CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM
OPERATIONS SUBCOMMITTEE MEETING

Meeting Minutes
Wednesday, February 5, 2020

Opening:
The regular meeting of the Operations Subcommittee was called to order at 9:00 a.m. on
February 5 by Chairman Keith Watkins.

Subcommittee Members Present:
John Gless* Kevin Severns Keith Watkins
Zac Green*

Subcommittee Members Absent:
Roger Smith

CDFA Staff:
Jonathan Babineau* Anmol Joshi* Keith Okasaki*
Tina Galindo* Sara Khalid* Lea Pereira*
David Gutierrez* Lucita Kumagai* Lydia Rodriguez*
Amelia Hicks* Magally Luque-Williams* Nawal Sharma*
Victoria Hornbaker* Dr. David Morgan* Michael Soltero*
Gavin Iacono* Alex Muniz* Jennifer Willems

Guests:
Price Adams Sara Garcia-Figuera* Curtis Pate*
Ruben Arroyo* John C. Gless Monique Rivera*
Bob Atkins Jim Gorden Jason Schwartze*
Kevin Ball* Subhas Hajieri* Cressida Silvers*
Jill Barnier* Dr. Melinda Klein* Neil McRoberts*
Brad Carmen Jessica Leslie Judy Zaninovich
Natalie DeAngelo Mark McBroom* Sandra Zwaal*
Rick Dunn* Dr. Neil McRoberts*

* Participated via Webinar

Keith Watkins welcomed the Subcommittee, staff, and members of the public participating in
person and online.
STRATEGIC PRIORITY 1 – Find and Eradicate Huanglongbing (HLB)

Laboratory Update
Lucita Kumagai stated that the California Department of Food and Agriculture (CDFA) lab received 6,790 plant samples in January 2020; 60 percent of the samples from Orange and Los Angeles Counties, 20 percent from San Bernardino County, ten percent from Riverside County and nine percent from San Diego County. She added that 21 percent of samples were taken during risk surveys and 69 percent are Huanglongbing (HLB) response samples. She stated that 2,580 Asian citrus psyllid (ACP) samples were sent to the Citrus Research Board (CRB) lab; 30 percent of samples from Los Angeles County, 20 percent from Orange County, 15 percent from San Bernardino County, 12 percent from San Diego County, ten percent from Riverside County and six percent from Ventura County. She stated that total samples year to date are 9,376; eight percent lower than January 2019 due to lower overall ACP numbers.

Lucita explained that as of January 31, 2020, there were positive detections at 1,292 sites with 69 percent located in Orange County. 1,788 infected trees have been removed to date, with 452 HLB-positive tree detections in Los Angeles County, 1,303 detections in Orange County, 26 detections in Riverside County and seven detections in San Bernardino County.

HLB Risk Survey Update
Magally Luque-Williams stated that the Risk-Based Survey cycle is finished in 15 of 17 counties, with surveyors still working in Orange and Los Angeles Counties. She explained that 43,763 sites have been surveyed with 10,686 ACP samples and 7,295 plant samples taken. Magally stated that she had 18 risk-survey staff: 11 in Los Angeles and seven in Orange County. There are ten staff working delimitation in Orange County: two in Santa Ana; two in orange; two in Placentia; three in Anaheim; and one in tree removal. No staff are currently working on quadrant sampling. There are 14 staff in San Bernardino County and two in Riverside County: six staff in Montclair; two in Ontario; six in Colton; and two in Corona.

Magally explained that quadrant samples are done on HLB positive tree and Candidatus Liberibacter asiaticus (CLas) positive ACP find sites, properties adjacent to find sites and any sites with inconclusive results. She stated that there have been 7,458 quadrant samples in 2019: 6,853 samples in Orange County; 161 samples in Riverside County; 256 samples in San Bernardino County; 156 samples in San Diego County; and 32 samples in Imperial County. In January 2020, 172 quadrant samples were collected in Orange County, eight samples collected in Riverside County and 179 samples collected in San Bernardino County.

Magally stated that the fall cycle of the HLB order survey in Imperial County is complete with 262 sites surveyed. Imperial County’s winter cycle is 40 percent complete with 15 miles and 21 sites surveyed, and San Diego County’s winter cycle is 82 percent complete with 18 miles and 171 sites surveyed.

HLB Detection, Delimitation and Tree Removal
Tina Galindo stated that the Los Angeles HLB delimitation survey is complete in Montebello and Pico Rivera, the El Monte expansion is 94 percent complete and the Whittier expansion is 81 percent complete. Staff will be diverted to the new La Mirada detection area. She stated that CRB tissue sampling project staff will begin winter sampling. She stated that she has two surveyors in
El Monte, two surveyors in Whittier and two surveyors conducting adjacent quadrant sampling. Los Angeles Risk-Based Survey work is mostly complete so the 19 staff working in Los Angeles will be diverted to Orange County Risk-Based Survey.

Magally provided an update on the Orange County HLB delimitation survey, stating, Anaheim’s 70 areas are 42 percent complete; Garden Grove’s 45 areas are 27 percent complete; Westminster’s 19 areas are 29 percent complete; Santa Ana’s 32 areas are 30 percent complete; and Tustin’s 12 areas are 83 percent complete. She added that Placentia’s six areas are 62 percent complete with seven HLB-positive trees; City of Orange’s 20 areas are 80 percent complete with 45 positive trees; Montclair’s four areas are 35 percent complete with four positive trees; Corona’s five areas are 71 percent complete with 19 positive trees; and Colton’s two areas are 23 percent complete with three positive trees. The 400-meter CLas positive ACP delimitation in Ontario is 69 percent complete and the San Bernardino re-survey is 45 percent complete. She explained that all HLB-positive trees in Montclair and Colton have been removed, with one refusal in Corona. There are seven tree removals pending in Orange County; six in Santa Ana and one in Garden Grove.

STRATEGIC PRIORITY 2 – Control ACP movement and Enforce Regulations

Regulatory Activity Update

Nawal Sharma stated that every shipment of bulk citrus moving out of an ACP quarantine zone requires an ACP-free form detailing quantity and mitigation method. He explained that this information is passed on from packinghouses through the receiving Agricultural Commissioner to CDFA. He explained that from September to December 2019, 189,664 bins have moved between quarantine zones. He noted that during these four months, 26 percent of fruit were field cleaned compared to five or ten percent in the past.

He stated that 56,255 total bins moved into Zone 2, San Joaquin Valley; 23 percent from Monterey County, 29 percent from Ventura County and 23 percent from Riverside County. Over 40 percent of fruit shipped into Zone 2 originated from Zone 4 (Santa Barbara and Ventura Counties). He explained that 44 percent of bins are field cleaned and 56 percent are moved under the spray and harvest mitigation. He added that approximately 12,000 bins have been moved using the grate cleaning mitigation method; two growers shipping from Monterey County to Ventura County account for 88 percent of these bins, and two growers shipping from Fresno County to San Diego County account for 12 percent.

Discuss Quarantine Logistics

Keith Okasaki explained that the Committee is considering placing traps at packinghouses receiving fruit moved under Quarantine Commodity (QC) Permit 1486, which allows fruit to be moved from any ACP regional quarantine into the HLB quarantine for final pack. He stated that currently there are no traps in place because Zone 6 is in the generally infested area. Only two packers within Zone 6 are receiving fruit under QC Permit 1486. He explained that if fruit is unloaded indoors, traps may determine if psyllids are moved in on unmitigated loads and help determine a regulatory response. If fruit is unloaded outside, the traps will not differentiate between ACP in the environment and ACP on unmitigated loads. He added that inside traps will not immediately show an influx of psyllids on loads without an established baseline, and additional county or CDFA resources would be required to place and service the traps.
It was stated that Riverside growers were concerned over QC Permit 1486’s lack of mitigation and wanted to see more use of spray and move. Victoria explained that the original discussion surrounding QC Permit 1486 was that it was facilitating movement from a low risk area to a higher risk area and so mitigation was not required. Keith confirmed that revoking QC Permit 1486 would require the growers to mitigate prior to moving the fruit. She explained that CDFA cannot require an area wide treatment prior to move fruit between quarantine zones. Nawal suggested that when the HLB quarantine expands, unmitigated fruit coming into the HLB quarantine zone would increase significantly. He believed that traps were not a complete solution. Victoria noted that the HLB quarantine area has expanded in Riverside due to HLB finds. It was stated that having more uniformity in movement between zones would be preferable.

Kevin Severns moved to present a motion to eliminate the QC Permit 1486 to the full Committee, seconded by John Gless. Victoria stated that Chandrika Ramadugu has offered 100 live capture ACP traps to CDFA, but it needs to be determined if they comply with the California Environmental Quality Act.

**STRATEGIC PRIORITY 3 – ACP Control/Suppression**

**Trapping and Treatment Updates**

*Southern California*

Tina stated that HLB treatment is complete in Montebello and Westminster. San Gabriel is nearly complete barring some weekend appointments and Corona is pending an expansion. She stated that areawide treatments in San Bernardino, Riverside and the Imperial border treatment are complete, with Ventura 50 percent complete due to new zones meeting the 90 percent requirement. She added that the San Diego border treatment will be completed next week. She stated that once San Bernardino, Riverside and Los Angeles Counties are complete, staff can be moved into Orange County to finish expansions and begin retreatment. Victoria stated that almost 300,000 properties in Los Angeles, Imperial, Orange, Riverside, and Santa Barbara Counties have been treated for ACP and HLB. She explained that 50,000 properties have been treated for ACP north of the Tehachapis. 60,000 properties have been treated for HLB in Los Angeles County, 42,000 in Orange County, 737 in San Bernardino County and 2,674 in Riverside County.

*Central Valley and Northern California*

Cassandra Davis stated that 3,296 Southern California grove sites were visited out of 10,000 possible sites in January 2020. She added that 3,042 ACP samples were collected at 600 sites.

Cassandra Davis noted that her presentation included winter trap numbers for Northern California counties that don’t do ACP trapping. CDFA contracts with the counties to use glassy-winged sharpshooter traps as ACP traps during the winter. She noted that delimitation numbers have been separated out from general detection traps which will be removed after a year. She stated that Agricultural Commissioners are taking over running ACP traps in Tulare and Kern Counties.

There have been no new ACP finds in Northern California and no active treatments. She explained that in 2019 there was a drastic reduction in finds, minus a few hot spots like Soledad in Monterey County. She explained that Soledad received full Merit and Tempo treatments from December 2018 to March 2019, with Tempo treatments done in September and October 2019. There were 241 adult and 520 nymph psyllid finds from August to October 2019, but no new trap finds since
October 2019. Victoria explained that north of the Tehachepis, CDFA requires an ACP find before they can treat with pesticides. She added that CDFA staff are waiting for the new HLB Risk-Based Survey layer, and Soledad is likely to be a target due to the repeat ACP detections.

**Biocontrol Update**

Dr. David Morgan stated that the Biocontrol program released 4,531,017 *Tamarixia radiata* in 2019, with CDFA producing 75 percent of released agents and CRB field cages accounting for the rest. The cool spring resulted in decreased production at CRB. He added that University of California Riverside (UCR) also produced insects but those went primarily into production rather than release. He stated that California sends 9,000 *Tamarixia* to release in Tijuana and Mexicali, Mexico each week. CDFA has also been sending insects to Arizona to assist UCR and USDA. He stated that 75 percent of agent releases are around HLB-infected areas, and releases along the border have increased by four percent. He confirmed that there are established populations of *Tamarixia* but that monthly releases still go far in driving down ACP numbers. David stated that *Tamarixia* production is at its maximum, although there has been a grant to increase lights to allow Cal Poly Pomona to continue producing *Tamarixia* in the winter.

David recommends moving from localized ACP suppression to areawide suppression as a barrier around urban areas. Victoria suggested a hybrid release, releasing *Tamarixia* around finds and as a barrier between ACP and commercial citrus. David stated that agent releases on borders and trade routes will continue regardless.

**Regional ACP Update**

Bob Atkins explained that grower liaison Jason Schwartze will be moving to the San Diego Agricultural Commissioner’s office. The CDFA is working to fill the vacancy caused by Jason moving to the county. Bob stated that there was interest in hard numbers from each county on neglected and abandoned groves. It was stated that this would allow the Subcommittee to understand the magnitude of the problem. Bob intended to track groves reported and owners contacted, letters sent, and groves removed or remediated. He noted that only one grove has gone to hearing, which the program won. It was noted that south of the Tehachepis, each established area could be harboraged for the psyllids and potentially for HLB, but it is more difficult to claim that staff are responding to ACP.

Dr. Neil McRoberts suggested that outreach regarding wash or pack be directed to small growers as a community activity at a collection point. There would be a higher upfront cost but would result in less overhead from enforcement.

**STRATEGIC PRIORITY 4 – Improve Data Technology, Analysis and Sharing**

**Data Analysis and Tactical Operations Center (DATOC) Update**

Neil stated that DATOC is working on a cost-benefit analysis of the program. He added that Holly Deniston-Sheets is working on simulations using the agent-based model to analyze San Gabriel. Brianna McGuire is working on data for resamples, sample density and detection density in various municipalities. He noted that DATOC hopes to establish an exposure rule for removal of non-sampled trees on exposed properties.
Jim Gorden stated that Dr. Tim Gottwald’s work on canines was recently published at the National Academy of Sciences.

**CLOSING COMMENTS & ADJOURNMENT**

The meeting was adjourned at 11:51 a.m. The next Operations meeting will be held in Visalia, California on March 4, 2020 at 9:00 a.m.