Events and Conferences

- California League of Cities (LOC) Annual Conference and Expo in Long Beach, CA
- California State Association of Counties (CSAC) Annual Meeting in Los Angeles County
 - Engaged with over 100 local government officials on ACP and HLB issues in California at each event
 - Conducted follow up outreach to all contacts made at both events to provide additional resources on the ACP and HLB via email and offer in-person presentations



Upcoming Activities:

- Media Training Refresh
- Gardening Group Outreach
- Master Gardener Webinars
- Committee Onboarding Documents
- Influencer Partnerships and Content Production
- Biocontrol Social Media Series and Media Outreach
- New Video Content Development
- 2025 Citrus Hero Awardees



Upcoming Events:

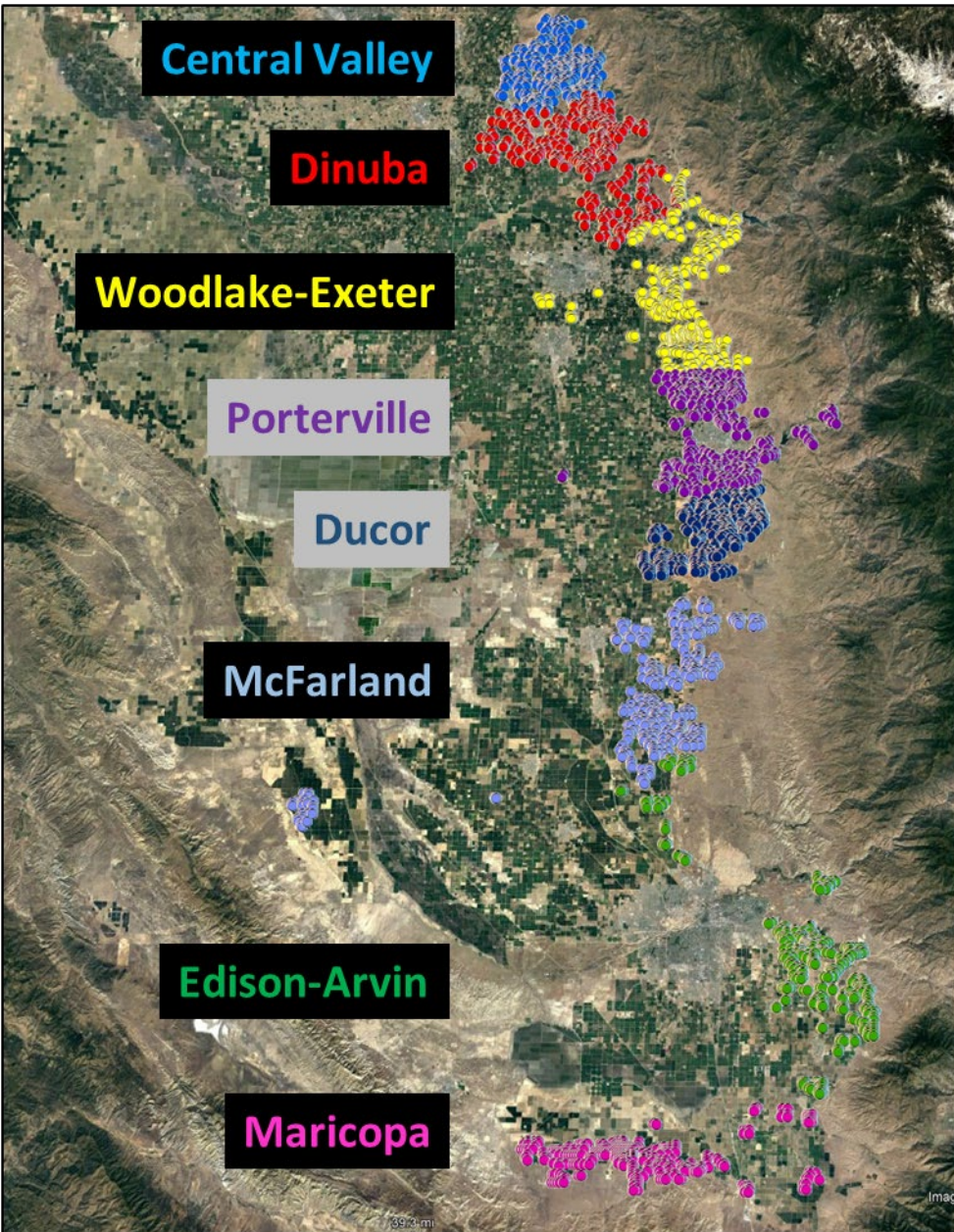
- Highland Citrus Harvest Festival
- CA Citrus Park Citrus Festival
- CCM Citrus Showcase
- CAPCA Spring Summit
- Southern California Association of Governments Conference
- And more!

Thank You



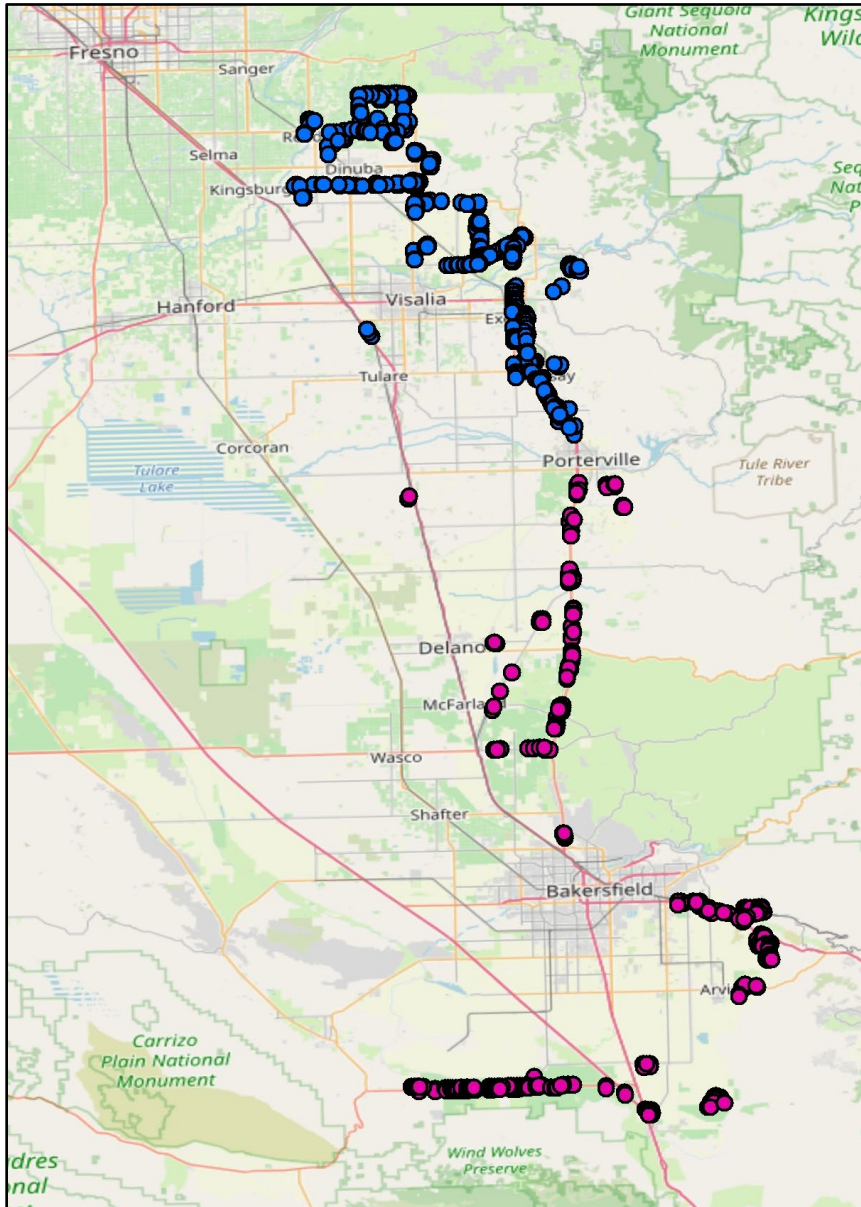
CITRUS PEST & DISEASE
PREVENTION PROGRAM

ACP Trapping (Spring & Fall, 2024)



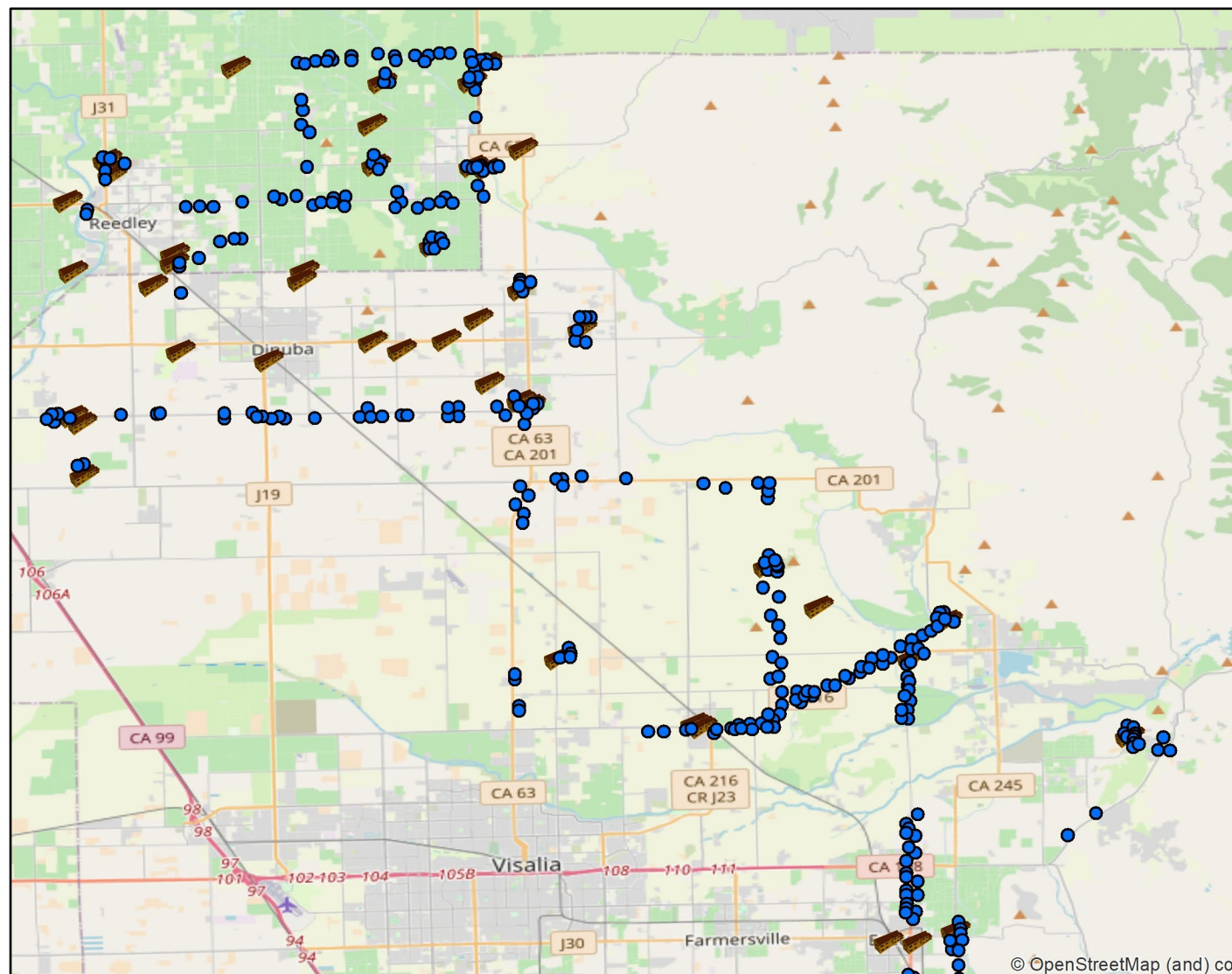
- Commercial citrus
- Trapping and inspections
- Eight rappers
 - Trap turnaround time ~ 2 weeks
 - No. of trap sites 3,748
 - 28,586 (fall and spring 2024) traps were inspected
- Multi-pest inspections
 - Three inspectors
 - 6,888 (fall and spring 2024) trees were inspected
- **NO ACP or other exotic pest detected**

ACP Trapping (Winter & Summer, 2024)

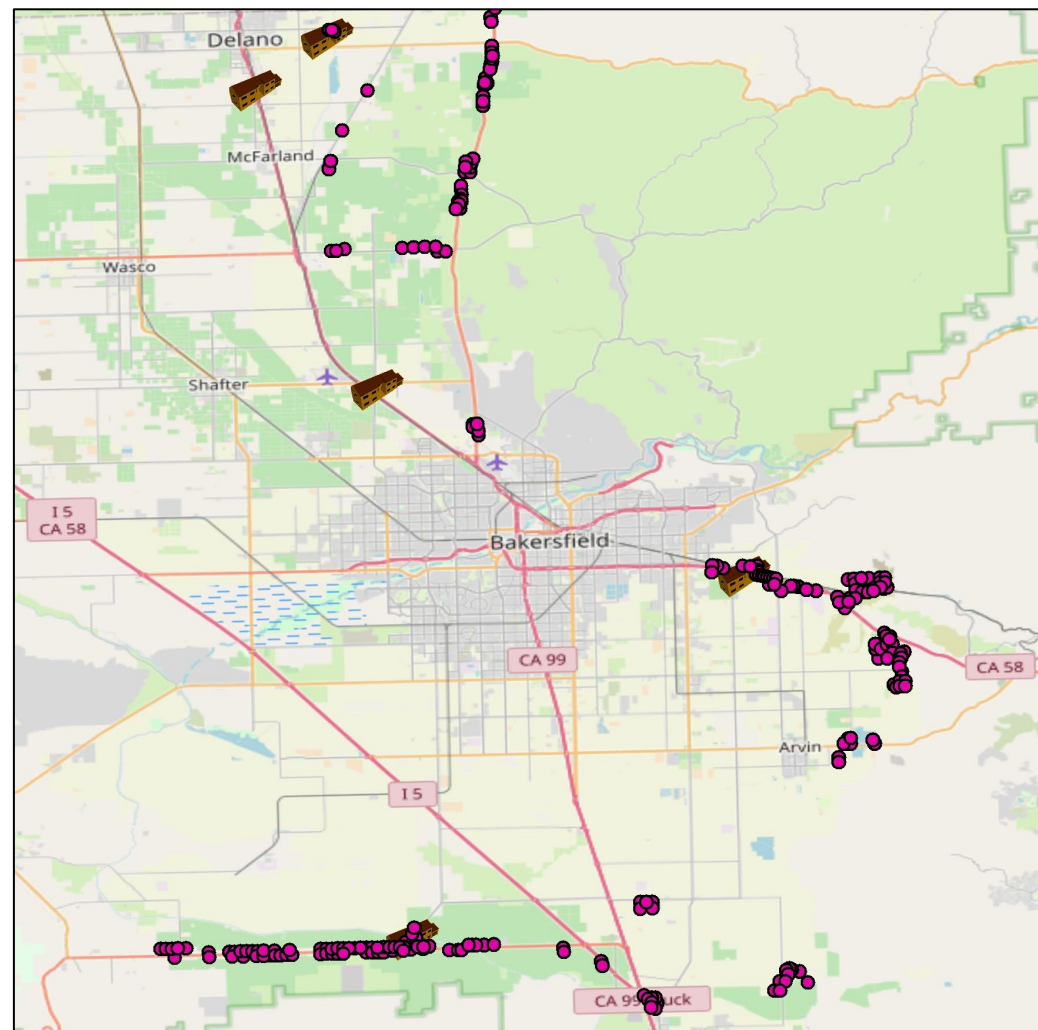
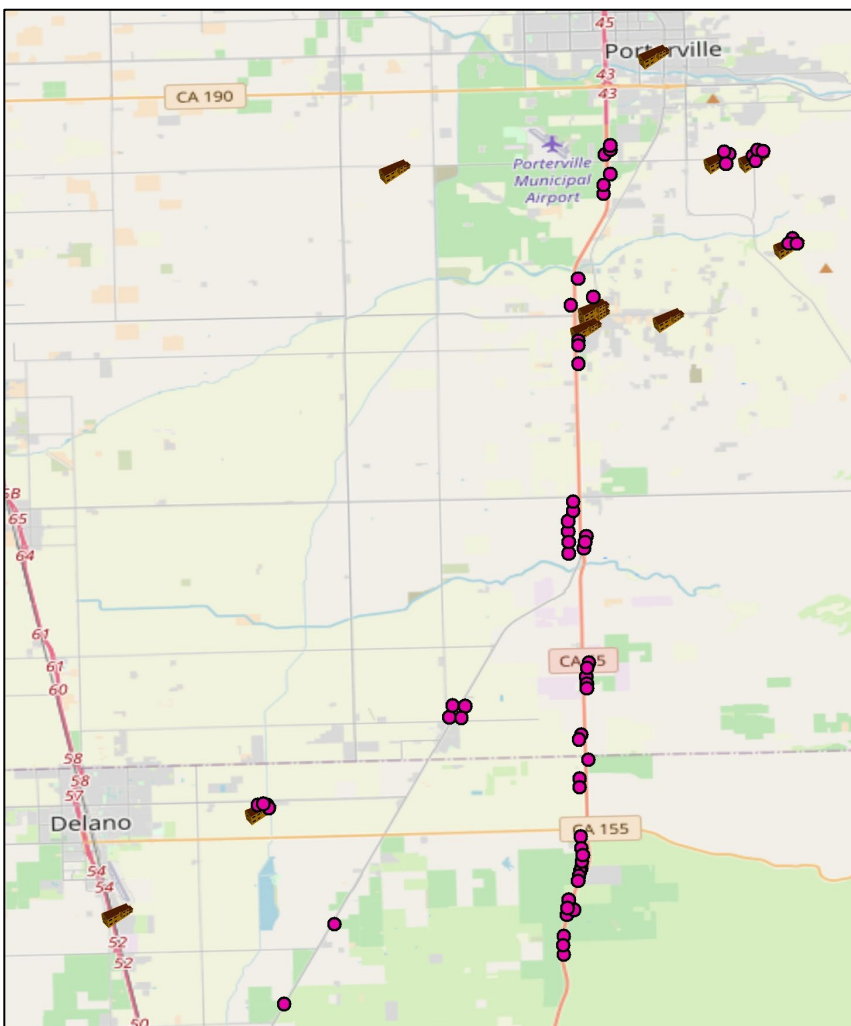


- Commercial citrus
- 2 trappers
- Turn around time ~ 3 weeks
- No. of trap sites 37
- 2476 (2024) traps were serviced
- **NO ACP or other exotic pest detected**

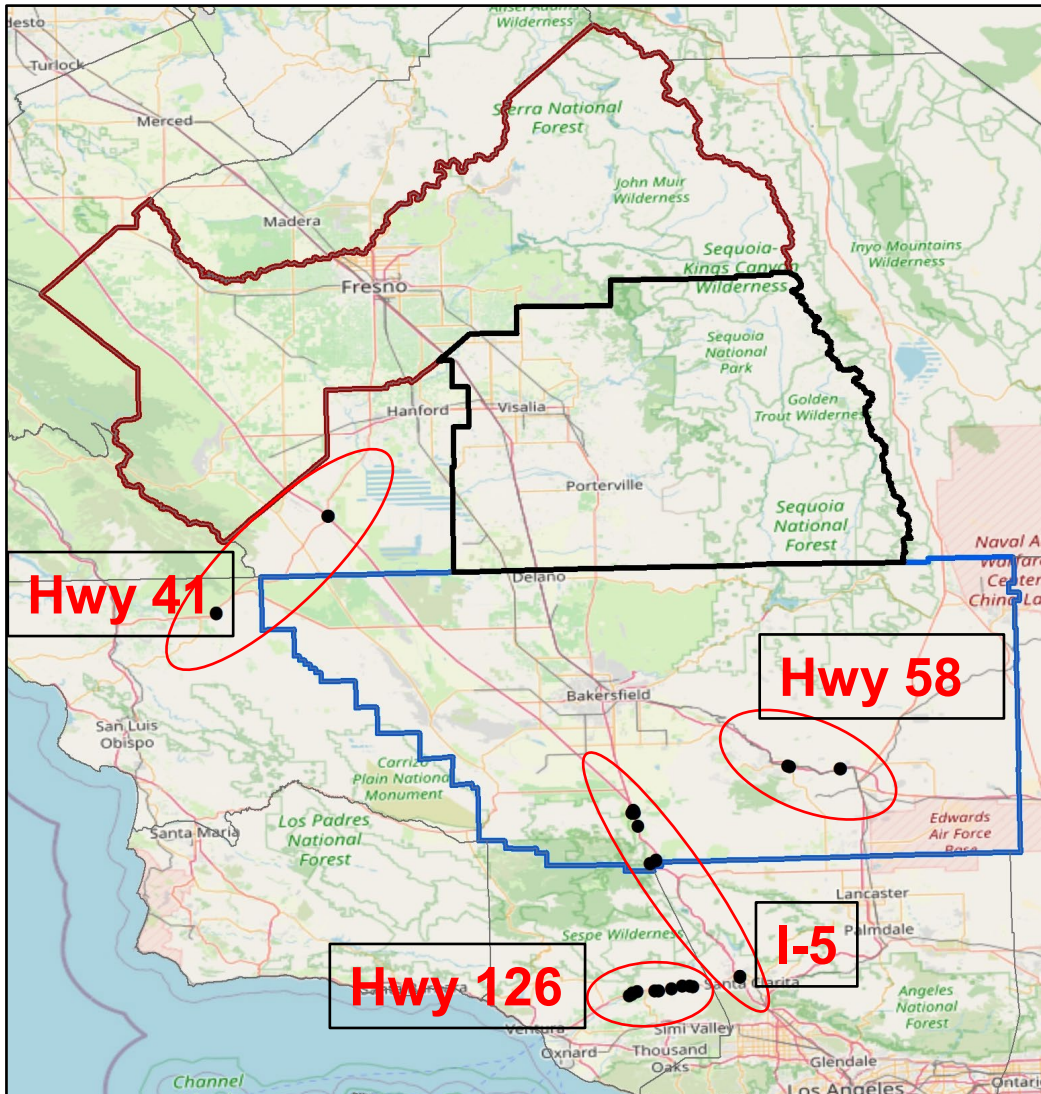
ACP Trapping (Winter & Summer, Northern Territory)



ACP Trapping (Winter & Summer, Southern Territory)



ACP Trapping (Non-Citrus Sites)



- Weigh-Stations
- Truck Stops
- Transportation Corridors
 - Interstate
 - State Routes

Locations	Trap sites	Visits	Serviced
Hwy 126	14	38	38
Fort Tejon & (Hwy 58)	17	40	40
Kettleman/Reef city	6	12	6
Total	37	90	84

Strategic Priority A				
Detect, Suppress, and Locally Eradicate ACP Populations				
Key Actions - SHORT TERM		Tactic Lead	Deadline	Notes/Status
1	Develop a strategic ACP suppression plan tailored to each region, taking into consideration the following: - ACP-infested vs. non-infested regions - Regional nuances (weather conditions, commodities grown, etc.) - Proximity to large commercial growing areas or dense residential areas	Keith O.	4/30/2025	Report to Operations
	Following TRT recommendations, Division staff will develop regional action plans to present to the Committee. The suppression plan should clearly lay out specific actions and operational activities per region, including: - Tarping protocols and potential adjustments - If surveying/trapping activities should be adjusted in certain regions - Residential proximity to commercial citrus areas - A clear definition and current map of each "region"			
Key Actions - LONG Term		Tactic Lead	Deadline	Notes/Status
2	Submit a request with Dr. Bodil Cass and work to identify organic ACP treatment options for effective suppression within HLB quarantine zones.	Keith O.	6/1/2025	Report to Science
Key Actions - SCIENCE SUBCOMMITTEE ACTIONS		Tactic Lead	Deadline	Notes/Status
3	Assign the existing CDFA PCD Task Force Committee to evaluate what activities can transfer from CDFA to regional entities (Question 2) and conduct the corresponding cost analysis. If this strategy is employed, it should be an incremental process, and an initial “test case” should be done to understand the impacts better.			Include effectiveness with cost effectiveness (Melinda)
	Develop a findings report to share with the committee	Jennifer	4/1/2025	Initial meeting to be held in March 2025
	Following the report, CDFA to conduct a cost analysis exercise to identify impact of the shift in responsibilities	Keith O./Carl	5/1/2025	
	Develop an initial "test case" in a single region to further evaluate efficacy.	Keith O./Etienne	6/15/2025	
4	Convene a working group consisting of Etienne Rabe, Neil McRoberts, and Melinda Klein to recommend region-specific pests and disease management activities (Questions 3, 14, and 15). The group will build off the “Commercial Citrus Regional Management” document the Technical Review Team provided. This working group will also address the question of what the expected impacts are if we are to reduce program activities in areas where commercial citrus doesn’t exist (Question 12).	David P.	3/15/2025	Recommendation: -Add Kevin B, John G, Ivan M to add key parties from each region -Discuss at cpdpc -separate non-commercial review?
5	Dr. David Morgan (CDFA) has coordinated Tamaraxia releases to avoid pesticide treatment areas and will continue to improve the coordination effort using CDFA’s pesticide treatment records (Question 7).	David M.	Ongoing/completed	Ongoing/completed

6	Dr. Neil McRoberts to create a short paper for the CPDPC summarizing what is known about the effect of California's climate on ACP control (Question 17).	Neil	3/31/2025	
7	CPDPC to discuss how long an area previously under ACP quarantine needs to be ACP-free to warrant removal of the quarantine (Longer Term Question 1). CDFA to submit another proposal to the USDA to remove regions from the ACP quarantine.	Keith O. / Raymond	3/1/2025	Package has been compiled. Will be presented to CPDPC 2/26/25

Strategic Priority B				
Detect and Eradicate HLB-Diseased Trees				
Key Actions - SHORT TERM		Tactic Lead	Deadline	Notes/Status
Commercial Groves				
1	Collaborating with USDA, develop a commercial HLB response plan with a regional approach	Keith O.	5/15/2025	Report to Operations
	A clear definition of what the “tipping point” looks like for HLB infestation in commercial groves (i.e., at what point does the response switch from tree removal/eradication to HLB management)			Eradication authority consideration
	Approaches should include recommendations for treatments, tree removal, delimitation surveys and sampling, etc.			2% inspection? X% of samples positive
2	Develop recommendations for non-regulatory sampling opportunities for industry members to consider	Keith O.	7/31/2025	Report to Operations
3	Determine the implications of what a statewide HLB quarantine may look like for California and evaluate the pros and cons	Keith O.	4/9/2025	Report to Operations
	Impacts on the import of nursery stock and/or fruit into California from other states under a statewide quarantine.			
Key Actions - LONG Term		Tactic Lead	Deadline	Notes/Status
Commercial Groves				
4	Collaborate with USDA to determine opportunities around changes to existing federal requirements	Keith O.	12/31/2025	Report to Operations Including: - Mandatory tree removal in commercial groves (see “tipping point” definition above) - Reduction of quarantine area (less than 5-mi.) - Defining metrics for the expiration of HLB- and ACP-quarantine areas (see Priority C)
5	Review the recent adjustments made to the commercial risk-based survey and evaluate what areas may need to be adjusted to accurately reflect the current HLB environment in California and other considerations mentioned above (i.e., regional HLB response plan approach).	David P / Anmol / Keith O	9/30/2025	Report to Ops/Science Consider outreach implications if growers are identified to be in high-risk areas (align with Strategic Priority D)
6	Evaluate opportunities for PCDs to support survey/trapping or other activities.	Jennifer	9/30/2025	Tied to A(3)
Residential Areas				

7	Develop a strategic HLB response plan tailored to unique residential scenarios/geographies, taking into consideration proximity to commercial groves and "hot spots" of HLB infections	Anmol / Keith O.	3/15/2025	Report to Ops/Science Plans should consider a strategic IPM approach (particularly in "hot spot" areas), and varying delimitation areas Utilize working group hot spot definition in B5
	Define: - What is considered "near" a commercial grove? - How a hot"spot" would be quantified? - How would a "buffer area" around a commercial grove be measured?			
8	Review the recent adjustments made to the residential risk-based survey and evaluate what areas may need to be adjusted to accurately reflect the current HLB environment in California and other considerations mentioned above (i.e., regional HLB response plan approach).	David P.	12/31/2025	Report to Science The following definitions determined above should be considered: proximity to commercial groves, hot spot areas and buffer area measurements
Key Actions - SCIENCE SUBCOMMITTEE ACTIONS				
9	Convene a working group, with members Keith Okasaki, CPDPD's EPM1s, Subhas Hajeri and Ram Uckoo, to study the best way to reallocate resources from urban areas to areas adjacent to commercial citrus (Questions 1, 4, 5, and 9).	Jennifer	6/30/2025	Expand group with committee members
	Specifically: - The level to retain in the hotspot area(s) - Resources to move to the edge of hotspot areas to establish a modified containment strategy - Increasing ACP and plant testing closer to commercial citrus - The impact of changes made in fall 2023 to the multi-pest and delimitation survey methodologies - Developing an approach for increasing HLB surveys in commercial citrus survey; expand upon the recommendations provided in the TRT Report for Question 9			

10	Convene a working group consisting of Etienne Rabe, Neil McRoberts and Melinda Klein to recommend region-specific pest and disease management activities (Questions 3, 14, and 15). The group will build off the “Commercial Citrus Regional Management” document the TRT provided. This group will also address the question of what the expected impacts are if we are to reduce program activities in areas where commercial citrus doesn’t exist (Question 12).	David P.	6/30/2025	Add Kevin Ball
11	Convene a working group consisting of Dr. Weiqi Luo, David Phong, Dr. Matthew Daugherty, Dr. Neil McRoberts and Dr. Robert Clark to identify criteria for defining hotspots within which the current response protocols are no longer effective (Question 6). The TRT report indicates that this definition should be supported by statistical modeling and by the positivity rate (%) of CLas+ plants at the STR level.	David P.	6/30/2025	Add Chris Boisseranc and Subhas or Ram
12	Approach regulatory agencies (USDA) to provide rationale/support for implementing the 5-mile radius (Question 13 a and b). Convene a group to discuss with regulatory agencies the issues with regulated entities (growers, nurseries, etc.) and how they can be part of developing quarantine boundaries.	Keith O.	6/30/2025	
13	CPDPC to discuss how long an area previously under ACP quarantine needs to be ACP-free to warrant removal of the quarantine (Longer Term Question 1). CDFA to submit another proposal to the USDA to remove regions from the ACP quarantine.	Keith O.	2/26/2025	To be discussed at 2/14/25 Science and 2/26/25 CPDPC

Strategic Priority C Control Movement of Psyllids Around the State; Enforce Regulations				
Key Actions - SHORT TERM		Tactic Lead	Deadline	Notes/Status
1	Evaluate current mitigations for bulk citrus movement and determine opportunities for regional adjustments to allow for ease of fruit movement while accounting for regional risk factors (i.e., moving from a low-risk area to a high-risk area, and vice versa).	Keith O.	5/31/2025	Report to Operations Ongoing, built into revised quarantine reg
2	Develop a list of pros and cons for a regionalized approach for tarping mitigations regarding bulk citrus movement across the state	Keith O.	4/9/2025	Report to Operations
	Consider: -What enforcement challenges will be presented? - Merits of post-processing/packed fruit and tarping - Cost analysis			
3	Evaluate the current nursery regulations within an HLB-quarantine zone (i.e., tree sales to residents) and discuss the implications of lessening or adjusting.	Keith O.	2/28/2025	To be presented at February CPCPC
Key Actions - LONG Term		Tactic Lead	Deadline	Notes/Status
4	In collaboration with USDA, define metrics for expiration of ACP-quarantine areas (see Priority B).	Keith O.	2/28/2025	To be presented at February Science and CPDPC meetings

Strategic Priority D

Outreach and Collaboration

Key Actions - SHORT TERM		Tactic Lead	Deadline	Notes/Status
1	Develop an approach for the reorganization of regional Grower Liaisons and how current Grower Liaison responsibilities may be transferred to other entities,	Zack McCormack	4/30/2025	Report to Outreach Sacramento CPDPD coordinator. Outline of duties in place. 1 in each region?
	Including: - Movement of responsibilities to CDFA staff - Movement of regional grower communications to PCDs, task forces, packinghouses and other industry partners - Movement of regional Grower Liaison responsibilities to one statewide Grower Liaison (following a similar format to Pierce's Disease)			
Key Actions - LONG Term		Tactic Lead	Deadline	Notes/Status
2	Align the Division's outreach plan and contractor activities to mirror the outcomes of the other Strategic Priorities, as needed.	Dahmoon Maeesomy	12/31/2025	Report to Outreach
	Explore additional tactics for engaging with ag-focused organizations, including nurseries, Ag in the Classroom and others.			

Strategic Priority E Operational Excellence

Key Actions - SHORT TERM		Tactic Lead	Deadline	Notes/Status
1	Evaluate the implications of moving back to a “program” and no longer operating as a “division,”.			
	Include: - A cost analysis/economic evaluation - Impacts to how being a “program” would affect or change the Division’s current operations, including: What would it look like if the Division was absorbed under the Plant Health and Pest Prevention Services Division? PEDP?	Anmol / Keith O. - implication Carl - cost analysis	3/26/2025	Report to Exec
2	Identify new options and/or improve accounting systems to monitor fiscal spending.	Carl	12/31/2025	Report to Finance
3	Continue efforts to improve communications with Committee members, including clarity on what staff needs from the committee, providing access to key program data via dashboards and other updates.	David G.	Ongoing	Report to Exec
4	Create an official onboarding process and responsibilities document for new Committee members	Keith O.	5/14/2025	Report to Exec Onboarding packets to be provided by Plant - Nursery Services
	May include: - Committee meeting responsibilities - Managing expectations for state operations and processes - Division staff may work with the outreach contractor for support in the development			
Key Actions - LONG Term		Tactic Lead	Deadline	Notes/Status
5	Once the Strategic Plan is finalized, evaluate the structure, membership and governance of the Committee in full to ensure operational efficiencies.		12/31/2025	
6	Define a “tipping point” in the progression of ACP and HLB at which time the Division’s current regulatory authority is no longer needed, and a full restructure of the Division’s Action Plan and/or Committee structure may occur.		1/31/2026	
	Consider: - What would be the implications of becoming a non-governmental, quasi-marketing order (similar to Citrus Research Board) and what milestones would need to be met to realize a benefit?			
Key Actions - SCIENCE SUBCOMMITTEE ACTIONS				
7	CPDPC to debate the importance of multi-pest survey and tree removal. The TRT and the Science Subcommittee have a range of opinions on this question (Question 8).		Ongoing	

8	CPDPC to debate the impact of refusals on the Program's effectiveness in surveying for and eradicating HLB (Questions 10 and 11). The TRT does not see refusal as a major issue for treatment and multi-pest surveys. However, in the case of commodity surveys, a higher refusal rate in certain regions (i.e., Ventura) could skew results.		Ongoing	
	Discuss at the full CPDPC meeting and the lessons learned from the Texas Tree Removal Program (Longer Term Question 2).		5/14/2025	USDA funding for tamarixia production?
9	<p>The TRT Report identified the following two lessons:</p> <ul style="list-style-type: none"> - Aggressive tree removal needs to be coupled with aggressive psyllid management for the greatest impact. - The number of commercial finds near residential areas also suggests coordinating management between residential and commercial production areas will significantly benefit commercial production areas. 			

Technical Advisory Committee Response to

Draft Questions for Technical Advisory Committee – Sept. 24, 2024

Priority attention/ranked for importance: Ranked A, B or C

Overarching Questions: The following are the foundational questions the CPDPC believes will best inform the refresh of the program’s strategic plan and fuel operational efficiencies throughout the program. While some may be more operational in nature, we’re seeking input from the Technical Advisory Committee (TAC) to provide a science-based response to these questions.

1. How do we quickly and efficiently move the survey work away from urban areas and focus our resources on areas adjacent to commercial citrus?

The group was not unified or in agreement that moving away from urban areas and focusing resources on areas adjacent to commercial citrus was going to benefit the longer term aims of disease control and management. There are concerns on the regulatory and biological impacts of this approach. However, to address the question at hand, the following steps are recommended:

- 1. Clarify the question. It refers to moving away from urban areas, but presumably it actually means refocusing efforts in urban areas so that the program focuses on locations closer to commercial citrus, not refocusing program resources away from urban citrus completely?*
- 2. Assuming point 1 is an accurate interpretation, create a working group to identify which activities to stop/reduce, and*
- 3. Evaluate the resources freed up by step 2. so that,*
- 4. The working group can design appropriate survey programs close to commercial citrus, taking local risk factors into account in assigning effort, and,*
- 5. Put in place the appropriate oversight/evaluation process to assess the performance of the new approach and report to CPDPC.*

2. What tasks should we move to the PCDs and how can we expedite the transfer process?

The different Pest Control Districts (PCDs) across the state have a range of resources available to conduct activities related to the current CPDPD program which makes it difficult to identify specific tasks to move. Any activities moved to PCDs should be introduced using a purposeful designed approach that clearly defines the specific goals intended by moving activities to the PCD. Within the current regional task forces, several groups are involved in coordinating activities to address regional needs and based on the area, there may be other organizations that should be considered if the CPDPC wants to move activities to a regional level. For example, County Ag Commissioners have a number

of responsibilities already – if the goal is for more regional control, they might also be considered given their regulatory responsibilities and authority.

Members of the group also felt that this was an “operational” question. This question needs to be addressed by CDFA’s Pest Control Districts and Task Force Committee, which has held meetings in the past and may have a better understanding of the “activities where PCD/Task Forces align/assist”. Additionally, it’s suggested that if the CPDPC is serious about deploying this strategy, a “test case” in which before and after costs and impacts of activities should be done to understand the impacts of moving CDFA activities to other groups (e.g. PCDs).

3. Evaluate the program in each region (north/south, urban-rural) and determine the best program for each region, knowing they can be quite different?

The regional management plans proposed by the TAC give a good starting point for discussion of this question. Please see Addendum A for more details.

Southern California Residential Program Ranking A

4. Would reducing residential surveys for and tree removal of HLB-positive trees in primarily urban areas (i.e., Southern California) put commercial citrus regions at a higher risk?
 - See 2022 SAP perspective on page 25.

While the group was not unanimous in this assessment, all members of the panel advocated for maintaining some level of current activity in the “core area” as a foundation for the program, which still includes tree removals and biocontrol in those areas. Reducing surveys and tree removals in any region increases risk to commercial citrus. Management of a growing reservoir of a plant pathogen requires testing and removal of infected hosts. While focusing resources on areas closer to commercial citrus may reduce local risk to those groves, pulling resources away from the known epicenter of CLas+ poses longer term risk to the entire industry as the reservoir will grow unchecked and unmonitored. Two strategic suggestions coming from the panel would be (a) move resources to the edge of the “core area” in a modified containment strategy where tree removals would have the maximal impact and (b) increase testing closer to commercial citrus to pinpoint areas in which CLas+ has a higher risk of entering groves due to proximity.

5. Multi-pest survey methodology adjustments (including an increased focus around commercial adjacent areas) and reductions in delimitation areas were implemented in early 2024. Have we recognized efficiencies (reduced staff hours, reduction in HLB detections, reduced budget expenditures on these activities?) in those changes?

The group was unanimous in finding that a complete response to this question requires budgetary information at the CDFA level and further analysis beyond the scope of advisory opinion requested from the TAC during this initial response. If this item is of interest for the TAC to pursue, a working group can be collected to address with appropriate CDFA support to be provided.

6. How should the program define an HLB hot spot now and in the future? How could we use these criteria to prioritize operational activities to be more efficient? What criteria would define when a hot spot is so out of control that current response protocols (treatment, tree removal, etc.) are no longer effective?

The group was in agreement that the CPDPP needs to carefully consider how it defines a hot spot since it has far-reaching implications for strategic decisions moving forward. Hot spots should be defined by (a) positivity rate (%) of CLas+ plants tested and (b) at a smaller scale than counties or ZIP codes, such as STRs. While the group has not had time to develop a specific metric, there is interest in pursuing this further to come up with a recommendation that can change over time based on the extent of the CLas reservoir, testing capacity, and areas of focus, but is still scientifically objective. The final definition should be supported by a concerted statistical modeling effort, have both an infection density basis, and a temporal component to characterize whether control appears to be working, and take into account that a hot spot is an area the CPDPP may want to deemphasize.

7. How do the HLB response treatments (250-meter foliar and systemic insecticides) impact the Tamarixia released in those areas? Is the timing of releases currently optimized, or do we need to re-evaluate the deployment of Tamarixia to be more efficient?

The group was in agreement that better coordination is needed to ensure that releases are not overlapping spatially or temporally with treatments, which could improve the complementary nature of these two elements of ACP management. ACP population densities in HLB treatment zones appear to be extremely low due to a combination of insecticide applications and Tamarixia releases in the surrounding area. Preliminary analysis suggests the impact of biocontrol in these treatment zones is being underestimated due to some combination of a lack of suitable ACP stages for parasitoids or direct non-target effects of insecticides on parasitoids. Better coordination is needed to ensure that releases are not overlapping spatially or temporally with treatments, which could improve the complementary nature of these two elements of ACP management. Further consideration of this issue is also warranted for treatments surrounding new ACP detections, especially in areas where parasitoid establishment has not been yet confirmed.

8. Given the latency of the disease expression, is there scientific justification that the multi-pest survey and HLB-positive tree removal contribute positively to eradication efforts?

The group had a range of opinions on this question. There is no direct argument from the biology of the disease (as we currently understand it) to the proposition that testing for the presence of CLas and removal of detected trees does not contribute to eradication efforts. In California it now seems clear that conditions are not continuously favorable for ACP or CLas except in a few areas, such as coastal San Diego County. The long latency period for the disease may be even longer under California conditions, and this may serve to increase the possibility of disease management by preventing trees from acting as sources of inoculum while the possibility of detection exists. However, experiences in Texas would suggest that tree removal alone isn't enough to slow disease spread in commercial settings.

It's important to differentiate two periods in addressing this question. The latency period is the interval between when a tree is first infected with CLas and when it becomes a source of new CLas cells that can be acquired by ACP when they feed. The incubation period is the time between when a tree becomes infected and when symptoms appear (or when HLB can reliably be detected as infected by other means). Historically, in climates which are very suitable for both ACP and CLas, a major problem with controlling HLB is that the incubation period is much longer than the latency period, so trees become sources of inoculum before they are visibly diseased, leading to the problem of "the invisible epidemic". The fact that the latency period is highly variable and can extend to over a year or more, also adds to the problem since it makes it difficult to quantify the risk of spread from data on known positive trees. The importance of strong psyllid control must be a part of the activities undertaken if tree removal is to contribute positively to eradication efforts. This result has been consistently shown in a range of field studies and in modeling work with independent and different modeling approaches. Further analysis of this issue is required to provide a more definitive answer as to the relative contribution of infected tree removal and ACP control on the rate of disease spread; additional support for a research project to address this question under California conditions is recommended for this industry to move forward.

Commercial Citrus Survey Ranking A

9. To supplement the current multi-pest survey and commodity survey and increase the sampling of commercial citrus for HLB, what commercial grove survey approach would the TAC recommend to assess more commercial groves each year as efficiently as possible (i.e., start with pool sampling borders of commercial blocks, etc.)?
 - See 2022 SAP Report page 17, 18, 23 for initial recommendations on invoking a commercial survey in SoCal.

The group was in agreement on this issue. The TAC recognizes why the CPDPC would like this question to be addressed, but the technical aspects of the question should not be examined in isolation from the regulatory issues and commercial interests of growers and/or the industry. Broadly, the aim of commercial screening could be tiered so that it maximizes the chances of detection. It should include the following elements:

- *A properly designed survey plan*
- *The use of randomization in selection of trees so that it does not rely on symptoms*
- *Composite (aka group or cluster) sampling to increase the number of trees initially screened*
- *Initial use of tests that maximize sensitivity to minimize false negatives, followed up by repeat testing of any positives with a test that maximizes specificity to screen out false positives.*

Members of the group see this as a priority to address, if the interest of the program is to pivot away from residential areas to commercial areas. In that case this would be a key program to develop. Testing ACP for CLAs was also highlighted as a key surveillance method and a primary target for initial grove management efforts.

Refusal Rates Ranking B

10. In the existing residential and commercial grove surveying efforts – multi-pest and commodity – are refusals to cooperate (residential and commercial) with these voluntary activities at high enough rates where they could be skewing the program’s ability to get a complete picture of infection rates in California?

The group was in agreement. The levels of refusals for commodity surveys and delimitation surveys were shared with the group by CDFA staff. Refusal rates were not provided by CDFA for the multi-pest survey, because nearby properties are surveyed should the initial location refuse. The group did express concerns about the rate of refusal in the Commodity survey. Specifically, the high refusal rates in the Ventura areas were noted as this region appears to be an outlier compared with other regions and may be skewing the program’s ability to get a complete picture of infection rates. Some TAC members recommended that the CPDPC representative for the Ventura region works with the local Task Force on outreach about this issue to determine its cause and improve participation rates. This acknowledgement of possible reduction in effectiveness is not to say that treatment efforts should be stopped in regions with higher than normal refusal rates as multiple partially effective actions may still help overall program goals.

11. When conducting non-mandatory residential treatments (ex. ACP+ response, ACP detection in non-infested areas, etc.), are current rates of refusals making these treatment activities effectively obsolete?

The group was in agreement. Refusal rates are not a systematic problem for the program and the CPDPC should be aware that concerns about refusal rate are currently

unwarranted. Rates of refusals were reported to the TAC and with only one exception were the refusal rates seen as an issue for treatments. For delimitation refusal, rates were very low across all counties reported and for commodity survey, refusals were low in all counties but one. Some TAC members suggested a possible approach to address this issue in future is the creation of a reserve earmark within the outreach budget which can be used for targeted outreach in areas where refusal rates are observed to be increasing, or when they exceed a pre-determined threshold.

Surveying Non-Commercial Citrus Regions Ranking B

12. In areas where commercial citrus doesn't exist, what is the impact of reducing program activities? *NOTE: build off existing work from Neil McRoberts and Sandra. Meeting notes, NMR, SO Looked at withdrawal of winter trapping in northern areas of the state.*

The group was in agreement. Together with staff from CDFA, members of the TAC recently completed an analysis for CPDPC in which identified cost savings in the winter ACP trapping program in northern counties. The approach used for that analysis could be extended to examine objective risk for reducing other program activities in counties with little-to-no commercial citrus. Such analyses should, however, be conducted within an overall framework where the requirements to maintain the emergency status of the program overall, and for qualifying for federal program support, have been laid out.

Commercial HLB Response Ranking A

13. What is the most scientifically effective response to a commercial HLB detection that places a reduced burden or less punitive response on growers in the area?

See responses below.

- a) Is there a scientific rationale for a 5-mile quarantine? Could it be reduced and maintain efficacy?

The group was in agreement. No clear scientific rationale for a five-mile quarantine was identified by the group but as this quarantine radius was identified by the federal and state regulatory agencies, those groups should be requested to provide the rationale used in setting the scale of the quarantine. Five miles is beyond the value that empirical studies have estimated to be the natural dispersal range for ACP, and what has been inferred from spatial analysis of ACP in residential trapping data. An analysis of commercial groves showed a significant invasion kernel of ~4-5 km from other infected groves. Regulatory agencies may use different parameters in setting up the quarantine distance. In these quarantine zones, the initial find may not be the initial site of infection so further survey should be conducted to find the full scope of infection. Efficacy of any quarantine zone depends on the range of activities that are mandated to take place within that quarantine zone to manage the pest/disease. The group believes that the 5 mile quarantine may be

larger than necessary but more information/studies need to be conducted to identify a minimum efficacious quarantine area.

- b) What criteria should be considered when establishing a quarantine around commercial HLB detections? Are there specific circumstances that should be evaluated prior to the establishment of the quarantine (ACP population levels, terrain, non-contiguous hosts, etc.)?

The group would need to understand the initial justification for the quarantine size by the federal and state regulators to best address this question.

- c) What is the most effective and efficient treatment for safeguarding bulk fruit for movement?
 - 1. Consider treatment activities such as pre-harvest treatments, spray and move in certain regions, tarping, post-harvest treatments, etc.)? Should treatment activities change within different ACP quarantine zones?

The group is in agreement. Tarping has shown effectiveness in reducing the movement of ACP with uncleaned fruit but the number of finds in packinghouses suggest some of the more lenient practices (i.e., grate cleaning) may not provide enough effectiveness, if not done in strict compliance with best practices; while grate cleaning can work effectively, the margin for falling below standards needed for compliance is narrow. Bulk fruit movement safeguards should continue to be part of any regional-specific management plans. The industry should consider minimizing long distance fruit movement when possible.

Fresh Slate Approach Ranking A

- 14. Looking at the program and where we are today, is there anything California's program should have done differently (or now moving forward to change course) to be more effective or efficient in its fight against ACP/HLB?

The group is in agreement. Relative to other programs and efforts to manage ACP and HLB across the US and across the world, the program has been responsive to changes in circumstance and has adapted as new issues develop. Phytosanitary programs develop and evolve as new information is learned and the CPDPP to date has been very responsive as new information comes to light.

- 15. If the TAC could redesign the program from the bottom up, how would the TAC approach the new program?

The group had a range of thoughts on this topic. A greater emphasis on regional management would be encouraged keeping in mind that humans can vector this bacterium along with ACP, and statewide coordination needs to be maintained as long as there is movement of plants, fruit and people across the state. Regional plans are suggested in the attached document (Appendix A).

Additional thoughts from the group, bear in mind the following:

- There is no evidence of significant additional approaches or methods to combat the disease being used elsewhere that could be adopted in California*
- The California program has a history of adaptability, evidence-based decision making, and engagement with scientific expertise*
- The California industry has extensive oversight of program operations and has conducted periodic reviews of program performance*

With those points in mind, the only clean sheet approach that wouldn't end up with something similar to the plans already being discussed, appears to be to start with the question of whether regulatory response in California needs to be significantly amended. The group noted that the broad thrust of the questions posed in this document highlights the inherent tension between individual grower/business interests and the regulatory requirements under which the program operates. Between the current situation and complete deregulation, significant voluntary efforts to detect and eradicate HLB cases in commercial citrus are only likely if a regulatory approach which is less burdensome to growers can be implemented.

16. Are there any fundamental principles or effective tactics being explored elsewhere in the world that we should evaluate for use in California?

The group did not identify any fundamental principles or effective tactics being explored elsewhere that should be evaluated. There were suggestions to avoid some areas of research, such as nutritionals as a sole mitigation treatment, but working to improve psyllid control and a focus on regional needs were the two areas that were recommended for continued support and evaluation.

17. Climate As An Ally in the ACP/HLB Fight - What data would need to be collected to effectively analyze how California's climate influences the ACP/HLB fight in California and how the program might be adapted to take advantage of that influence?

There is already a significant body of analysis in this area. The idea that California benefits from a less favorable climate for ACP (and CLAs) than Florida is well established. The TAC recommends that the group could carry out a short review/synthesis of the available information and report to the CPDPC. At various times scientific input to the CPDPC has emphasized the value in amplifying the natural benefits California provides rather than

viewing them as opportunities to cut corners. For example, the natural topography helped in establishing production regions which are isolated from one another by natural barriers to spread of ACP. The industry amplifies this effect by maintaining tarping requirements for bulk citrus movement. The same principle should be applied to the use of the climatic restrictions on ACP and CLas. This is the underlying idea in the regional management plans we have proposed and which have been provided along with this document.

Longer-Term Questions **Ranking C**

1. Removal of ACP Quarantine Areas – From an entomological perspective, how long would an area previously under ACP quarantine need to be ACP-free to warrant removal of the quarantine?

This question should be part of a wider discussion about evidence-based quarantine exit criteria with regulators. When no psyllid is detected within the period covering two generations, the quarantine removal should be considered. An example that was shared with the TAC was that ACP adult survivorship varies with temperature and time of the year, so one has to consider the longest survivorship in the computation. The longest an adult psyllid lives is 88-90 days when temperature is between 55 and 60 F. Thus after 180 days with no detection, removal of the quarantine was suggested.

2. Texas Tree Removal Program – Looking at Texas' departure from its residential and commercial tree removal program, what learnings can the California program obtain? What worked and what didn't?

The lesson from Texas is that aggressive tree removal needs to be coupled with aggressive psyllid management for the greatest impact. All infected trees present in an environment cannot be identified for removal due to the latency period before symptoms develop, but an infected tree is not a problem in itself if there is no vector in the environment. The number of commercial finds near residential areas also suggests coordinating management between residential and commercial production areas will significantly benefit commercial production areas.

Appendix: Links expire Nov. 3

- **CPDPP Activities Overview (includes overview of multi-pest, commodity and other survey activities):**
https://nstpr.sharepoint.com/:p:/g/CC/EZvJQtJDC3RAifOC5wMmfgoBh1P2mlxEBdm8j_0mlypAWw?e=H5crvm
- **2022 SAP Report: 2022 SAP Review Full Report.pdf**
 - **2024 SAP Status Report: Success Acceleration Status SAP 2024.docx**
 - **Appendices: SAP Appendices .pdf**
- **2018 CPDPP Strategic Plan:**
<https://www.cdfa.ca.gov/citrus/docs/committee/ActionPlan.pdf>
- **Active Citrus Quarantine Maps:**
<https://cdfa.maps.arcgis.com/apps/webappviewer/index.html?id=a1c46000bf474fdbad97834b82e2cce8>
- **CPDPD Mission And Vision Statements: Mission and Vision.docx**

The Technical Advisory Committee that reviewed and responded to these questions includes: Bodil Cass, Robert Clark, Matthew Daugherty, Subhas Hajeri, Neil McRoberts, Ivan Milosavljević, Sandra Olkowski, Mamoudou Sétamou, and Melinda Klein (chair).

This report was submitted to CPDPD on November 5, 2024.

Addendum A. Commercial Citrus Regional Management

General concept

The idea is to use a set of basic disease management principles in a modular way to build a plan for each region. The emphasis given to different activities will vary from region to region, dictated by the baseline level of risk for that region and the seasonal fluctuation in risk (based on climate and local urban citrus density). For each region, a brief description is provided explaining the rationale for the priority actions identified and a statement about the key needs for that region in building its Asian citrus psyllid (ACP) and Huanglongbing (HLB) management plan. A table at the end of the document summarizes recommended activities by region. *Please keep in mind the ideas below are some of the thoughts from the TAC on those potential activities that will benefit the various regions. If this approach is taken, we encourage further discussion, engaging key parties from each region in order to fully develop regional management plans.*

The question of how to encourage more surveillance in commercial citrus by the industry is not addressed directly, but needs to be discussed, particularly in relation to regions such as Riverside, San Bernardino, Ventura and San Diego where there is significant threat of movement of CLas+ ACP from urban locations to commercial citrus. The San Joaquin and Sacramento Valleys are currently at a distinct advantage due to the lack of ACP and should build on that advantage to protect commercial citrus production. The current regulatory response to HLB detections in commercial citrus appears to be acting as an incentive for growers not to carry out scouting and testing of trees for CLas. A review of the overall program would benefit from an open discussion about the possibilities for a different regulatory approach that takes advantage of climactic, environmental and geographic differences between the regions to optimize control efforts.

If regional control efforts are developed, the inclusion of committee representatives from CPDPC including Grower Liaisons, Pest Control Districts, County Ag Commissioners office and key PCAs in the region should be considered. Key regional activities would be tailored to the needs and environmental conditions present in those regions with most activities focused around psyllid management, state survey and outreach efforts directed to assist regional needs.

Coastal San Diego

The climate is among the most favorable for ACP development year-round in the state. Known HLB centers of infection and quarantine areas are in place. Heterogeneous commercial citrus production with a high proportion of ranchette properties that either do not participate in commercial citrus production or pick themselves and sell locally. A pest control district (PCD) covers some of the larger commercial production acreage, but not all, and does not maintain field or office staff. The terrain can be challenging for pest management activities including ground rig insecticide application. Urban citrus is common in larger towns and cities but much of the commercial citrus has some physical

separation from urban centers. Detachment from agriculture in some areas of San Diego and other cities may lead to relatively high refusal rates for urban programs. Increasing commodity survey refusal rates over the past few years in this area suggest commercial programs have similar issues in monitoring efforts. Based on the prevalence of ranchette properties, increasing efforts to improve psyllid control (e.g. additional releases of *Tamarixia radiata* in residential areas near small commercial producers) should be considered. Incentivizing alternate crops may also be an approach for this region to consider.

Key needs in building regional approach: There's a range of engagement levels between growers in this area that limit area wide control efforts that has been present throughout the ACP program activities. A review of commercial producer concerns and better communication may be needed for this region.

Coachella and Imperial

The climate in this region is the least favorable for ACP development relative to any other region in the state. Commercial citrus is mostly focused in well-organized and active PCDs with good management and some existing organizational resources. Some growers in this region have additional regulatory burden from Sweet Orange Scab quarantines to deal with. Larger cities and private rural properties have backyard citrus, but refusal rates for urban programs are lower than in other areas impacted by ACP populations.

Key needs in building regional approach: additional resources and institutional structure to manage issues locally, regional data tracking for ACP to support decision making since ACP levels are so low.

Riverside and San Bernardino

This region has some of the largest areas of commercial citrus at risk from HLB because of the proximity of known urban HLB tree finds, and the overall size of the urban citrus population. The more inland portions of the region will experience short periods of unfavorable conditions for ACP, but the level of climatic assistance in reducing ACP populations generally is low. Grower engagement in the ACP/HLB management program is variable. There are large variations in socio-economic status and connections with agriculture across the region leading to patchy refusal rates in urban programs. The region contains citrus packing facilities.

Key needs in building regional approach: prioritize defense of commercial citrus, additional resources and institutional structure to manage issue locally.

Ventura and Southern Santa Barbara

ACP populations in this region show strong seasonal patterns, in step with available degree days, but modulated by the availability of citrus flush. Cool winters generally delay ACP development and result in relatively low infestation of the spring flush. Acreage is dominated by lemon which flushes more frequently than other varieties, such as mandarin and sweet orange, which have more defined spring/fall flush cycles. Relatively cool summer temperatures also lead to regional increases in ACP population numbers through the summer and fall months with numbers decreasing naturally only with the return of cold winter weather. The region has a diverse population of growers and a corresponding diversity in management approaches and resource availability. Grower engagement in the ACP/HLB management program is variable. The terrain can be challenging for pest management activities including ground rig insecticide application. Commodity survey refusal rates are significantly higher in this region relative to the other Southern California regions. The recent HLB detections in the Santa Paula area have resulted in a large area of commercial citrus and a number of packing facilities moving into a quarantine zone. The low lemon price over recent seasons has had an impact on the ability of growers to carry out treatments. There is no PCD, but the Ventura Co Task Force is highly engaged, while the Santa Barbara industry is mainly focused on a small and quite cohesive group of growers. In both counties, a key group of PCAs and growers together with the GLs, the CPDPC rep, the Agriculture Commissioners' offices, and UC scientists provide collective leadership and decision making. PCAs in the region already collect and compare ACP phenology data and use an ACP phenology model prototype to help in decision making. The Task Force and Santa Barbara growers have also pushed for new research on thresholds and stronger IPM approaches.

Key needs in building regional approach: prioritize defense of commercial citrus, improve regulatory survey efforts, additional resources to manage issue locally.

Northern Santa Barbara, SLO and Monterey

This is a large, diverse region with a relatively low density of commercial citrus production in the landscape, few large urban areas, and production is somewhat isolated from other major commercial citrus areas. Significant production occurs around Santa Maria, Nipomo and on the western side of the Salinas Valley. ACP populations have historically been sporadic, with low population sizes except for a few notable outbreaks. Highly suitable conditions for ACP population growth generally occur only between May and October, with a lack of development degree days during the first three to four months most years.

Key needs in building regional approach: A local decision-making committee and resources for local decision making. An emphasis on sanitation to reduce introduction of ACP and CLAs from other production areas. Focus urban program on high risk areas closest to commercial citrus.

The San Joaquin Valley

The majority of the state's citrus production and processing is located here. The valley does not have a resident ACP population, but does experience regular detections of individuals and small isolated populations, particularly in the fall of each year. Favorable conditions for ACP development are typically compressed by cold winter/spring conditions and interrupted by periods of excess heat in mid-summer. Influx of bulk citrus from southern California for processing represents an ongoing risk of introduction, but tarping for inter-region movement of loads from areas with ACP has had a demonstrable effect of reducing ACP detections along transport routes. The level of organization within the industry is high, with PCDs and an active Task Force both playing a role in organizing coordinated treatments and surveillance.

Key needs in building regional approach: a local decision-making committee from existing PCD/Task Force membership and resources for local decision making. Maintain good history of prevention and rapid response.

The Sacramento Valley

There are small, localized, areas of commercial citrus production in counties to the north of the I80 corridor. There have been small numbers of ACP detections along I80 and in Sacramento, but the region's small citrus acreage and relative isolation from the rest of citrus production mean that it currently is at a low risk level. There are no existing local loci of decision making connected with ACP/HLB management and the scattered nature of the acreage would make coordination difficult. The climate is generally highly favorable for ACP development only during the middle of the summer and early fall. Due to the differences in current ACP levels and commercial production volume and density, this region was not included in the management chart. Suggested activities for this region include the following:

- Retain oversight by CPDPC directly
- Continue to support some surveillance in highest risk urban centers and along I80 to act as sentinels for ACP arrival in region
- Encourage growers to use sticky panel traps for monitoring in conjunction with local UCCE offices
- Use ACP phenology and CLas infection risk model to monitor seasonal variation in risk
- Encourage citizen science monitoring efforts along with regional UCCE and CPDPD outreach activities.

Suggested Activities	Coastal San Diego	Coachella, Imperial	Riverside, San Bernardino	Ventura, So. Santa Barbara	No. Santa Barbara, SLO, Monterey	San Joaquin Valley
Create (Continue) local committee with CPDPC reps, GL, PCD reps, county Ag Commissioner's office and key PCAs	X	X	X	(X)	X	X
Establish (Continue) ACP phenology data collection in commercial citrus	X	X	X	(X)	X	
Use ACP phenology and CLas infection risk model to monitor seasonal variation in risk	X	X	X	X	X	X
Use ACP canine detectors to find ACP at low densities		X			X	
Test ACP from commercial citrus for CLas levels to assess risk of infection	X	X	X	X	X	
Track timing and type of ACP or ACP-effective treatments applied in PCD and cooperating commercial citrus	X	X			X	
Focus <i>T. radiata</i> releases on non-cooperating or low management 25+ or small scale commercial citrus	X		X	X		
Focus <i>T. radiata</i> releases around known HLB quarantines				X		
Coordinate <i>T. radiata</i> releases with treatments to maximize benefits	X		X	X		
Outreach to homeowners and municipalities about encouraging natural enemies through planting choices and replacing old/unwanted citrus with alternatives	X		X	X		
Outreach to encourage removal of backyard citrus close to commercial production		X			X	X
Encourage phytosanitary BMP for field crews, equipment, bulk citrus transport, etc. to minimize disease spread and to maximize the benefit of regional isolation	X		X	X	X	X
Implement urban survey plan to start in STR grids closest to commercial citrus and work back towards known HLB locations	X		X	X		
Focus non-commercial surveillance on highest risk STRs closest to commercial citrus (and work back towards urban areas)		X			X	X
Maintain effort on coordinated treatments when ACP are detected or predicted risk is high.						X

All activities are recommended but the activities highlighted above are expected to be especially helpful in these areas.

A photograph of an orange orchard with many ripe oranges hanging from the trees. The text is overlaid on the image.

Right-Sizing the Citrus Division

CPDPC Meeting
February 26, 2025

Citrus Division vs. Program

History

- 2009 – CPDPP established as part of Plant Division
 - Detection and eradication conducted by PD/EP
 - Regulatory conducted by Pest Exclusion
 - Citrus work placed on hold for emergency projects
- 2019 – Citrus Division formed with dedicated resources
 - 225 positions proposed
 - 168 positions realized

Strategic Planning Recommendation

Evaluate the implications of moving back to a “program” and no longer operating as a “division”, including

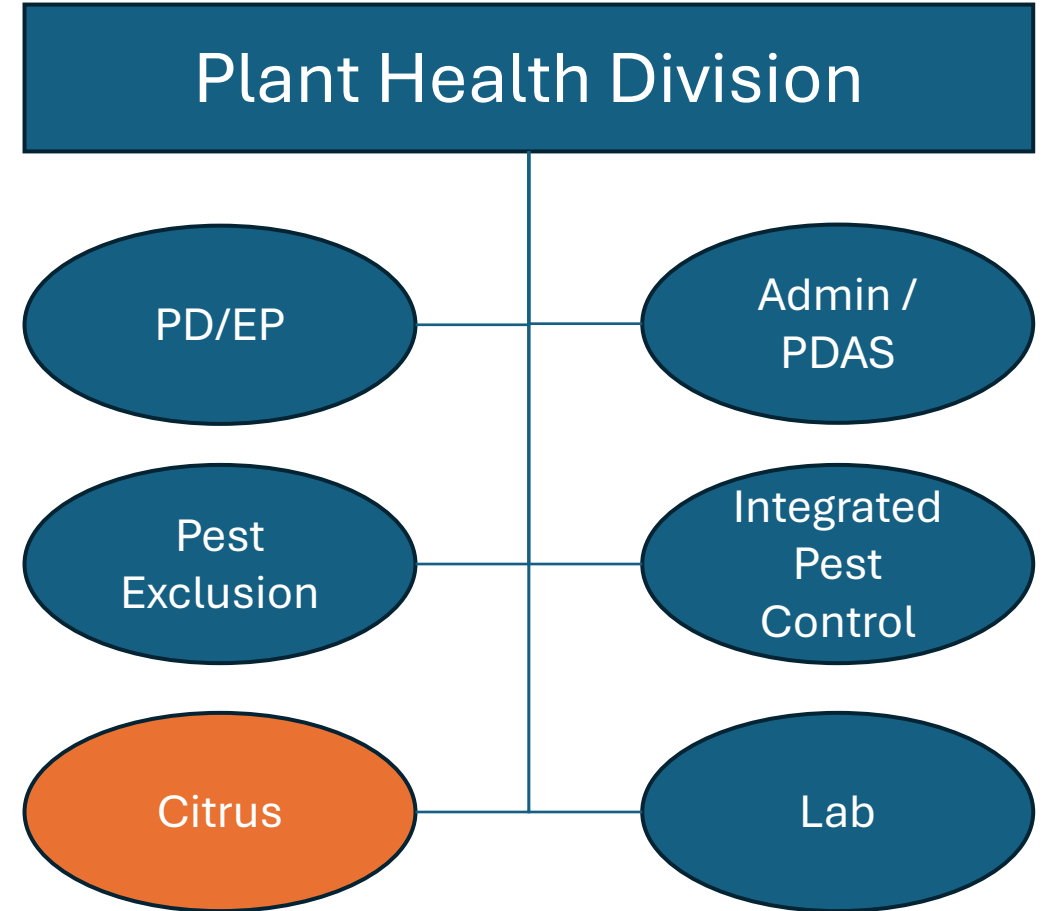
- A cost analysis/economic evaluation
- Impacts to how being a “program” would affect or change the Division’s current operations

Options for Discussion

- Option A – Move division to Plant Health as a Citrus Branch
- Option B – Re-integrate staff into Plant Health into existing branches
- Option C – Right-size the Citrus Division in alignment with strategic priorities
- Option D – Increase the assessment rate

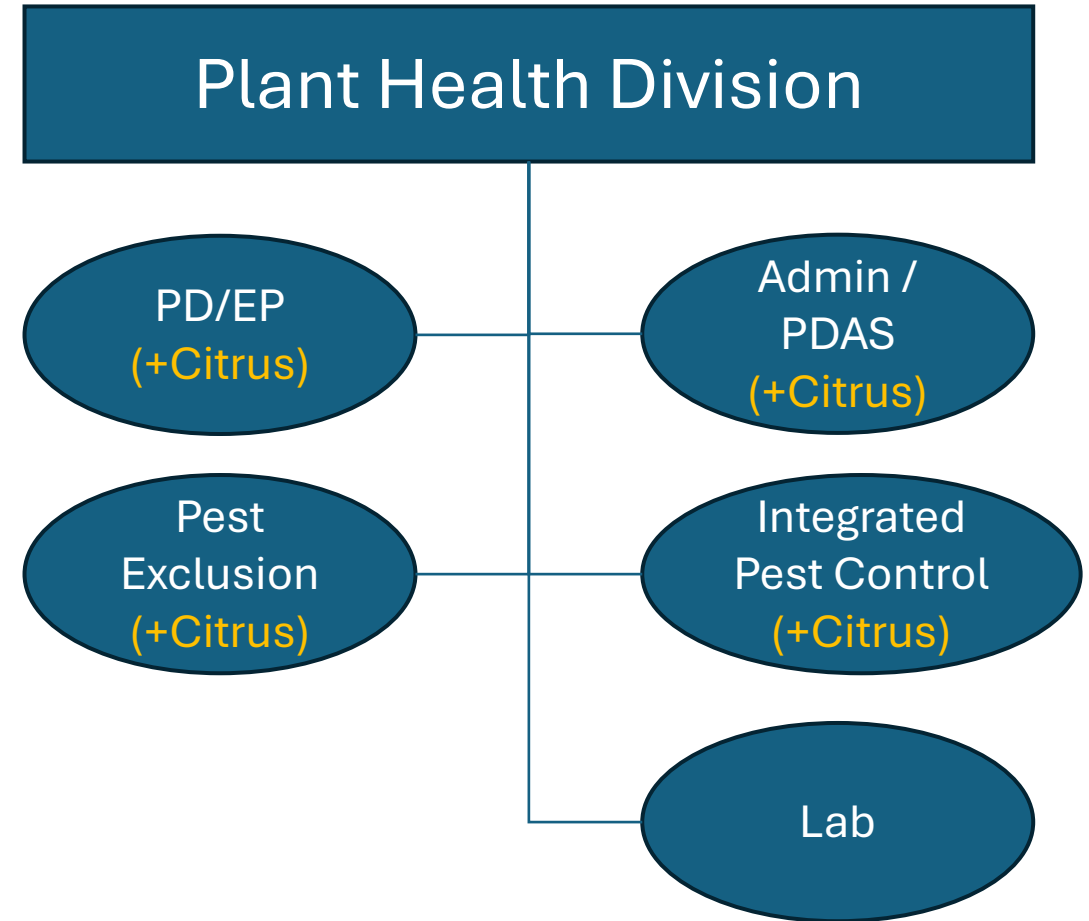
Option A – Citrus Branch in Plant Division

- Entire division becomes a branch under Plant Division
 - Plant Division will have a higher indirect rate than Citrus
- General continued autonomy of citrus activities
- Conditionally dedicated workforce
- Estimated annual savings vs. Option C – less than \$84,000 (0.3%)



Option B – Re-Integrate into Plant Division

- Citrus Division staff are distributed within Plant Division
 - PD/EP – detection, survey, treatment, and tree removal
 - Pest Exclusion – regulatory
 - Admin – distributed across branches
- No dedicated workforce. Staff will be pulled to respond to pest emergencies (e.g. fruit flies)
- Cost savings – workload dependent. Salary and benefits estimated \$2.6m*



Option C – Right-Size the Citrus Division

- Align with strategic planning and priorities
 - Remove HLB-positive trees
 - If commercial citrus within 1 mile of an HLB detection, CPDPD to conduct 250m delimitation and treatment
 - If no commercial citrus within 1 mile, CPDPD to conduct delimitation and treatment on find site and adjacent properties
 - Continue ~75% of multi-pest survey within 1,500m of commercial citrus
- Transfer vacant/filled permanent positions to Plant Division
 - No longer conduct citrus activities
 - Reduction in salary and benefits
 - Reduced cost for indirect, vehicles, office space, etc.
- Agreements aligned to strategic priorities

Option C – Right-Size the Citrus Division

- Initial plan – 225 staff
- 2019 actual – 168 staff
- Proposed right-sizing of division – **136** staff
 - Permanent positions transferred to Plant Division – **32**
 - Positions transferred are permanently lost
 - 5 vacant positions currently on loan to Plant
 - 1 position has been swept
 - 18 positions will be given to Plant
 - 8 positions will be given to other divisions
 - Additional 2 LTs and 11 seasonals
 - Projected salary, indirect, and OE&E savings **\$4.1 million**
- Current (**proposed**) Citrus Division permanent positions
 - Northern District – 21 (**18**)
 - Central District – 49 (**43**)
 - Southern District – 85 (**63**)
 - Admin – 13 (**12**)
- Complete moves prior to 7/1/25

Option C – Right-Size the Citrus Division

Estimated Savings Summary

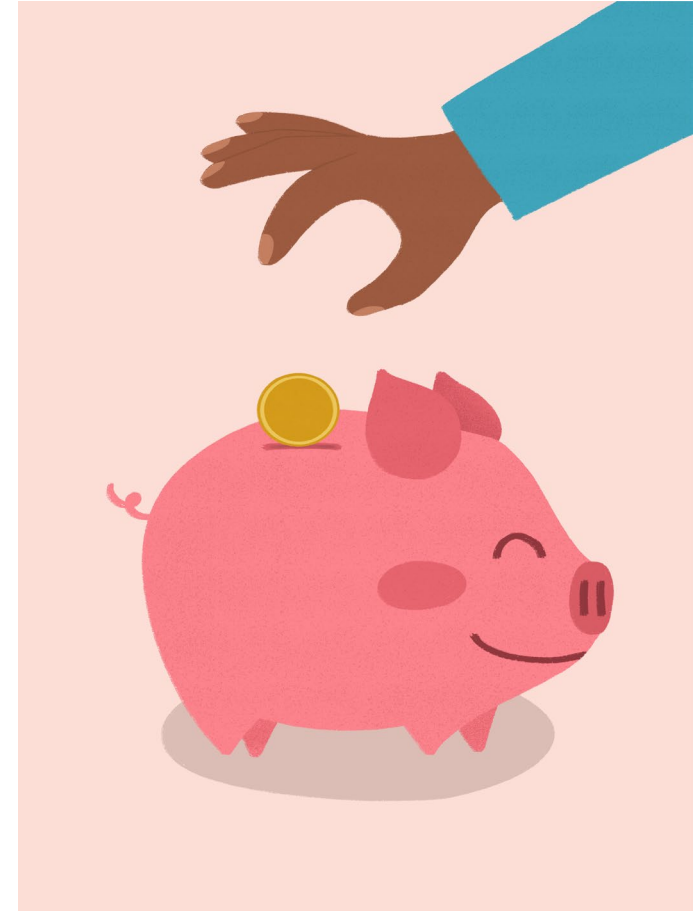
¹Total Estimated Savings – \$5.6m

- Permanent Positions: \$2,440,000
- Limited Term Positions: \$115,000
- Seasonals: \$535,000
- ²Indirect: \$666,000
- ³Other Savings: \$344,000
- Projected Agreement Savings: ~\$1.5m

¹Complete position moves prior to 7/1/2025 to realize estimated savings.

²Estimate is based on known factors only.

³Vehicle and phone savings only.



Summary of Options for Discussion

	Option A Citrus Branch in Plant	Option B Citrus Re-Integrated into Plant	Option C Right-Sized Citrus Division	Option D Raise Assessment Rate
Workforce	Conditionally dedicated	No dedicated staff	Dedicated	Dedicated
Priority	Varies	Varies	Citrus	Citrus
Regulatory	Shared	No dedicated staff	Dedicated	Dedicated
Fiscal Team	Shared	No dedicated staff	Dedicated	Dedicated
Expenditures	\$34.1m	\$33.2m	\$31.0m	\$34.5m
Indirect Cost	\$4.2m	\$4.2m	\$3.3m	\$3.9m
Agreement Reduction	~1.5m	~\$1.5m	~\$1.5m	~\$1.5m
Total Spend	\$36.8m	\$35.9m	\$32.8m	\$36.9m
Savings	\$1.6m	\$4.1m	\$5.6m	\$1.5m



Discussion