#### **MEETING NOTICE**

The Citrus Pest and Disease Prevention Committee will hold a meeting on: Wednesday, November 8, 2023 at 9:00 a.m.

#### This meeting will be held via Webinar and In-Person at:

California Citrus State Historic Park 9400 Dufferin Ave. Riverside, CA 92503

#### PUBLIC PARTICIPATION

Members of the public are encouraged to provide comment to the Committee and may suggest items to be placed on the agenda for discussion at the next Committee meeting. While the Committee values the participation of the public, the Committee Chair reserves the right to limit the time for public comment depending on the length of agenda and the number of commenters. Public comment must be related to the Committee's authority and jurisdiction and its placement on the agenda is within the discretion of the Committee Chair.

All matters noticed on this agenda may be considered for action. Items listed on the agenda may be considered in any order at the discretion of the Committee Chair. Any item not so noticed will not be considered or discussed. Each of the agenda items may include discussion and possible action by the Committee. Time will be allowed for members of the public to make comments on each agenda item. All meeting agendas and notices are available on the California Department of Food and Agriculture website at: <a href="https://www.cdfa.ca.gov/citruscommittee/">https://www.cdfa.ca.gov/citruscommittee/</a>.

For further information, please contact Victoria Hornbaker, Director, Citrus Pest and Disease Prevention Division, 1220 N Street, Sacramento, 95814, (916) 274-6300.

#### AMERICAN WITH DISABILITIES ACT

All Committee meetings must be accessible to the physically disabled. Any person needing a disability-related accommodation or modification in order to attend or participate in any Committee or Committee meeting or other Committee activity may request assistance by contacting Victoria Hornbaker at (916) 274-6300. Providing your request at least five (5) business days before the meeting will help ensure availability of the requested accommodation.

#### Wednesday, November 8, 2023 at 9:00 a.m.

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California Citrus State Historical Park 9400 Dufferin Ave. Riverside, CA 92503

- This Meeting is Open to the General Public and Available via Webinar and In-Person -

Reserve your Webinar seat at:

https://attendee.gotowebinar.com/register/7118444321298169689

To log in anonymously enter "guest" for name and a blind email account or Call in anonymously at: Toll Free Number: 866-901-6455 Participant Code: 885-844-771 Attendee will be in listen only mode

#### AGENDA

- 1. Call to Order, Welcome and Opening Comments Mark McBroom, Chairman
- 2. Roll Call David Gutierrez, CDFA
- 3. Public Comment Mark McBroom, Chairman
- Approval of Consent Agenda Items
   Mark McBroom, Chairman

   a. Minutes from August 9, 2023 Committee Meeting Mark McBroom
- 5. Executive Committee Report
  - a. Ventura County Vacancy Mark McBroom
  - b. Fruit Fly Update Victoria Hornbaker
- Finance Subcommittee Report
   Bob Felts, Jr., Chair, Finance Subcommittee
   Review 2022/2023 Budget Expenditures and Revenue
  - a. Review 2022/2023 Budget Expenditures and Revenue Bob Felts, Jr.
  - b. 2023/2024 Budget Review Bob Felts, Jr.

- 7. Operations Subcommittee Report
  - John C. Gless, Chair, Operations Subcommittee
  - a. Strategic Priority 1 Find and Eradicate HLB
    - i. Laboratory Update Lucita Kumagai
    - ii. HLB Risk Survey David Phong
      - a. Southern California Sentinel Survey David Phong
    - iii. CDFA Operational Update David Gutierrez
      - a. Ventura County Detections Jennifer Willems
  - b. Strategic Priority 2 -Control ACP Movement and Enforce Regulations
    - i. CDFA Regulatory and County Agreement Update Keith Okasaki
    - ii. HLB Mitigation Discussion Keith Okasaki
  - c. Strategic Priority 3 ACP Control/Suppression
    - i. Biocontrol Update Dr. David Morgan
- 8. Science Subcommittee Report

Dr. Etienne Rabe, Chair, Science Subcommittee

Strategic Priority 4 – Improve Data Technology, Analysis and Sharing

- a. Ethyl Formate Registration Update Dr. Etienne Rabe
- b. Sweet Orange Scab Regulation Update Keith Okasaki
- c. Risk Based Survey Working Group Recommendation Dr. Etienne Rabe
- d. Regulatory Working Group Update Keith Okasaki
- Outreach Subcommittee Report Kevin Ball, Chair, Outreach Subcommittee Strategic Priority 5 - Outreach and Education a. Outreach Update – Price Adams
- 10. USDA Report Helene Wright, USDA State Plant Health Director
- 11. CCM Report Casey Creamer, CCM President
- 12. CRB Report Marcy Martin, CRB President
- 13. CPDP Report Dr. Subhas Hajeri, CCTEA Program Director

- 14. Other Items, Closing Comments and Adjournment **Mark McBroom,** Chairman
  - a. PEIR Update Victoria Hornbaker
  - b. CYVCV Update Victoria Hornbaker
    - i. Proposed CYVCV Regulatory Response Keith Okasaki
  - c. Report Out on Pest Control District Working Group Dr. Ravneet Behla
  - d. HLB Prevalence and Positivity Rate Dr. Weiqi Luo

Alternate Meeting Locations:

510 N. Kaweah	24740 Avenue 324	1701 S. Lexington St.
Exeter, CA 93221	Lemon Cove, CA 93244	Delano, CA 93215
2789 Somis Rd.	887 Casserly Rd.	
Somis, CA 93066	Watsonville, CA 95076	

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#### **CONSENT AGENDA**

#### 1. Minutes approval from August 9, 2023 meeting

#### CALIFRONIA CITRUS PEST AND DISEASE PREVENITION COMMITTEE MEETING

Meeting Minutes Wednesday, August 9, 2023

#### **Committee Members Present:**

Kevin Ball*	Bob Felts Jr.	Etienne Rabe*
Franco Bernardi	John C. Gless	Rod Radtke
Brad Carmen	Jim Gorden	Roger Smith
Aaron Dillon	Mark McBroom	Keith Watkins

#### **Committee Members Absent:**

Craig Armstrong

John Gless

Jared Plumlee

#### California Department of Food and Agriculture (CDFA) Staff:

Carl Baum*	Anmol Joshi	David Phong*
Ravneet Behla*	Sarah Kraft*	Michael Soltero*
Fernando Berber	Luci Kumagai*	Heather Scheck*
Kiana Dao*	Daniel Lee*	Patty Tran*
Paul Figueroa*	David Morgan*	Fabian Velasco
David Gutierrez	Alex Muñiz*	Nilan Watmore
Victoria Hornbaker	Lauren Murphy	Jennifer Willems*
Laura Irons*	Keith Okasaki*	Jason Wu*

#### Guests:

Price Adams Jason Kilian\* Margaret O'Neill\* Curtis Pate\* Michael Bliss\* Melinda Klein Melissa Cregan\* Mark Lee\* Cressida Silvers\* Natalie DeAngelo\* Jessica Leslie\* Leigh Sitler\* Daniel Delgado\* Jasmine Lopez\* Jacob Villagomez\* Karen Lowerison\* Frank Wagoner\* Rick Dunn Weigi Luo\* Karen Westerman\* Mary Easton\* Lisa Finke Magally Luque-Williams\* Helene Wright\* Michael Frantz\* Marcy Martin Qijun Xiang\* Judy Zaninovich Ariana Gehriq\* Mia Neunzig\* Sandra Zwaal\* Sandra Olkowski\* Subhas Hajeri\*

Logan Henderson\*

\*Attended the meeting virtually.

#### **Opening Comments**

Mark McBroom called the Citrus Pest and Disease Prevention Committee (CPDPC) meeting to order at 9:06 a.m. Mark McBroom welcomed the committee, staff, and members of the public participating in person and online. There was a quorum for the meeting.

#### **Public Comments**

Judy Zaninovich stated that while the glassy-winged sharpshooter (GWSS) is not considered a disease vector for citrus in California, because GWSS tends to collect on young citrus trees, it has been a priority for the Pierce's Disease Control Program to treat all citrus located near grape vineyards. These treatments also help to suppress the spread of Asian citrus psyllid (ACP). Pierce's Disease Program does not currently receive the funding to treat high-population areas where GWSS has been detected. Funding has been level for the past few years although costs continue to increase, thus, there are less acres that can be treated.

#### **APPROVAL OF CONSENT AGENDA ITEMS**

The consent agenda contained the following items:

- 1. Minutes from the June 28, 2023 Committee meeting.
- 2. 2023-2024 CPDPC Committee and Subcommittee meeting calendars.
- 3. Memorandum of Understanding between the Citrus Pest and Disease Prevention Division and the Central California Tristeza Eradication Agency.
- 4. CPDPC member term renewals for Brad Carmen, John C. Gless and Jared Plumlee.

Motion: To approve the consent agenda as presented.
First: Jim Gorden
Second: John C. Gless
Motion Carries: The motion passed unanimously.

#### FINANCE SUBCOMMITTEE REPORT

#### **Review 2022/23 Budget Expenditures and Revenue**

Bob Felts Jr. reported that expenditures increased by \$3,077,720 in May and \$3,090,518 in June, with an increase in Huanglongbing (HLB) treatment in Southern California of \$777,894 in May and \$718,603 in June and in state administrative costs of \$361,077 in May and \$512,896 in June. This brings the year-to-date total expenditures to \$33,148,887 by the end of May, approximately \$1,000,000 higher than the previous year, and \$36,239,404 by the end of June, approximately \$200,000 higher than the previous year.

Bob reported that 2022-23 FY revenue increased by approximately \$2,100,000 since the June 2023 meeting bringing the total to \$11,690,133, approximately \$1,000,000 ahead compared to this same time the previous year.

#### 2023/2024 Budget Adjustment Review

Bob explained that Victoria and staff have reduced the CPDPC 2023/2024 Fiscal Year (FY) budget to \$43,700,000. There are also several proposed budget cuts that will help to further reduce to the budget to achieve the \$41,500,000 target budget requested by the Committee. The budget for grove trapping, outreach, and data analysis are under review.

Victoria Hornbaker reported that changes to HLB delimitation survey and treatment operations in Southern California have been implemented, refocusing survey efforts from residential core areas around detections to detections on the leading edge and near commercial groves.

Victoria explained that grove trapping in Southern California was previously removed in favor of a bi-annual sentinel tree survey for ACP. David Phong gave a presentation covering a plan to reduce the redundancy of grove trapping operations in the Central Valley and Northern California, the program was able to show that using existing detection traps and GWSS traps would provide adequate coverage and the Cooperative Agricultural Support Services Authority (CASS) grove traps can be removed to reduce redundancy and cost.

Motion: To reduce the 2023/2024 Committee budget by \$2,000,000 with reductions to grove trapping, statewide survey, and outreach.
First: Jim Gorden
Second: John C. Gless
Motion Carries: The motion passed unanimously.

#### Set the 2023/2024 Assessment Rate

Bob presented the projected crop estimate for 2023/2024. The National Agricultural Statistics Service FY 2023/24 crop estimate comes to a projected total of 180,400,000 projected cartons of citrus fruit. Using a figure of \$0.09 would generate an estimated revenue of \$16,236,000.

Motion: To set the assessment rate at \$0.09, effective October 1, 2023.

First: John C. Gless

Second: Jim Gorden

**Motion Carries:** The motion passed with 10 yays (Kevin Ball, Franco Bernardi, Brad Carmen, Bob Felts Jr., John C. Gless, Jim Gorden, Mark McBroom, Rod Radtke, Roger Smith, and Keith Watkins) and 1 abstention (Aaron Dillon).

#### **OPERATIONS SUBCOMMITTEE REPORT** Laboratory Update

Lucita Kumagai presented the laboratory update for the huanglongbing (HLB) testing program from the Plant Pest Diagnostics Center. She reported that in 2023, the year began with an average of 5,000 plant samples and 2,000 ACP samples received in January, increasing to an average of 10,000 plant samples and decreasing to an average of 400 ACP samples received in May and June. She estimates that with rising temperatures, ACP samples received are likely to increase in August. As of July 2023, a total of 53,625 combined plant and ACP samples were received. As of August 4, 2023, there are 4,087 total detected HLB positive sites, 6,009 total detected HLB positive trees, and 719 total detected *Candidatus* Liberibacter asiaticus (*C*Las) positive ACP samples with 70 percent of all HLB positive trees having been detected in Orange County.

#### HLB Risk-based Survey

David Phong presented data for 2023 Risk Survey cycle 1. Cycle 1 2023 began in February 2023 and is 70 percent complete with 25 of the 41 allocated counties completed and 10,649 properties visited. 2,936 properties were sampled generating 943 entomology and 2,344 plant samples.

#### **CDFA Operational Update**

David Gutierrez presented the operational update including ACP and HLB delimitation survey and treatment areas for the Southern, Central, and Northern Districts.

#### **Southern District**

A total of 39 HLB positive trees have been detected in Rancho Bernardo, San Diego County. All trees have been removed and disposed in local landfills. Delimitation survey and treatments have been completed. Final abatement will be initiated soon for the 13 refusal properties. Results are still pending for 10 plant samples. Since January 2023, a total of 1,758 HLB positive trees were detected in all HLB find counties with the majority of detections found in Anaheim, Santa Ana, Westminster, Garden Grove, Whittier, and Pico Rivera. Eight public meetings were held to conduct delimitation treatments in counties. A total of 550 HLB positive trees were removed April through July 2023.

#### **Central District**

Since the last meeting in April, two ACP detections were confirmed in Kern County (one residential and one commercial). One commercial ACP detection was also confirmed on June 21<sup>st</sup> in Tulare County. ACP delimitation and detection trapping activities are still ongoing. With treatment completed for all residential ACP detections, *Tamarixia* releases are now only being conducted in Santa Barbara County. Multi-pest survey is still ongoing. Citrus commodity survey was conducted in the Spring with additional surveys scheduled for Santa Barbara County.

#### **Northern District**

There have been no new treatments in Northern California since December 2022. *Tamarixia* releases are still ongoing in San Jose, Santa Clara County, at an average of

6,000 biocontrol agents per month. HLB risk survey 2023 Cycle 1 completed in June 2023 for 19 counties. Supplementary grids were added to 10 of the 19 counties.

#### **CDFA Regulatory and County Agreement Update**

Keith Okasaki presented the regulatory county monthly activity report for October 2022 through June 2023. He noted that total inspections have increased by 550 with 111 notices of violation down from 214 and 20 notices of proposed action down from 25 for this same time period the previous year. New county regulatory agreements are set to begin in October 2023.

#### **HLB Retail Nursery Proposal**

Aaron Dillon reported that the recommendations from the Science Advisory Panel included concerns regarding the distribution of illicit citrus nursery stock within quarantine areas. It was recommended that the program should establish a retail nursery working group and develop a protocol that supports the availability of disease-free, pesticide-protected citrus nursery stock within quarantine areas for sale to the public. The Nursery Working Group was formed and met on March 24, 2023 and May 2, 2023 where clean nursery stock protocols were discussed and recommended, including random inspections performed by Citrus Division staff to insure compliance. Concerns include the shelf life of citrus trees and the likelihood of participation by retail nurseries. The Nursery Working Group felt that it is important to develop a reasonable and actionable plan for the sale of clean citrus now as HLB quarantines continue to expand in California.

#### **Biocontrol Update**

Dr. David Morgan reported that a total of approximately 1,300,000 *Tamarixia* have been released to date this year with 78 percent of releases occurring in HLB detection areas. LED lights have been installed at the California Polytechnic State University *Tamarixia* production center, which will aid in the increased production of *Tamarixia* during the darker winter months. Trees monitored by Biocontrol staff in Southern California experienced zero percent flushing with very few ACP present on the trees.

#### ACP Trap Comparison Update

Daniel Lee presented an efficacy comparison between 3D traps versus yellow panel (YP) traps for ACP trapping. Many ACP samples found on yellow panel traps are not viable for HLB analysis, leading to the development of 3D traps by University of California, Riverside researchers. A comparison was observed in 34 study locations with one of each trap placed on opposite sides of the same trees for 12 30-day cycles from mid-July 2021 to late July 2022. The results of this study revealed that YP traps were more effective than 3D traps at catching ACP. Another study compared YP traps to No-Mess YP traps, which uses a histo-clear, orange oil based clearing agent that facilitates easier removal of trapped ACP for CLas testing. A comparison was observed in 4 counties for 5 to 6, 30-day cycles from mid-September 2022 to late March 2023. The results of this study revealed that no-mess traps have a similar efficacy as YP traps, however no-mess traps are approximately 5 times more expensive than YP traps at a 2020 cost of \$1.39 per YP no-mess trap compared to \$0.28 per YP trap.

#### **ACP Canine Detection Update**

Lisa Finke stated that, based on recommendation by Greg Parra, she has submitted a proposal to the United States Department of Agriculture (USDA) for Plant Protection Act (PPA) Section 7721 Funding for funding for the pest detection dogs. This will allow for ACP detection dogs to be available to the program at no cost.

**Motion:** To write a letter of support for the ACP Canine Detection Team's proposal to PPA7721.

First: Jim Gorden Second: Roger Smith Motion Carries: The motion passed unanimously.

#### SCIENCE SUBCOMMITTEE REPORT

#### **Ethyl Formate Registration Update**

Dr. Etienne Rabe reported that the ethyl formate registrant responded to the Environmental Protection Agency's deficiency letter, and ethyl formate was submitted for science review in early July 2023. Jim Cranney has continued to inquire about the status of the pending registration and should receive a status update within the next few days.

#### **Neonicotinoid Risk Mitigation Update**

Casey Creamer reported that the regulations for neonicotinoid risk mitigation have been finalized. There are restrictions to use on half rate on citrus, but that there is also an exemption for use for quarantine pests such as ACP. Citrus growers, under the recommendation of a pest control advisor (PCA) may use neonicotinoids at the full rate on quarantine pests. The grower must retain the PCA recommendation on file for two years. Regulation is scheduled to begin in 2024.

#### Sweet Orange Scab (SOS) Regulation Update

Keith Okasaki reported that regulation for SOS interior quarantine was approved by the Office of Administrative Law and the Secretary of the State and will be effective on October 1, 2023.

#### **Pest Control Districts**

Dr. Etienne Rabe reported that CDFA staff are still working on a report from the Pest Control District (PCD) meeting. Etienne noted that the budget may need to be adjusted to accommodate using the infrastructure available in the Central Valley at the Tristeza Agency. He would like to see some activities devolved to the PCDs where growers have more input as he feels that this will keep growers engaged and involved.

#### Science Advisory Panel (SAP) Update

Dr. Etienne Rabe reported that there will be Science Subcommittee meeting on August 29<sup>th</sup> to further discuss the recommendations made by the Risk-Based Survey (RBS) Working Group. Keith Okasaki reported that the RBS Working Group met on July 31<sup>st</sup>,

where the group further discussed recommendations made by the Science Advisory Panel. The RBS Working Group agreed to immediately shift southern California survey efforts to residential properties in proximity to commercial citrus, as well as in areas within the quarantine but outside of the delimitation areas. Northern California survey would focus on areas with ACP detections and where immature life stages are observed. The formal recommendation will be available at the next CPDPC meeting.

#### **OUTREACH SUBCOMITTEE REPORT**

Price Adams reported that Nuffer Smith Tucker (NST) coordinated several media interview opportunities over the past several months in both consumer and industry publications, including the Public Broadcasting Service program "Hungry Planet," Telemundo San Diego, Modern Farmer, Western Press, and targeted media outreach in both Kern County and the city of Los Angeles. NST will also be helping to coordinate program appearances at the upcoming Ventura County Fair's Citrus Day, a Mid-Autumn Festival with IW Group, and National Hispanic Heritage Month with subcontractor The MRKT. NST also facilitated a visit to the Citrus Clonal Protection Program (CCPP) with gardening influencer Coastal Homestead and is working to complete the Citrus Pest and Disease Prevention Program (CPDPP) year in review annual report. Train-thetrainer workshops in Escondido, Santa Paula, and Exeter are also being coordinated. A video regarding what groves should expect when dealing with HLB is in development as NST works to consider the SAP recommendations regarding continued media outreach and information distribution for CLas positive detections in commercial orchards. NST staff also created and distributed a new quarterly blog to elected officials in the Southern California HLB detection cities, to be shared on social media channels for encouraging resident cooperation with agricultural efforts. Preparations are underway for the League of Cities Annual Conference as well as a dedicated media outreach campaign to city planners.

#### **USDA Report**

On behalf of Helene Wright, Victoria Hornbaker reported that the CPDPP received an additional \$1,300,000 in funding as well as \$325,000 in CHRP funding for operations involving Citrus Yellow Vein Clearing Virus (CYVCV). Victoria also submitted project proposals to the PPA7721 for Citrus Commodity Survey for \$441,000 and a grower outreach proposal for \$226,000.

#### Citrus Research Board (CRB) Report

Marcy Martin reported that CRB has been in search of a person to oversee and takeover the Data Analysis and Tactical Operations Center (DATOC) project. A citrus integrated pest management entomologist has been hired to assist in developing a program for ACP control management of Districts 2 and 3. Dr. Melinda Klein has initiated a project for citrus research and field trials. CRB is also currently in the budget planning stages for the 2023/24 FY.

#### **Citrus Pest Detection Program (CPDP) Report**

Dr. Subhas Hajeri reported that the CPDP plans to deploy a total of 4,800 traps throughout 2,400 locations in the Central Valley, Tulare County, Southern Tulare, and Kern County. He will be working with David Phong to review data and reduce redundancy of trap deployments. As part of the Joint Powers Agreement for the Central California Tristeza Eradication Agency (CCTEA) and the CPDP, the agency has been rebranded as the Alliance of Pest Control Districts (APCD) to better align with the implementation of multi-pest survey and regional cooperation and coordination efforts.

#### OTHER ITEMS, CLOSING COMMENTS AND ADJOURNMENT Program Environmental Impact Report (PEIR) Update

Victoria reported that there was a meeting on August 7, 2023 to review items requiring correction on the PEIR per the Appellate Court's decision in 2021.

#### **CYVCV Update**

Victoria Hornbaker reported that the California CYVCV working group has been meeting and working with USDA officials to develop and refine a regulatory proposal. USDA has requested a finalized proposal by next week, but Victoria has requested additional time to refine the proposal.

The meeting adjourned at 2:22 p.m. The next meeting will be on November 8, 2023 in Riverside, California.

### EDGAR GUTIERREZ

#### VALENCIA, CALIFORNIA | 805-535-8526| edguti72@gmail.com

#### **Professional Summary**

Enthusiastic and Passionate about the Agro Industry, with over 20 years involved in all phases of crop cultivation with hands-on experience from development to production in some of the largest citrus operations in Central America Mexico, Chile, Argentina, and the USA.

#### Education |BSc Agronomy (2000) | EARTH UNIVERSITY, COSTA RICA.

- Major: Agricultural Sciences
- Minor: Natural Resource Management

#### Skills & Abilities

PEOPLE PERSON LEADERSHIP CHALLENGE TAKER LENGUAGES (SPANISH, ENGLISH, PORTUGUESE) HIGH ADAPTABILITY MULTI CULTURAL

#### Experience

### VICE PRESIDENT FARMING OPERATIONS, LIMONEIRA COMPANY, SANTA PAULA, CALIF.USA. 2018 – PRESENT

- Leading all farming operations of the company globally (USA, Chile, Argentina) overseeing all Citrus Varieties, Avocados, and Wine Grapes on 15,000 Acres of land.
- Working currently on transforming farming teams in all regions to operate in a more structural and functional organization, as well as establishing Standard Operational Procedures across all the farming business units to function efficiently at a Global Scale.
- Implementing all agronomic programs based on regional and crop requirements (Valley, Desert Tropical, and Coastal) to maximize production.
- Creation and Executing of the P&L of all Farming Business Units National and International (\$28MM Annual Budget).
- Researching and implementing Better Agricultural Practices to maximize the use of water, and increase biological activity inside the orchards via compost, biological corridors, and Algae production to minimize chemical inputs and increase soil microbiota as part of our ESG platform.
- Implementing Technology Platforms to manage farm data, operate irrigation systems, prediction of harvest volumes, and visualization of all farms at a large scale via AgWorld, Phytec, WiseConn, and See Tree.
- Supporting third-party growers on technology adaptation and agronomical practice enhancement.

## **RESEARCH & DEVELOPMENT DIRECTOR/ THE WONDERFUL COMPANY MEXICO CITRUS DIVISION | 01/2016 -2018.**

- In charge of all research activities among the different regions of Mexico (10,000 acres) that include developing and executing protocols for better agricultural practices to maximize production, flower timing induction, better seasonality per market needs, quality enhancement, better pest & and disease control, higher production of fancy fruit ratio to mention some of the main focuses of the department.
- Responsibilities included new project developments in Mexico, participating in the process from land acquisition, farm design, irrigation layouts, land preparation, and planting, ready for farming teams to work on the projects.

## FARMING DIRECTOR | THE WONDERFUL COMPANY MEXICO CITRUS DIVISION | 06/2011 TO 01/2016

- As Farming Director for the Mexico Division, I was responsible for conjunction leading the entire Persian Lime plantations in the North, South, and Gulf of the country divisions, making this project the largest lime operation in Mexico at the time. These farms included 5000 acres of Fert irrigated land on high-density certified materials, roads, infrastructure, packing facilities, and all Farming staff.
- As part of my duties, I also managed 3900 acres of producing Eureka Lemons, 3600 acres of producing limes in the state of Tabasco, and 2000 acres of adult-producing Limes in the state of Veracruz. Executed all agronomic plans, directed harvesting planning, crop estimations, fertilization, and pest control programs in collaboration with the California Team for all age plantings and varieties.
- Operating annual budget (\$8MM), and Capex over \$60MM over 5 years.

#### GENERAL FARMING OPS MANAGER | DEL ORO S.A. COSTA RICA A CDC COMPANY| 02/2006 TO 06/2011

During my time in this company, I performed many responsibilities as I worked my way up.

- As the General Farming Ops Manager, I had the responsibility to oversee 14000 acres of Valencia Oranges, early and late varieties spread over 6 operations. Had to develop, manage, and execute, spray ops, harvest, cultural and replants program, new developments, and mechanical shops operations as well as budgets. The team under my management accomplished developing the farming SOPs on which the company based its agricultural practices and methodology at the time.
- From 2007 to 2008 I functioned as the Pest & Disease Supervisor having under my responsibility all spray operations (Foliar Nutrition, Insecticides, and Fungicides) for Birmania and Yafa Farms (4500 acres of Valencia Oranges) with the main responsibility of executing all spray programs as well as Scouting Teams to generate control thresholds for each pest. While in charge all calibration and application methods were redefined to save 40% in water, significant reduction of chemical products, application efficacy, and fuel reduction. All these resulted in higher fruit utilization at the juice plant.
- From 2006 to 2007 I was responsible for a 25-acre site to compost 60 thousand M.T. of citrus peel waste a year and converted it into organic fertilizer for the Certified Organic Orchards of the Company. The team accomplished the reduction of the C/N ratio from 40/1 to 15/1 material in 30 days using effective microorganisms and controlled methodology, reducing previous problems with fly proliferations, bad smells, and negative field results on the Nitrogen portion of the plantation.

## CONSULTANT ON DAIRY WASTE MANAGEMENT PROJECT | DOS PINOS COOP. PRODUCERS ASSOCIATION | 03/2004 TO 02/2006

• As part of the Government Environmental compliances, I was hired by Dos Pinos, the largest Cooperative of Dairy Farmers in Costa Rica to develop a program focused on the diagnosis and management proposal to quantify and recuperate solids (manure) to produce organic fertilizers based on the use of efficient microorganisms and deliver water discharges in compliance with the environmental legislations. A total of 30 farms were diagnosed to implement the plot plan.

### **KURT ALLEN METHENY**

2693 Bayshore Ave. Ventura, CA 93001 | kurtmetheny@gmail.com | (805) 317-1219

#### EXPERIENCE | LIMONEIRA COMPANY

JANUARY 2011-PRESENT

#### DIRECTOR OF HARVEST

- Develop and maintain annual lemon harvest budget of over 6 million cartons
- Weekly detailed crop forecast 20 weeks forward detailing grade, size, color, and volumes by sub growing region allowing sales and marking to connect crop conditions with market trends
- Inform sales teams to bid contracts with major export and domestic customers
  - Create Financial forecast of lemon harvest budget monthly
  - Engage in executive strategy meetings and lead business strategy meetings to interface sales, packing, and farming managers
- Develop key performance indicators and monitor results in improved information flow and decisionmaking ability in storage, packing & sales
- Work in collaboration with senior management including CEO, CFO, and Vice Presidents
- Develop and Implement Grower Recruiting Strategy: Work with sales and packing teams to develop by district supply requirements and create a deliberate recruiting strategy targeting premier growers that fill sales demands
- Oversee harvest department direct reports' and contractors' performance and growth
- Review seasonal district harvest process that leads to YoY continued improvement
- Project Management of Grower Portal: Lead redesign of new grower website improving grower wash
  reporting, receiving reporting and grower cost transparency. Creating a place for growers to
  exchange food safety documentation and future digital farming platforms
- Project Management of Grower Services Team: Delineating team focus of improving messaging and communication with growers. Upgrading cross-departmental problem solving and speed. Redesigning reports and valuable information to grower in real time for strengthened efficiency Reducing pool closing timeline and accelerating grower cash flow

#### HARVEST MANAGER

- Maintained & advanced grower relationships in multiple areas throughout California and Arizona while managing grower expectations of quantity, quality, and value of crops
- Developed crop estimate and forecast for multiple growing regions
- Coordinated with packing and sales teams to developed harvest strategies yielding increased packing utilization and customer arrivals
- Supervised harvest department personnel, employee morale, and efficiency
- Mediated cross departmental conflicts
- Managed lemon harvest and transportation for company owned orchards across multiple locations including San Joaquin Valley, Ventura, Coachella Valley, Cadiz, and Yuma, AZ
- Estimated and oversaw harvest & hauling budget for lemons in excess of \$15 million per year
- Negotiated rates with Farm Labor Contractors and trucking companies
- Reviewed and approved all harvest and hauling invoices. Redesigned review & approval process with grower accounting team to increase payments timing to contracts and reduced errors. Implemented DocuWare software for invoice approval and emailing of all bills to growers for payment approval
- Hired Farm Labor Contractors and kept abreast of changing labor laws and regulations
- Collaborated with Farm Labor Contractors who hire H2A Farm Workers in multiple growing areas
  resulting in increased lemon harvester labor pool & allowed harvest of crops before ground-fall waste
- Managed multiple Farm Labor Contractors during peak harvest season of 20+ harvest crews and 400+ pickers
- Worked with Farm Labor Contractors to achieve and maintain superior ratings on PrimusGFS audits and Global Gap audits
- Managed ACP quarantine areas with USDA and County Ag Commissioners

#### ASSISTANT HARVEST MANAGER

- Contracted and managed harvest crews for harvest quality and efficiency
- Estimated lemon crop volumes and quality in multiple growing areas
- Coordinated weekly harvest schedules

#### ACCOMPLISHMENTS

- Oversaw harvest budget increase from \$3 million to \$28 million
- Increased grower portfolio from 15 growers to over 120 growers
- Redesigned and Automated Storage Excel Inventory Report
- Improved Harvest Estimating Process and Excel Sheets
- Recruited and retained growers following mergers and acquisitions of Associated Citrus Packers, Marlin Packing, and Oxnard Lemon totaling over 3 million cartons
- Redesigned Farm Labor Contractor Contracts
- · Coordinated Sales and Harvest operations for improved harvest to market profits
- Implemented of DocuWare accounting software

LEADERSHIP | BOARD OF DIRECTORS VALLEY AG FEDERAL CREDIT UNION MARCH 2016 - PRESENT

**BOARD OF DIRECTORS** COLORADO RIVER GROWERS, INC. MAY 2015 - PRESENT

EDUCATION CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO, CA COLLEGE OF AGRICULTURE, FOOD, & ENVIRONMENTAL SCIENCES Bachelors Degree in Agriculture Business Management

Independent Course of Study Concentration in Accounting

CPDPC September 2023 Results

**CPDPC Finance Subcommittee** 

October 17, 2023



# FY 22-23 Expenditures

## FY 22-23 June 2023 Expenditures

#	Group	Region	Activity	Appr	ommittee oved 2022- 3 Budget	Remaining 2022-23 Budget	Expe	ne 2023 enditures r FI\$Cal	Ex	ear to Date penditures per FI\$Cal	22	or year FY21- Year to date openditures	June 2023 Encumbrance Changes	ear to Date cumbrances
1 /	ACP Mgmt	Border	Treatment	\$	724,879	\$ 116,835	\$	7,947	\$	608,044	\$	316,461	\$ -	\$ -
2 /	ACP Mgmt	Central	Survey	\$	3,029,321	\$ 231,530	\$	167,995	\$	2,797,791	\$	2,338,123	\$ (75,112)	\$ 368,002
3 /	ACP Mgmt	Central	Treatment	\$	1,523,191	\$ 317,124	\$	42,913	\$	1,206,067	\$	210,278	\$ (17,451)	\$ 858,333
4 4	ACP Mgmt	Northern	Survey	\$	1,763,771	\$ 358,486	\$	171,963	\$	1,405,285	\$	1,396,362	\$ (120,371)	\$ 484,326
5 A	ACP Mgmt	Northern	Treatment	\$	455,799	\$ 402,840	\$	6,897	\$	52,958	\$	89,997	\$ (1,696)	\$ 182,921
6 /	ACP Mgmt	Southern	Treatment	\$	2,489,759	\$ 1,777,111	\$	12,998	\$	712,648	\$	714,436	\$ (417)	\$ 374,532
74	ACP Mgmt	Southern	Survey	\$	225,853	\$ 87,843	\$	6,603	\$	138,010	\$	265,488	\$ (63)	\$ -
8 A	ACP Mgmt	Statewide	Biocontrol	\$	1,940,356	\$ 472,912	\$	192,936	\$	1,467,444	\$	1,614,026	\$ (472)	\$ 1,658,753
9 /	ACP Mgmt	Statewide	Survey	\$	3,000,000	\$ 1,305,074	\$	58,354	\$	1,694,926	\$	2,432,734	\$ -	\$ 2,021,497
10 /	ACP Mgmt	Statewide	Regulatory	\$	3,239,008	\$ 988,014	\$	87,065	\$	2,250,994	\$	3,004,976	\$ (55,590)	\$ 667,385
11	HLB Det	Border	Survey	\$	224,385	\$ 8,771	\$	25,325	\$	215,614	\$	155,604	\$ (13,117)	\$ 75,679
12	HLB Det	Southern	Survey	\$	2,126,158	\$ 224,742	\$	295,000	\$	1,901,416	\$	1,358,021	\$ (936)	\$ 689
13	HLB Det	Statewide	Survey	\$	6,601,352	\$ 2,210,623	\$	253,642	\$	4,390,729	\$	5,098,800	\$ (2,307)	\$ 4,232
14	HLB Det	Statewide	Diagnostics	\$	3,353,434	\$ 722,055	\$	127,922	\$	2,631,379	\$	2,599,741	\$ 19,258	\$ 173,403
15	HLB Erad	Southern	Treatment	\$	5,358,641	\$ (857,402)	\$	718,603	\$	6,216,043	\$	3,844,814	\$ (218,763)	\$ 959,410
16	HLB Erad	Statewide	Regulatory	\$	844,501	\$ 113,857	\$	63,874	\$	730,645	\$	540,979	\$ -	\$ -
17	ACP/HLB	Statewide	Admin	\$	3,624,361	\$ (1,229,564)	\$	512,896	\$	4,853,925	\$	7,905,864	\$ (8,054)	\$ 129,023
18	ACP/HLB	Statewide	Outreach	\$	1,970,527	\$ 415,059	\$	190,024	\$	1,555,467	\$	979,022	\$ (195,054)	\$ 855,925
19	ACP/HLB	Statewide	Data Analysis	\$	1,739,067	\$ 487,178	\$	137,003	\$	1,251,889	\$	999,996	\$ 394	\$ 303,775
20 /	ACP Mgmt	Statewide	Diagnostics	\$	215,393	\$ 57,262	\$	10,558	\$	158,131	\$	205,947	\$ -	\$ -

Totals *\$44,449,755* 

\$8,210,350 \$3,090,518

\$\$\$6,239,404

\$36,071,668

\$(689,751)

\$9,117,884

# FY 22-23 Revenue Summary

### **Revenue Received**

Revenue Received To Date (October 2022 to September 2023) \$13,021,243

Last Meeting (October 17, 2023) Revenue Received to Date

\$12,705,939

Increased from last meeting to current

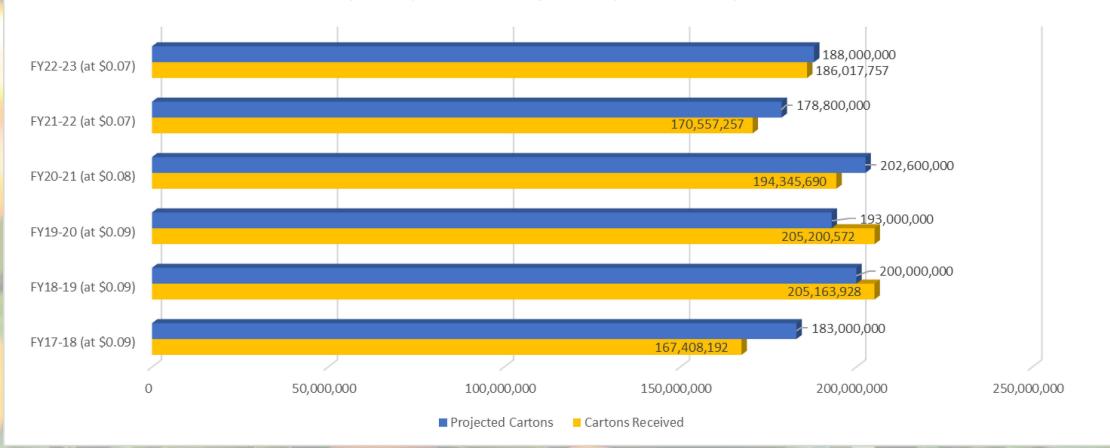
\$315,304

# FY 22-23 Carton Comparison

FY22/23 Projected Cartons	FY22/23 F Cartons	-		1/22 Projected tons (CPDPC)	
188,400,000 Cartons \$0.07/per carton \$13,188,000	188,000 Carto \$0.07/per \$13,160	ns r carton	\$	184,450,000 Cartons 0.07/per carton \$12,911,500	FY21/22 collected 170,557,257 cartons at \$0.07/ per carton, which was 95% of the projected cartons received
Year to Date Revenue F	Received	Revenue Am	nount	Cartons	
Current YTD (\$0.07/per cartor	n)	\$13,021,243 186,017,757			
Prior Year FY21-22 YTD (\$0.0	)7/per carton)	\$11,905,4	76	170,078,229	

Converted assessment amounts to cartons for comparison

Crop Year (October to September) Carton Comparison



# FY 23-24 Expenditures

## FY 23-24 July 2023 Expenditures

#	Group	Region	Activity	Арр	ommittee roved 2023- 4 Budget		Remaining 2023-24 Budget	Ехр	ly 2023 enditures r FI\$Cal	Ехре	r to Date enditures r FI\$Cal	23	r year FY22- Year to date penditures	July 2023 Encumbrance Changes		ear to Date cumbrances
1	ACP Mgmt	Central	Survey	\$	3,688,353	\$	3,594,964	\$	93,389	\$	93,389	\$	77,668	\$ 499,348	\$	499,348
2	ACP Mgmt	Central	Treatment	\$	1,881,438	\$	1,868,859	\$	12,579	\$	12,579	\$	45,155	\$ 5,000	\$	5,000
3	ACP Mgmt	Northern	Survey	\$	1,759,845	\$	1,725,313	\$	34,532	\$	34,532	\$	44,711	\$ 86,800	\$	86,800
4	ACP Mgmt	Northern	Treatment	\$	53,107	\$	51,691	\$	1,416	\$	1,416	\$	905	\$ 381,044	\$	381,044
5	ACP Mgmt	Statewide	Biocontrol	\$	1,720,409	\$	1,696,745	\$	23,664	\$	23,664	\$	20,771	\$ 1,277,009	\$	1,277,009
6	ACP Mgmt	Statewide	Survey	\$	1,000,000	\$	999 <i>,</i> 422	\$	578	\$	578	\$	-	\$ 3,817,049	\$	3,817,049
7	ACP Mgmt	Statewide	Regulatory	\$	3,257,844	\$	3,214,371	\$	43,474	\$	43,474	\$	69,574	\$ 470,359	\$	470,359
8	HLB Det	Southern	Survey	\$	2,199,453	\$	2,044,522	\$	154,931	\$	154,931	\$	121,000	\$ -	\$	-
9	HLB Det	Statewide	Survey	\$	5,887,471	\$	5,592,326	\$	295,145	\$	295,145	\$	398,010	\$ -	\$	-
10	HLB Det	Statewide	Diagnostics	\$	3,556,269	\$	3,470,587	\$	85,683	\$	85 <i>,</i> 683	\$	65,521	\$ 91,562	\$	91,562
11	HLB Erad	Southern	Treatment	\$	6,179,634	\$	5,995,477	\$	184,157	\$	184,157	\$	162,634	\$ 932,703	\$	932,703
12	HLB Erad	Statewide	Regulatory	\$	770,273	\$	735 <i>,</i> 464	\$	34,810	\$	34,810	\$	42,958	\$ -	\$	-
13	ACP/HLB	Statewide	Admin*	\$	2,073,024	\$	2,072,924	\$	100	\$	100	\$	403,608	\$ -	\$	-
14	ACP/HLB	Statewide	Outreach	\$	1,552,478	\$	1,550,641	\$	1,838	\$	1,838	\$	3,340	\$ 363,085	\$	363,085
15	ACP/HLB	Statewide	Data Analysis	\$	1,245,934	\$	1,201,686	\$	44,248	\$	44,248	\$	47,040	\$ -	\$	-
16	ACP Mgmt	Statewide	Diagnostics	\$	209,462	\$	209,250	\$	213	\$	213	\$	41	\$ -	\$	-
17	Indirect	Statewide	Indirect	\$	4,465,004	\$	4,022,517	\$	442,487	\$	442,487	-		\$ 99,078	\$	99,078
			Totals	\$4	1,500,000	\$ <b>4</b>	40,046,757	\$1,	453,244	\$1,	453,244	\$	1,502,937	\$8,023,036	ç	58,023,036

\*\$55,693 will be reallocated to other budgets line items in the future.

## FY 23-24 August 2023 Expenditures

#	Group	Region	Activity	Арр	ommittee proved 2023- 24 Budget	F	Remaining 2023-24 Budget	Expe	ust 2023 enditures r FI\$Cal	Ex	ar to Date penditures per FI\$Cal	23	or year FY22- Year to date xpenditures	August 2023 Encumbrance Changes	lear to Date
1	ACP Mgmt	Central	Survey	\$	3,688,353	\$	3,503,221	\$	91,742	\$	185,131	\$	181,160	\$ (16,854)	\$ 482,494
2	ACP Mgmt	Central	Treatment	\$	1,881,438	\$	1,840,937	\$	27,922	\$	40,501	\$	91,189	\$ 260	\$ 5,260
3	ACP Mgmt	Northern	Survey	\$	1,759,845	\$	1,679,552	\$	45,761	\$	80,293	\$	97,560	\$ (23,768)	\$ 63,032
4	ACP Mgmt	Northern	Treatment	\$	53,107	\$	51,279	\$	412	\$	1,828	\$	2,665	\$ -	\$ 381,044
5	ACP Mgmt	Statewide	Biocontrol	\$	1,720,409	\$	1,600,467	\$	96,278	\$	119,942	\$	109,886	\$ (94,240)	\$ 1,182,768
6	ACP Mgmt	Statewide	Survey	\$	1,000,000	\$	928 <i>,</i> 835	\$	70,587	\$	71,165	\$	107,441	\$ (103,016)	\$ 3,714,033
7	ACP Mgmt	Statewide	Regulatory	\$	3,257,844	\$	3,141,550	\$	72,821	\$	116,294	\$	132,759	\$ (73,394)	\$ 396,964
8	HLB Det	Southern	Survey	\$	2,199,453	\$	1,871,785	\$	172,737	\$	327,668	\$	252,852	\$ 8,511	\$ 8,511
9	HLB Det	Statewide	Survey	\$	5,887,471	\$	5,324,340	\$	267,986	\$	563,132	\$	909,489	\$ 6,858	\$ 6,858
10	HLB Det	Statewide	Diagnostics	\$	3,556,269	\$	3,234,752	\$	235,834	\$	321,517	\$	286,851	\$ (85,904)	\$ 5,658
11	HLB Erad	Southern	Treatment	\$	6,179,634	\$	5,410,065	\$	585,411	\$	769,568	\$	431,787	\$ 3,967,842	\$ 4,900,544
12	2 HLB Erad	Statewide	Regulatory	\$	770,273	\$	701,325	\$	34,138	\$	68,948	\$	89,681	\$ -	\$ -
13	ACP/HLB	Statewide	Admin*	\$	2,073,024	\$	1,970,858	\$	102,065	\$	102,165	\$	1,025,852	\$ -	\$ -
14	ACP/HLB	Statewide	Outreach	\$	1,552,478	\$	1,523,438	\$	27,203	\$	29,040	\$	27,593	\$ 250,698	\$ 613,783
15	6 ACP/HLB	Statewide	Data Analysis	\$	1,245,934	\$	1,154,692	\$	46,995	\$	91,243	\$	101,126	\$ -	\$
16	6 ACP Mgmt	Statewide	Diagnostics	\$	209,462	\$	201,463	\$	7,787	\$	7,999	\$	12,579	\$ -	\$ -
17	/ Indirect	Statewide	Indirect	\$	4,465,004	\$	3,506,667	\$	515,850	\$	958,337	-		\$ 15,960	\$ 115,038
			Totals	\$4	<i><b>1,500,000</b></i>	\$ <b>:</b>	37,643,976	\$2,	401,530	<b>\$</b> .	3,854,773		\$3,860,470	\$3,852,953	\$11,875,989

\*\$55,693 will be reallocated to other budgets line items in the future.

## FY 23-24 September 2023 Expenditures

#	Group	Region	Activity	Арр	ommittee roved 2023- 4 Budget		Remaining 2023-24 Budget	Ехр	mber 2023 enditures er FI\$Cal	Ex	ear to Date spenditures per FI\$Cal	23	or year FY22- Year to date openditures	ptember 2023 incumbrance Changes		Year to Date
1	ACP Mgmt	Central	Survey	\$	3,688,353	\$	3,210,570	\$	292,652	\$	477,783	\$	331,668	\$ (238,204)	\$	244,290
2	ACP Mgmt	Central	Treatment	\$	1,881,438	\$	1,819,087	\$	21,850	\$	62,351	\$	172,573	\$ -	\$	5,260
3	ACP Mgmt	Northern	Survey	\$	1,759,845	\$	1,624,701	\$	54,851	\$	135,145	\$	155,592	\$ 48,296	\$	111,328
4	ACP Mgmt	Northern	Treatment	\$	53,107	\$	51,279	\$	-	\$	1,828	\$	2,665	\$ -	\$	381,044
5	ACP Mgmt	Statewide	Biocontrol	\$	1,720,409	\$	1,465,390	\$	135,076	\$	255,018	\$	196,284	\$ (135,107)	\$	1,047,661
6	ACP Mgmt	Statewide	Survey	\$	1,000,000	\$	735,407	\$	193,428	\$	264,593	\$	251,469	\$ (323,273)	\$	3,390,760
7	ACP Mgmt	Statewide	Regulatory	\$	3,257,844	\$	3,034,623	\$	106,927	\$	223,221	\$	211,962	\$ (49,317)	\$	347,647
8	HLB Det	Southern	Survey	\$	2,199,453	\$	1,718,906	\$	152,879	\$	480,547	\$	414,491	\$ 1,907	\$	10,418
9	HLB Det	Statewide	Survey	\$	5,887,471	\$	5,021,479	\$	302,861	\$	865,993	\$	1,367,957	\$ 63	\$	6,921
10	HLB Det	Statewide	Diagnostics	\$	3,556,269	\$	3,046,027	\$	188,725	\$	510,242	\$	596,132	\$ 916,971	\$	922,629
11	HLB Erad	Southern	Treatment	\$	6,179,634	\$	5,099,058	\$	311,007	\$	1,080,575	\$	1,022,658	\$ 1,141,652	\$	6,042,196
12	HLB Erad	Statewide	Regulatory	\$	770,273	\$	668 <i>,</i> 980	\$	32,345	\$	101,293	\$	129,896	\$ -	\$	-
13	ACP/HLB	Statewide	Admin*	\$	2,073,024	\$	1,852,285	\$	118,573	\$	220,739	\$	1,688,712	\$ -	\$	-
14	ACP/HLB	Statewide	Outreach	\$	1,552,478	\$	1,470,632	\$	52,806	\$	81,846	\$	157,287	\$ 1,471,155	\$	2,084,939
15	ACP/HLB	Statewide	Data Analysis	\$	1,245,934	\$	1,102,820	\$	51,872	\$	143,114	\$	229,835	\$ -	\$	-
16	ACP Mgmt	Statewide	Diagnostics	\$	209,462	\$	175,802	\$	25,661	\$	33,661	\$	25,275	\$ -	\$	-
17	Indirect	Statewide	Indirect	\$	4,465,004	\$	3,122,663	\$	384,004	\$	1,342,341	\$	-	\$ 181	\$	115,219
			Totals	\$4	1,500,000	<b>\$</b> 3	35,219,708	<b>\$2</b> ,	425,519	\$	6,280,293		\$6,954,458	\$2,834,323	Ş	\$14,710,312

\*\$55,693 will be reallocated to other budgets line items in the future.

# FY 23-24 Clean Citrus Program Summary

Budget Summary	
Fund Balance	\$255 <i>,</i> 036
Revenue Received To Date (July 2023 to September 2023)	\$7,883
Expenditures to Date (July 2023 to September 2023)	\$5,871
Reimbursements Received To Date (July 2023 to September 2023)	\$10,014
Net Balance	\$267,062



# **QUESTIONS?**



California Department of Food & Agriculture Plant Pest Diagnostics Center HLB Testing Program 2023

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 1-3 Percent infection per year from 2008 – Oct 2023 – Fig. 3 If you have any questions, please call or email me at 916-738-6710 <u>lucita.kumagai@cdfa.ca.gov</u>. Fig 1a. 2022 -Total number of plant and ACP samples submitted per month.

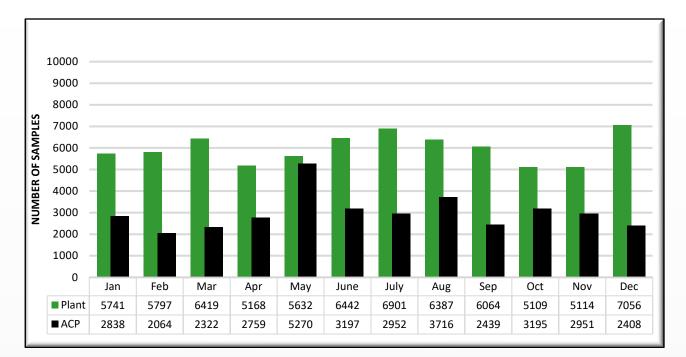
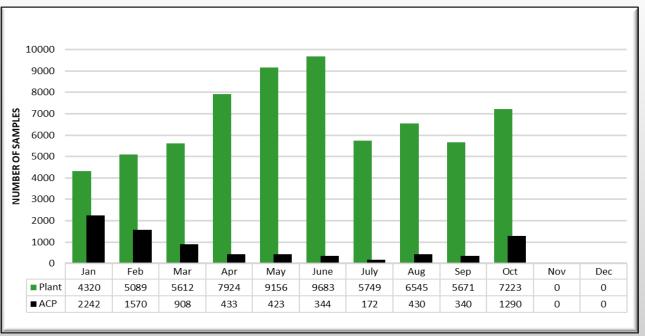
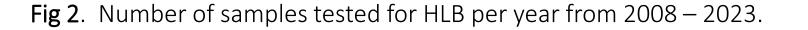
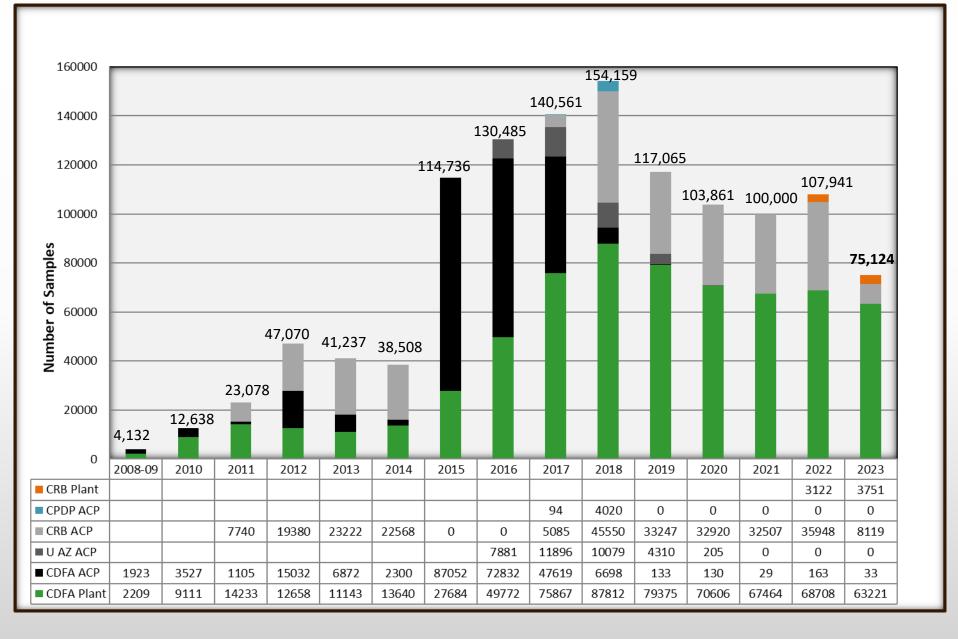


Fig 1b. 2023 -Total number of plant and ACP samples submitted per month.







Combined total of plant and ACP samples tested from 2008 – 2023 is 1,210,595

Table 1. Tally of positive sites, positive trees, and CLas+ ACP samples by county and city as of 11/3/2023.

City	# Sites	# Trees	# ACP samples
Oran Garden Grove	ge County 646	1021	112
Santa Ana	653	1010	94
Anaheim	809	1331	156
Westminster	361	597	20
Orange	272	374	40
Tustin	52	64 22	10 3
Fountain Valley Huntington Beach	27	30	2
Placentia	82	110	15
La Habra	5	6	1
Fullerton	15	22	6
Yorba Linda	13	13	5
Irvine Costa Mosa	24	29 12	3
Costa Mesa Brea	1	12	0
Buena Park	9	16	2
Cypress	5	1	5
Stanton	5	6	1
Midway City	4	8	0
Los Alamitos	1 3007	0 4673	1 479
Total Los Ang	geles County	4073	479
Whittier	204	251	44
Pico Rivera	177	246	64
Montebello	80	111	2
San Gabriel	78	96	7
Rosemead	50	69	7
Paramount	29	35	5
La Mirada La Puente	53 37	72 40	6
Norwalk	15	12	5
Cerritos	7	9	5
Hacienda Heights	4	4	1
Lakewood	5	6	0
Duarte	82	123	3
El Monte	74	105	8
South El Monte Alhambra	23	43	4
Temple City	12	11	2
Compton	1	1	0
Glendora	1	0	1
South Gate	9	10	4
Long Beach	8	8	3
Los Angeles	6 27	5 34	1
Downey Carson	4	34	1
Monrovia	20	28	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 City of Industry	1	2	0
Claremont	1	0	1
Santa Fe Springs	2	1	1
Azusa	1	3	0
Total	1039 side County	1358	192
Corona	104	148	27
Riverside	26	28	5
Eastvale	2	2	0
Jurupa Valley	23	32	4
Moreno Valley	1	1	0
Total San Bern	156 Iardino Coun	211	36
Rancho Cucamonga	3	7	2
Montclair	8	7	1
Colton	6	11	3
San Bernardino	2	1	1
Ontario	173	282	21
Fontana	30	41	9
Chino Total	18 240	28 377	39
	n Diego	5//	35
Fallbrook	1	0	1
Oceanside	4	9	4
Pauma Valley	1	0	1
Vista	1	0	1
	26	42	0
San Diego			1
San Diego Valley Center	1	0	
San Diego Valley Center Total	34	<b>51</b>	8
San Diego Valley Center Total V	34 Ventura		8
San Diego Valley Center Total	34	51	

**HLB Positive Detections** 

#### Table 2. Percent positives per county

County	Sites	Trees	ACP
Orange	66.7%	69.55%	63.1%
LA	23.1%	20.21%	25.3%
Riverside	3.5%	3.14%	4.7%
San Bernardino	5.3%	5.61%	5.1%
San Diego	0.8%	0.76%	1.1%
Ventura	0.7%	0.7%	0.7%
Total	100%	100%	100%

**Table 3.** Tally of positive samples fromRisk-based and HLB Response surveys.

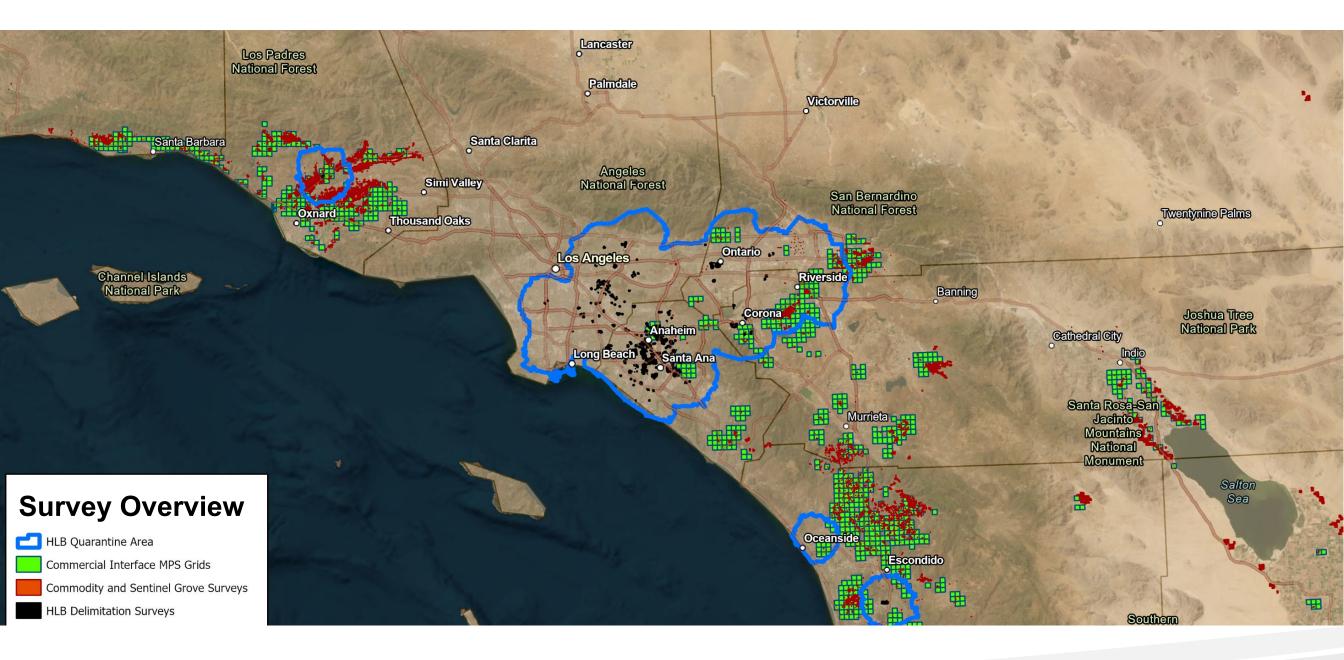
Sample type	Tre	ees	ACP				
Risk-based Survey	446	7%	470	62%			
HLB Response	6273	93%	289	38%			
Total	6719	100%	759	100%			

# **Fig 3**. Number of positive detections from 2012 – 2023 per county as of 11/3/2023

	2012		2015		2016		2017		2018		2019		2020		2021		2022		2023		Total	
County	Plant	ACP																				
Orange	-	-	-	-	-	-	147	66	553	69	585	55	407	24	434	38	849	47	1698	180	4673	479
Los Angeles	1	1	10	3	19	3	119	47	146	12	150	9	56	10	60	7	314	89	483	11	1358	192
San Bernardino	-	-	-	-	-	-	-	-	0	1	2	2	13	7	75	10	91	14	196	5	377	39
Riverside	-	-	-	-	-	-	3	3	0	0	19	9	12	2	20	0	88	14	69	8	211	36
San Diego	-	-	-	-	-	-	-	-	-	-	-	-	0	1	9	4	0	2	42	1	51	8
Ventura	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	5	49	5
TOTAL	1	1	10	3	19	3	269	116	699	82	756	75	488	44	598	59	1342	166	2537	210	6719	759

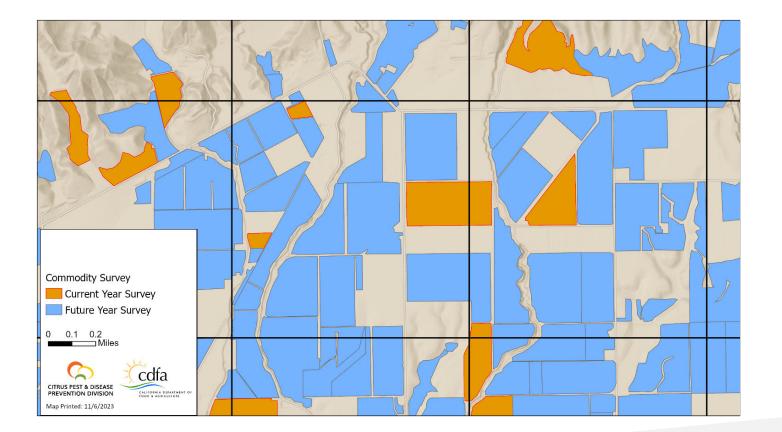


Southern California Commercial Grove Survey Full Committee Meeting November 8, 2023



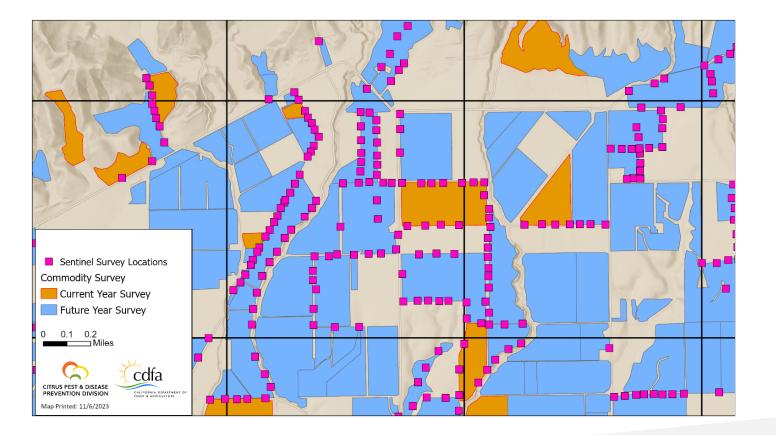
## Commodity Survey

- 20% of commercial citrus grown in California surveyed on an annual basis.
- Surveyed in the Fall and Spring.
- Visual inspection on every 5 to 10 tree rows.
- Collect plant samples from symptomatic trees for HLB testing.
- Collect suspect ACPs observed for CLas testing.

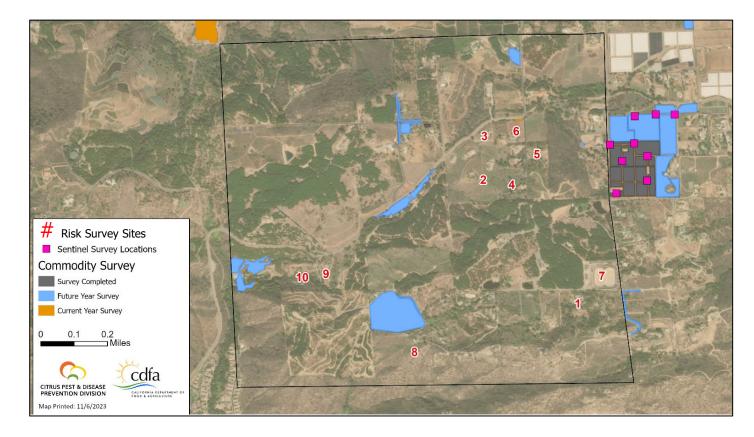


## Sentinel Survey

- Fixed commercial citrus tree locations in Southern California.
- Each sentinel tree is surveyed
   2 times per year.
- Each grid is visited 4 times a year.
- Visual inspection (and tap).
- Collect suspect ACPs observed for CLas testing.

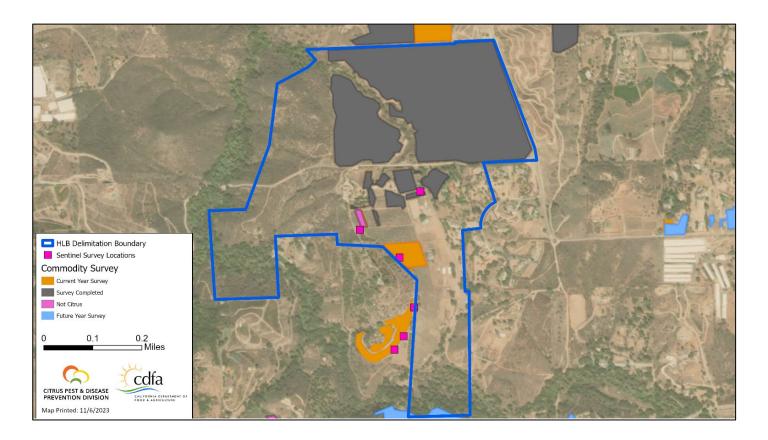


## Multi-Pest (Risk) Survey



- In Southern California: ~350 square miles per year in residential areas adjacent to commercial groves.
- Visual inspection of 5 to 200 properties with hosts in the assigned grids.
- Collect plant samples from symptomatic trees for HLB testing.
- Collect suspect ACPs observed for CLas testing.

## HLB Delimitation Survey



- Find site and adjacent properties, or 250 meters around HLB or CLas + ACP detections.
- Visual inspection of all residential and commercial properties within delimitation area.
- Collect suspect ACPs observed for CLas testing.
- Collect plant samples from <u>all</u> residential host trees or from <u>all</u> trees in the parameters of commercial groves.

## Survey Summary

Survey Type	Commercial / Residential	Extent	Frequency and Duration	ACP Samples	Plant Samples
Commodity	Commercial	CDFA surveys a representative of 20% of commercial citrus grown in California annually (~270k acres) to achieve 100% survey every 5 years	Fall and Spring		Collect plant samples from symptomatic trees
Multi-pest (MPS) = Risk Based	Residential	1,000 square miles statewide per year (~350 square miles of which are in areas adjacent to commercial groves)	Year-round	Collect suspect ACPs observed for CLas	for HLB testing
Sentinel Tree Survey	Commercial	~9,000 trees	2 times per year per tree (4 times per grid)	testing.	Very rarely
HLB Delimitation	Both	Find site and adjacent properties, or 250 meters around HLB or CLas + ACP detections	Immediately upon detection		Collect plant samples from all the host trees



Data: 1/1/2022 through 10/31/2023

	AC	Ps*	Plants		
Programs	PDRs	Positive	PDRs	Positive	
Sentinel	10,000	0	0	0	
Commodity	500	2	800	0	
Multi-Pest (Risk)	30,000	282	28,000	349	
HLB Delimitation	2,500	73	45,000	3,460	

\* All suspect ACP are collected for CLas testing only (not entomologically identified).

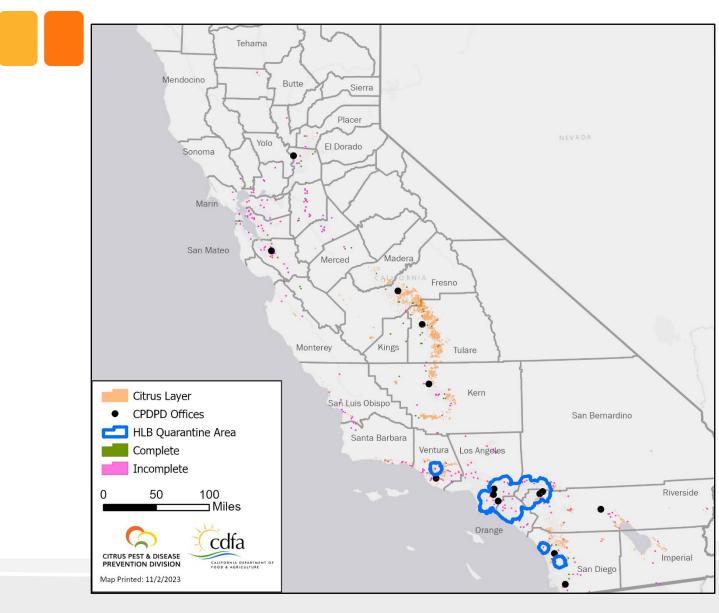


- By discontinuing sentinel location surveys, CDFA will retain year-round coverage.
- CDFA will focus resources on broader and more intensive surveys throughout Southern California (Commodity and Multi-Pest/Risk).

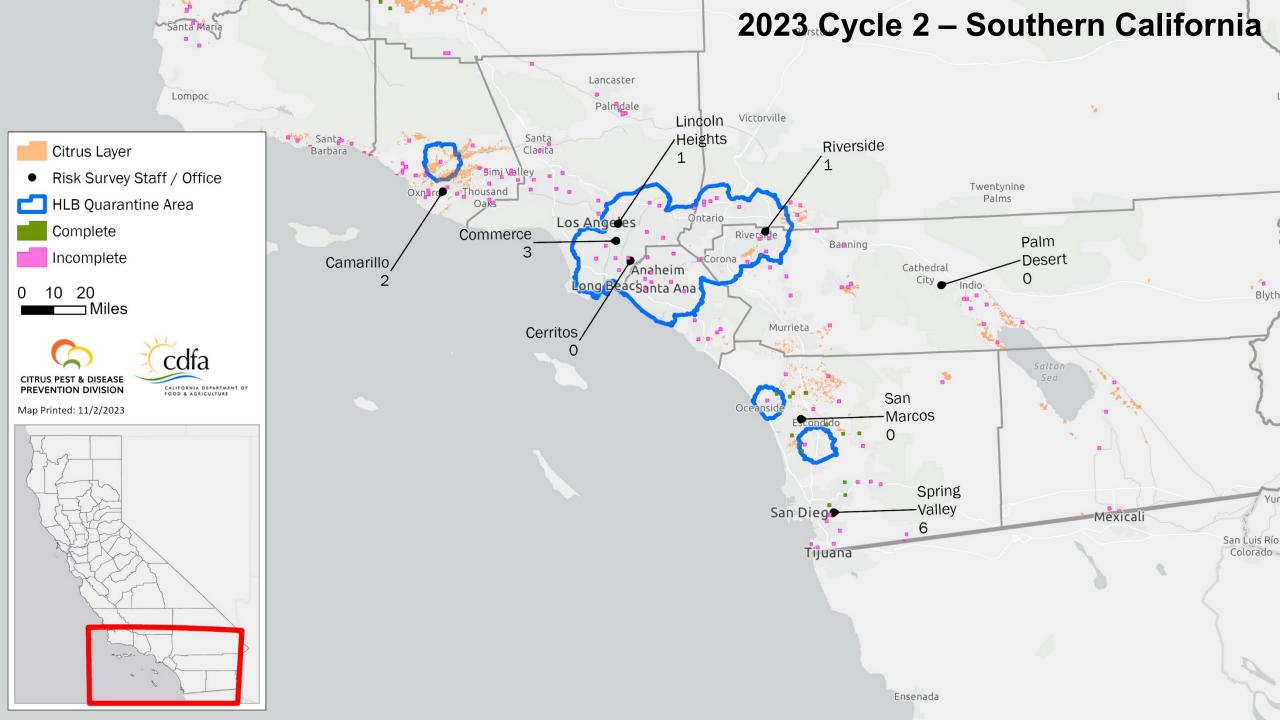


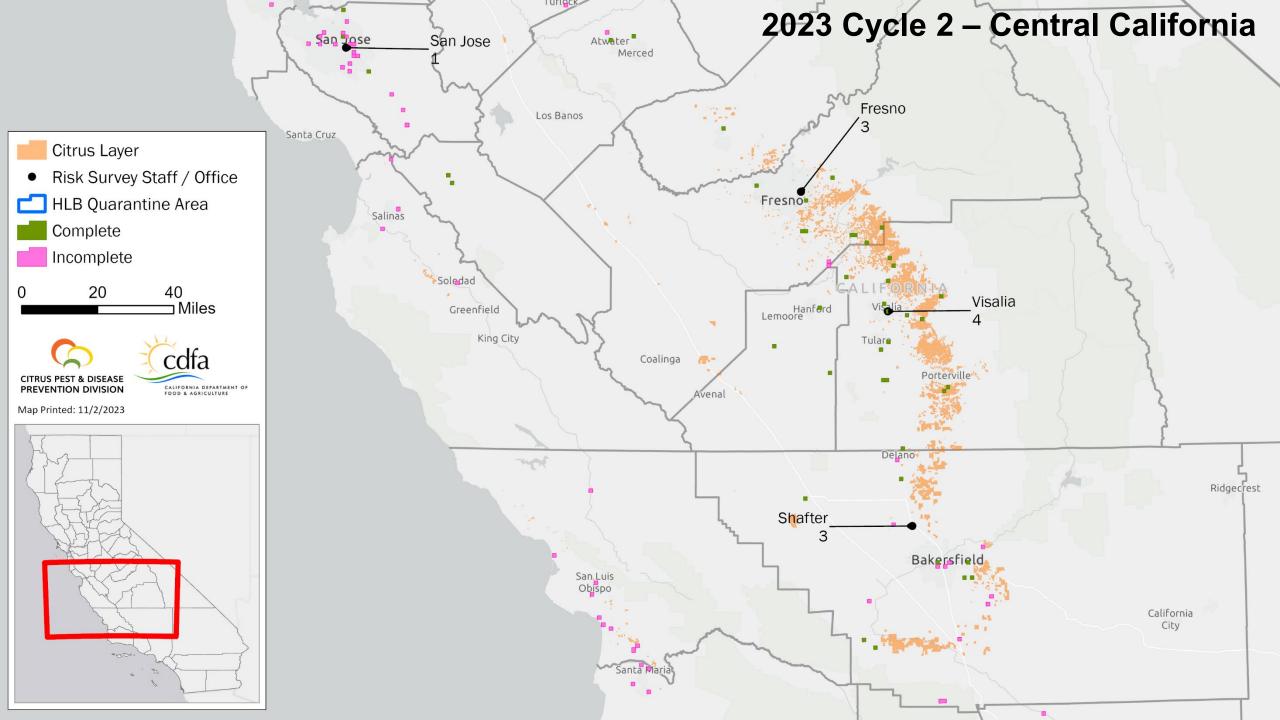
Multi-Pest Survey Update Full Committee Meeting November 8, 2023

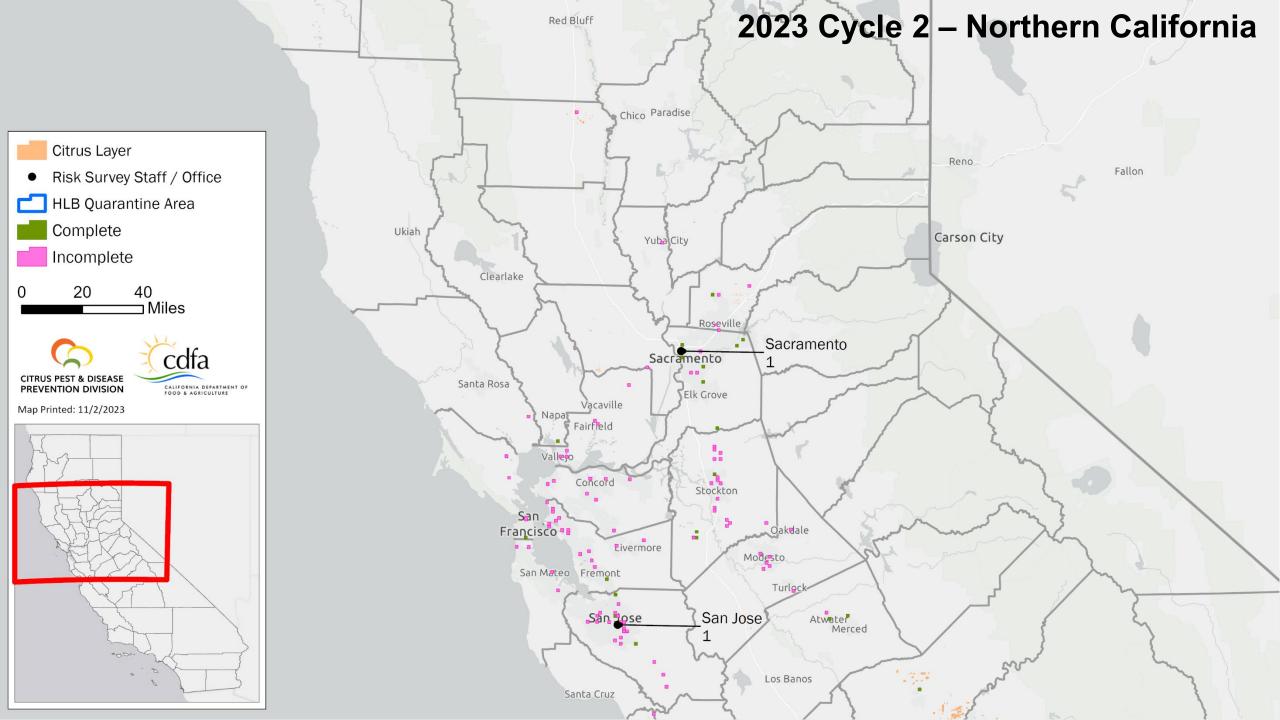
## 2023 Cycle 2



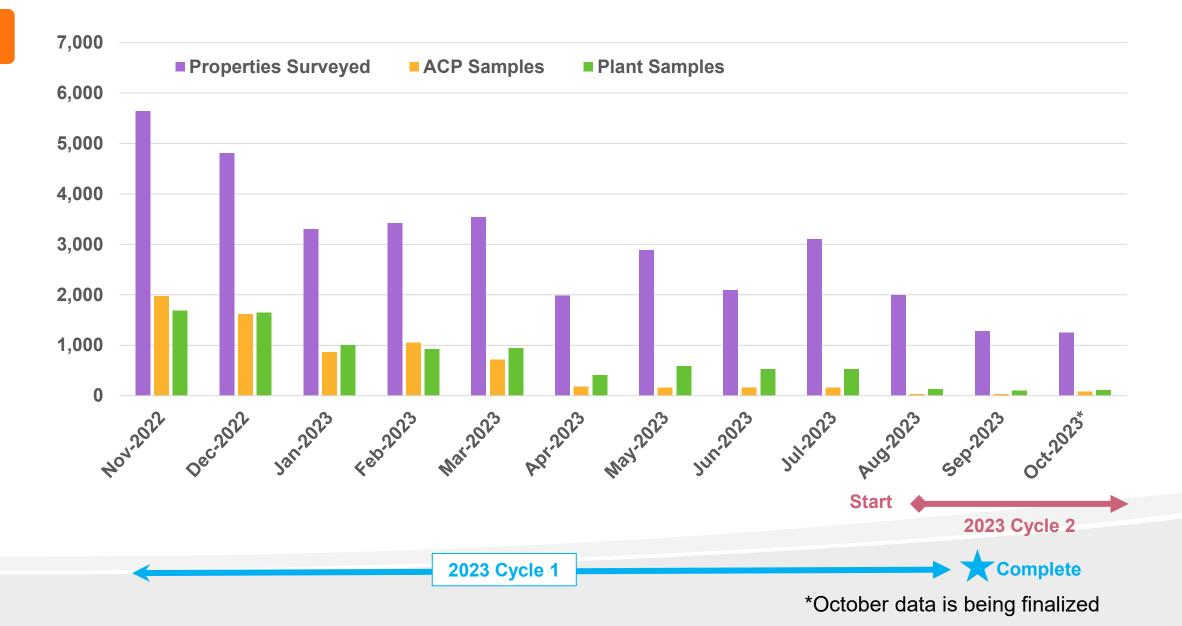
- Began August 2023
- 22% Complete
- Survey Complete in 5 of 34
   Allocated Counties
- 2,287 Properties Visited
- 284 Properties Sampled
- 104 Entomology PDRs
- 208 Plant PDRs







#### Statewide Trends (All Cycles)





## Santa Paula HLB+ Update

**CPDPC** Meeting

November 8, 2023

# Central District

#### Santa Paula, Ventura County

- Initial CLas positive ACP confirmed on September 19, 2023.
  - Since the initial detection, there have been five CLas positive ACP samples confirmed.
- Initial HLB+ tree detection on September 27, 2023, on a residential property.
  - Commercial citrus is within 1 mile of treatment boundary.
- As of November 3, 2023, there were a total of 48\* HLB+ trees.
  - 25 HLB+ trees have been removed.
  - 29 total refusals.
- The HLB delimitation boundary has expanded four times.
- The 5-mile quarantine boundary expanded once.



# Central District





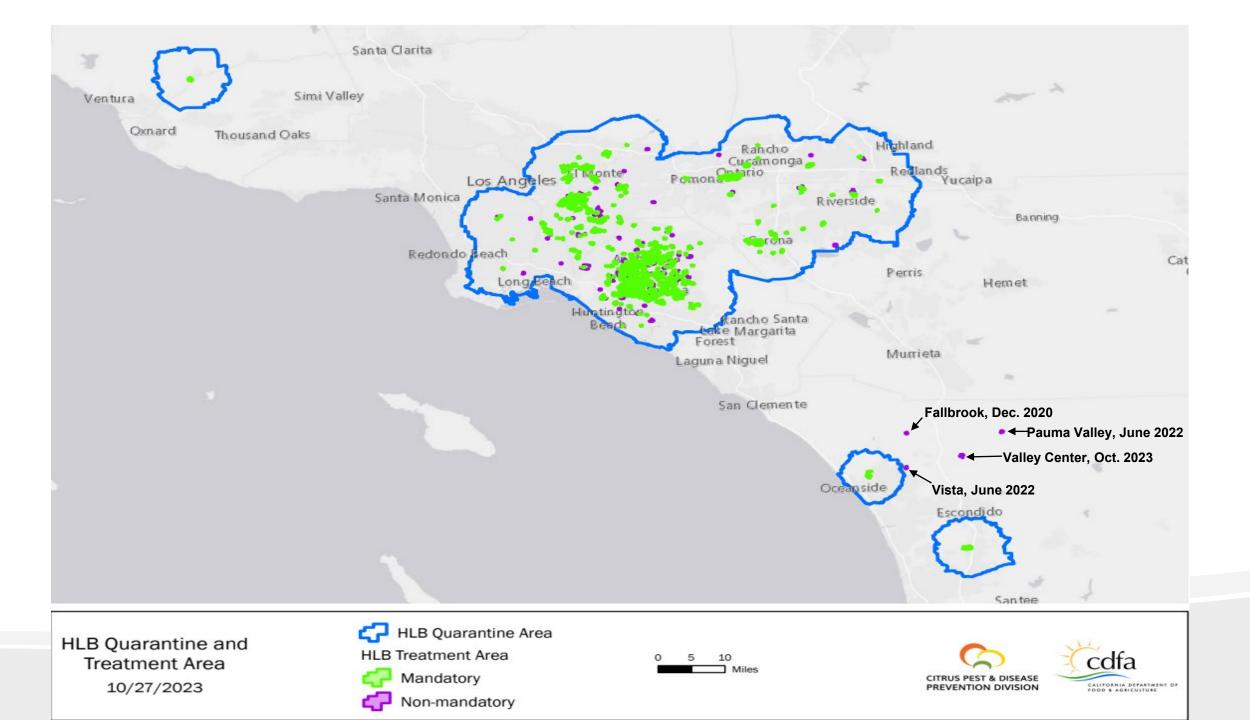
HLB+ Trees



#### **Operational Update**

**CPDPC** Meeting

November 8, 2023



### Southern District

#### HLB Detection Updates

- A total of 2,460 positive trees were detected since January 2023.
  - Majority of the detections were in Anaheim, Santa Ana, Garden Grove, El Monte, Duarte, Pico Rivera, Corona, and Ontario.
- An adult CLas+ ACP was detected in a residential grove in Valley Center, San Diego County.
  - Originally, a sample of twenty ACP adults were collected as part of the commodity survey.
  - Staff conducted perimeter survey of the find-site and the adjacent groves.
    - More than 225 plant samples and 77 insect samples were submitted to the lab, the results are pending.
  - Delimitation survey in the 250m area is ongoing.
  - Most of the properties in the delimitation area are residential groves with 25+ citrus trees.



#### Southern District

#### **Delimitation Survey and Treatments**

County	Areas
Orange	Irvine, Orange, Anaheim, Buena Park, Westminster, Garden Grove, Santa Ana, Stanton, Costa Mesa, and Tustin
Los Angeles	Montebello, Cerritos, Duarte, South Gate, La Mirada, Artesia, San Gabriel, Downey, El Monte, La Puente, Paramount, Pico Rivera, Rosemead, Temple City, and Whittier
San Bernardino	Fontana, Ontario
Riverside	Corona, Jurupa Valley
San Diego	Valley Center

• Seven public meetings were held to conduct delimitation treatments in different areas of Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.



#### Southern District

#### **HLB Positive Trees**

	Trees Removed (Aug- Oct)	Cumulative Pending Trees
Los Angeles	180	19
Orange	663	479
Riverside	27	9
San Bernardino	64	28
San Diego	3	0
Total	937	535



Quadrant Samples – Find Site, Adjacent, Inconclusive (Aug - Oct)					
Los Angeles	416				
Orange	678				
Riverside	260				
San Bernardino	578				
San Diego	79				
Total	2,011				

# Central District

- County ACP Detections
- Fresno County
  - One residential detection confirmed on October 17.
  - Treatment completed on November 2.

#### Kern County

- One residential detection confirmed on October 19.
- Treatment completed October 24.
- One residential detection confirmed no 10/31, public meeting to be scheduled.





#### > Trapping Activities

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

#### Biocontrol

• Releases were conducted in Fresno and Kern near the recent detections. Releases were also done near the Santa Paula HLB delimitation boundary.

#### Survey Activities

• Multi-pest/risk and citrus commodity surveys are on-going.



### Northern District

#### ACP Detection Trapping

Ongoing trapping in Placer, San Joaquin, and Stanislaus Counties.

#### ACP Delimitation Trapping

- No changes to delim trapping in Santa Clara County (606 delim traps), San Joaquin County (43 delim traps), and Sonoma County (55 delim traps) since last meeting.
- Delimitation traps have been up for nearly 1 year and will be converted to detection traps between December 2023 – January 2024.

#### County ACP Detections

• Santa Clara County - eight residential detections within existing delimitation area.

#### ACP Treatment

No new treatments since December 2022.



### Northern District



#### > Biocontrol

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

#### HLB Risk-Based / Multi-Pest Survey

- 2023 Cycle 1 completed June 2023 for 19 counties.
- 2023 Cycle 2 began August/September 2023.
  - Currently at 15% complete for 17 counties.

#### County Monthly Activity Report October 2022 - September 2023

County	FY 2022 23	Percent	CAs	Grower	Transporter	Packer	Fruit Seller	Regulatory	NOVs	NOPAs
-	Budget	Expended	Issued	Inspections	Inspections	Inspections	Inspections	Incidents		
Fresno	\$84,424.26	100%	82	1	402	1	0	0	32	3
Imperial	\$55,892.01	61%	4	20	24	5	0	1	1	0
Kern	\$70,000.00	62%	90	7	496	18	0	0	3	0
Kings	\$20,035.30	80%	0	0	6	108	0	0	0	0
Los Angeles	\$263,358.11	70%	1	12	0	8	516	1	0	0
Monterey	\$14,227.50	81%	0	25	0	0	4	0	0	0
Orange (*1)	\$87 <i>,</i> 987.88	22%	0	51	2	0	0	0	0	0
Riverside	\$680,306.63	95%	30	171	1,082	2	39	22	11	2
San Bernardino (*3)	\$29,334.95	43%	8	9	1	0	0	3	1	0
San Diego (*1)	\$561,592.75	87%	10	509	425	91	113	0	2	0
San Luis Obispo	\$8,035.44	100%	10	3	0	0	0	0	0	0
Santa Barbara (*2)	\$15,147.08	100%	19	8	1	0	19	0	2	0
Tulare	\$340,031.38	100%	333	2	3,608	24	5	16	71	22
Ventura (*4)	\$200,951.41	100%	68	13	506	11	0	0	8	0
Total	\$2,431,324.70	87%	655	831	6,553	268	696	43	131	27

(\*#) = number of invoices missing from the reporting period

# HLB Quarantine Mitigations

CPDPC - NOVEMBER 8, 2023

## Mitigations

- •Spray and harvest
- •Field cleaning by machine
- •Grate cleaning (with approval)

•Standalone: Wet wash

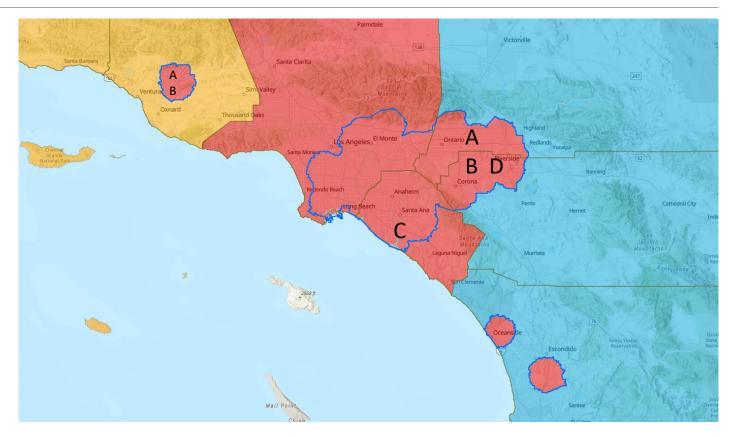
•Safeguarding in transit – always required and is not considered a mitigation

## 1. Within Contiguous HLBQ

#### •Current: 1 mitigation

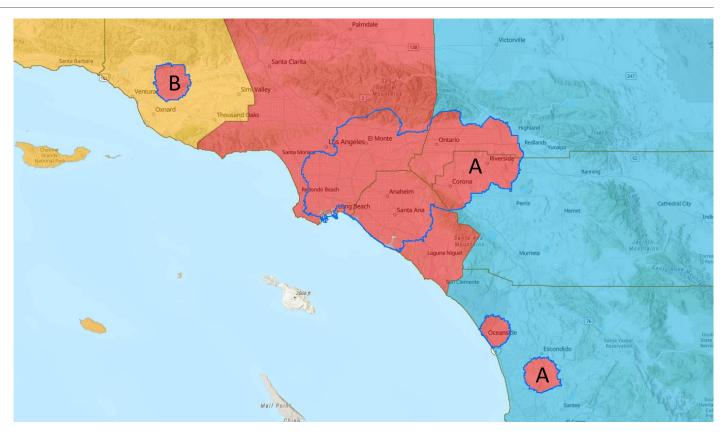
#### •Proposed:

- Within contiguous HLBQ and original ACPQ zone – no mitigation (A to B)
  - Within Ventura HLB
  - Within Riverside and San Bernardino HLB
- Within contiguous HLBQ but out of original ACPQ zone – 1 mitigation (C to D)
  - Orange HLB to Riverside HLB



## 2. To Non-Contiguous HLBQ

- •Current: 2 mitigations or wet wash
- •Proposed: 1 mitigation (A to B)
  - Ventura HLB from/to Riverside HLB
  - San Diego HLB to Ventura or Riverside HLB

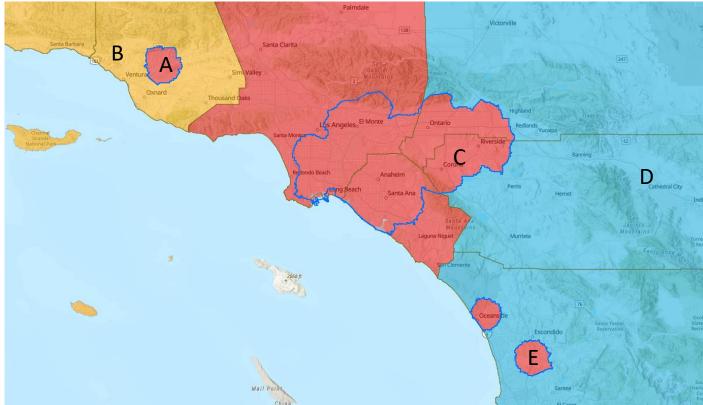


## 3. Out of HLBQ

•Current: 2 mitigations or wet wash

#### •Proposed:

- Within county 1 mitigation
  - Ventura HLB to Ventura ACP (A to B)
  - Riverside HLB to Riverside ACP (C to D)
- Out of county no change. 2 mitigations or wet wash (E to B or D)
  - Riverside HLB to Imperial
  - San Diego HLB to Ventura or Riverside
  - Ventura HLB to Tulare



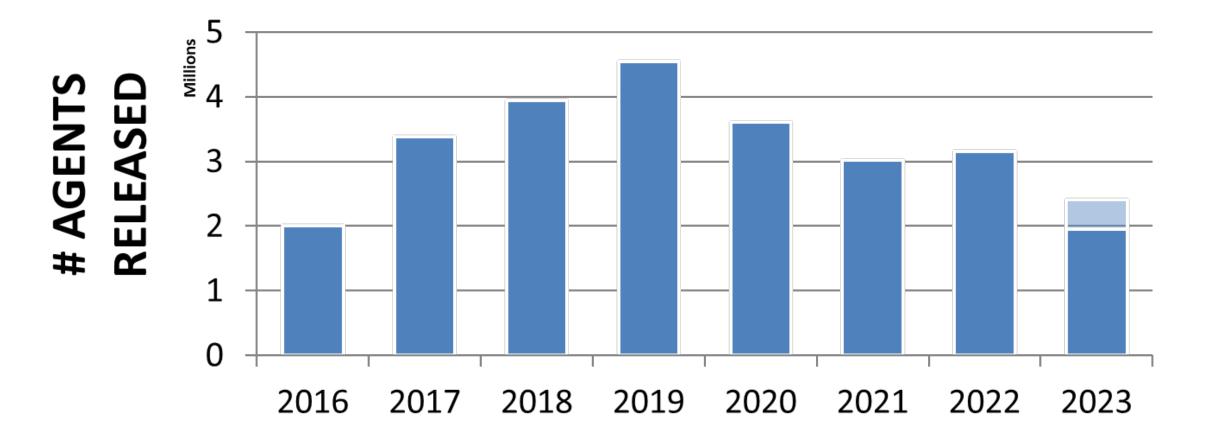
# **Asian Citrus Psyllid Biocontrol Update**



### October 2023 Report



## Tamarixia Releases in California





## Biological Control Agent Releases - 2023

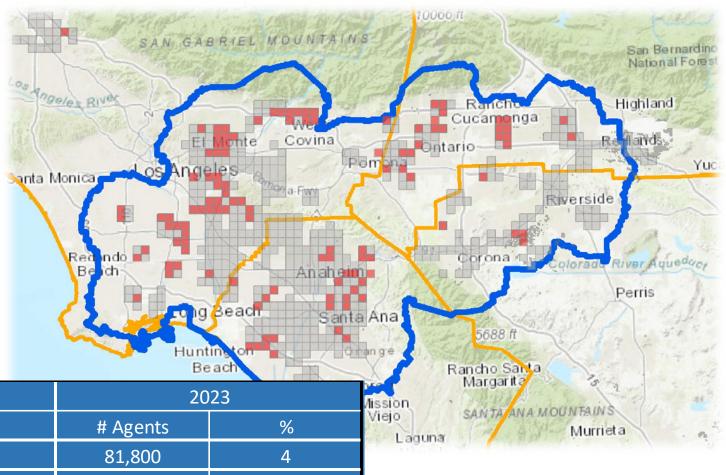
	<b>Releases Previous Month</b>	Releases, 2023	Releases 2011-2	2023
County	October	T. radiata	T. radiata	D. aligarhensis
	2023	Released	Released	Released
mperial	0	49,800	637,543	10,295
Los Angeles	73,800	537,570	7,924,879	107,734
Orange	57,000	473,540	6,192,716	71,179
Riverside	21,600	213,100	4,070,202	127,739
San Bernardino	29,200	178,460	2,228,715	57,252
San Diego	24,000	158,900	3,161,264	86,403
Ventura	20,000	137,000	2,379,106	16,830
Santa Barbara	0	50,500	401,982	12,012
Kern	0	37,000	393,664	0
Santa Clara	6,000	52,000	278,037	0
Placer	0	0	3,400	0
San Luis Obispo	0	8,900	139,200	0
Гulare	0	1,800	63,400	0
Fresno	4,800	4,800	22,200	0
Nonterey	0	14,600	29,000	0
Madera	0	1,200	5,600	0
Arizona	0	32,000	253,500	0
Mexico	0	0	306,000	0
TOTAL	236,400	1,951,170	28,490,408	489,444
	TOTAL (2011-2021):			28,979,852



## **Biological Control Agent Release Areas**

#### Releases in:

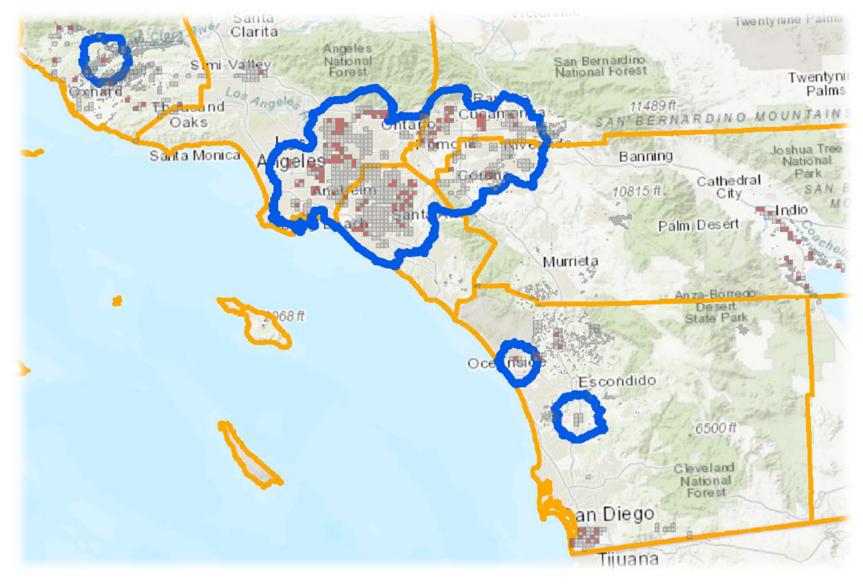
- HLB Quarantine areas
- Borders
- Trade routes
- Area-wide management
- Newly established ACP



Release Type	20	22	2023		
	# Agents	%	# Agents	%	
Borders	129,600	4	81,800	4	
HLB	2,406,050	76	1,561,570	80	
New	291,600	9	120,300	6	
Routes	333,050	11	187,500	10	

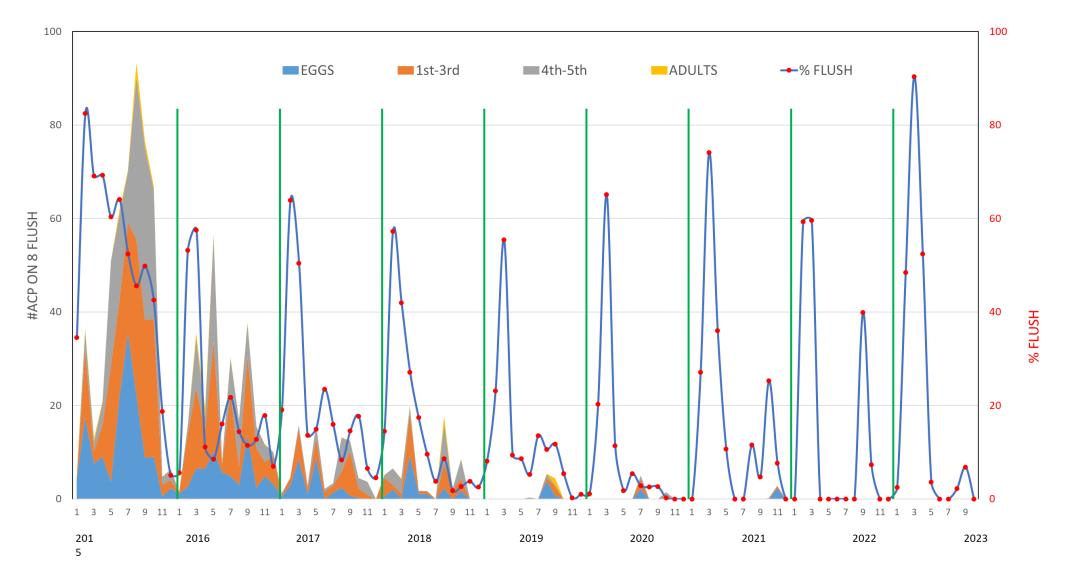


## **Biological Control Agent Release Areas - SoCal**

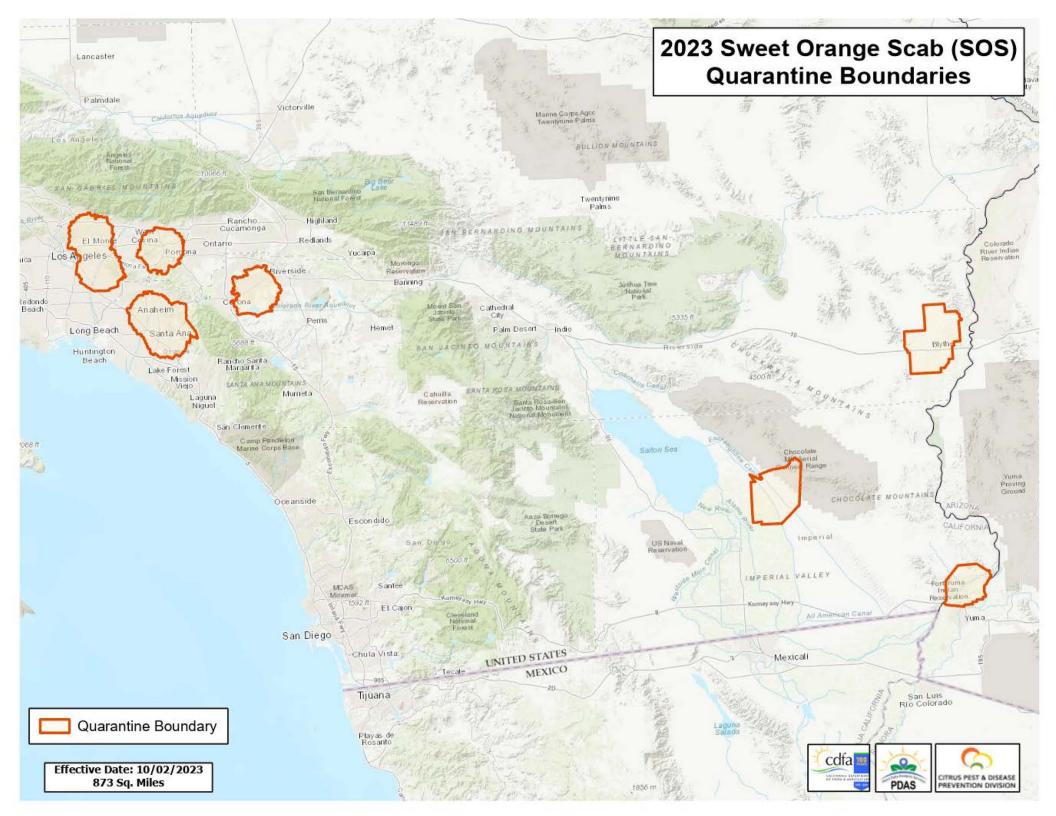




# Region-Wide Urban Monitoring 2015 - Present



ST & DISEASE ON DIVISION



#### Regulatory Working Group Summary

The Science Advisory Panel (2022) recommended CDFA convene a regulatory working group to evaluate quarantine requirements. Discussions were held regarding:

- 1. HLB quarantine mitigations.
  - a. Nothing to report and covered in the Operations section of this meeting.
- 2. An exit strategy to lift an ACP quarantine.
  - a. Regulatory packages submitted to USDA in 2016 and 2019.
  - b. Letter and data detailed the program's comprehensive pest prevention activities and negative trap and survey data.
  - c. Request was denied due to an ineffective blunder trap.
- 3. The requirement to safeguard fruit in transit.
- 4. Reviewing and validating screenhouse breach policies.

#### ACP Detections Along Citrus Highways 7/17/14 - 7/17/2023

Effective 4/1/2017, all citrus fruit must be safeguarded while in transit by either covering the load with a tarp, an insect proof barrier, or transporting the fruit in an enclosed container. Prior to 2017, citrus fruit could be moved without safeguarding the load in transit.

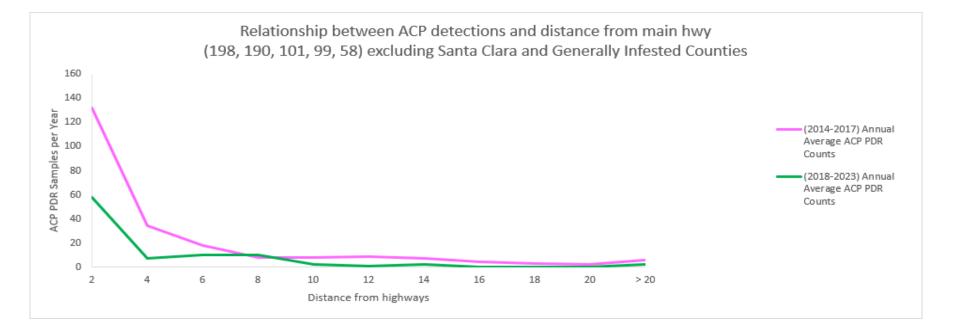
The tables below show the number of Pest Damage Records (PDR) with a confirmed Asian citrus psyllid (ACP) detection prior to and after the safeguarding requirement became effective. A single PDR may have multiple ACP detections. Detections in southern California were not considered as the area is generally infested with ACP.

Highway 99								
2014 - 2017 2018 - 2023 % Reduction								
1 Mile Buffer	210	33	-84%					
2 Mile Buffer	315	43	-86%					

Highway 190							
2014 - 2017 2018 - 2023 % Reductio							
1 Mile Buffer	21	4	-81%				
2 Mile Buffer	24	5	-79%				

Highway 58							
2014 - 2017 2018 - 2023 % Reduction							
1 Mile Buffer	64	13	-80%				
2 Mile Buffer	164	17	-90%				

Highway 198								
2014 - 2017 2018 - 2023 % Reductio								
1 Mile Buffer	17	13	-24%					
2 Mile Buffer	43	21	-51%					



#### ACP Insect-Resistant Structure Breach Risk Model Guide (DRAFT)

This risk model is to be used as a guide for evaluating the risk level of a breach of an insect-resistant structure. Qualifying factors listed below will be considered when determining the level of risk and appropriate regulatory path forward following a breach but are not comprehensive. The Risk Assessment Team will consider all available information before recommending action and any breach may warrant recommendations not listed in this guide.

A breach is defined as any hole or opening in an insect-resistant structure larger than approximately 0.3 square millimeters (0.5mm x 0.6mm) in size, large enough for an Asian citrus psyllid (ACP) to enter.

<b>Risk Level</b>	Qualifying Factors	Possible Result(s)*		
	Small sized breach			
	No ACP detections within 5 miles of the nursery within the prior			
Low	3 months	Hold for 1 or 2 inspection cycles		
	Breach was repaired or an effective safeguard was put in place			
	within an hour			
	Moderate sized hole or breach of structure			
	Multiple ACP have been detected within 5 miles of the nursery	Hold for 2 inspection cycles		
	within the prior 3 months			
Moderate	Nursery is located within the ACP generally infested area	Scion trees on hold and tested for viruses and viroids after at least 5 months		
	Breach was reparied within 1 day			
	Mother/increase trees are housed within the breached			
	structure			
	Large breach, entire wall(s) removed, or roof was removed			
	Nursery is located within the ACP generally infested area	Hold until plants are sampled and		
	Nursery is located within a huanglongbing (HLB) quarantine or	tested		
	within 5 miles of a Clas+ ACP detection			
Severe	Breach was not repaired within 1 day	All plants considered outdoor		
	Mother/increase trees are housed within the breached	nursery stock		
	structure			
	Intentional breach of structure without prior approval by the	Structure is de-certified (1)		
	Risk Assessment Team			

\*Any hold issued applies to shipments of plants from a certified insect-resistant structure. Plants may be moved or shipped as outdoor nursery stock while the hold is in effect. Inspections or sampling and testing following a breach must be complete with negative results before a structure can be recertified.

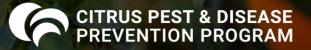
(1) Structure must be empty of all plant material for at least 1 ACP lifecycle to start the re-certification process

California Citrus Risk Assessment Team

Keith Okasaki - CDFA Citrus Pest and Disease Prevention Division	Keith.Okasaki@cdfa.ca.gov
Luis Oquendo-Diaz - USDA APHIS PPQ	Luis.OquendoDiaz@usda.gov
Francisco Quintana - USDA APHIS PPQ	Francisco.L.Quintana@usda.gov

# ottreach Update

November 8, 2023





# **Recent Outreach Activities**



# **Ventura County ACP+ and HLB+ Detections**

### **Crisis Communications Activations and Outreach Activities**

- Crisis Communications Management Team facilitation
- Key message and press release development
- Citrus Insider notifications to statewide distribution list
- Industry partner outreach and notifications
- Media outreach on new CLas+ ACP and HLB+ plant sample detections, including what it means for homeowners, potential impacts for the industry and the current state of ACP and HLB in California.





OCTOBER 3, 2023 / CITRUS, FRUITS & VEGETABLES, NUDUSTRY

The California Department of Food and Agriculture (CDFA) has imposed a quarantine in Ventura County due to the discovery of Huanglongbing (HLB). This marks the first instance of HLB-positive trees in the county. CDFA, collaborating with the U.S. Department of Agriculture (USDA) and the Ventura County Agricultural Commissioner, is taking swift action. The HLB detection was made in an orange and a lime tree in Santa Paula, triggering the removal of infected trees and a mandatory survey within 250 meters of the site. A grower meeting is scheduled for October 4 to address the HLB detections in Santa Paula. Ventura County is now part of Bulk Citrus Regional Quarantine Zone 6.

In response to the detection of Candidatus Liberibacter asiaticus (CLas)-positive Asian citrus psyllid (ACP) samples from the site, CDFA crews are actively working to eliminate the infected trees and conducting mandatory surveys in the vicinity. The aim is to suppress the disease vector, ACP, by treating all host plants in the 250-meter area. Measures taken after an HLB detection are crucial to safeguard nearby citrus from the disease.



# Kern County Proactive Outreach

 Op-Ed placed in the Bakersfield Californian, bylined by Keith Watkins

**Unique Visitors Per Month: 208,742** 

 English and Spanish radio advertising

Spanish Radio Ad Impressions: 323,000

 Billboard placement in South Bakersfield

Impressions: 727,268

 Valley Ag Voices Advertorial and Half Page Ad Reach: 7,000

 $_{\rm \odot}$  Univision Central Valley Interview

#### A Dangerous Pest Poses a Threat to Central Valley's Commercial Citrus

p De Obras Peri & Disasae Preventiar Program dargerem peri cabel de Asian im-s-politi XCP.

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DANGEROUS PEST THREATENS KERN COUNTY PROTECT LOCAL CITRUS PROTEJA LOS CÍTRICOS LOCALES

Everts Elderstoney Cassifieds Horses Cais 2014 Publishers M

Community Voices: Kern growers ready to fight

against dangerous citrus pest

CaliforniaCitrusThreat.org PeligranCitricosEnCalifornia.org -O-70"

1 X h



Bakersfield.com

**Community Voices** 

By METTH HACKORE THE R. 2027



# **Hyperlocal Outreach and Community Events**

- City of Los Angeles hyperlocal outreach
  - Encouraging residents to cooperate with agricultural officials and to be vigilant when inspecting their trees for HLB.



Learn more

californiacitrusthreat.org Protect Your Citrus -Califonia Citrus Threat





 Ventura County Fair Citrus Day Celebration





# **Multicultural Outreach**

### **Hispanic Heritage Month**

- Outreach campaign featuring the level of importance residents should place on being vigilant in looking for the ACP and HLB to keep citrus thriving for years to come.
  - Radio advertising
  - Editorial feature placement
  - Press day with Alex Muniz







### Mid-Autumn Festival

 Advertorial content development, featuring how residents can celebrate with citrus safely and prevent the spread of the ACP and HLB.

m (1 m)







# HLB In a Grove Educational Video

- Newly developed "HLB in a Grove" response guide video
  - High-level overview of regulatory requirements in the event of a positive plant sample in a grove
- Recommendation from Science Advisory Panel



# **Train-the-Trainer Workshops**

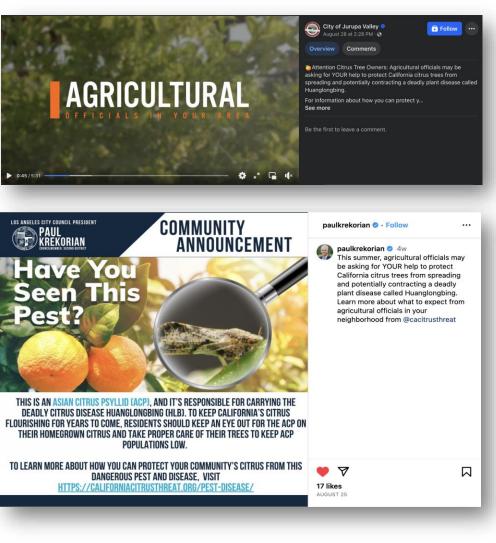
- Spanish-language workshops held in Santa Paula and Exeter
  - Attendees from over 25 different organizations attended
- Exploring English and Spanish dual-workshop days for future trainings



# **Elected Official Outreach Meetings & Activities**

- Distributed shareable content to 344 elected officials
  - "With Your Help, Agricultural Crews Can Help Save Backyard Citrus"
  - Used e-mail marketing data and tactics to optimize reach and engagement
- HLB outreach to city of Los Angeles, including Green Meadows and Vermont Vista neighborhoods
- Citrus Hero Award: Buena Park City Officials and Staff

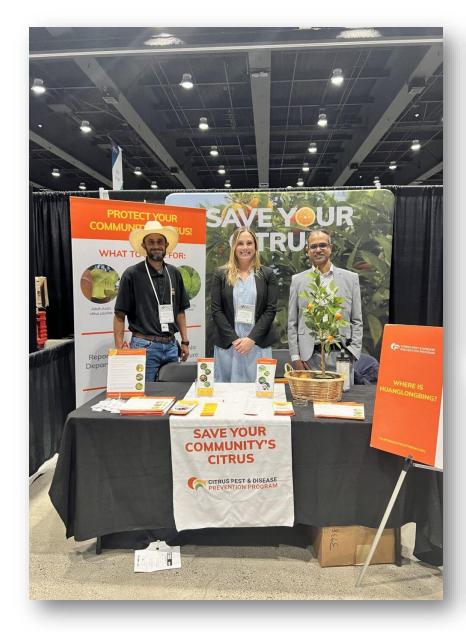






# **Elected Official Events**

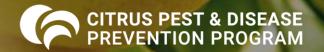
- California League of Cities
  - Over 100 engagements with elected officials.
  - Pre-conference eBlast sent to 62 cities, 565 individual contacts
  - California State Association of Counties (CSAC), Oakland, Nov. 14-16

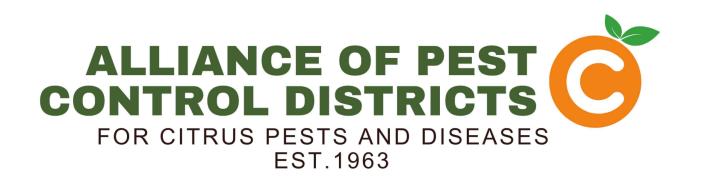




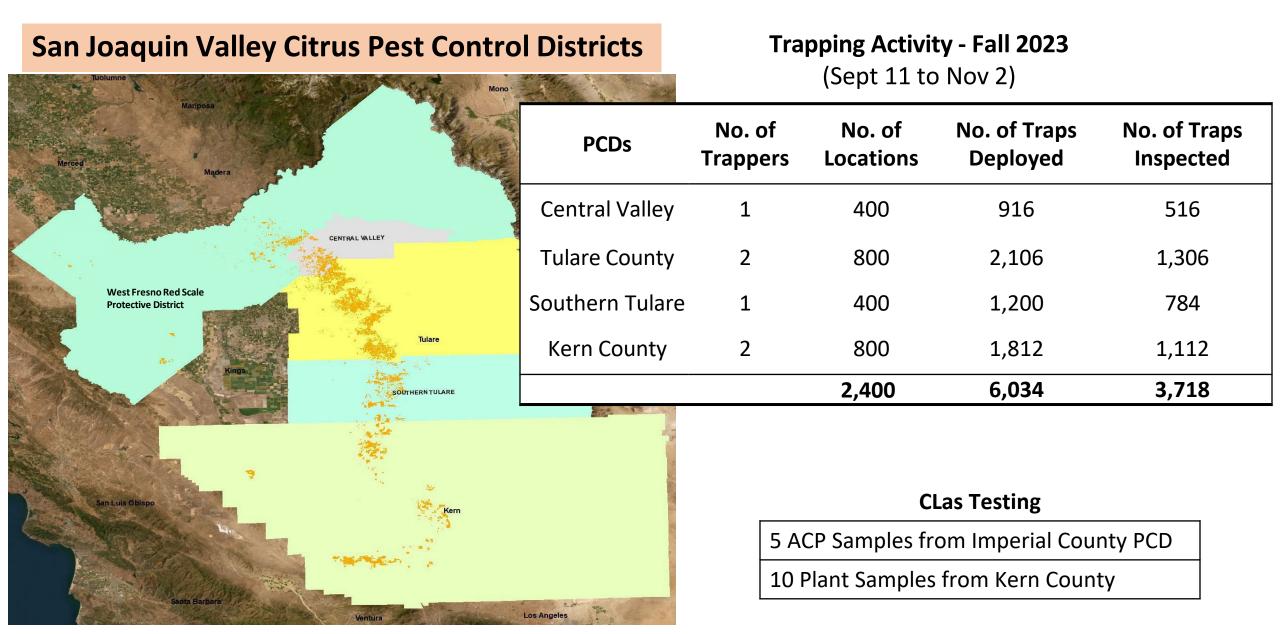
California State Association of Counties

# Thank You





# **Alliance of Pest Control Districts (APCD)**



#### County Monthly Activity Report October 2022 - September 2023

County	FY 2022 23	Percent	CAs	Grower	Transporter	Packer	Fruit Seller	Regulatory	NOVs	NOPAs
-	Budget	Expended	Issued	Inspections	Inspections	Inspections	Inspections	Incidents		
Fresno	\$84,424.26	100%	82	1	402	1	0	0	32	3
Imperial	\$55,892.01	61%	4	20	24	5	0	1	1	0
Kern	\$70,000.00	62%	90	7	496	18	0	0	3	0
Kings	\$20,035.30	80%	0	0	6	108	0	0	0	0
Los Angeles	\$263,358.11	70%	1	12	0	8	516	1	0	0
Monterey	\$14,227.50	81%	0	25	0	0	4	0	0	0
Orange (*1)	\$87 <i>,</i> 987.88	22%	0	51	2	0	0	0	0	0
Riverside	\$680,306.63	95%	30	171	1,082	2	39	22	11	2
San Bernardino (*3)	\$29,334.95	43%	8	9	1	0	0	3	1	0
San Diego (*1)	\$561,592.75	87%	10	509	425	91	113	0	2	0
San Luis Obispo	\$8,035.44	100%	10	3	0	0	0	0	0	0
Santa Barbara (*2)	\$15,147.08	100%	19	8	1	0	19	0	2	0
Tulare	\$340,031.38	100%	333	2	3,608	24	5	16	71	22
Ventura (*4)	\$200,951.41	100%	68	13	506	11	0	0	8	0
Total	\$2,431,324.70	87%	655	831	6,553	268	696	43	131	27

(\*#) = number of invoices missing from the reporting period

# HLB Quarantine Mitigations

CPDPC - NOVEMBER 8, 2023

# Mitigations

- •Spray and harvest
- •Field cleaning by machine
- •Grate cleaning (with approval)

•Standalone: Wet wash

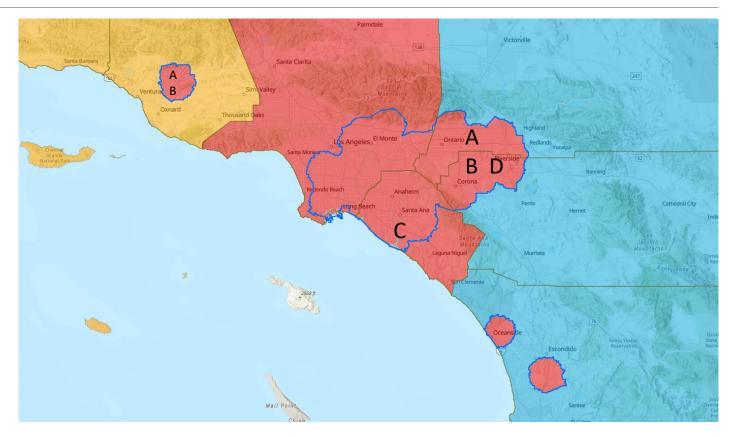
•Safeguarding in transit – always required and is not considered a mitigation

# 1. Within Contiguous HLBQ

#### •Current: 1 mitigation

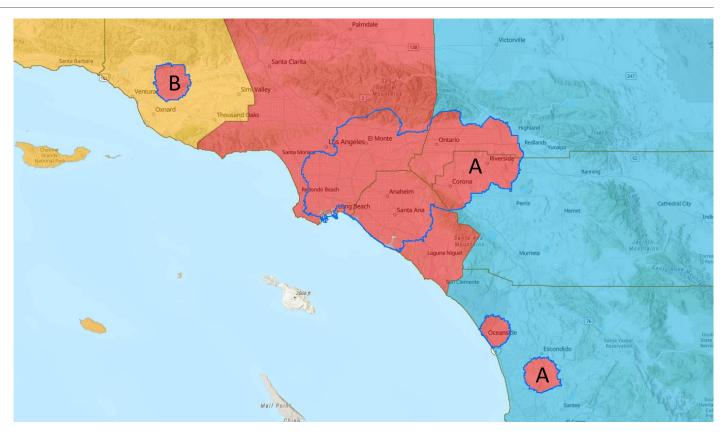
#### •Proposed:

- Within contiguous HLBQ and original ACPQ zone – no mitigation (A to B)
  - Within Ventura HLB
  - Within Riverside and San Bernardino HLB
- Within contiguous HLBQ but out of original ACPQ zone – 1 mitigation (C to D)
  - Orange HLB to Riverside HLB



# 2. To Non-Contiguous HLBQ

- •Current: 2 mitigations or wet wash
- •Proposed: 1 mitigation (A to B)
  - Ventura HLB from/to Riverside HLB
  - San Diego HLB to Ventura or Riverside HLB

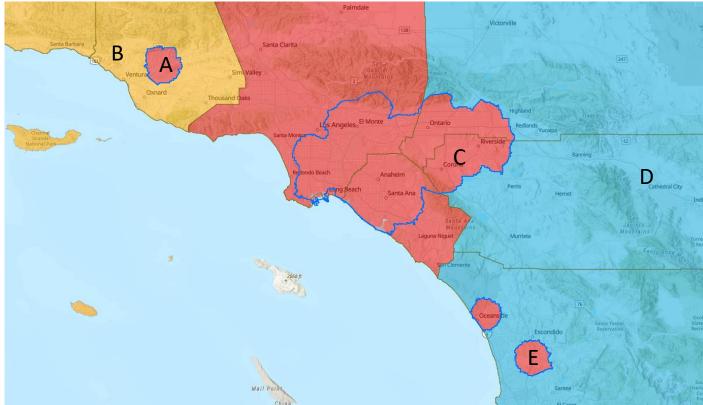


# 3. Out of HLBQ

•Current: 2 mitigations or wet wash

#### •Proposed:

- Within county 1 mitigation
  - Ventura HLB to Ventura ACP (A to B)
  - Riverside HLB to Riverside ACP (C to D)
- Out of county no change. 2 mitigations or wet wash (E to B or D)
  - Riverside HLB to Imperial
  - San Diego HLB to Ventura or Riverside
  - Ventura HLB to Tulare



#### California Department of Food and Agriculture CYVCV Regulatory Response

This is a working document and is not for distribution.

As of April 2023, all delimitation and arc surveys for citrus yellow vein clearing virus (CYVCV) are complete. 579 trees in the city of Tulare, as well as two trees in the city of Visalia, tested positive for the virus. All positive trees were found on residential properties where hold notices have been issued. Multi-pest risk-based survey on residential properties, and commodity survey of citrus groves, will continue statewide where CDFA staff will look for symptoms of CYVCV and sample as appropriate.

Actionable plant pests are individually regulated through quarantine. Quarantines identify the target pest, host articles and commodities, and establish restrictions on moving host articles and commodities to prevent the artificial spread of the target pest.

#### State interior quarantine

Manage virus vectors and pathways through quarantine regulation to limit the spread of the virus within California until more research is conducted and information is available.

- 1. Identify articles and commodities that are hosts of the virus. The main host commodities are grape and citrus plants and plant parts. Movement of hosts would be regulated as pathways for spreading the virus.
- 2. Removal of infected trees is not required. Treatment for vectors around tree detections is not required.
- 3. Establish a quarantine through California Code of Regulations and Federal Order with ½-mile radius from a positive tree detection. Quarantine area may be expanded administratively following subsequent detections like the huanglongbing state interior quarantine.
- 4. Enforce quarantine restrictions through compliance agreements.
  - a. Nursery requirements
    - i. Host plants must be treated with systemic and foliar application effective against CYVCV insect vectors within 90 days prior to shipment. Production and wholesale nurseries currently treat Asian citrus psyllid (ACP) host plants every 90 days. Treatments for ACP with products effective against CYVCV insect vectors may count so additional treatments may be avoided.
    - ii. Nurseries with an APHIS-approved structure may ship plants from a quarantine area and interstate. California nurseries already follow these guidelines to ship citrus plants intra and interstate.
  - b. Quarantine Commodity (QC) permits would be created and issued for specific, low-risk movement that is exempt from sections of the regulation. Examples of types of movement that may qualify under a QC permit are plants moved from one approved structure to another and plants sold for farm direct planting within the same quarantine zone. In both examples, plants could be moved or shipped without treatment.

#### California Department of Food and Agriculture CYVCV Regulatory Response

- c. Retail nurseries would not sign a compliance agreement. Production/wholesale nurseries would supply treated trees to retail establishments. Retail nurseries often do not have the ability to apply pesticides. Under the ACP quarantine, treatment is done at the production/wholesale level and retail trees are generally sold locally and within a few months.
- d. Citrus fruit requirements
  - i. Fruit that is free from extraneous plant material is not proven to be a host of CYVCV. Growers would follow a performance standard to ship fruit from a quarantine area. The performance standard is to ship fruit free from plant material and insects to avoid spreading CYVCV on fruit.
  - ii. Mitigation measures that may be used to achieve the performance standard are:
    - 1. Preharvest treatment to knock down insect vectors that may be on the fruit,
    - 2. Field cleaning by machine to remove stems and leaves and manipulate the fruit to dislodge insect vectors, and
    - 3. Any additional mitigation measure scientifically and/or field proven to effectively meet the performance standard as agreed upon by CDFA and the county agricultural commissioners.
  - iii. Harvesters must disinfect tools and equipment before leaving a grove. As the CYVCV may be mechanically transmitted, harvesting tools would be identified as a host article.
    - 1. Landscapers disinfect between properties and handle green waste.
    - 2. Standard packing procedure will mitigate the pest risk once fruit is washed and packed. Fruit that is washed, waxed, and packed would be exempt from any further California CYVCV regulation.
    - 3. Bins must be disinfected at a packinghouse before returning to groves.
  - iv. Green waste requirements
    - CYVCV-host green waste produced in a quarantine area must remain within the quarantine, be placed into the green waste stream, and/or be moved to a receiver operating under a compliance agreement.
    - 2. Green waste from groves may be chipped or burned on site.
- e. Explore including a quarantine exit strategy in the regulation. In the absence of the target pest, an area may be removed from quarantine.

# Pest Control Districts and Task Force Work Group Update

### **Citrus Pest and Disease Prevention Committee Meeting**

### November 8, 2023 Ravneet Behla, Program Supervisor CPDPD



### Objectives

- Identify ACP-HLB activities where Pest Control Districts (PCD) and Task Force (TF) can align/ assist
- Gain efficiencies by reducing duplication



Accomplished so far

- Held three work group meetings (January 2020, January 2023 and June 2023)
- CPDPD provided overview of all ACP-HLB activities
- Work group reviewed activity maps
- Finalized activity matrix and solicited responses from PCD, TF and CAC



### Responses Received: PCD

			$PCD^{\Psi}$		
Activity	CCTEA	CCTEA Tulare	Hemet	Imperial	San Diego
Outreach and Education				Yes	
ACP Detection - Residential				Yes*	
ACP Detection - Commercial Groves	Yes	Yes		Yes*	
ACP Visual Survey – Residential					
ACP Visual Survey - Commercial Groves	Yes	Yes		Yes	
ACP Treatment – Residential					
ACP Treatment - Commercial Groves			Yes		
Areawide Treatment Coordination			Yes	Yes	
<b>Treatment Around Commercial Groves – Residential</b>	No*	No*			Yes
Citrus Multi-Pest Commodity Survey	Yes	Yes			
Multi-Pest Risk-Based Survey – Residential					
HLB Delimitation Survey – Residential					
HLB Delimitation Survey - Commercial Groves					
Diagnostics	Yes	Yes		Yes	



 ${}^{\Psi} \text{Table lists only PCD that responded}$ 

### Responses Received: TF

	Task Force					
Activity	Ventura	San Bernardino	Santa Barbara	San Luis Obispo		
Outreach and Education	Yes					
ACP Detection – Residential						
ACP Detection - Commercial Groves						
ACP Visual Survey – Residential						
ACP Visual Survey - Commercial Groves						
ACP Treatment – Residential						
ACP Treatment - Commercial Groves						
Areawide Treatment Coordination	Yes					
Treatment Around Commercial Groves – Residential						
Citrus Multi-Pest Commodity Survey						
Multi-Pest Risk-Based Survey – Residential						
HLB Delimitation Survey – Residential						
HLB Delimitation Survey - Commercial Groves						
Diagnostics						

CITRUS PEST & DISEASE PREVENTION DIVISION

### Responses Received: CAC

			CAC <sup>Y</sup>	1	
Activity	Madera	Kern	Riverside	San Bernardino	San Luis Obispo
Outreach and Education	Yes	Yes	Yes	Yes	Yes
ACP Detection – Residential		Yes			Yes
ACP Detection - Commercial Groves					
ACP Visual Survey – Residential					
ACP Visual Survey - Commercial Groves					
ACP Treatment – Residential	Yes				
ACP Treatment - Commercial Groves					
Areawide Treatment Coordination	Yes				
Treatment Around Commercial Groves –					
Residential					
Citrus Multi-Pest Commodity Survey					
Multi-Pest Risk-Based Survey – Residential					
HLB Delimitation Survey – Residential					
HLB Delimitation Survey - Commercial Groves					
Diagnostics					



 ${}^{\Psi} \text{Table lists only CAC that responded}$ 

### Topics under discussion

- Can grower (s) anonymously submit samples to CCTEA?
- Cost analysis for activities that can be assisted by PCD and TF
- Contract/ grant execution process



# Thank You!



# HLB Prevalence and positivity rate estimation in Southern CA





#### Weiqi Luo

**Neil McRoberts** 







Support: CRB #5300-199

### Citrus population in Southern CA (Residential vs commercial)

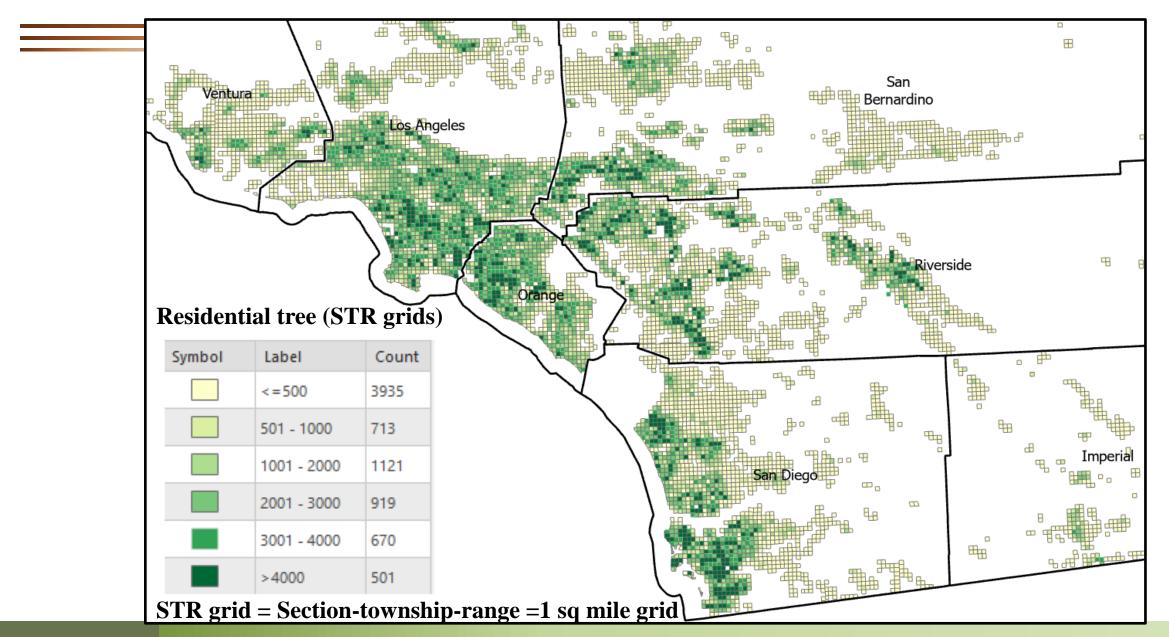
County	Total number of STRs	Number of STRs with Residential Properties	Total Number of Residential Properties	Percent of Residential Properties with Citrus	Estimated Number of Residential Citrus Properties	Average number of citrus tree planted per property	Residential	Total commercia citrus (acres)
LA	4,129	2,447	1,589,829	63.25%	1,005,544	1.90	1,910,534	
Orange	873	621	563,373	41.61%	263,914	2.17	572,693	5(
Riverside	7,622	1,942	611,347	55.97%	342,167	3.04	1,040,188	16,4
San Diego	4,373	1,804	590,277	77.91%	459,897	3.06	1,407,285	10,0
Imperial	4,499	538	36,706	62.71%	23,017	2.39	55,010	7,2
San Bernardino	20,457	2,277	485,689	68.19%	331,169	2.42	801,429	2,7
Ventura	1,952	572	174,682	62.71%	109,539	2.40	262,893	26,0

Total residential citrus trees in Southern CA = 6,050,032 Total commercial citrus trees in Southern CA = 6,310,100

Assuming typical 100 trees/acre

Refined residential citrus population and distribution are also available for Coastal, Central and Central North CA

### Residential Citrus distribution in Southern CA



### Number of Citrus tree/property & citrus type preference

County	Total Properties Sampled (2013, 2019, 2020)	Mean Trees	1 Tree	2 Trees	3 Trees	4 Trees	5+ Trees
Los Angeles	43,524	1.90	24,512 (56.3%)	10,018 (23.0%)	4,467 (10.2%)	2,114 (4.9%)	2,413 (5.5%)
Orange	13,673	2.17	7,120 (52.0%)	3,018 (22.0%)	1,511 (11.0%)	775 (5.7%)	1,249 (9.1%)
Riverside	12,841	3.04	4,769 (37.1%)	2,801 (21.8%)	1,798 (14.0%)	1,143 (8.9%)	2,330 (18.1%)
San Diego	20,916	3.06	8,267 (39.5%)	4,540 (21.7%)	2,597 (12.4%)	1,633 (7.8%)	3,879 (18.5%)
Imperial	1,017	2.39	452 (44.4%)	245 (24.0%)	124 (12.1%)	64 (6.3%)	132 (12.9%)
San Bernardino	3,920	2.42	1,884 (48.0%)	851 (21.7%)	439 (11.1%)	279 (7.1%)	467 (11.9%)
Ventura	12,319	2.40	5,428 (44.0%)	2,948 (23.9%)	1,679 (13.6%)	935 (7.6%)	1,329 (10.7%)

## Number of Citrus tree/property & citrus type preference

Dooryard citrus type distribution (%) by county

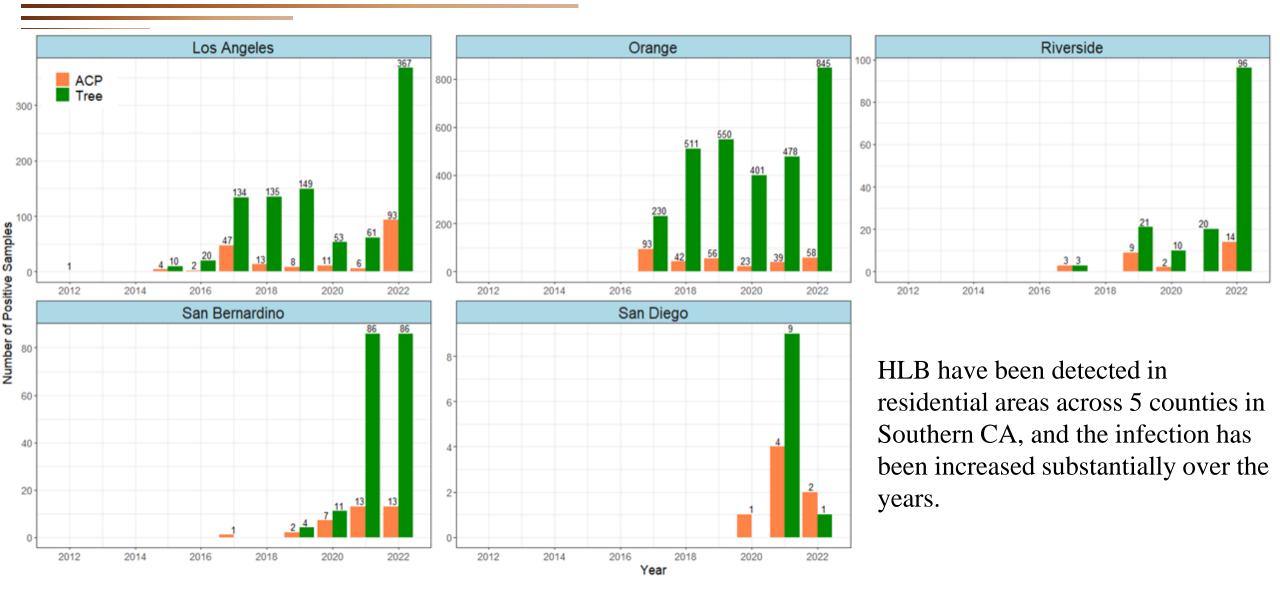


County	Orange	Lemon	Lime	Grapefruit	Mandarin	Tangerine	Tangelo	Pomelo	Kumquat	Calamondin	Other
LA	25.0	28.7	14.5	6.8	7.1	4.7	1.1	3.3	6.3	1.6	0.9
Orange	26.7	27.7	15.0	6.2	6.2	5.9	1.1	2.4	5.8	1.8	1.2
Riverside	31.4	30.3	12.7	9.7	4.7	3.8	1.9	1.0	3.2	0.9	0.3
San Diego	34.1	31.2	11.3	6.5	4.3	5.1	2.4	0.5	2.5	1.9	0.2
Imperial	21.0	38.3	15.1	13.7	4.0	3.1	3.6	0.2	0.5	0.3	0.0
San Bernardino	29.6	30.3	14.9	7.5	5.4	4.1	1.7	1.1	3.8	1.3	0.3
Ventura	35.8	37.6	8.1	6.8	4.1	5.1	0.8	0.3	1.0	0.5	0.0

Lowest

Highest

### HLB detections in Southern CA, 2012 - 2022



## HLB situations in Southern CA, 2012 - 2022

#### **Estimated HLB Prevalence (% areas/STRs infected with HLB)**

0.4%	0.5%	2.4%	3.6%	4.0%	2.6%	2.9%	
		16.2%	13.7%	20.5%	14.9%	17.9%	
		0.9%		0.8%	2.0%	2.0%	
		0.9%		3.0%	3.4%	5.6%	
					0.2%	0.2%	

#### Estimated HLB Positivity Rate (% trees infected with HLB)

0.6%	0.3%	0.7%	0.5%	0.6%	0.7%	1.4%	
		1.3%	0.7%	1.8%	1.1%	3.9%	
		0.2%		0.6%	0.4%	0.7%	
		16.0%		0.6%	0.5%	1.1%	
					1.3%	3.3%	

-- Year without HLB finds or insufficient sampling

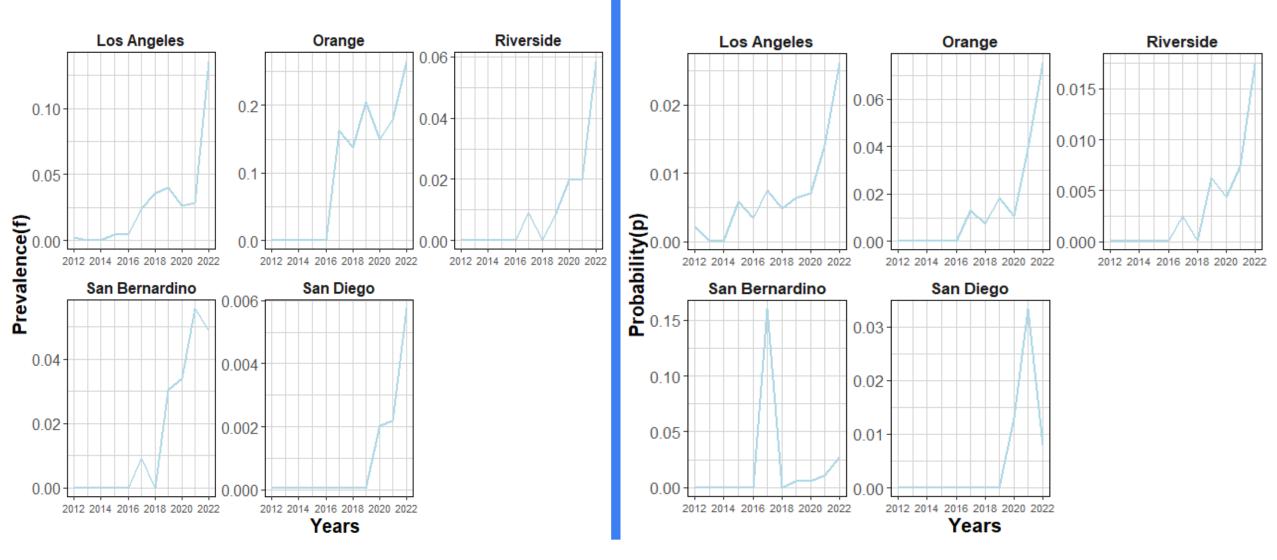
**Example:** the total HLB+ trees (estimated) in **Orange and Riverside county in 2022** 

Orange: Dooryard Tree population \* Prevalence \* Positivity Rate = 572,693 \* 0.265 \* 0.075 = 11,382 Riverside: Dooryard Tree population \* Prevalence \* Positivity Rate = 1,040,188 \* 0.058 \* 0.018 = 1,085

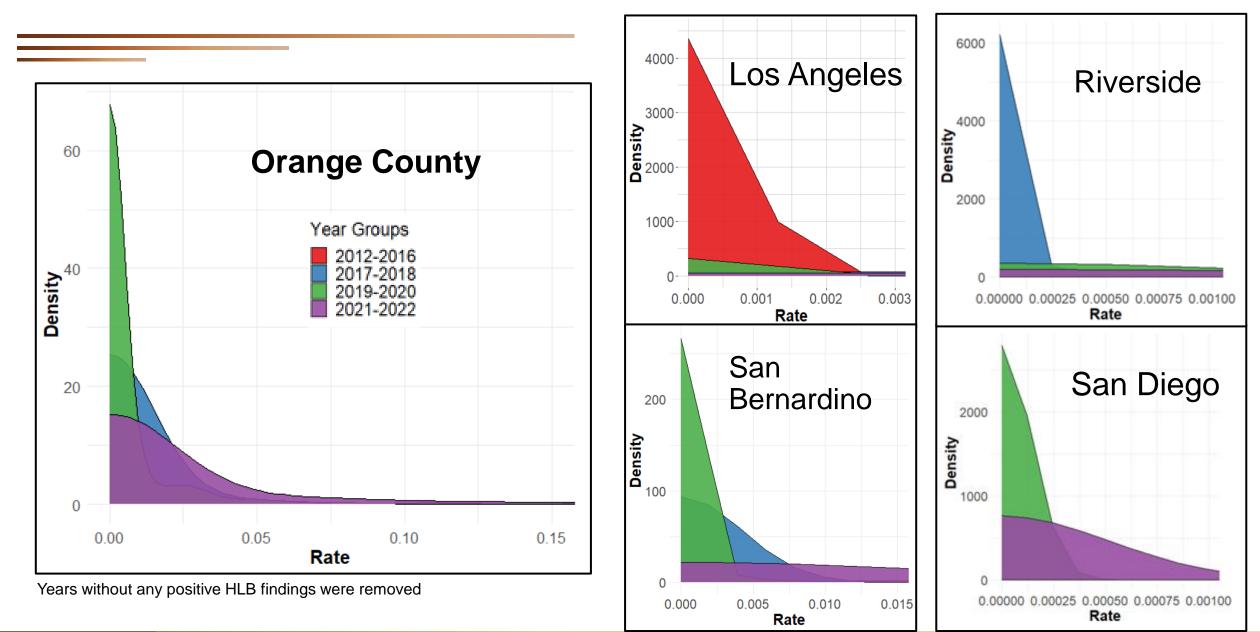
### Estimated HLB Prevalence and positivity rate for each County by Year

#### **Estimated HLB Prevalence**

#### **Estimated HLB Positivity Rate**



### Estimated HLB positivity rate at STR level for each County by Year



## Method & References

Assumption: No False Negative for HLB+ sampling

Method: We use the binomial probability law to estimate HLB prevalence f and the STR level positivity rate p. Here, q=1-p.

$$P(x|f,p) = (1-f)0^{x} + f\binom{n}{x}p_{\text{pool}}^{x}(1-p_{\text{pool}})^{n-x}$$
$$= (1-f)0^{x} + f\binom{n}{x}(1-q^{m})^{x}q^{m(n-x)}$$

Terms:

*x*: The number of positive pooled samples for a specific STR

*n*: The total number of pooled samples for a specific STR

*f*: The overall prevalence of HLB within a County

p: The probability of an individual sample testing positive from an infected STR group, in other words, the positivity rate of HLB within each STR

m: The number of individual samples combined into one pooled sample

Reference:

Comparison of methods for estimation of individuallevel prevalence based on pooled samples

David W. Cowling<sup>a,\*</sup>, Ian A. Gardner<sup>a</sup>, Wesley O. Johnson<sup>b</sup>

Estimation of animal-level prevalence from pooled samples in animal production Eric G. Evers<sup>\*</sup>, Maarten J. Nauta