

**CALIFORNIA CITRUS PEST AND DISEASE PREVENTION PROGRAM
COMMITTEE MEETING**

Meeting Minutes
Wednesday, May 9, 2018

Opening:

The regular meeting of the California Citrus Pest and Disease Prevention Committee (CPDPC) was called to order at 10:00 a.m. on May 9, 2018 in Visalia, California by Committee Chairman Jim Gorden.

CPDPC Members Present:

Craig Armstrong	John Gless	Mark McBroom	Roger Smith
Ed Civerolo	Jim Gorden	George McEwen	Brian Specht
Aaron Dillon	Ted Grether	James McFarlane	Keith Watkins
Bob Felts, Jr.	Link Leavens	Kevin Severns	

CPDPC Members Absent:

Nick Hill	Etienne Rabe
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CDFAs Staff:

Nick Condos	Tina Galindo	Sara Khalid	David Morgan*
Cassandra Davis*	Kevin Hoffman*	Jason Leathers*	Colleen Murphy
Adrian Gonzales*	Victoria Hornbaker	Magally Luque-Williams*	Nawal Sharma*

Guests:

Price Adams*	Rahul Gupta*	Melinda Klein	Kim Wilenius*
Bob Atkins	Subhas Hajeri*	Ellen Kragh	Helene Wright
Jill Barnier	Linda Haque	Joel Reyes	Judy Zaninovich*
Brendyn Dornich*	Tim Hoesterer	Sylvie Robillard*	Sandra Zwaal*
Rick Dunn	Geoff Hollenbeck*	Cressida Silvers	
Jason	Brett Kirkpatrick*	Gary Schulz	

*** Participated via Webinar**

Opening Comments:

Jim Gorden welcomed the Committee, staff, and members of the public participating in person and online and stated that there is a quorum for the meeting. He acknowledged that the meeting was being held in compliance with the Bagley-Keene Open Meeting Act.

COMMITTEE BUSINESS & UPDATES

Jim Gorden reviewed the consent agenda which contained minutes from the Committee meeting that took place on March 14, 2018.

Motion: To approve the consent agenda as presented

First: Keith Watkins

Second: John Gless

Motion Passes: All in favor

FINANCE SUBCOMMITTEE REPORT & DISCUSSION

Projection of Dedicated Program Resources

Nick Condos presented a resource projection to CPDPC for a full-scale program, with dedicated staff. He explained that the proposed Citrus Division costs did not require the full estimated cost of \$78.3 million (490 personnel) or \$65.6 million (cost and 411 personnel for Huanglongbing (HLB) (treatment only) and could be taken line by line based on the most critical division needs.

Nick reminded the Committee of the motion that was moved at the last Committee meeting to increase lab costs by \$399,000 to add ten permanent staff at CDFA's lab. These new personnel would increase lab capacity to 138,000 plant samples per year. Nick estimated that 966 positive trees would be discovered and 134,000 new HLB treatment properties created annually. He stated the division would need 62 contractor treatment trucks and 84 treatment crew members to keep up with this increased demand, up from the current 28 contractor treatment trucks and 53 crew members. Nick added that if southern California area-wide treatments and border treatments are included, the division would instead require 88 contractor treatment trucks and an additional 79 staff.

Nick stated that based on 138,000 plant samples and 91,000 Asian citrus psyllid (ACP) sample capacity, 100 risk-based surveyors and 47 delimitation surveyors would be needed for optimum sample acquisition.

In response to the question of how efficient each contractor treatment truck is, Nick Condos and Tina Galindo explained that contractor treatment trucks cost more than acquiring trucks for CDFA directly, but only require one staff as crew compared to three staff per each CDFA truck. In addition, purchasing CDFA trucks would require as many as nine offices and additional storage facilities.

Nick Condos earmarked 25 staff for the emergency quarantine regulation program, 25 staff for the diagnostic program, 8 staff for the ACP treatment program and 40 staff for the ACP trapping program in addition to the labor contract with the Cooperative Agricultural Support Services (CASS) for grove trapping, and 26 staff for the biocontrol program. All these programs together reach the target staff of 490.

Nick explained operating expenses for labs (\$3.1 million) were proportionally higher than core staff operating expenses (\$13.5 to \$15.7 million) due to the nature of lab work. Service contract costs primarily consisted of contractor treatment trucks, at \$12.6 million for 60 service trucks and \$18.5 million for 80 trucks. He listed a variety of research contracts, bulk citrus enforcement contracts, and ACP detection and treatment contracts: Citrus Research Board (CRB), DATOC, Data Management, Gottwald risk-based surveys, and CASS for grove trapping.

Nick Condos specified that there is currently a contract with Dr. Karen Jetter to perform cost/benefit analysis of program elements, which will help identify the most cost-effective path forward.

Nick stated that budget negotiations are currently ongoing in the legislature until mid-June, and the Committee is presented with a window of opportunity. The budget change proposal process for fiscal year 2019/2020 begins in July, and Nick suggested that a motion be passed to allow the program to begin recruiting now. CDFA could grow the program for two years to reach the target of 490 dedicated personnel.

Nick presented the Committee with three break points of strategic planning.

Strategic Priority 1: HLB Elimination

Nick presented the first strategic priority to find HLB and eliminate the inoculum. This included risk-based, delimitation and grove-based surveys in southern California at a total cost of \$16.5 million. This priority required HLB diagnostics, a total cost of \$5.5 million. Tree removal would cost \$1.9 million. The total for Priority 1 would be \$24 million.

Strategic Priority 2: Enforce Quarantines

Nick presented the second strategic priority to include CDFA and County Agricultural Commissioner enforced quarantine to be \$5.1 million. Quarantine required an ACP detection program, totaling \$6.7 million. Core administration to run these programs costs \$4.7 million. Various support contracts totaled \$6.7 for a total of \$23.2 million for Priority 2 and a grand total of \$47.2 million.

Strategic Priority 3: Treatment

Nick presented the third strategic priority, treatment. HLB treatments in an 800-meter radius around HLB positive trees cost \$20 million. Area wide and border treatment were \$13.5 million. San Joaquin Valley and Northern California treatments were \$1.7 million and the biocontrol program would cost \$1.8 million for the \$37 million total for Strategic Priority 3 and a grand total of \$84.2 million.

In response to questions of similar programs, Nick stated that the Glassy-winged Sharpshooter Program only contained 30 to 40 dedicated staff, due to most work being done at the county level. It was suggested that perhaps one quarter of the proposed program could be built within one year. Nick believed it would be reasonable to start with the core staff and general funds first and build outward from there. It was suggested these numbers might rise based on sudden emergencies.

James McFarlane estimated that Strategic Priority 2 quarantine would cost approximately \$34 million which is within their expected budget. He noted that cost does not include ACP detection or HLB response treatments. Nick Condos added that the \$34 million figure also did not include support contracts such as NST and Gottwald risk-based surveys.

James McFarlane stated that the Committee would need to fund the \$13 million for ACP detection and HLB response treatments in the future. It was recommended that the Committee perform a good faith action such as raising assessments by \$0.01, and ask the Legislature for sufficient funds to properly deal with the threat beyond the currently allocated budget.

It was stated that a day and a half is not sufficient for the Committee to fully grasp the material, and that an interim meeting could be held in 2 weeks to vote on a budget. Nick Condos explained that the legislative process would be open until early June, so a delay of approximately ten days for an interim meeting was possible. It was suggested that passing a motion for \$34 million might keep the Committee from raising the requested additional funds later, and rejecting a motion might cause the Committee to appear indecisive or not dedicated to the Citrus program. Nick agreed that the Legislature might have issue with the Committee vacillating. It was also stated that the Committee is an advisory body, and the funding requested has no guarantee of being granted by the Legislature.

Motion: To provide base level dedicated resources (\$34 million) for HLB survey, HLB diagnostics, quarantine, tree removal and core administration.

First: James McFarlane

Second: John Gless

Motion Passes: 9 yays (Ed Civerolo, Bob Felts Jr, John Gless, Jim Gorden, Ted Grether, Link Leavens, George McEwen, James McFarlane and Roger Smith), 5 nays (Craig Armstrong, Mark McBroom, Kevin Severns, Brian Specht and Keith Watkins) and 1 abstention (Aaron Dillon).

EXECUTIVE SUBCOMMITTEE REPORT & DISCUSSION

Committee and Subcommittee Vacancies

Jim Gorden appointed Etienne Rabe and Craig Armstrong to the Finance Subcommittee. He mentioned that James McFarlane desired to be relieved of the chairmanship of that committee at the end of the budget year.

Jim appointed Roger Smith to the Operations Subcommittee at the last meeting, and wished to appoint Ted Grether to that Subcommittee.

Jim appointed Kevin Olson and Aaron Dillion to the Science Subcommittee.

OPERATIONS COMMITTEE REPORT & DISCUSSION

Strategic Priority 1 – Find and Eradicate HLB

HLB Survey Update

Magally Luque-Williams presented the report for Operations. She stated that the second cycle of risk-based surveys was completed, except for Los Angeles and San Diego. San Diego is slated to be finished that week. This cycle of surveys completed 915 square miles and 53,713 properties. 23,000 ACP samples and 12,000 plant samples were collected.

Magally reviewed the most current list of HLB positive trees and ACP positive for CLAs by county.

She added there was an HLB supplement survey in progress in Orange County to cover areas not previously surveyed. It was planned to cover 30 miles, 50 percent of which was done. 432 sites

were visited so far, 391 entomology samples and 184 plant samples gathered. This supplement survey discovered the Yorba Linda ACP-positive property.

Magally explained that the program also performs a survey along the border with Mexico. The spring cycle of the border survey is in progress. Survey teams have completed 19 of a proposed 40 miles (100 sites) in Imperial County and 19 of a proposed 32 miles (198 sites) in San Diego. 2 entomology samples and 74 plant samples were collected in Imperial County, and 25 entomology samples and 9 plant samples were collected in San Diego.

Tina Galindo presented an update to the Los Angeles delimitation survey areas, the labs have three surveyors each in Norwalk, Pico Rivera, Rosemead and Whittier. The Norwalk survey was 42 percent complete since its start in December. The Pico Rivera survey was 70 percent complete since its start in August. The Rosemead survey was 26 percent complete since its start in December. The Whittier survey was 50 percent complete since its start in October. Tina added that inconclusive samples from the CA-1B survey were being resampled. Seven of the ten sites have been resampled. Other inconclusive resampling requests were in progress.

In response to a question on HLB positive tree procedure, Tina explained that once HLB positive trees are identified, the program tends to return the next day to remove it or within a week if requested. Nick Condos stated that if the property owner refuses, the program will send a letter requesting compliance, followed by a warrant and final abatement letter if necessary. He stated that hundreds of sites currently refuse to allow samples or avoid contact. Approximately four sites currently await warrants and the final abatement letter to remove HLB positive trees.

HLB Diagnostic Update

Keith Watkins presented Luci Kumagai's report of total plant and ACP lab samples. He stated that the lab processed 30,536 plant samples to date in 2018; the CDFA lab also analyzed 1159 ACP samples, the CRB lab analyzed 17,770 ACP samples, the Citrus Pest Detection Program (CPDP) lab processed 2,988 ACP samples and University of Arizona analyzed 4,707 samples. He explained that the program is on track to exceed previous years' samples based on productivity so far.

It was suggested productivity at the CDFA lab was low during March and April. Nick Condos explained that was due to a lack of psyllid samples to run. In response to a question of price, Nick stated that University of Arizona charged approximately \$22 per sample, nearly the cost for CDFA to run the sample in their own labs. It was stated new nursery regulations from USDA provided a protocol for new nursery blocks to alleviate shipping requirements, which will increase biannual nursery samples in CDFA labs by 300-1500 samples per nursery.

Strategic Priority 2 – Control ACP Movement and Enforce Regulations

Regulatory Activity Update

Keith Watkins stated that 3900 bins of fruit traveled from Orange County into San Joaquin Valley as of April 2018. That fruit was field-cleaned only. Keith cautioned that the Committee should be aware of potential issues with transferring fruit or trees between quarantine zones.

Field-cleaning is occurring in Monterey and San Luis Obispo County moving fruit into Ventura County. There were concerns that bins may contain psyllids after the green leaf material was removed by field-cleaning. Nawal Sharma stated that negligible amounts of mature hard leaves were found upon checking the bins from the Monterey lemon grower engaged in field-cleaning. It was advised that the Operations Subcommittee take on that issue as a pilot project.

Strategic Priority 3 – ACP Control/Suppression

Biocontrol Update

Dr. David Morgan specified that 68 percent of biocontrol agent releases were targeted around HLB sites. A new monitoring protocol was put in place to run transects across HLB areas. David explained *Diaphorencyrtis* releases were recently discontinued due to cost and recovery issues. After analyzing three years of data, David agreed with the Committee's findings that ACP numbers have declined by 60 percent in urban areas. He stated that this was partially due to climate change and partially due to a 75 percent ACP decrease during the stage when ACP can be parasitized by *Tamarixia*. David noted a correlation between ant growth and ACP growth, as the ants protect the ACP from parasitism or predation.

David stated that the USDA held a multi-agency meeting about biocontrol agents during the first week of May 2018. A multi-agency initiative between Florida, Texas and California intends to release findings explaining the purpose and goals of biocontrol.

Regional ACP Management

Bob Atkins stated that Jason Schwartze has been appointed as the new San Diego County Grower Liaison.

Bob stated Kern County activity to be dying down due to grower treatments. The growers have formed a network of around 25 growers per team captain, but filling the captain seats has proven difficult. Bob explained PCAs provided a natural avenue for communication between growers, and broadcasts through those PCAs were performing well without need for captains.

Bob noted that there is some concern about abandoned groves in Fresno County and explained that under the Food & Agriculture code the Agricultural Commissioner can remove those orchards as they are a public nuisance.

Bob met with the Early Detection Technologies (EDT) Task Force on April 27, 2018. Carla Thomas and Neil McRoberts provided results from CA-1A and 1B participants. CA-1A was a benchmark of healthy trees and CA-1B were reference samples for common pathogens. The Task Force will meet in mid-June after samples are analyzed.

SCIENCE SUBCOMMITTEE REPORT

Updates from May 2, 2018 Science and Technology Subcommittee

Ed Civerolo discussed minutes from the Subcommittee meeting. Dr. Tim Gottwald reported on the risk-based survey and plans for next year to optimize the HLB delimitation survey. He proposed a methodology change for the survey. He noted that samples have gone up due to

intensive surveying but picking the right sample in a newly infected HLB positive tree was difficult. Tim explained that infection in LA and Orange County areas was entering an exponential phase and disease progression has increased. He recommended that the delimitation program should concentrate on the edges of the region. The subcommittee supported a recommendation to reduce the survey distance from 800 meters to 400 for HLB positive trees and CLas positive ACPs.

Motion: To reduce the HLB delimitation survey area from 800 to 400 meters.

First: Roger Smith

Second: Keith Watkins

Motion Passes: All in favor

Ed explained decreasing the delimitation distance would reduce survey costs by 75 percent. It was suggested that the motion was only for survey response; treatment would warrant more discussion.

Ed explained that Brianna McGuire of the Dr. Neil McRoberts lab was attempting to define tree exposure. He stated that Dr. Karen Jetter is analyzing a cost/benefit analysis of the program, and she hoped to have data to share by June or July. Luci Kumagai presented an update on HLB PCR protocols at the March 2018 meeting. Ed explained that the PCR primers Luci used for CLas detection were modified to be more specific to CLas, and that the lab is no longer testing for CLam after no findings in over ten years. The lab was using the RNR primaries to validate 16S results. Ed lauded the QPCR results overall as robust, reliable and specific.

Ed stated that Sara Garcia-Figura presented a project to estimate risk of introducing CLas and CLas infected ACPs between quarantine zones through bulk citrus shipments. Spencer Walse presented an update on ACP mitigation measures for fruit movement. Ed stated fogging was discussed as a post-harvest treatment, and the team was looking at a short list of other appropriate chemicals.

Ed stated that Dr. Beth Grafton-Cardwell gave presentations on current treatment efficacy of the area-wide buffer treatments. Ed explained she presented data suggesting sites treated with Tempo and Merit showed zero ACP after 16 weeks, and that she suggested residential treatments should continue. He noted that control in Ventura was inconsistent due to timing issues between buffer and grove treatments, and that Beth recommended response treatments continue in high-risk areas like Riverside and the Central Valley. It was stated that area wide buffer treatments are not uniformly effective. It was also suggested that Ventura would see better results if the buffer treatments were better timed.

Motion: To not accept Dr. Beth Grafton-Cardwell's recommendation regarding area-wide buffer treatments without additional scientific data.

First: Mark McBroom

Second: Craig Armstrong

Motion Passes: 13 yays (Craig Armstrong, Ed Civerolo, Aaron Dillon, Bob Felts Jr, John Gless, Ted Grether, Link Leavens, Mark McBroom, George McEwen, James McFarlane,

Kevin Severns, Roger Smith, and Brian Specht), 1 nay (Keith Watkins) and 1 abstain (Jim Gorden).

Strategic Priority 4 – Improve Data Technology, Analysis and Sharing

Sara Khalid indicated MOUs have been signed by all three parties. Colleen Murphy discussed development of a mobile application to collect field information on survey activities. Nick stated the app would be a good investment. Luci Kumagai gave an update on research activities. Laura Petro gave an overview on CDFR-issued permits to assist in activities at UC Riverside since detection of HLB in the area.

Bob Atkins added that Greg McCollum worked in conjunction with Early Detection Task Force on testing flush and nymphs. His findings were that nymphs produced by an HLB positive ACP mother acquired HLB from the plant, not the mother. Bob stated this finding could update work instructions; he believed finding HLB positive nymphs on a plant should be sufficient to declare the plant HLB positive.

OUTREACH SUBCOMMITTEE REPORT

Strategic Priority 5 – Outreach and Education

Updates from April 11, 2018 Outreach Subcommittee

Price Adams presented an Outreach update.

Home Owner Outreach

Outreach redistributed English and Spanish PSAs over radio and television in 10 of California's 11 DMAs (sans Eureka), totaling 350 broadcasts and 14 million impressions in one month. In April, Outreach worked on a presentation with Nick Condos and the Orange County Ag Commissioner to a Santa Ana community group to address treatment concerns. Price stated that billboards go up during the summer months in McFarlin, Hwy 99, Hwy 5 and San Ysidro urging the public not to move citrus. Outreach presented information about HLB and ACP to Grow Riverside and attended an expo to educate smaller growers. Outreach ran Facebook ads in cities with HLB detections and are looking for opportunities at farmer's markets. Price stated that per Outreach Subcommittee request, Outreach was considering ways to reach vendors as well as growers.

Industry Outreach

NST and CCM hosted a tour of UC Riverside citrus groves for more than 200 PCAs from southern California during the CAPCA Spring Summit in April 2018. Beth Grafton-Cardwell presented her recommendations, Alan Washburn presented scouting techniques for ACPs and Victoria Hornbaker discussed ACP quarantines at the summit. Price stated that agricultural media outlets, including The Packer and Ag Daily, covered the CPDPC's strategic plan to combat HLB. Outreach also ran an article on ACP management in CAPCA's Advisor magazine. She stated that Outreach worked with Annika Forester to conduct six training workshops in the central and coastal regions. Price wanted to hold meetings with field managers and supervisors of packing houses to provide updates for ACP and HLB in coordination with the Ag Commissioner, with the first meeting in June at a Riverside County location.

Elected Official Outreach

Price explained Outreach coordinated with CCM and CDFA to prepare testimony for their Senate Ag committee meeting. She stated Outreach staffed a booth at Southern California Association of Governments to develop stronger contact with the 191 cities present there. Outreach secured meetings with representatives of Fullerton, Garden Grove, Riverside, Whittier, San Gabriel and La Puente and with County Agricultural Commissioners. Outreach shared information with 10 city governments via Facebook and Twitter which local government could send out to their constituents.

CCM REPORT

Joel Reyes described his tree removal experiences in Anaheim areas. He began work in August, and received the tree removal program in late November with a budget of \$35,000. His team removed 966 trees from residential areas before increasing work in Anaheim, Riverside, and the central valley thanks to a small increase in funding. New outreach in Anaheim signed up 45 new locations, 35 of which were completed. 85 Anaheim home owners reached out to Joel, along with 49 locations in San Gabriel and 17 in other LA areas.

CRB REPORT

Gary Schulz stated that the CRB expect a visit from the USDA on May 30, 2018 regarding lab reaccreditation. Melinda Klein stated that CRB received 69 new research project pre-proposals, winnowed to 46 by the Research Priority Screening Committee in late April. Full proposals are reviewed in late May. Melinda explained that the Committee will be meeting July 17-18, 2018 to move those proposals to full board consideration and August 14-16, 2018 to review all new and continuing research projects. Final decision will be made by the end of the fiscal year, September 25, 2018.

Grower seminars are scheduled for June 26-28, 2018 8:30 a.m. in Palm Desert, transferring to meet in Santa Paula and finished in Exeter. Nomination meetings for District 2 will be held on July 10, 2018 at 1 p.m. at the Santa Paula Community Center and at the Tulare Agriculture Commissioner's office on July 12, 2018.

Gary Schulz stated that Nick Condos, Jim Gorden, Melinda Klein, and others worked on a project to bring canine CLAs detection teams to California with the help of Dr. Tim Gottwald and others in Florida. He explained that three research projects are currently funded. HLB MAC funds allow for care and feeding of the 19 dogs, and to bring four dogs into California on four occasions and Texas on one occasion. A CRB research project funded a canine detection unit in UC Riverside to follow up on work from last year. The CRB's Florida-1 project, an early detection technology developed by Neil McRoberts and Greg McCollum, moved 19 canines from the Coast to Coast Canines operation to the Excelsior kennels in Orlando under the authority of the USDA. It was suggested the dogs may require retraining. Gary Schulz expected 60 days of retraining to be necessary. Gary noted that when the dogs were brought to California in 2016 and 2017, only one tree the dogs alerted on tested positive for CLAs. More study will be required to validate the dogs as a viable tool.

CLOSING COMMENTS & ADJOURNMENT

The meeting was adjourned at 3:32 p.m. The next Committee meeting will be held in Ventura, California on July 11, 2018 at 10:00 a.m.