

**City of Garden Grove**  
**WEEKLY CITY MANAGER'S MEMO**  
**August 12, 2021**

TO: Honorable Mayor and City Council      FROM: Scott C. Stiles, City Manager  
Members

**I. ITEMS FROM OTHER GOVERNMENTAL AGENCIES, OUTSIDE AGENCIES, BUSINESSES AND INDIVIDUALS**

- A.** Memorandum from Mr. Larry Dick and Mr. Bob McVicker of the Municipal Water District of Orange County (MWDOC) outlining monthly water usage data figures, an estimate of Tier 2 volume for MWDOC, and selected water supply information.
  
- B.** *Findings of an Emergency for Asian Citrus Psyllid/Huanglongbing and Amendment to the Proclamation of an Emergency Program against the Huanglongbing Disease* from the California Department of Food and Agriculture.

• **OTHER ITEMS**

- SOCIAL MEDIA HIGHLIGHTS AND NEWSPAPER ARTICLES  
Copies of the week's social media posts and local newspaper articles are attached for your information.
  
- MISCELLANEOUS ITEMS  
Items of interest are included.



Scott C. Stiles  
City Manager



## Memorandum

**DATE:** August 10, 2021  
**TO:** Member Agencies – MWD OC Divisions Two & Three  
**FROM:** Larry Dick, Director – Division Two  
Bob McVicker, Director – Division Three  
**SUBJECT:** Monthly Water Usage Data, Tier 2 Projection & Water Supply Information

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The attached figures show the recent trend of water consumption in Orange County (OC), an estimate of Imported Water Sales for MWD OC, and selected water supply information.

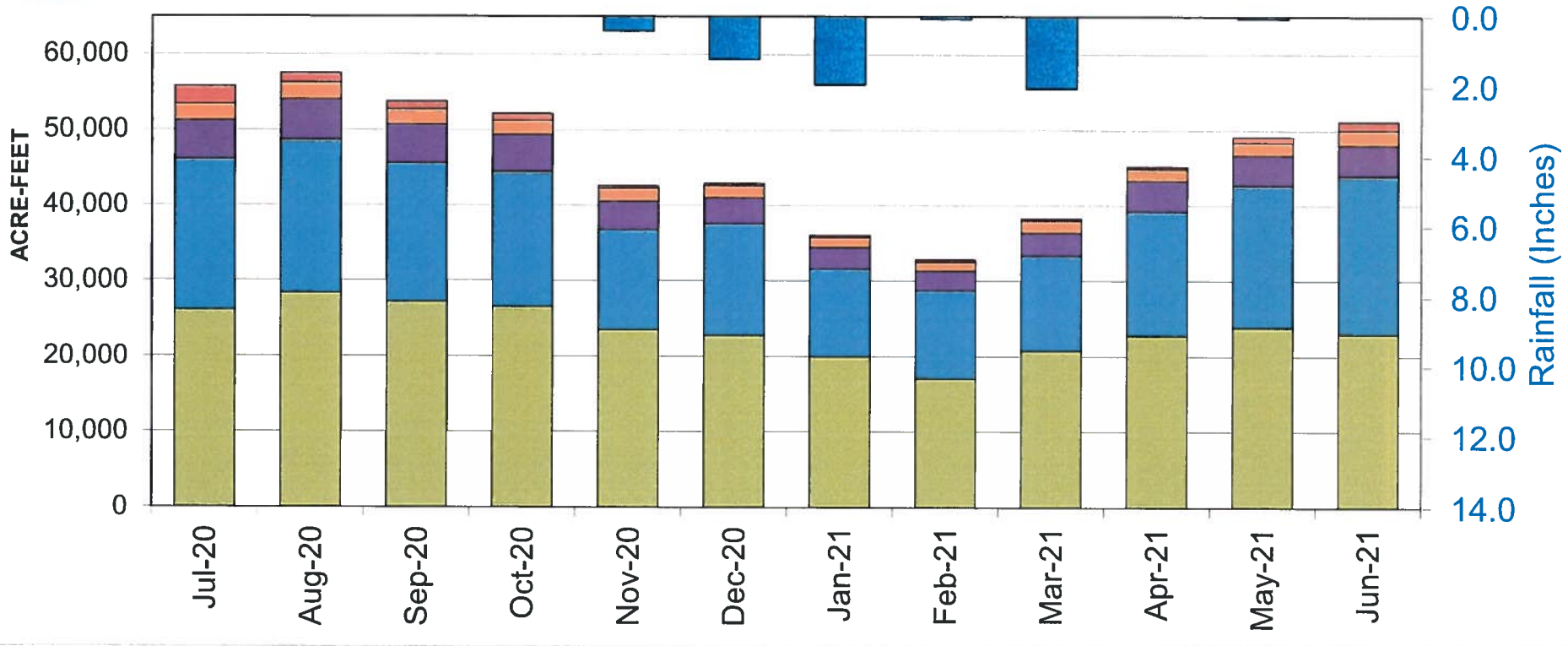
- OC Water Usage, Monthly by Supply **OCWD Groundwater was the main supply in June.**
- Estimated OC Water Usage, Monthly, Comparison to Previous Years Water usage in June **2021 was above average compared to the last 5 years.** We are projecting a slight Increase in overall water usage compared to FY 2019-20. On July 8<sup>th</sup> 2021, state officials have ask California residents to voluntary reduce their water usage by 15% compared to 2020 levels.
- Historical OC Water Consumption Orange County M & I water consumption is **projected** to be **547,000 AF in FY 2020-21** (this includes ~11 TAF of agricultural usage and non-retail water agency usage). This is about **15,000 AF more than FY 2019-20** and is about **31,000 AF more than FY 2018-19**. Water usage per person is projected to be slightly higher in **FY 2020-21 for Orange County at 155 gallons per day** (This includes recycled water usage). Although OC population has increased 20% over the past two decades, water usage has not increased, on average. A long-term decrease in per-capita water usage is attributed mostly to Water Use Efficiency (water conservation) efforts. **O.C. Water Usage for the last five Fiscal Years (FY 2015-16 to FY 2019-20) was the lowest since the 1982-83 Fiscal Year** (FY 1982-83 was the third wettest year on record).

Water Supply Information Includes data on Rainfall in OC; the OCWD Basin overdraft; Northern California and Colorado River Basin hydrologic data; the State Water Project (SWP) Allocation, and regional storage volumes. The data have implications for the magnitude of supplies from the three watersheds that are the principal sources of water for OC. Note that a hydrologic year is Oct. 1<sup>st</sup> through Sept. 30<sup>th</sup>.

- Orange County's accumulated precipitation through **early August** was below average for this period. Water year to date rainfall in Orange County is **5.7 inches**, which is **45% of normal**.
- Northern California accumulated precipitation through **early August** was **47% of normal for this period**. Water Year 2020 was 63% of normal while water year 2019 was 137% of normal. The **Northern California snowpack was 66% as April 1<sup>st</sup>. As of late June, 100.00%** of California is experiencing **moderate to exceptional drought conditions** while 100.00% of the state is experiencing abnormally dry conditions. The State Water Project Contractors Table A Allocation was lowered to 5% in March 2021.
- Colorado River Basin accumulated precipitation through **early August** was **80% of normal** for this period. The **Upper Colorado Basin snowpack was 74% of normal** as of April 13<sup>th</sup>. **Lake Mead and Lake Powell** combined have about **50.2% of their average storage volume** for this time of year and are at **33.6% of their total capacity**. If Lake Mead's **level falls below a "trigger" limit 1,075 ft. at the end of a calendar year**, then a shortage will be declared by the US Bureau of Reclamation (USBR), impacting Colorado River water deliveries to the Lower Basin states. As of early July, Lake Mead levels were **7.15' BELOW the "trigger" limit**. The USBR predicts that there is a **97% chance that the trigger level will be hit in 2022 and a 94% chance in 2023**.



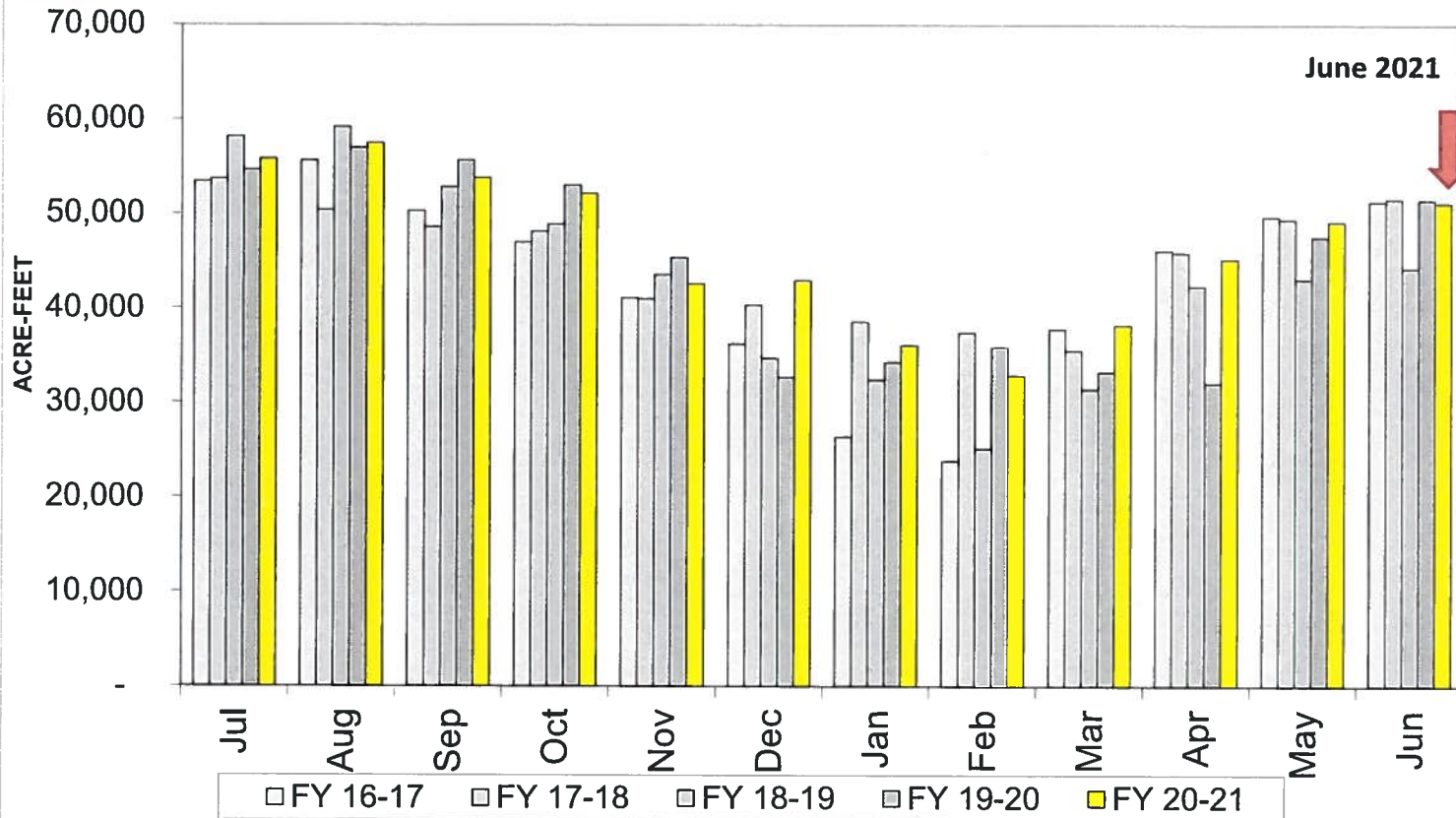
**Fig. 1 OC Water Usage, Monthly by Supply with projection to end of fiscal year**



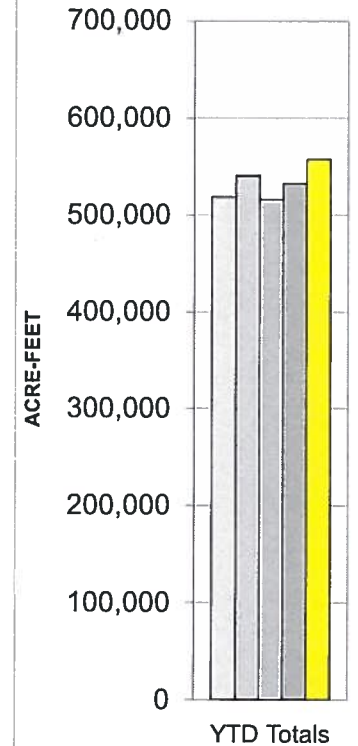
- [1] Imported water for consumptive use. Includes "In-Lieu" deliveries and CUP water extraction. Excludes "Direct Replenishment" deliveries of spreading water and deliveries into Irvine Lake.
- [2] GW for consumptive use only. Excludes In-Lieu water deliveries and CUP water extraction that are counted with Import. BPP in FY '20-21 is 77%.
- [3] MWDOC's estimate of monthly demand is based on the projected 5 Year historical retail water demand and historical monthly demand patterns.
- [4] Total water usage includes IRWD groundwater agricultural use and usage by non-retail water agencies.



**Fig. 2 OC Monthly Water Usage [1]: Comparison to Last 4 Fiscal Years**

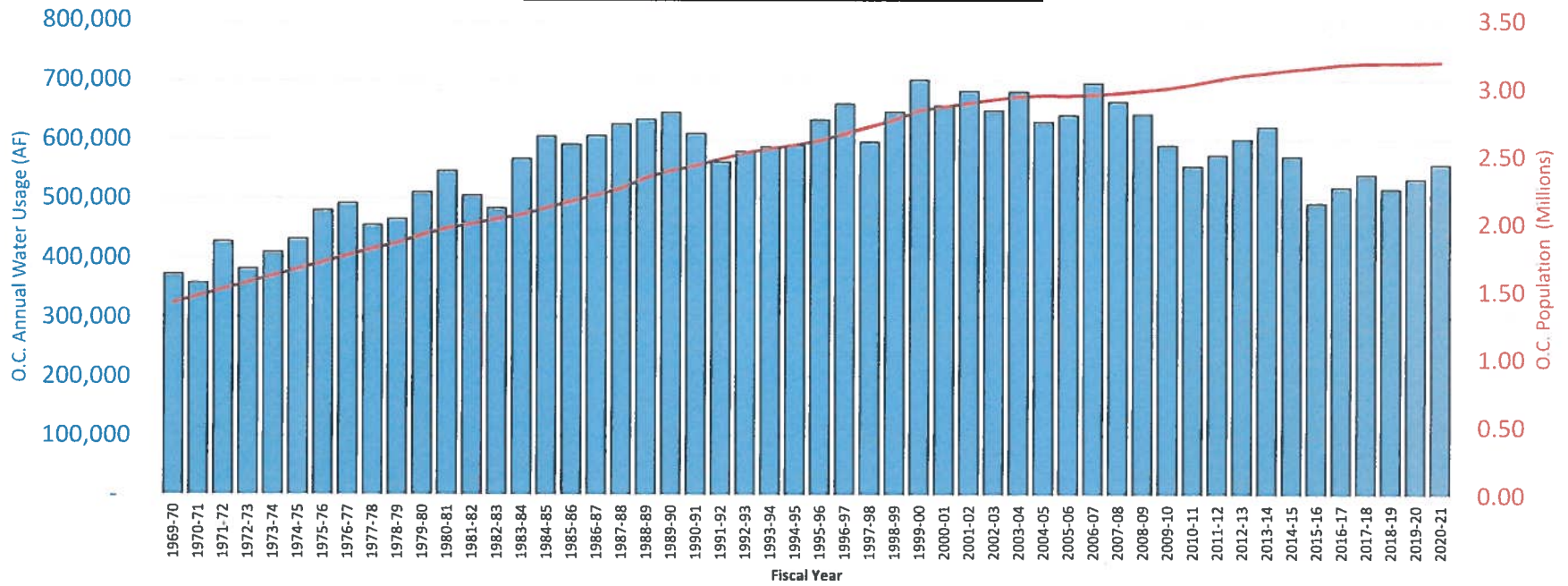


**Partial Year Subtotals**

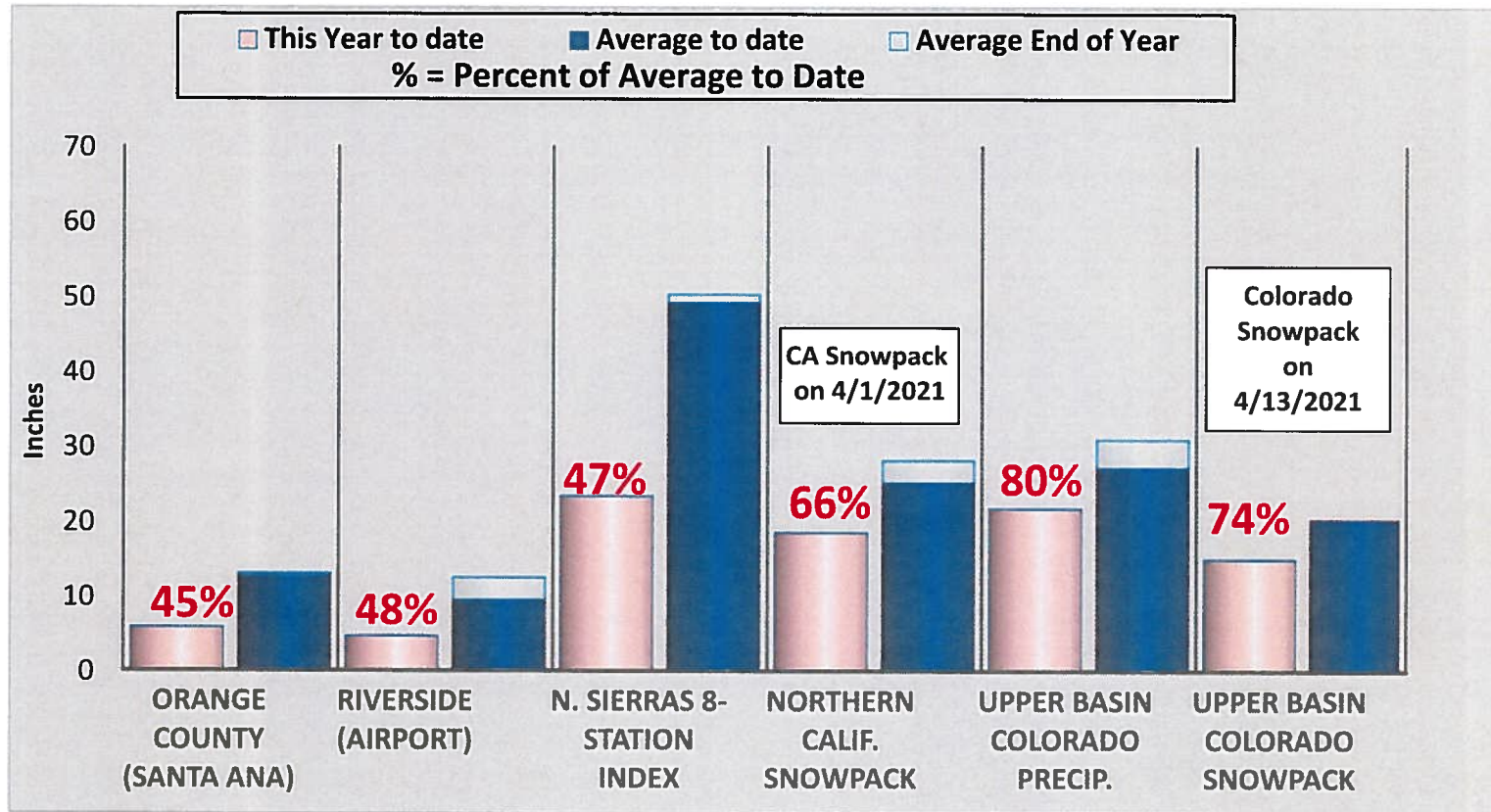


[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water and excludes GWRS production) Recent months numbers include some estimation.

### Orange County Annual M & I Water Usage

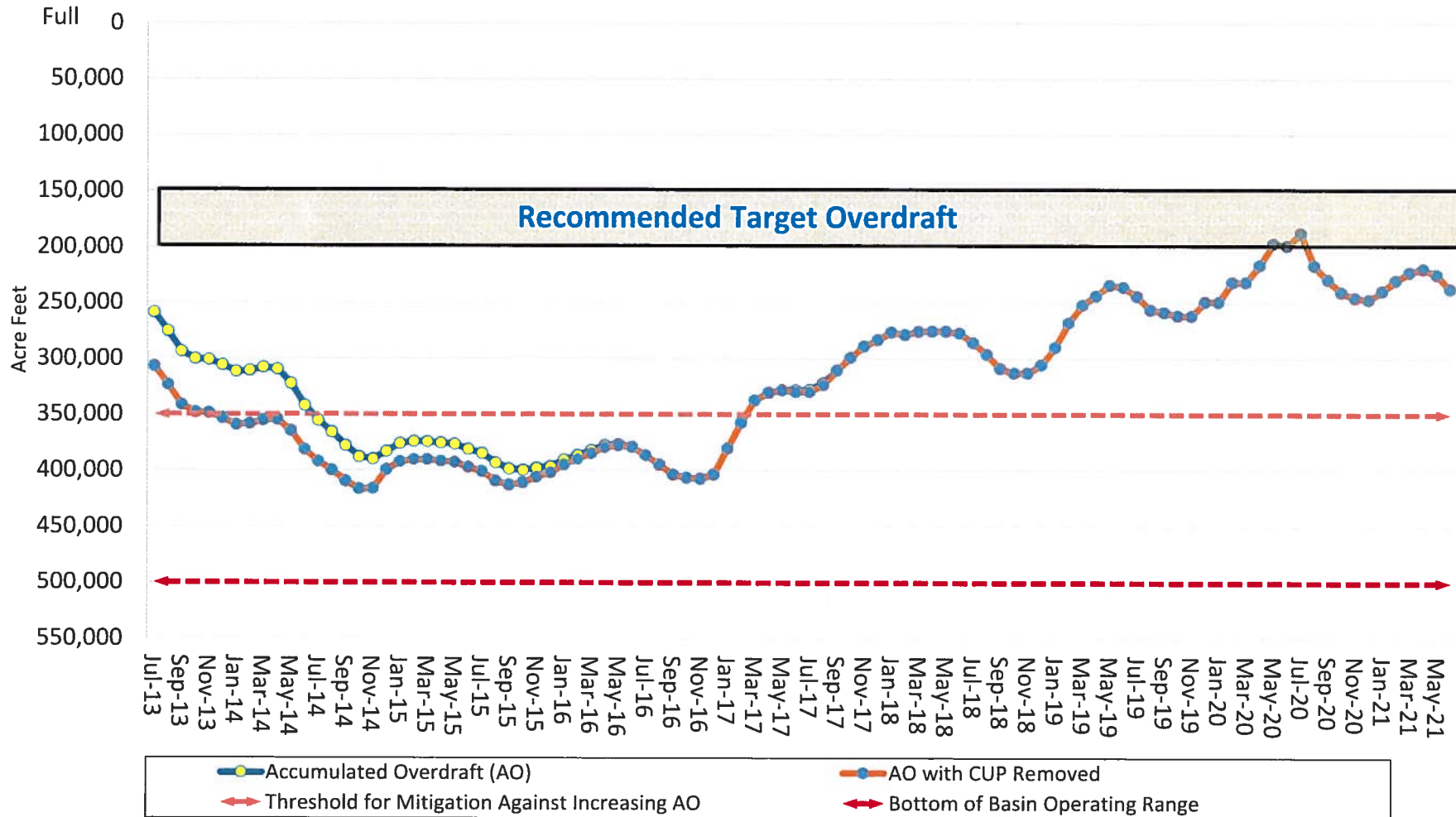


## Accumulated Precipitation for the Oct.-Sep. water year, early August 2021



\* The date of maximum snowpack accumulation (April 1st in Northern Calif. , April 15th in the Upper Colorado Basin) is used for year to year comparison.

## Accumulated Overdraft of the OCWD Groundwater Basin as of June 2021



	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
AO (AF)	244,057	256,239	258,445	261,464	261,645	248,909	249,051	231,354	231,354	216,098	196,677	198,754
AO w/CUP removed (AF)	244,057	256,239	258,446	261,464	261,645	248,909	249,051	231,354	231,354	216,098	196,677	198,754
	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
AO (AF)	187,392	216,548	229,124	240,414	245,441	246,998	239,329	229,738	222,470	219,388	224,458	237,335
AO w/CUP removed (AF)	187,392	216,548	229,124	240,414	245,441	246,998	239,329	229,738	222,470	219,388	224,458	237,335

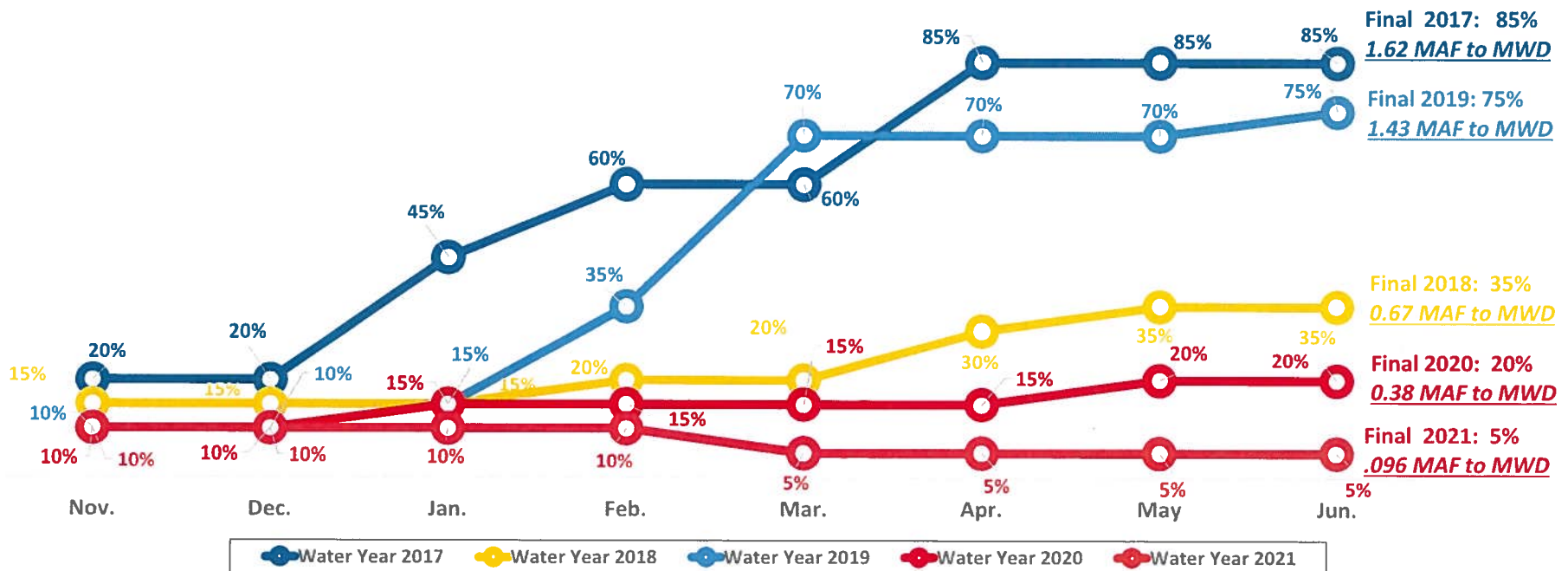
\* Source ~ OCWD Monthly Board of Directors Packet, Water Resources Summary



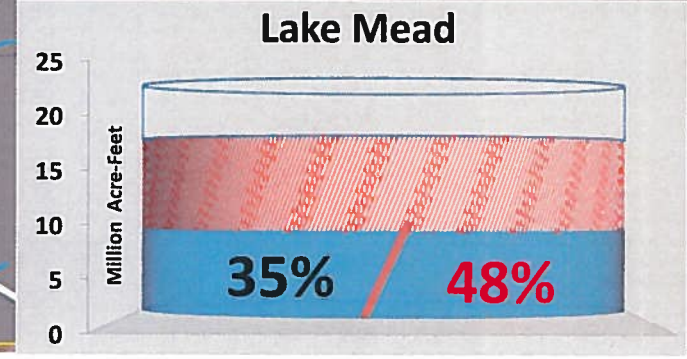
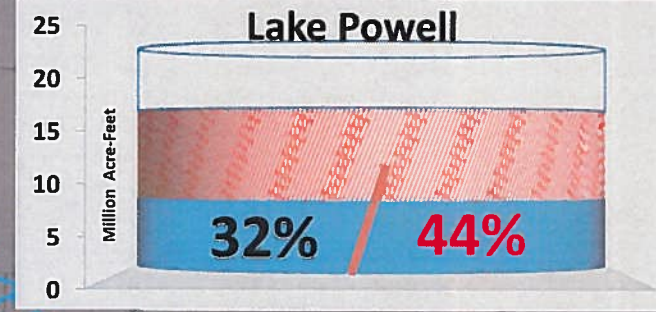
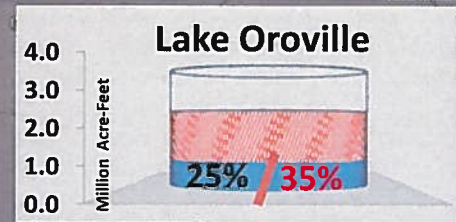
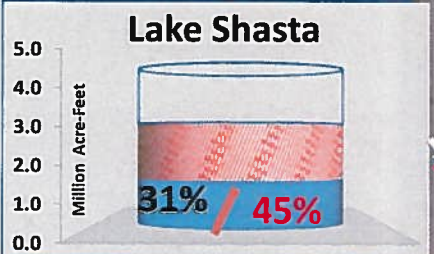


# SWP TABLE A ALLOCATION

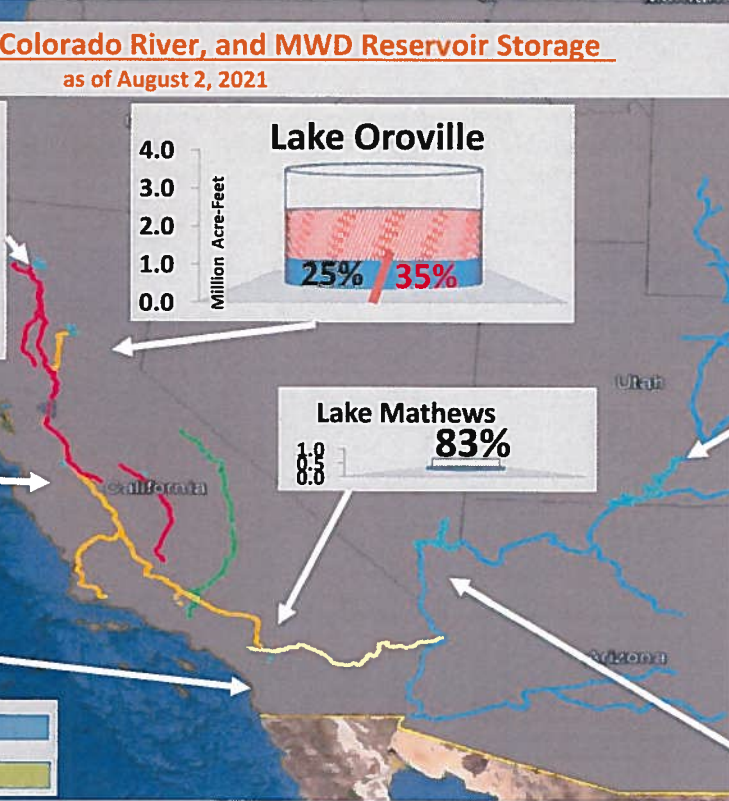
FOR STATE WATER PROJECT CONTRACTORS



**State Water Project, Colorado River, and MWD Reservoir Storage**  
as of August 2, 2021

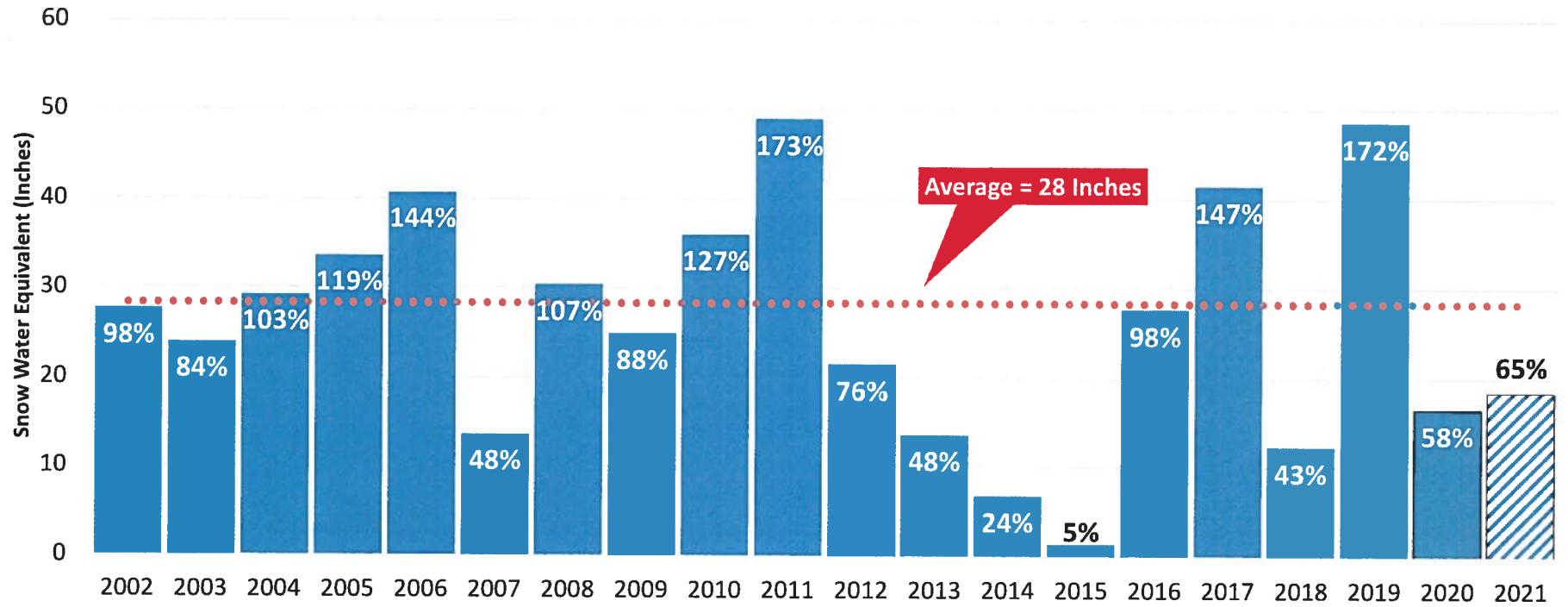


**% of Capacity** [Blue bar]  
**% of Historical Avg.** [Red bar]

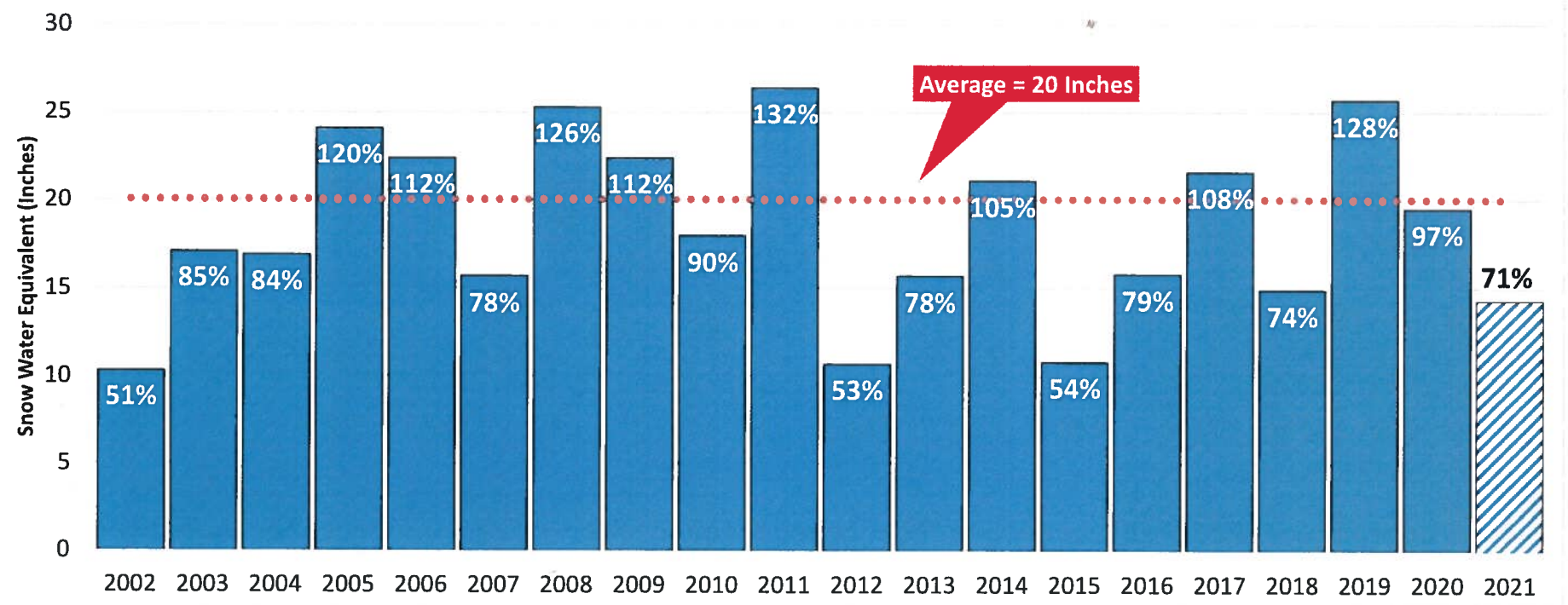


prepared by the Municipal Water District of Orange County  
\*Numbers are Subject to Change

### Historical Northern California April 1st Peak Snow Water Equivalent

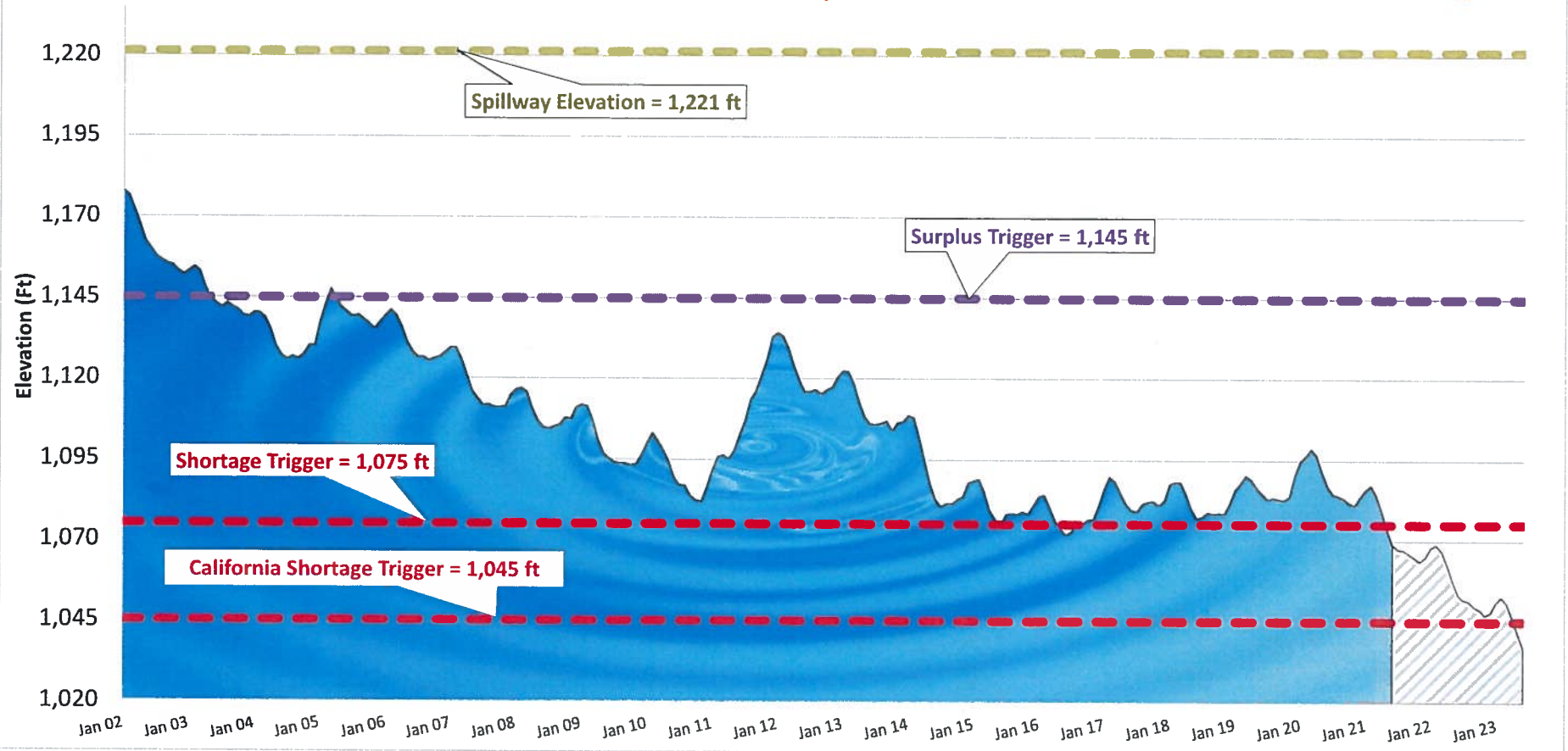


Historical Colorado Basin April 15th Peak Snow Water Equivalent



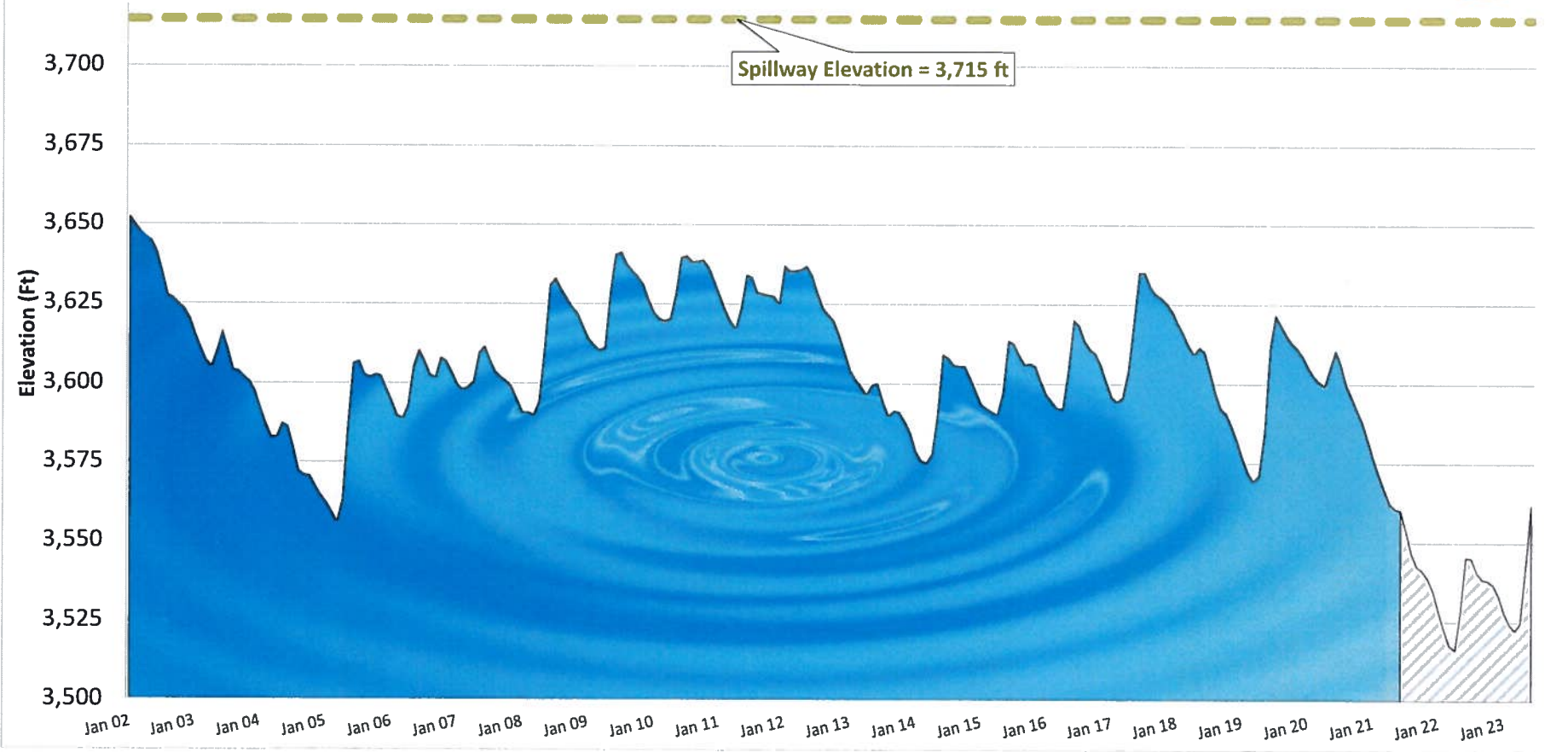
## Lake Mead Levels: Historical and Projected projection per USBR 24-Month Study

Projected Historical  
CA Shortage



## Lake Powell Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical □ Projected

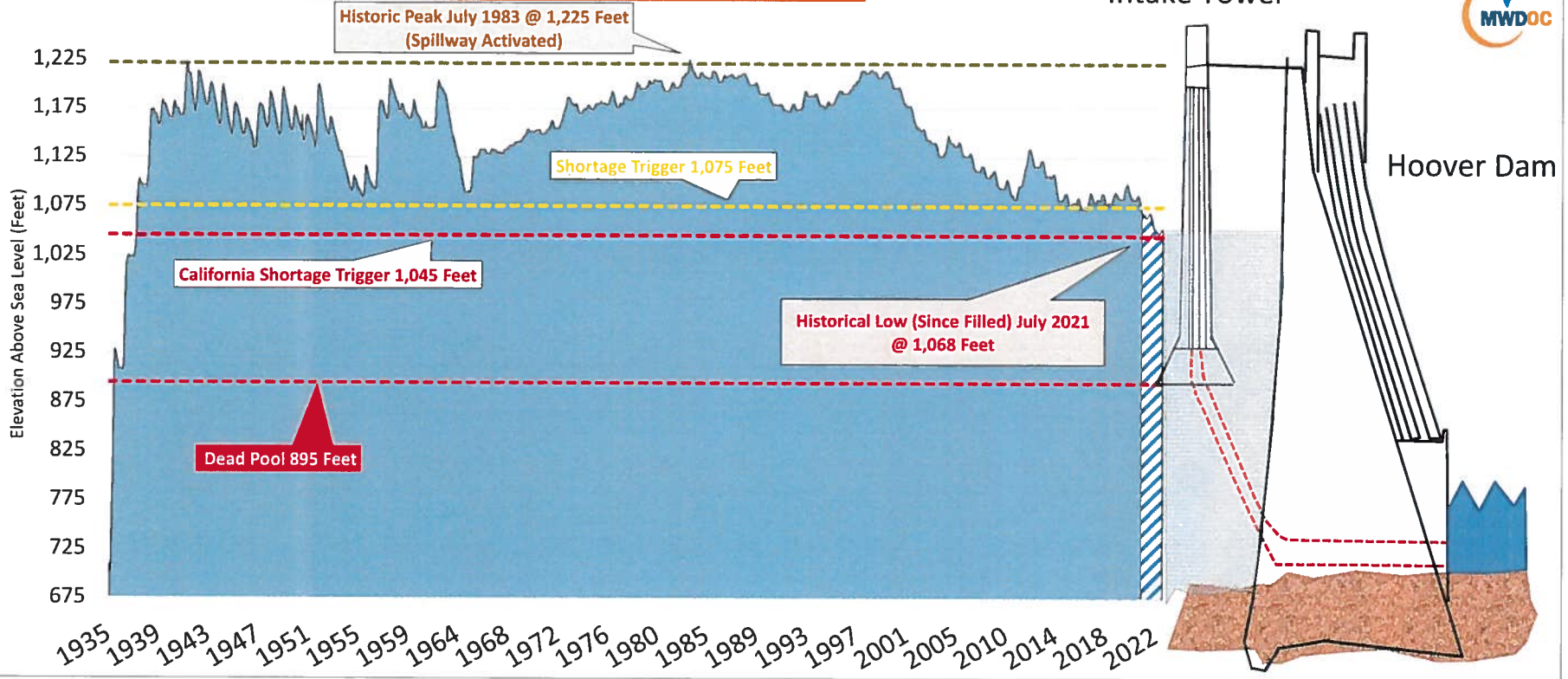


## Lake Mead Historical Water Elevation Level



Intake Tower

Hoover Dam





## CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

### AMENDMENT TO THE PROCLAMATION OF AN EMERGENCY PROGRAM AGAINST THE HUANGLONGBING DISEASE

#### FOR COMMUNITIES IN ORANGE COUNTY

Between April 11, 2017 to July 2, 2021, the California Department of Food and Agriculture (CDFA) confirmed the presence of the causative bacterial agent of the citrus disease huanglongbing (HLB) in citrus tree tissue collected in the cities of Anaheim, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, Orange, Placentia, Santa Ana, Tustin, Westminster, and Yorba Linda, in Orange County.

HLB is a devastating disease of citrus and is spread through feeding action by populations of the Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama. In order to determine the extent of the infestation, and to define an appropriate response area, additional surveys took place for several days over a 250-meter radius area, centered on the detection sites. Based on the results of the surveys, implementation of the CDFA's ACP and HLB emergency response strategies are necessary for eradication and control. The Proclamation of Emergency Program and associated Notice of Treatment are valid until July 2, 2022, which is the amount of time necessary to determine that the treatment was successful.

HLB is considered the most devastating disease of citrus in the world. In the United States, HLB's unchecked spread in Florida starting in 2006 resulted in devastating impacts on the environment and economy. Symptoms of HLB include yellow shoots with mottling and chlorosis of the leaves, misshapen fruit, fruit that does not fully color, and fruit that has a very bitter taste, which makes it unfit for human consumption. These symptoms often do not appear until two years after infection, making this particular disease difficult to contain and suppress. The bacterium that causes the disease, namely *Candidatus Liberibacter asiaticus*, blocks the flow of nutrients within the tree, causing the tree to starve to death. There is no cure, and trees infected with the disease will die two to five years after infection. The undesirable symptoms of HLB-infected trees result in the trees' loss of commercial and aesthetic value while they remain hosts for spreading HLB to ACP and other plants. These effects would be catastrophic to California's natural environment, agriculture, and economy. For example, the effect of HLB's establishment in Florida resulted in a citrus industry loss of \$7 billion. Similar consequences can be expected in California, where the citrus industry is valued at \$2.2 billion.

ACP feeds on members of the plant family Rutaceae, primarily on *Citrus* and *Murraya* species, but is also known to attack several other genera, including over forty species of plant that act as hosts and possible carriers. The most serious damage to the environment and property caused by ACP—the death and loss in value of host plants—is due to its vectoring the phloem-inhabiting bacteria in the genus *Candidatus Liberibacter*. However, the psyllids also cause injury to their host plants via the withdrawal of large amounts of sap as they feed, and via the production of large amounts of honeydew, which coats the leaves of the tree and encourages the growth of sooty mold. Sooty mold blocks sunlight from reaching the leaves.

On November 22, 2017, the University of California and the United States Department of Agriculture (USDA) released a briefing paper that indicates, beginning in June 2017, a sharp increase in HLB and HLB-positive ACP detections, cities containing HLB, and ACP nymphs. Prior to the release of the November 22, 2017 briefing paper, the level of HLB risk in California



was thought to be relatively stable. Following the release of the November 22, 2017 briefing paper, the Department has become aware of the exponential intensification of the HLB epidemic, as demonstrated by the indicators contained in the paper.

Considering the exponential intensification of the HLB epidemic, emergency action is needed to protect California from the negative environmental and economic impact HLB will cause should it be allowed to remain in this area. The emergency program is based on recommendations developed in consultation with the California HLB Task Force, USDA experts on HLB and ACP, the Primary State Entomologist, the Primary State Plant Pathologist, and the affected counties agricultural commissioners' representatives who are knowledgeable on HLB and ACP. Incorporating these experts' recommendations and findings, the program requires removal of all HLB-infected trees.

In determining how to respond to this emergency, the CDFA employs integrated pest management (IPM) principles. IPM includes cultural, biological, physical, and chemical control methods. The CDFA considered all relevant factors, data and science and determined that cultural, biological, and chemical control methods would not abate the imminent threat posed by HLB-positive trees or meet its statutory obligations. Therefore, a physical method was selected, which includes removal of any infected host plant. This option was selected based upon minimal impacts to the environment, biological effectiveness, minimal public intrusiveness, and cost.

The November 22, 2017 briefing paper revealed the exponential intensification of the HLB epidemic, which necessitates immediate action to address the epidemic's imminent threat to California's natural environment, agriculture and economy. More specifically, in addition to citrus, the HLB/ACP complex threatens loss and damage to native wildlife, private and public property, and food supplies.

In addition, the Secretary is mandated to: thoroughly investigate the existence of the disease; determine the probability that the disease will spread; adopt regulations as are reasonably necessary to carry out the provisions of this code (title 3, California Code of Regulations, section 3591.21); abate the disease from the established treatment area; and prevent further economic damage. See FAC sections 401, 403, 408, 5401-5405, and 5761-5763.

A Program Environmental Impact Report (PEIR) has been prepared which analyzes the ACP and HLB treatment program in accordance with Public Resources Code (PRC), section 21000 et seq. The PEIR was certified in December 2014, and is available at <http://www.cdfa.ca.gov/plant/peir/>.

The treatment plan for the HLB infestation shall be implemented as follows:

1. Physical Control. All host plants found to be infected with HLB will be removed and destroyed using mechanical means in order to stop the spread of the disease.

**Public Notification:**

Residents of affected properties shall be invited to a public meeting or contacted directly by CDFA staff. Consultation with the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be provided at the public meeting or upon request to address residents' questions and concerns.

Residents shall be notified in writing at least 48 hours in advance of any treatment in accordance with the Food and Agricultural Code sections 5771-5779 and 5421-5436. For any questions related to this program, please contact the CDFA toll-free telephone number at 800-491-1899 for assistance. This telephone number is also listed on all treatment notices. Treatment information is posted at [http://cdfa.ca.gov/plant/acp/treatment\\_maps.html](http://cdfa.ca.gov/plant/acp/treatment_maps.html).

Following the treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit on the property.

Press releases, if issued, are prepared by the CDFA information officer and the county agricultural commissioner in close coordination with the program leader responsible for treatment. Either the county agricultural commissioner or the public information officer serves as the primary contact to the media.

Information concerning the HLB/ACP program shall be conveyed directly to local and State political representatives and authorities via letters, emails, and/or faxes.

Enclosed are the findings regarding the treatment plan, the November 22, 2017 UC and USDA briefing paper, maps of the treatment area, work plan, integrated pest management analysis of alternative treatment methods, and a pest profile.

Attachments

## FINDINGS OF AN EMERGENCY FOR ASIAN CITRUS PSYLLID/HUANGLONGBING

### Orange County Program CS-5963

Between April 11, 2017 to July 2, 2021, the California Department of Food and Agriculture (CDFA) confirmed the presence of the causative bacterial agent of the citrus disease huanglongbing (HLB) from citrus tree tissue collected in the cities of Anaheim, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, Orange, Placentia, Santa Ana, Tustin, Westminster, and Yorba Linda, in Orange County. HLB is a devastating disease of citrus and is spread through feeding action by populations of the Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama.

Additional surveys were conducted by CDFA in order to determine the extent of the infestation in Orange County and to define an appropriate response area. Each survey took place for several days over a 250-meter radius area, centered on the following detections: June 14, 2017, Fullerton; June 18, 2019, La Habra; November 20, 2019, Placentia; March 13, 2020, Westminster; July 3, 2020, Fountain Valley; August 28, 2020, Tustin; March 18, 2021, Garden Grove; June 18, 2021, Huntington Beach; June 24, 2021, Irvine, Orange, and Santa Ana; July 2, 2021, Anaheim and Yorba Linda. Based on these surveys, and findings and recommendations from California's HLB Task Force, the Primary State Entomologist, the Primary State Plant Pathologist, USDA experts on HLB and ACP, and County Agricultural Commissioner representatives who are knowledgeable on HLB and ACP, I have determined that HLB poses a statewide imminent danger to the environment and economy.

The results of the additional surveys also indicated that the local infestation is amenable to CDFA's ACP and HLB emergency response strategies, which include removal of any infected host plant. This option was selected based upon minimal impacts to the natural environment, biological effectiveness, minimal public intrusiveness, and cost.

HLB is considered one of the most devastating diseases of citrus in the world. The bacterium that causes the disease, namely *Candidatus Liberibacter asiaticus*, blocks the flow of nutrients within the tree and causes the tree to starve to death within two to five years of infection. There is no cure. Symptoms of HLB include yellow shoots with mottling and chlorosis of the leaves, misshapen fruit, fruit that does not fully color, and fruit that has a very bitter taste, which makes it inedible for human consumption. These symptoms often do not appear until two years after infection, making this particular disease difficult to contain and suppress. These undesirable symptoms of HLB-infected trees result in the trees' loss of commercial and aesthetic value while at the same time they are hosts for spreading HLB.

ACP is an insect pest that is native to Asia. It has appeared in Central and South America, the Caribbean, and Mexico. In the United States, ACP has been found in Alabama, Arizona, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, and Texas. In California, ACP has been found in twenty-eight counties.

ACP feeds on members of the plant family Rutaceae, primarily on *Citrus* and *Murraya* species, but is also known to attack several other genera, including over forty species of plant that act as hosts and possible carriers. The most serious damage to the environment and property caused by ACP—the death and loss in value of host plants—is due to its vectoring the phloem-inhabiting bacteria in the genus *Candidatus Liberibacter*. In addition, the psyllids also cause injury to their host plants via the withdrawal of large amounts of sap as they feed and via the production of large amounts of honeydew, which coats the leaves of the tree and encourages the growth of sooty mold. Sooty mold blocks sunlight from reaching the leaves.

These pests present a significant and imminent threat to the natural environment, agriculture, and economy of California. For example, unabated spread of HLB would have severe consequences to both the citrus industry and to the urban landscape via the decline and the death of citrus trees. The

value of California citrus production in the 2016-17 marketing year was \$3.389 billion. The total economic impact of the industry on California's economy in 2016-17 was \$7.1 billion. The California citrus industry added \$1.695 billion to California's state GDP in 2016. Estimated full time equivalent jobs in the California citrus industry in 2016-17 totaled 21,674. Estimated wages paid by the California citrus industry income in 2016-17 totaled \$452 million. A 20 percent reduction in California citrus acreage would cause a loss of 7,350 jobs, \$127 million in employee income, and reduce state GDP by \$501 million.

Additionally, if unabated, the establishment of HLB in California would harm the natural environment as commercial and residential citrus growers would be forced to increase pesticide use. And, the establishment of HLB could lead to enforcement of quarantine restrictions by the USDA and our international trading partners. Such restrictions would jeopardize California's citrus exports, which are valued at over \$800 million per year.

The causative bacteria of HLB was first detected in Los Angeles in 2012. It has subsequently been detected in Orange, Riverside, San Bernardino, and San Diego counties. Prior to November 2017, the level of HLB risk in California was thought to be relatively stable. However, on November 22, 2017, the University of California and the United States Department of Agriculture released a briefing paper that indicates, beginning in June 2017, a sharp increase in HLB and HLB-positive ACP detections, cities containing HLB, and ACP nymphs. Following the release of the November 22, 2017 briefing paper, the Department has become aware of the exponential intensification of the HLB epidemic, as demonstrated by the indicators contained in the paper.

Infected trees are destroyed as soon as they are discovered. However, due to the length of time it takes for symptoms to appear on infected trees, new infestations continue to be discovered. If the current infestation is not abated immediately, HLB will likely become established in neighboring counties and could pave the way for a statewide HLB infestation.

The CDFA has evaluated possible treatment methods in accordance with integrated pest management (IPM) principles. As part of these principles, I have considered the following treatments for control of HLB: 1) physical controls; 2) cultural controls; 3) biological controls; and 4) chemical controls. Upon careful evaluation of each these options, I have determined that it is necessary to address the imminent threat posed by HLB using currently available technology in a manner that is recommended by the HLB Task Force.

Based upon input from the HLB Task Force, the Primary State Entomologist, the Primary State Plant Pathologist, USDA experts on HLB and ACP, and county agricultural commissioner representatives who are knowledgeable on ACP and HLB, I find there are no cultural, chemical or biological control methods that are both effective against HLB-positive trees and allow CDFA to meet its statutory obligations, and therefore it is necessary to conduct physical and chemical treatments to abate this threat. As a result, I am ordering removal of all HLB-infected trees.

A Program Environmental Impact Report (PEIR) has been prepared which analyzes the ACP and HLB treatment program in accordance with Public Resources Code (PRC), section 21000 et seq. The PEIR was certified in December 2014 and is available at <http://www.cdfa.ca.gov/plant/peir/>. The PEIR addresses the treatment of the ACP and HLB at the program level and provides guidance on future actions against the ACP and HLB. It identifies feasible alternatives and possible mitigation measures to be implemented for individual ACP and HLB treatment activities. The ACP and HLB program have incorporated the mitigation measures and integrated pest management techniques as described in the PEIR. In accordance with PRC section 21105, this PEIR has been filed with the appropriate local planning agency of all affected cities and counties. No local conditions have been detected which would justify or necessitate preparation of a site-specific plan.

## **Sensitive Areas**

The CDFA has consulted with the California Department of Fish and Wildlife's California Natural Diversity Database for threatened or endangered species, the United States Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Wildlife when rare and endangered species are located within the treatment area. Mitigation measures for rare and endangered species will be implemented as needed. The CDFA shall not apply pesticides to bodies of water or undeveloped areas of native vegetation. All treatment shall be applied to residential properties, common areas within residential development, non-agricultural commercial properties, and rights-of-way.

## **Work Plan**

The proposed treatment area encompasses those portions of Orange County which fall within a 250-meter radius area around the property on which HLB has been detected, and any subsequent detection sites within the treatment area boundaries. The Proclamation of Emergency Program and associated Notice of Treatment are valid until July 2, 2022, which is the amount of time necessary to determine that the treatment was successful. Maps of the treatment area boundaries are attached. The work plan consists of the following elements:

1. Physical Control. All host plants found to be infected with HLB shall be destroyed. Infected host plants shall be removed and destroyed using mechanical means.

## **Public Information**

Residents of affected properties shall be invited to a public meeting or contacted directly by CDFA staff. Consultation with the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be provided at the public meeting or upon request to address residents' questions and concerns.

The resident of an affected property is provided a confirmation letter informing them that a tree on their property is infected with HLB and it is subject to mandatory removal. Residents are directed to contact the CDFA toll-free telephone number at 800-491-1899 for assistance.

## **Findings**

HLB poses a significant, imminent threat to California's natural environment, agriculture, public and private property, and its economy.

The work plan involving physical control of this pest is necessary to prevent loss and damage to California's natural environment, citrus industry, native wildlife, private and public property, and food supplies.

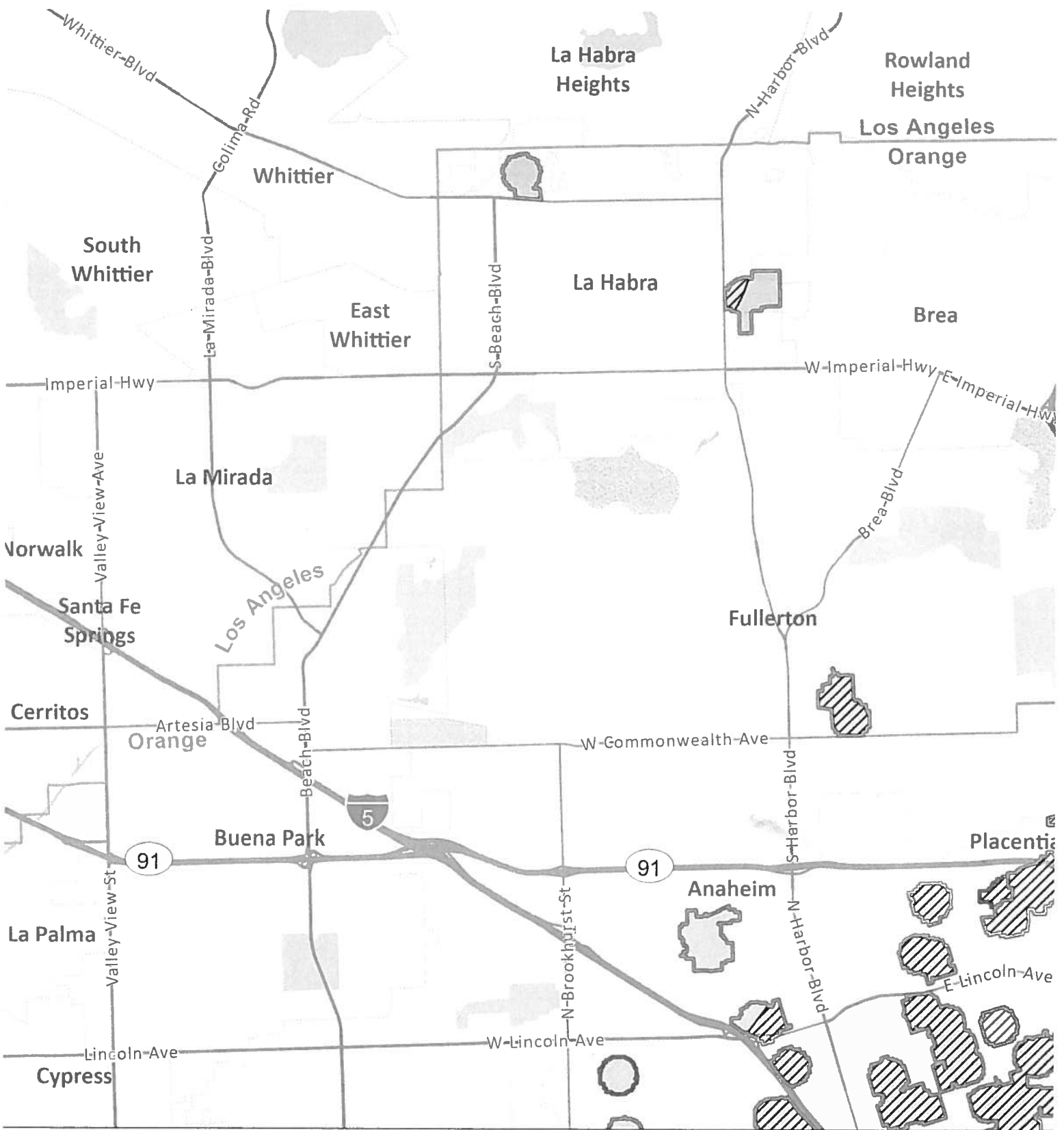
My decision to adopt findings and take action is based on FAC sections 24.5, 401.5, 403, 407, 408, 5401-5405, and 5761-5764.

**Karen Ross** Digitally signed by Karen Ross  
Date: 2021.08.05 15:19:41  
-07'00'

Karen Ross, Secretary

**August 5, 2021**

Date



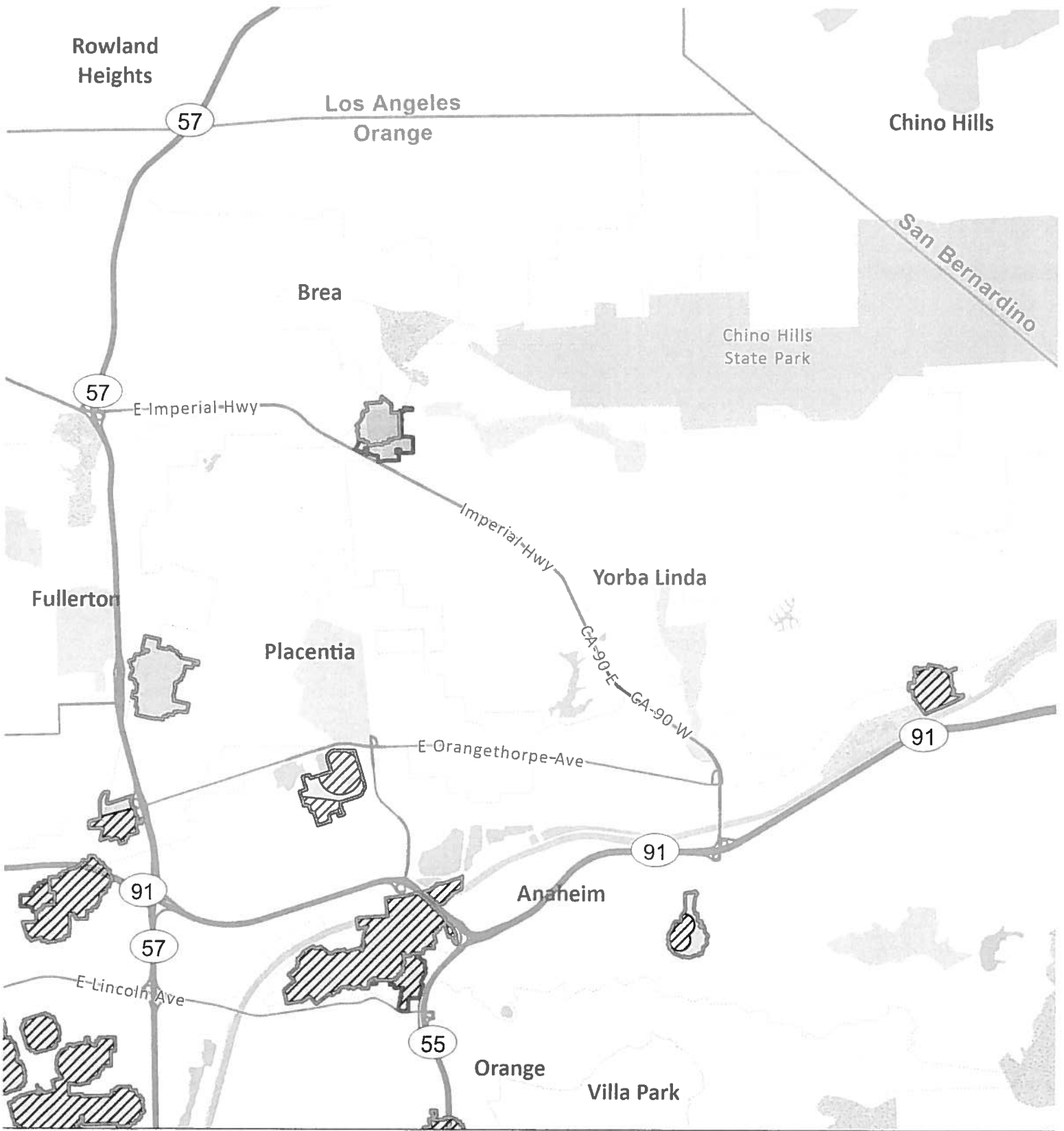
Asian Citrus Psyllid Program - Proclamation of an Emergency Program Map  
 Orange County Amendment 33 (2021) - Portions of Orange County - Part 1



- Existing Treatment Area
- New Treatment Area
- Environmental Sensitive Area: Treatment Mitigation in Place

City or Census-Designated Place Within Treatment Area

- |                 |                  |            |             |
|-----------------|------------------|------------|-------------|
| Anaheim         | Huntington Beach | Placentia  | Westminster |
| Brea            | Irvine           | Santa Ana  | Yorba Linda |
| Fountain Valley | La Habra         | Stanton    |             |
| Fullerton       | North Tustin     | Tustin     |             |
| Garden Grove    | Orange           | Villa Park |             |



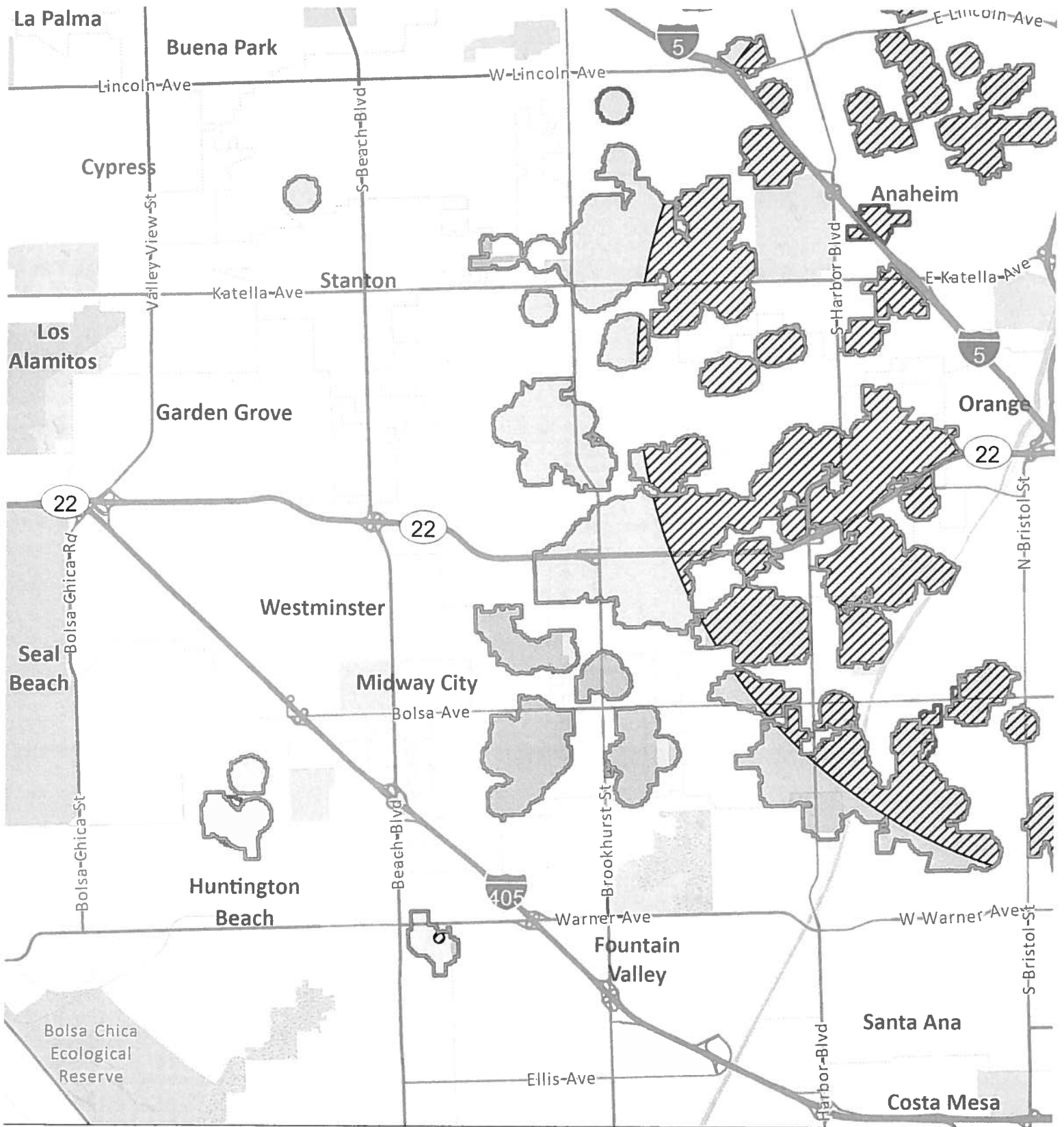
Asian Citrus Psyllid Program - Proclamation of an Emergency Program Map  
 Orange County Amendment 33 (2021) - Portions of Orange County - Part 2






- Existing Treatment Area
- New Treatment Area
- Environmental Sensitive Area: Treatment Mitigation in Place

City or Census-Designated Place Within Treatment Area

- |                 |                  |            |             |
|-----------------|------------------|------------|-------------|
| Anaheim         | Huntington Beach | Placentia  | Westminster |
| Brea            | Irvine           | Santa Ana  | Yorba Linda |
| Fountain Valley | La Habra         | Stanton    |             |
| Fullerton       | North Tustin     | Tustin     |             |
| Garden Grove    | Orange           | Villa Park |             |




Asian Citrus Psyllid Program - Proclamation of an Emergency Program Map  
 Orange County Amendment 33 (2021) - Portions of Orange County - Part 3


-  Existing Treatment Area
-  New Treatment Area
-  Environmental Sensitive Area: Treatment Mitigation in Place

City or Census-Designated Place Within Treatment Area

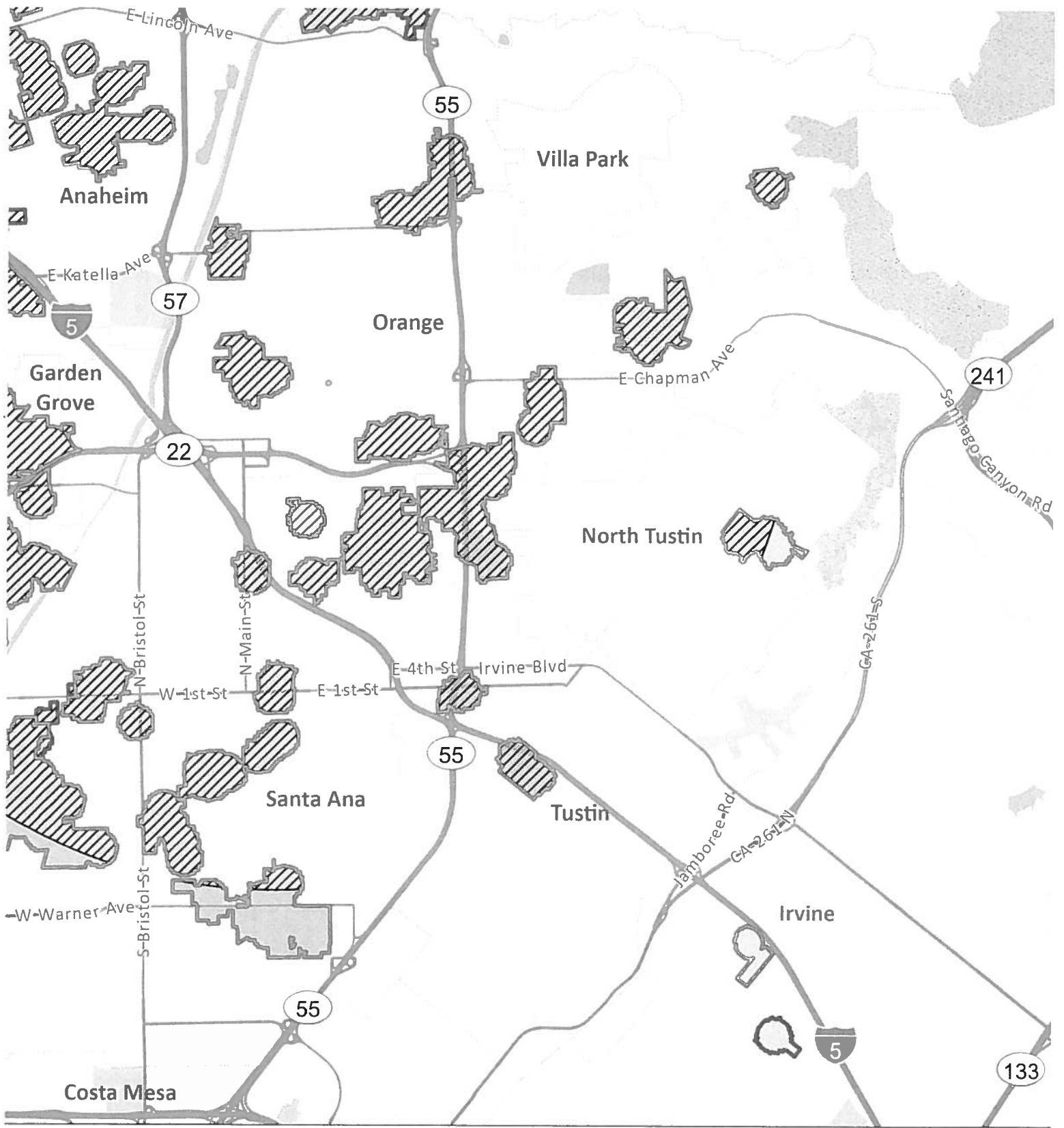
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|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|  Anaheim         |  Huntington Beach |  Placentia  |  Westminister |
|  Brea            |  Irvine           |  Santa Ana  |  Yorba Linda  |
|  Fountain Valley |  La Habra         |  Stanton    |                                                                                                    |
|  Fullerton       |  North Tustin     |  Tustin     |                                                                                                    |
|  Garden Grove    |  Orange           |  Villa Park |                                                                                                    |

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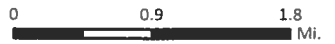
 CITRUS PEST & DISEASE PREVENTION DIVISION

 cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE





Asian Citrus Psyllid Program - Proclamation of an Emergency Program Map  
 Orange County Amendment 33 (2021) - Portions of Orange County - Part 4



- Existing Treatment Area
- New Treatment Area
- Environmental Sensitive Area: Treatment Mitigation in Place

City or Census-Designated Place Within Treatment Area

- |                 |                  |            |             |
|-----------------|------------------|------------|-------------|
| Anaheim         | Huntington Beach | Placentia  | Westminster |
| Brea            | Irvine           | Santa Ana  | Yorba Linda |
| Fountain Valley | La Habra         | Stanton    |             |
| Fullerton       | North Tustin     | Tustin     |             |
| Garden Grove    | Orange           | Villa Park |             |



Asian Citrus Psyllid/Huanglongbing Work Plan  
December 2020

## **I. Detection and Survey Activities for ACP**

### **A. Urban and Rural Residential Detection Trapping and Visual Survey**

Trapping for Asian citrus psyllid (ACP) is a cooperative State/County trapping program to provide early detection of an infestation in a county. Traps are serviced by either State or County agricultural inspectors. The trap used for ACP detection is the yellow panel trap, which is a cardboard panel coated with an adhesive on each side. ACP becomes entangled on the sticky surface and cannot move off the trap. Yellow panel traps have proven successful at detecting infestations of ACP. At all locations where traps are placed, the host plant is visually inspected for ACP. If ACP is detected, the host is visually surveyed for additional ACP and symptoms of Huanglongbing (HLB).

- Trap Density: Five to 16 traps/square mile.
- Trap Servicing Interval: Monthly.
- Trap Relocation and Replacement: Traps are relocated and replaced every four to eight weeks to another host with a minimum relocation distance of 500 feet.
- Visual surveys and/or tap sampling are conducted once at each trapping site when the trap is placed.

### **B. Commercial Grove Trapping**

In counties with substantial commercial citrus production, and which are not generally infested with ACP, traps are placed within the groves at the density of one trap per 40 acres. Traps are replaced every two weeks and submitted for screening. In areas that are generally infested with ACP, agricultural inspectors visually survey commercial groves for plant tissue displaying symptoms of HLB and collect ACP which are tested for HLB.

### **C. Delimitation Trapping and Visual Survey Outside of the Generally Infested Area**

The protocols below are the actions in response to the detection of ACP in counties north of Santa Barbara County and the Tehachapi Mountains.

#### **1. Response to the Detection of One or More ACP**

##### **a. Trapping**

ACP traps are placed at a density of 50 traps per square mile in a four-square mile delimitation area centered on the detection site. Traps are serviced weekly for one month. If no additional ACP are detected, the traps are serviced monthly for one year past the date the ACP was identified. Subsequent detections may increase the size of the delimitation survey area and restarts the one-year duration on the trap servicing requirement.

##### **b. Visual Survey**

All find sites and adjacent properties are visually surveyed for ACP and HLB. Additional sites may be surveyed as part of the risk-based survey.

## **II. Detection and Survey Activities for HLB**

### **HLB Delimitation Survey**

Upon confirmation of an HLB infected citrus tree (or host plant), a mandatory delimitation survey is initiated in the 250-meter radius area surrounding the detection. All host plants are visually surveyed for symptoms of HLB and presence of ACP. Plant and insect samples are collected

Asian Citrus Psyllid/Huanglongbing Work Plan  
December 2020

from every host plant in the 250-meter area and subsequently analyzed for HLB-associated bacteria.

### III. Treatment Activities

#### Treatment

The Citrus Pest and Disease Prevention Division (CPDPD) treatment activities for ACP vary throughout the state and depend on multiple factors.

#### Factors CPDPD considers prior to treatment include:

- Determination if suppression of ACP is feasible;
- The proximity of the ACP infestation to commercial citrus;
- Whether growers are conducting coordinated treatment activities;
- The level of HLB risk; and
- Consistency with the overall goal of protecting the state's commercial citrus production.

#### Scenarios Throughout the State in which Treatment Occurs:

- In areas with commercial citrus production that are generally infested with ACP, and where all growers are treating on a coordinated schedule, CPDPD may conduct residential buffer treatments to suppress ACP populations.
- In areas where HLB is detected, CPDPD conducts residential treatments to suppress ACP populations.
- In areas where ACP has not been previously detected, or where ACP has been detected at low densities, CPDPD conducts residential treatments in response to ACP detections to prevent ACP establishment or suppress populations.
- In areas where ACP has been detected along the California-Mexico border, CPDPD conducts residential treatments in response to ACP detections to suppress ACP populations.

CPDPD's current policy is to not conduct treatments in areas that are generally infested if there is limited or no commercial citrus production in the area, or if all growers in the area are not treating.

#### 1. Treatment Protocols

A Program Environmental Impact Report (PEIR) has been certified which analyzes the ACP treatment program in accordance with Public Resources Code, Sections 21000 et seq. The PEIR is available at <http://www.cdfa.ca.gov/plant/peir>. The treatment activities described below are consistent with the PEIR.

In accordance with the integrated pest management principles, CPDPD has evaluated possible treatment methods and determined that there are no physical, cultural, or biological controls available to eliminate ACP from an area.

In general, when treatment has been deemed appropriate, CPDPD applies insecticides to host trees in the residential (urban) areas in a 50 to 800-meter radius around each detection site. Only ACP host plants are treated.

##### a. International Border Treatments

CPDPD treats citrus host plants in the residential area within two miles of the California-Mexico border. This treatment is conducted within a 400-meter buffer surrounding ACP

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detections that are within two miles of the California-Mexico border, within one year. In this case, a Notice of Treatment (NOT) is issued. A public meeting is held at least once a year.

**b. Within a Generally Infested Area with Commercial Citrus Production**

CPDPD treats citrus host plants within a 250-meter buffer surrounding commercial citrus groves if the growers are conducting coordinated treatments in 90 percent of the designated Psyllid Management Area (PMA) and have completed two out of three of the coordinated treatments. There is flexibility and an opportunity for treatment from CPDPD if growers are participating in these treatments for the first time and have achieved 90 percent participation in the PMA and if ACP have been detected within one mile of the commercial citrus groves within one year. The exception is Imperial County, which has fewer residential properties, and therefore residential citrus host plants are treated within 800 meters of commercial citrus. A NOT is issued. A public meeting is held at least once per year.

**c. Outside of the Generally Infested Area**

The actions below are in response to the detection of one or more ACP, whether collected live or in a trap, in counties north of Santa Barbara County and the Tehachapi Mountains.

- Detection of one ACP at one site - All properties with hosts within a 50-meter radius of the detection site are treated. A subsequent detection of one or more ACP within 400-meters will result in all properties with hosts within 400-meters of the detection site(s) being treated.
- Detection of two or more ACP at one site - All properties with hosts within a 400-meter radius of the detection site are treated.
- A NOT is issued.
- A public meeting is held at least once per year.

**d. In response to an HLB Detection**

- All properties within a 250-meter radius of the detection site are treated.
- A NOT is issued for HLB positive tree detections and ACP detections that are positive for the bacteria that causes HLB.
- All host plants found to be infected with HLB are destroyed.
  - Infected host plants are removed and destroyed by mechanical means.
- A Proclamation of an Emergency Program (PEP) is issued for HLB positive tree detections.
- A public meeting is held at least once per year.

**2. Treatment Methodology**

The treatment protocol consists of both a foliar and a systemic insecticide. The foliar Insecticide is used for immediate reduction of the adult population in order to prevent the adults from dispersal. The systemic insecticide is a soil treatment used to kill the sedentary nymphs and provide long term protection against reinfestation. Treatment frequency is dependent on the insecticide applied and severity of the infestation. Treatments will end no later than two years after the last psyllid detection in the treatment area.

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CPDPD uses registered pesticides and follows the label directions. The treatment protocol may be adjusted to use only the foliar or the systemic insecticide to allow for mitigations in special situations.

**a. Foliar Treatment**

Tempo® SC Ultra (cyfluthrin) is a pyrethroid contact insecticide. Treatment initially occurs once, and subsequent applications may occur for up to three times annually if additional psyllids are detected. This material is applied to the foliage of all host plants using hydraulic spray or hand spray equipment.

**b. Soil Treatment**

A systemic soil application is made using either Merit® 2F or CoreTect™.

- Merit® 2F (imidacloprid), is a neonicotinoid systemic insecticide. Treatment initially occurs once, and a subsequent application may occur once on an annual basis if additional psyllids are detected. This material is applied to the soil within the root zone of host plants.
- CoreTect™ (imidacloprid) is a neonicotinoid systemic insecticide. It is used in place of Merit® 2F in situations where there are environmental concerns about soil surface runoff of the liquid Merit® 2F formulation, such as host plants growing next to ponds and other environmentally sensitive areas. Treatment initially occurs once, with a subsequent application once on an annual basis if additional psyllids are detected. This material is a pelletized tablet and is inserted into the soil and watered in within the root zone of host plants.

**INTEGRATED PEST MANAGEMENT ANALYSIS OF ALTERNATIVE TREATMENT  
METHODS FOR CONTROL OF THE ASIAN CITRUS PSYLLID AND HUANGLONGBING  
May 2018**

The treatment program used by the California Department of Food and Agriculture (CDFA) for control of the Asian citrus psyllid (ACP), *Diaphorina citri* (Hemiptera: Psyllidae), and the disease it transmits, namely Huanglongbing, *Candidatus Liberibacter asiaticus*, targets multiple life stages. A contact insecticide is used for an immediate control of ACP adults in order to prevent spread, and a systemic insecticide is used to control developing ACP nymphs and to give the plant long term protection from re-infestation. The contact insecticide preferentially used contains the synthetic pyrethroid cyfluthrin, while the systemic insecticide contains the synthetic neonicotinoid imidacloprid. Both products have been shown to be effective against ACP elsewhere, particularly in Florida. In addition, HLB-infected plants are removed in their entirety and destroyed, in order to remove a reservoir for the disease. The California Huanglongbing Task Force, a joint government, university, and industry group formed in 2007 to provide guidance to the CDFA on matters pertaining to ACP and HLB has endorsed the use of these chemicals in the CDFA's treatment program.

Below is an evaluation of alternative treatment methods to control ACP and HLB which have been considered for treatment programs in California.

#### **A. PHYSICAL CONTROL**

**Mass Trapping.** Mass trapping of adults involves placing a high density of traps in an area in an attempt to physically remove them before they can reproduce. The current available trapping system for ACP relies on short distance visual stimulus, and is not considered effective enough to use in a mass trapping program.

**Active Psyllid Removal.** Adult ACPs are mobile daytime fliers, and adults could theoretically be netted or collected off of foliage. However, due to their ability to fly when disturbed, and the laborious and time-prohibitive task of collecting minute insects from several properties by hand, it would be highly unlikely that all adults could be captured and removed. Nymphs attach themselves to developing leaves and stems via their proboscis. Therefore, physical removal of the nymphs would entail removal of the growing shoots which will stunt the tree and reduce fruit production. For these reasons, mechanical control is not considered to be an effective alternative.

**Host Removal.** Removal of host plants for ACP would involve the large-scale destruction of plants and their roots by either physical removal or phytotoxic herbicides. Additionally, host removal could promote dispersal of female psyllids in search of hosts outside of the treatment area, thus spreading the infestation. For these reasons, host removal is considered inefficient and too intrusive to use over the entirety of the treatment areas used for ACP. However, physical host removal of HLB-infected plants in their entirety is used for HLB control, because it is limited in scope to just the infected tree and it is effective at eliminating the disease reservoir, thereby preventing further spread of the disease by ACP.

#### **B. CULTURAL CONTROL**

**Cultural Control.** Cultural controls involve the manipulation of cultivation practices to reduce the prevalence of pest populations. These include crop rotation, using pest-resistant varieties, and intercropping with pest-repellent plants. None of these options are applicable for ACP control in an urban environment, and may only serve to drive the psyllids outside the treatment area, thus spreading the infestation.

### C. BIOLOGICAL CONTROL

**Microorganisms.** No single-celled microorganisms, such as bacteria, are currently available to control ACP.

**Nematodes.** Entomopathogenic nematodes can be effective for control of some soil-inhabiting insects, but are not effective, nor are they used, against above ground insects such as psyllids.

**Parasites and Predators.** There have been two parasites released in Florida against ACP, but only one of these are considered somewhat successful there, namely *Tamarixia radiata* (Hymenoptera: Eulophidae). This insect has been released into the environment in southern California. The CDFA is working with the citrus industry to pursue options for incorporating this parasite into treatment programs statewide. In addition, a second wasp has been recently released by the University of California Riverside, *Diaphorencyrtus aligarhensis*.

**Sterile Insect Technique (SIT).** SIT involves the release of reproductively sterile insects which then mate with the wild population, resulting in the production of infertile eggs. SIT has neither been researched nor developed for ACP, nor has it been developed for any species of psyllids, and is therefore unavailable.

### D. CHEMICAL CONTROL

**Foliar Treatment.** A number of contact insecticides have been researched for use against ACP elsewhere, particularly in Florida. Contact insecticides are more effective against adult ACPs than the sedentary nymphs because adults actively move around on plants, thereby coming into contact with residues, whereas nymphs have to be directly sprayed in order for them to come into contact. The following product has been identified for use by the CDFA, based on a combination of effectiveness against ACP, worker and environmental safety, and California registration status.

Tempo® SC Ultra is a formulation of cyfluthrin which is applied to the foliage of all host plants. Tempo® SC Ultra is a broad-spectrum synthetic pyrethroid insecticide which kills insects on contact. Tempo® SC Ultra has no preharvest interval, which makes it compatible with residential fruit-growing practices.

**Soil Treatment.** A number of systemic insecticides have been researched for use against ACP elsewhere, particularly in Florida. Systemic insecticides are particularly effective against psyllid nymphs because nymphs spend much of their time feeding, thereby acquiring a lethal dose. The following products have been identified for use by the CDFA, based on a combination of effectiveness against ACP, worker and environmental safety, and California registration status.

Merit® 2F is a formulation of imidacloprid which is applied to the root system of all host plants via a soil drench. Imidacloprid is a synthetic neonicotinoid insecticide which controls a number of other phloem feeding pests such as psyllids, aphids, mealybugs, etc.

CoreTect™ is a formulation of imidacloprid which is applied to the root system of all host plants via insertion of a tablet into the soil, followed by watering. It is used in place of Merit® 2F in situations where there are environmental concerns about soil surface runoff of the liquid Merit® 2F formulation, such as host plants growing next to ponds and other environmentally sensitive areas.

## E. RESOURCES

- Grafton-Cardwell, E. E. and M. P. Daugherty. 2013. Asian citrus psyllid and huanglongbing disease. Pest Notes Publication 74155. University of California, Division of Agriculture and Natural Resources Publication 8205. 5 pp.  
<http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnasiancitruspsyllid.pdf>.
- Grafton-Cardwell, E. E., J. G. Morse, N. V. O'Connell, P. A. Phillips, C. E. Kallsen, and D. R. Haviland. 2013. UC IPM Management Guidelines: Citrus. Asian Citrus Psyllid. Pest Notes Publication 74155. University of California, Division of Agriculture and Natural Resources. <http://www.ipm.ucdavis.edu/PMG/r107304411.html>.



## PEST PROFILE

Common Name: Asian Citrus Psyllid

Scientific Name: *Diaphorina citri* Kuwayama

Order and Family: Hemiptera, Psyllidae

Description: The Asian citrus psyllid (ACP) is 3 to 4 millimeters long with a brown mottled body. The head is light brown. The wings are broadest in the apical half, mottled, and with a dark brown band extending around the periphery of the outer half of the wing. The insect is covered with a whitish waxy secretion, making it appear dusty. Nymphs are generally yellowish orange in color, with large filaments confined to an apical plate of the abdomen. The eggs are approximately 0.3 millimeters long, elongated, and almond-shaped. Fresh eggs are pale in color, then, turn yellow, and finally orange at the time of hatching. Eggs are placed on plant tissue with the long axis vertical to the surface of the plant.

History: Asian citrus psyllid was first found in the United States in Palm Beach County, Florida, in June 1998 in backyard plantings of orange jasmine. By 2001, it had spread to 31 counties in Florida, with much of the spread due to movement of infested nursery plants. In the spring of 2001, Asian citrus psyllid was accidentally introduced into the Rio Grande Valley, Texas on potted nursery stock from Florida. It was subsequently found in Hawaii in 2006, in Alabama, Georgia, Louisiana, Mississippi, and South Carolina in 2008. ACP was first found in California on August 27, 2008 in San Diego County. Subsequent to this initial detection in San Diego County, the ACP has been detected in Fresno, Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, Tulare, Ventura, Marin, Monterey, San Francisco, and Santa Clara counties. The ACP has the potential to establish itself throughout California wherever citrus is grown.

Distribution: ACP is found in tropical and subtropical Asia, Afghanistan, Saudi Arabia, Reunion, Mauritius, parts of South and Central America, Mexico, the Caribbean, and in the U.S. (Alabama, Arizona, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, and Texas).

Life Cycle: Eggs are laid on tips of growing shoots; on and between unfurling leaves. Females may lay more than 800 eggs during their lives. Nymphs pass through five instars. The total life cycle requires from 15 to 47 days, depending on environmental factors such as temperature and season. The adults may live for several months. There is no diapause, but populations are low in the winter or during dry periods. There are nine to ten generations a year, with up to 16 noted under observation in field cages.

Hosts and Economic Importance: ACP feeds mainly on *Citrus* spp., at least two species of *Murraya*, and at least three other genera, all in the family Rutaceae. Damage from the psyllids occurs in two ways: the first by drawing out of large amounts of sap from the plant as they feed and, secondly, the psyllids produce copious amounts of honeydew. The honeydew then coats the leaves of the tree, encouraging sooty mold to grow which blocks sunlight to the leaves. However, the most serious damage caused by ACP is due to its ability to effectively vector three phloem-inhabiting bacteria in the genus *Candidatus Liberibacter*, the most widespread being *Candidatus Liberibacter asiaticus*. These bacteria cause a disease known as huanglongbing, or citrus greening. In the past, these bacteria have been extremely difficult to detect and

characterize. In recent years, however, DNA probes, electron microscopy, and enzyme-linked immunosorbent assay tests (ELISA) have been developed that have improved detection. Symptoms of huanglongbing include yellow shoots, with mottling and chlorosis of the leaves. The juice of the infected fruit has a bitter taste. Fruit does not color properly, hence the term “greening” is sometimes used in reference to the disease. Huanglongbing is one of the most devastating diseases of citrus in the world. Once infected, there is no cure for disease and infected trees will die within ten years. The once flourishing citrus industry in India is slowly being wiped out by dieback. This dieback has multiple causes, but the major reason is due to HLB.

### Host List

#### **SCIENTIFIC NAME**

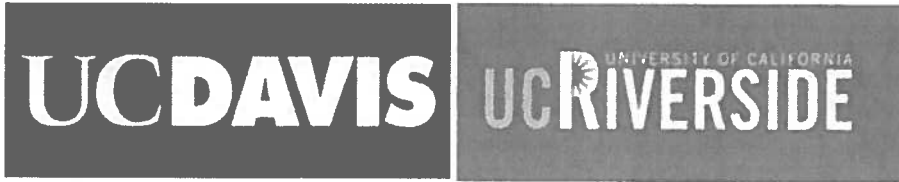
*Aegle marmelos*  
*Aeglopsis chevalieri*  
*Afraegle gabonensis*  
*Afraegle paniculata*  
*Amyris madrensis*  
*Atalantia monophylla*  
*Atalantia* spp.  
*Balsamocitrus dawei*  
*Bergia* (=Murraya) *koenigii*  
*Calodendrum capense*  
*X Citroncirus webberi*  
*Choisya arizonica*  
*Choisya ternate*  
*Citropsis articulata*  
*Citropsis gilletiana*  
*Citropsis schweinfurthii*  
*Citrus aurantiifolia*  
  
*Citrus aurantium*  
  
*Citrus hystrix*  
*Citrus jambhiri*  
*Citrus limon*  
*Citrus madurensis*  
 (=X *Citrofortunella microcarpa*)  
*Citrus maxima*  
*Citrus medica*  
*Citrus meyeri*  
*Citrus × nobilis*  
*Citrus × paradisi*  
*Citrus reticulata*  
*Citrus sinensis*  
*Citrus* spp.  
*Clausena anisum-olens*  
*Clausena excavata*  
*Clausena indica*  
*Clausena lansium*

#### **COMMON NAMES**

bael, Bengal quince, golden apple, bela, milva  
 Chevalier's aeglopsis  
 Gabon powder-flask  
 Nigerian powder-flask  
 mountain torchwood  
 Indian atalantia  
  
 Uganda powder-flask  
 curry leaf  
 Cape chestnut  
  
 Arizonia orange  
 Mexican or mock orange  
 Katimboro, Muboro, West African cherry orange  
 cherry-orange  
 African cherry-orange  
 lime, Key lime, Persian lime, lima, limón agrio, limón ceutí, lima mejicana, limero  
 sour orange, Seville orange, bigarde, marmalade orange, naranja agria, naranja amarga  
 Mauritius papeda, Kaffir lime  
 rough lemon, jambhiri-orange, limón rugoso, rugoso  
 lemon, limón, limonero  
 calamondin  
  
 pummelo, pomelo, shaddock, pompelmous, toronja  
 citron, cidra, cidro, toronja  
 Meyer lemon, dwarf lemon  
 king mandarin, tangor, Florida orange, King-of-Siam  
 grapefruit, pomelo, toronja  
 mandarin, tangerine, mandarina  
 sweet orange, orange, naranja, naranja dulce

anis  
 clausena  
 clausena  
 wampi, wampee

<i>Clymenia polyandra</i>	a-mulis
<i>Eremocitrus glauca</i>	Australian desert lime
<i>Eremocitrus hybrid</i>	
<i>Esenbeckia berlandieri</i>	Berlandier's jopoy
<i>Fortunella crassifolia</i>	Meiwa kumquat
<i>Fortunella margarita</i>	Nagami kumquat, oval kumquat
<i>Fortunella polyandra</i>	Malayan kumquat
<i>Fortunella spp.</i>	
<i>Limonia acidissima</i>	Indian wood apple
<i>Merrillia caloxylon</i>	flowering merrillia
<i>Microcitrus australasica</i>	finger-lime
<i>Microcitrus australis</i>	Australian round-lime
<i>Microcitrus papuana</i>	desert-lime
<i>X Microcitronella spp.</i>	
<i>Murraya spp.</i>	curry leaf, orange-jasmine, Chinese-box, naranjo jazmín
<i>Naringi crenulata</i>	naringi
<i>Pamburus missionis</i>	
<i>Poncirus trifoliata</i>	trifoliolate orange, naranjo trébol
<i>Severinia buxifolia</i>	Chinese box-orange
<i>Swinglea glutinosa</i>	tabog
<i>Tetradium ruticarpum</i>	evodia, wu zhu yu
<i>Toddalia asiatica</i>	orange climber
<i>Triphasia trifolia</i>	trifoliolate limeberry, triphasia
<i>Vepris (=Toddalia) lanceolata</i>	white ironwood
<i>Zanthoxylum fagara</i>	wild lime, lime prickly-ash



**USDA** United States Department of Agriculture  
Animal and Plant Health Inspection Service

**USDA** United States Department of Agriculture  
Agricultural Research Service

## **Briefing Paper: Recent changes in the ACP/HLB invasion in California and implications for regional quarantines**

**Date: 11/22/2017**

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Department of Entomology, UC Riverside & UC Lindcove Research and Extension Center, Exeter, CA 93221

*David Bartels*

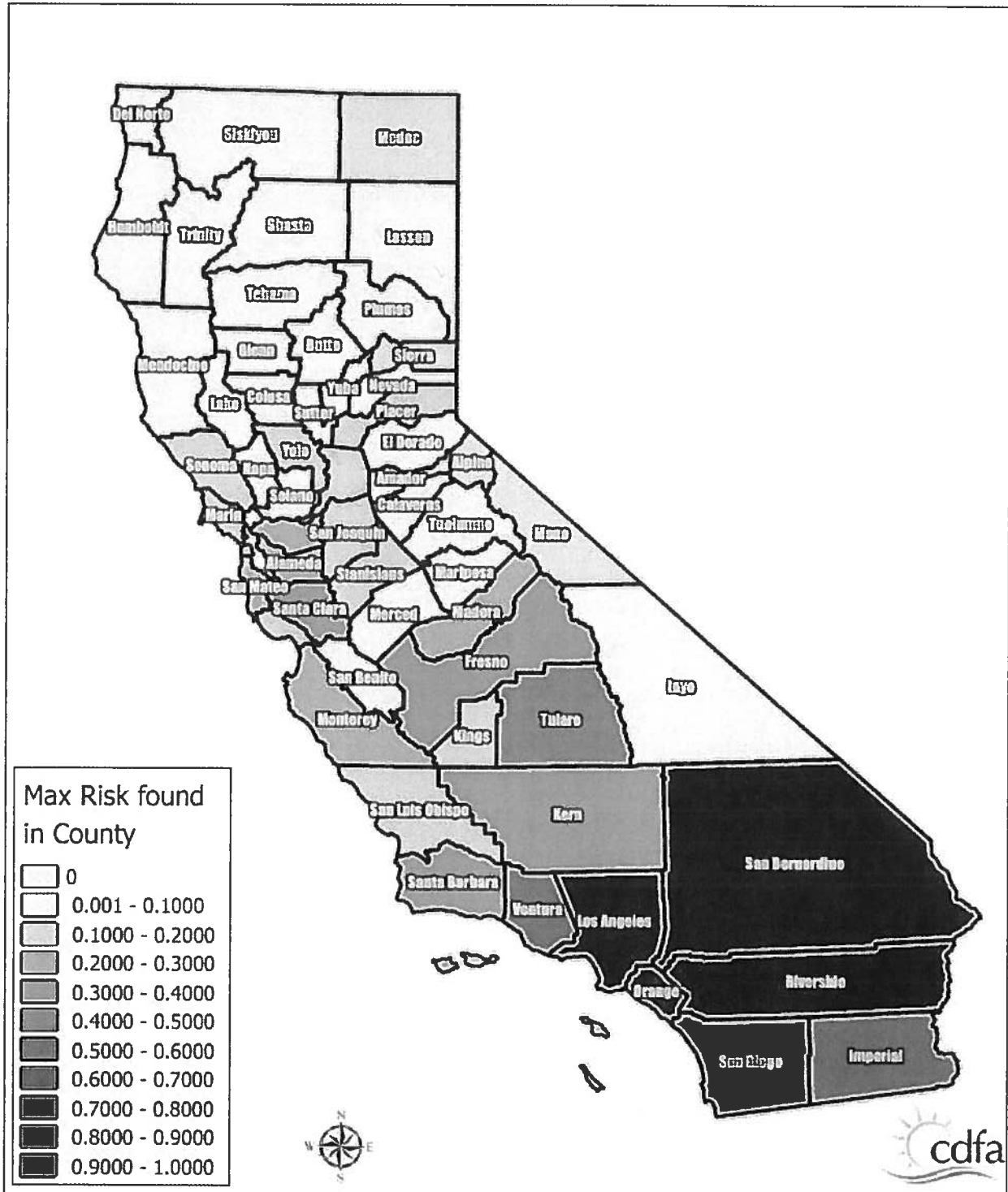
USDA-APHIS-PPQ, Field Operations – Data Analysis, Risk, and Targeting, 2150 Centre Ave., Bldg B., 3E14, Fort Collins, CO 80526

*Tim Gottwald*

USDA-ARS, U.S. Horticultural Research Laboratory, 2001 S. Rock Road, Fort Pierce, FL 34945

### **State-wide background risk level for HLB**

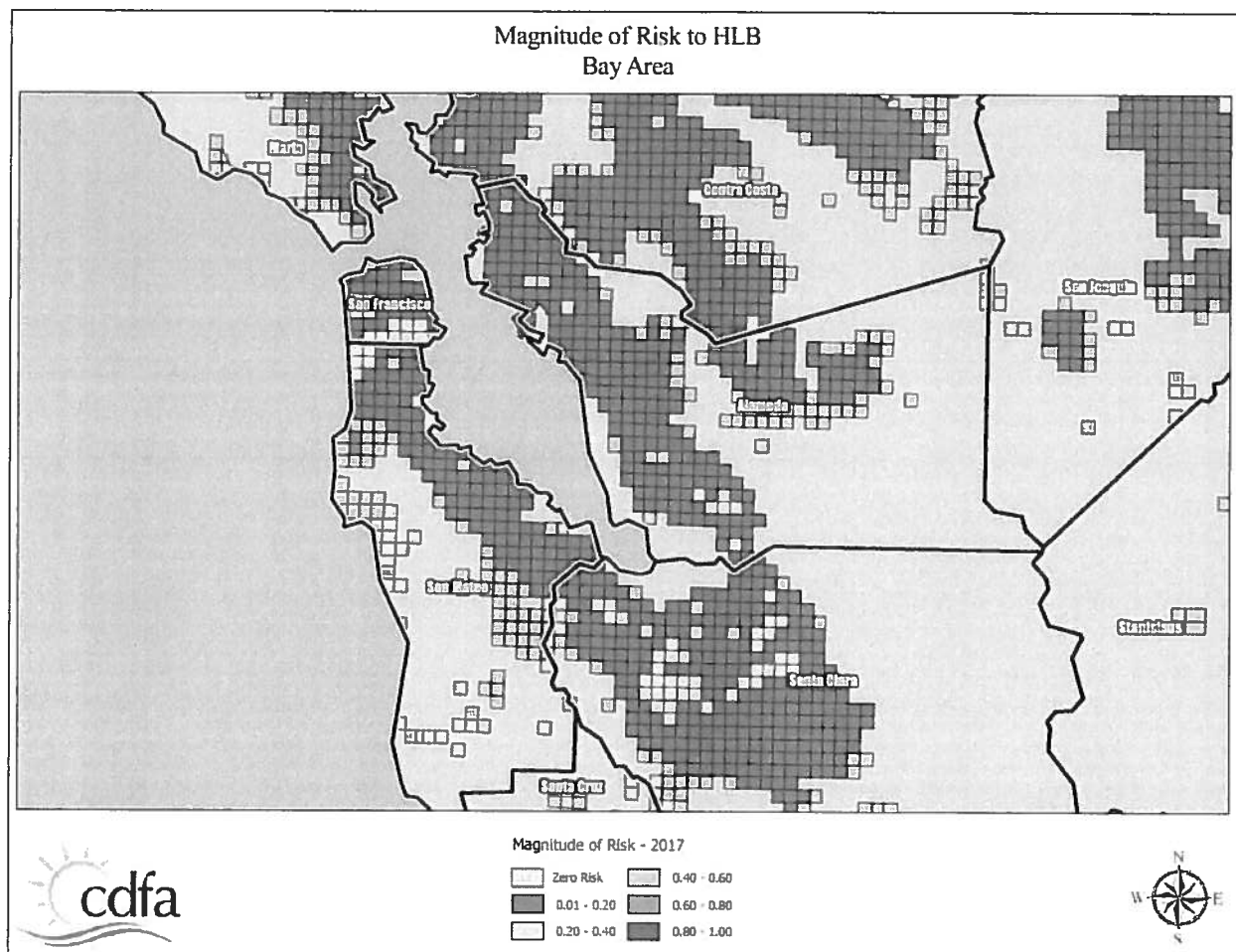
Since 2012, a background risk level for HLB in both residential and commercial citrus in each square mile of interest has been calculated 2-3 times per year using a risk model developed in Florida and adapted for use in California (Gottwald et al., 2014). The model uses a range of risk variables including census data, topography, land use, and known incidence of both HLB and Asian Citrus Psyllid (ACP) to produce a risk value ranging from 0 (extremely low risk) to 1 (very high risk) that applies to each square mile. Figure 1 shows the current risk status across the state at a county level, where the risk level applied to the county is the highest value for any individual square mile within that county



**Figure 1. Maximum HLB risk level by county across California as estimated by the USDA-ARS HLB risk model.**

In Figure 1 note that the risk level is generally higher in the south than north, because of the known presence of HLB and large ACP population in the southern counties. Note also that in northern California even counties with only a few ACP detections – for example Santa Clara County – may still have

relatively high risk levels because of population census data that indicate the background risk of the presence of infected citrus in private yards is relatively high. To illustrate this point further, Figure 2 shows the San Francisco Bay Area in more detail.



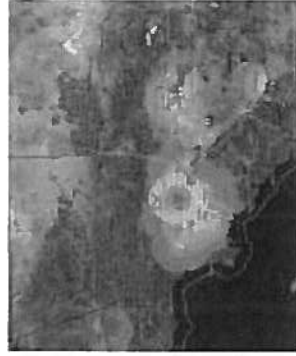
**Figure 2. Individual square mile HLB risk levels for the San Francisco Bay Area. Note that the general risk level is low, but there are pockets of moderately high risk in San Francisco itself, and more noticeably in San Jose, associated with population census risk factors; ACP detections in this area is still low and sporadic.**

While the background risk of HLB is strongly dependent on factors which are either static (e.g. topography) or change only slowly (e.g. human socio-economic factors) the presence of the ACP vector of the pathogen introduces a large dynamic component into the risk level across the state. To illustrate the impact of the vector population on changing risk status for HLB Figure 3 shows changes in HLB risk for the proposed quarantine areas 5 (San Diego, Imperial and Eastern Riverside) and 6 (LA, Western Riverside, San Bernardino and Orange). The risk level is shown as a blue-to-red heat map with higher risk indicated by darker red color and lower risk indicated by darker blue color; a time series of six periods is shown for each area.

Zone 6, 2012-13



Zone 6, 2013-14



Zone 6, 2014-15



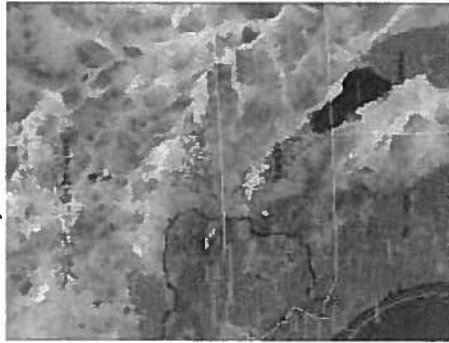
Zone 6, 2015-16



Zone 6, 2016-17



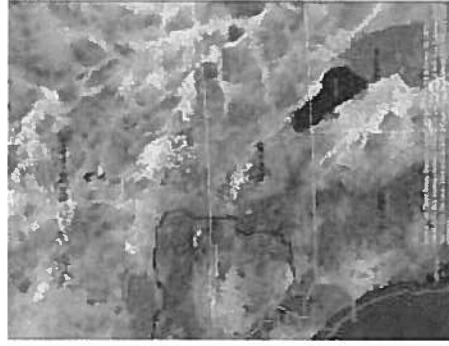
Zone 5, 2012-13



Zone 5, 2013-14



Zone 5, 2014-15



Zone 5, 2015-16



Zone 5, 2016-17



**Figure 3. Changes in background risk of HLB in proposed quarantine areas 5 and 6 from 2012 to present. Red color indicates high risk, blue indicates low risk. Note that the location of the early HLB detections in Hacienda Heights and San Gabriel falls inside the single high-risk area predicted in 2012. The progressive increase in risk in both areas is apparent with the passage of time. All known cases of HLB are in proposed Quarantine Area 6.**

Figure 3 tells us at least two useful things about HLB risk. First, note that in 2012-13 the only area of predicted high risk was centered on Hacienda Heights and San Gabriel, the locations of the first HLB discoveries in California; in other words, the risk model correctly anticipated the presence of HLB. Also note that the model also highlighted the focus of high risk in the city of Riverside as early as 2013-14; this outbreak emerged in 2017. These results are important for interpreting the presence of areas of elevated risk in places such as San Jose. Second, the pattern of change in risk in both areas 5 and 6 is a steady increase, spreading out from the original high risk area in LA, but also with additional foci developing at locations quite distant from the original focus. These changes are associated mainly with the spread of ACP through the region and the patterns of population density of the insect recorded in the risk-based surveys.

Taken together the results presented in this section highlight two important aspects of HLB risk that are relevant to quarantine regulations:

1. Because HLB-affected citrus plant material can be propagated and spread by human activity, the risk of HLB and ACP are to some extent independent, particularly in areas that are not generally infested with ACP.
2. **The risk of HLB can exist before the arrival of the vector** in an area because HLB-affected plant material is often brought to an area by human activities.

After ACP infests an area with pre-existing infected trees present, the vector population eventually comes into contact with the infected trees and foci of disease begin to build around them. This is because ACP acquires the pathogen from the infected trees and establishes a recurring cycle of infection and acquisition. Because trees remain asymptomatic for a long period of time, spread in the absence of detection and tree removal can occur.

### **Reducing disease spread by quarantines**

The basic principle of underlying the use of quarantines is to restrict the spread of disease by sub-dividing an area into smaller regions and limiting the opportunities for disease to spread from one region to another. In the case of invasive and highly mobile diseases, quarantines should be applied early and rigorously to have the largest effect on disease spread. Importantly, quarantines do not have to be 100% effective to be worth imposing. If the incursion of the disease into generally uninfected areas can be limited to a low rate, and psyllid populations can be kept low, local eradications can be achieved when new incursions are detected.

The basic idea of setting up quarantine regions within the state is an ecological analogue of the idea of constructing a ship using multiple watertight compartments; even if one compartment is flooded, as long as the flow of water is negligible to the other compartments the ship won't sink. In instituting a quarantine policy, the aim is to limit the flow of vectors and disease throughout the state and thus safeguard the industry and homeowners as a whole.

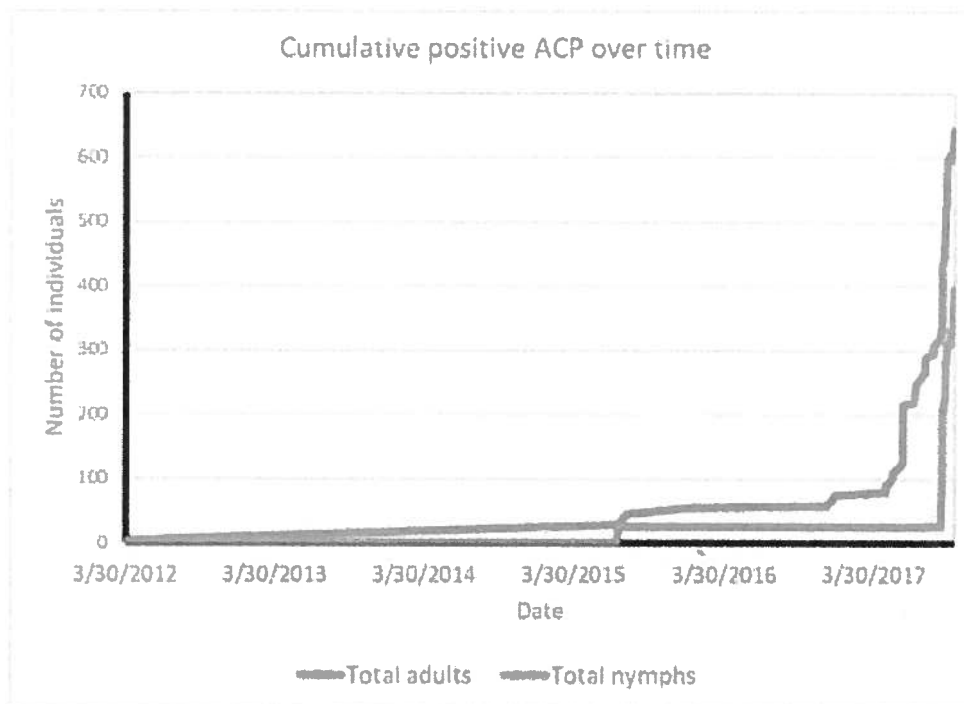


## Recent changes in the dynamics of HLB/ACP detections

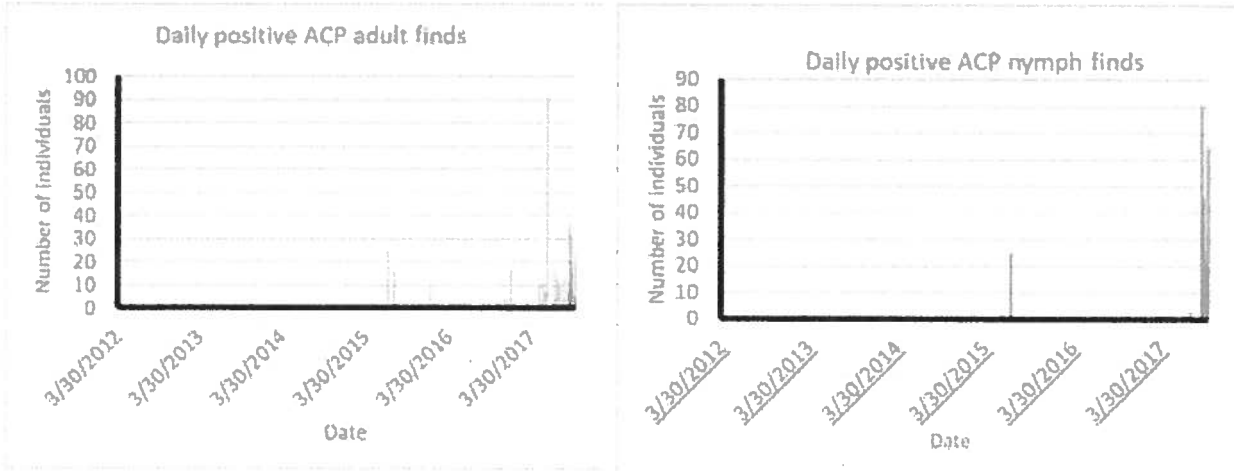
Until recently, the rate of accumulation of new positive ACP and tree detections had been relatively stable. Over the last 6 months there has been a dramatic increase in the rate of new detections of HLB infections in both ACP and citrus trees. In addition, there has been a recent increase in the number of cities in which positive finds have been reported and a sharp increase in the number of ACP nymph detections. These results are summarized in Figures 4 through 7.

Taken together the results indicate an exponential increase in the intensity of the HLB epidemic at multiple scales. The pathogen is becoming more prevalent in the vector population and in the tree population. At the same time, the upswing in nymphal detections indicates that the transmission rate is increasing and the increase in the number of cities with positive detections indicates that the geographic extent of the epidemic is increasing rapidly.

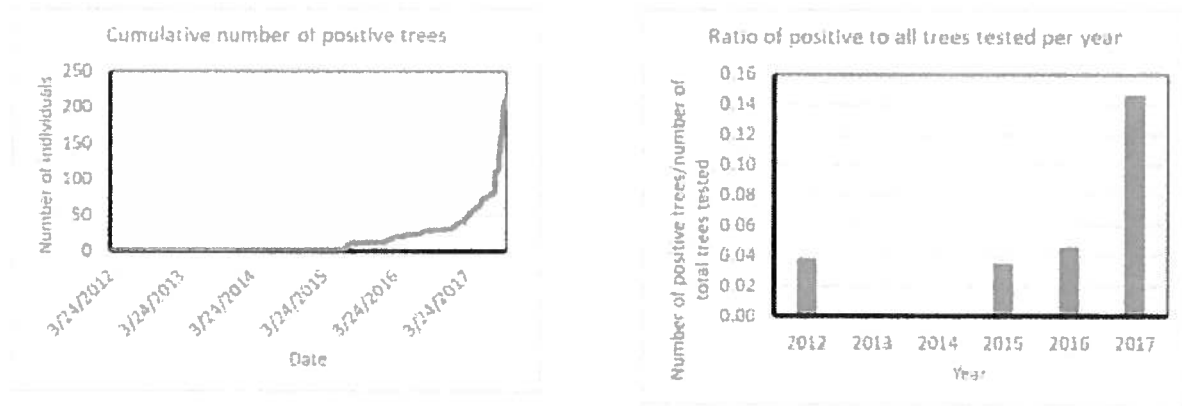
Most of these changes have become apparent only in the last 6 months. Given the very sharp increase in the intensity of the epidemic, a rapid response is needed to implement additional measures to slow the rate of spread of HLB beyond its current range before the opportunity is lost.



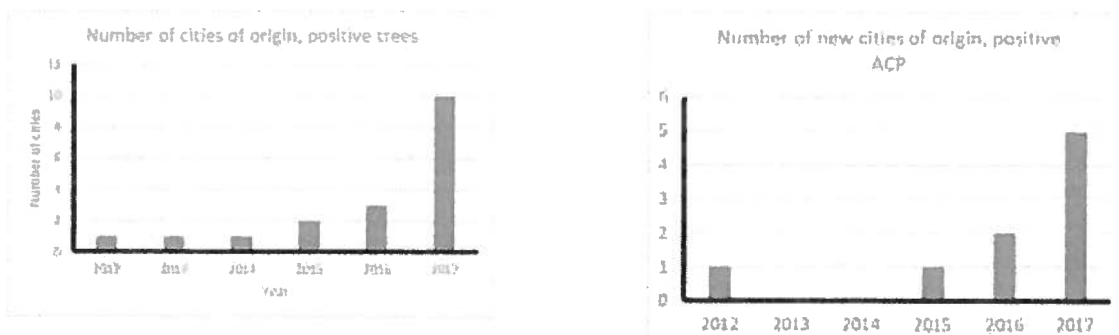
**Figure 4: Cumulative counts of PCR-positive ACP samples collected in California over time since 2012. Note the sharp increase in the rate of accumulation from mid-2017 onwards.**



**Figure 5: Daily discovery rate for PCR-positive ACP (adults and nymphs are shown separately). Note the sharp increase in finds toward the end of 2017, particularly for nymphs which had largely been absent from positive samples until recent detections.**



**Figure 6: PCR-positive tree detections over time. In the left panel the cumulative number of detections is shown, highlighting the exponential increase in 2017. In the right panel the ratio of positive trees to all trees tested per year is shown. Note that until 2017 the ratio had been more or less stable at approximately 5%, but has nearly tripled in 2017 to just under 15%.**



**Figure 7: Numbers of cities with PCR-positive ACP detections over time. The left panel shows the cumulative figure, the right panel shows the number of new cities per year. Mirroring the results for trees and for ACP, note the sharp increase in 2017. These results indicate that the epidemic is intensifying across several spatial scales at a very high rate.**

### Changes in diagnostic results on tested Asian Citrus Psyllids

The previous section detailed the recent sharp increases in PCR detections for ACP and trees. These increases indicate that the pathogen population is growing and this can be seen directly by considering the Ct values in qPCR tests. Results highlighting the increase in the pathogen population are shown here in Figures 8 and 9.

Figure 8 shows the data for qPCR Ct values obtained from psyllid samples collected in different sampling cycles of the survey program. The data are sub-divided into samples obtained from inside and outside the existing HLB quarantine areas. It can be seen that the Ct values obtained from ACP samples inside the quarantine areas are showing a much faster increase in the proportion of low values (CT <32 to 33), indicating an intensification of the pathogen population in the vector population.

The presence of some ACP with low qPCR Ct values outside the existing quarantine areas highlights the risk of ACP moving the disease around and the need for quarantine regulations that apply at a larger scale than the current radius around confirmed HLB-positive trees.

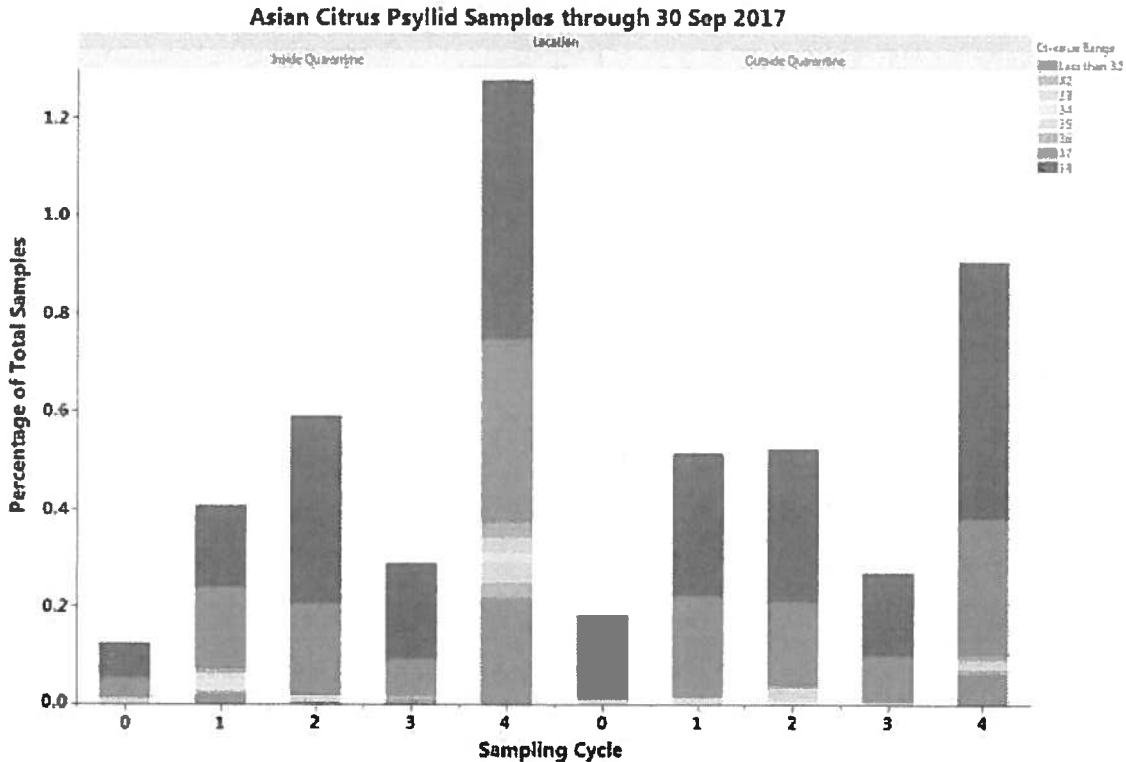
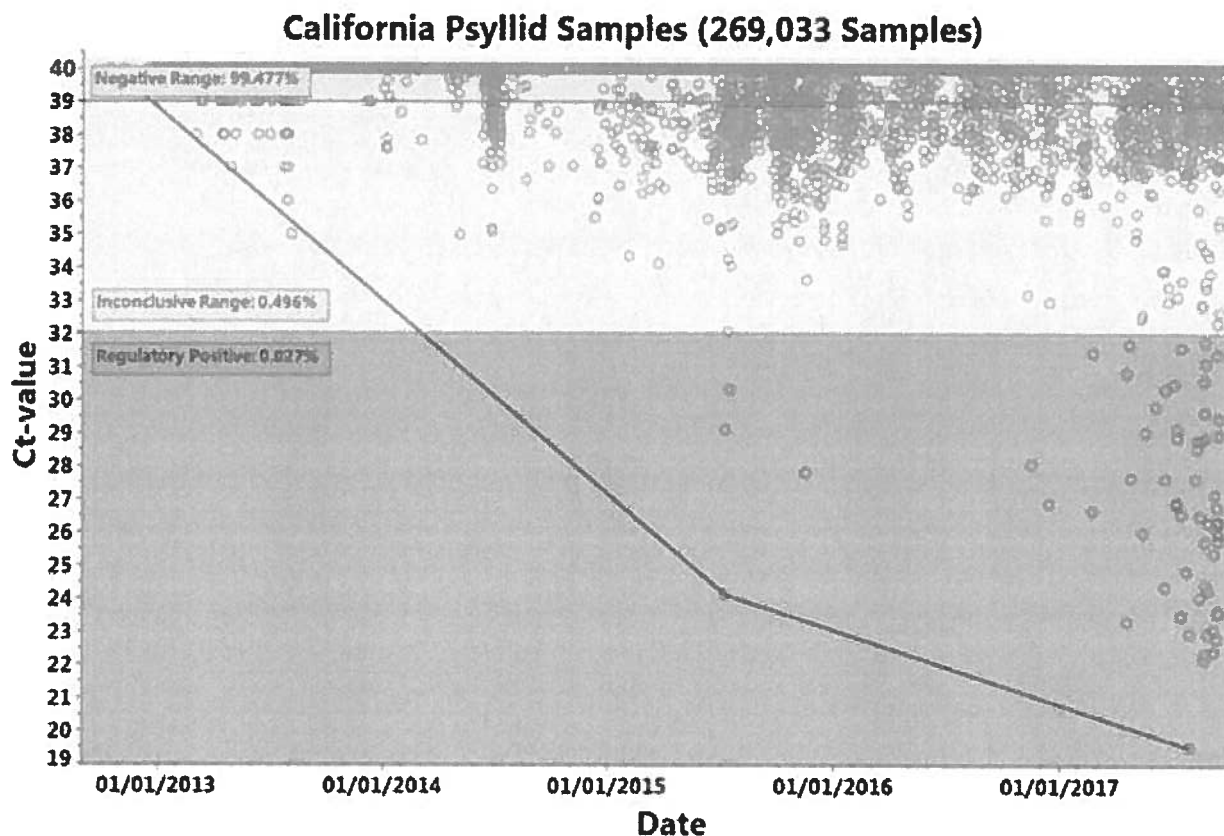


Figure 8: qPCR test results on ACP samples tested by CDFA through 30 September 2017. Note that the proportion of light blue and red (indicating presence of the HLB pathogen) in the samples from inside the quarantine areas (left panel) has increased over time, whereas no corresponding change is apparent in samples outside the quarantine areas (right panel).



**Figure 9: qPCR regulatory results recorded since the detection of HLB in California over time compared to the concentration of the pathogen in the sample (Ct < 32.1= HLB positive (red zone), Ct 32.1-38.9 = suspect (yellow zone), Ct > 38.9=HLB not detected (green zone)). The lower the Ct value, the higher the concentration of the HLB bacterium. Note the trend towards lower Ct values over time and the increase in numbers of HLB positive psyllids starting in 2015 and continuing through 2017 indicating that the titre (concentration) of HLB DNA in the psyllids is increasing.**

### **Implications of changes in the dynamics and recommendations**

To summarize the recent changes in the dynamics of HLB/ACP detections in trees and psyllids:

1. The number of HLB positive citrus trees detected has increased exponentially in the last 4 months as compared to the previous 6 years.
2. The number of HLB positive and infectious Asian citrus psyllids has increased exponentially in the last four months as compared to the previous 6 years.
3. These HLB infectious psyllids are spreading to new communities in the LA basin at a significantly escalated rate compared to the previous 6 years.
4. These infectious psyllids can be spread by movement of ACP-host nursery stock, bulk citrus, and other possible carriers of ACP.

Given the above developments in the California HLB epidemic it is of the utmost urgency to further compartmentalize the state using quarantine zones defined by HLB risk to commercial citrus (rather than 5 mile and county wide quarantines). This will help to reduce the potential for spread of HLB to zones where HLB has not been detected in citrus trees, nor has Asian citrus psyllid become established in some cases. The proposal to divide the state into 7 zones for bulk citrus movement and three zones for nursery stock, will serve to restrict the dispersal of HLB and its ACP vectors. Currently all known HLB infected trees are inside a single quarantine zone – zone 6. However, with the exponential escalation of the number of infected ACP and citrus trees requires an immediate regulatory response to restrict spread before the opportunity for such measures to be effective is lost.

**WEEKLY MEMO 8-12-2021**

**SOCIAL MEDIA  
HIGHLIGHTS**



## Post Performance

August 5, 2021 - August 11, 2021

Review the lifetime performance of the posts you published during the publishing period.


**Included in this Report**

 @CityGardenGrove

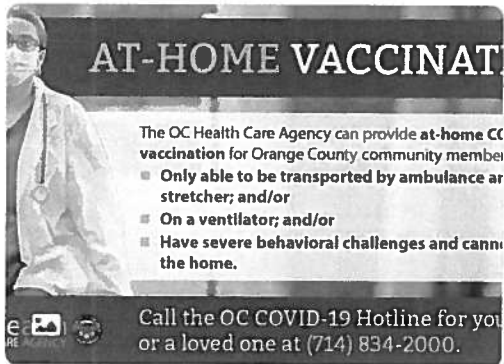
 Garden Grove City Hall

 gardengrovecityhall



 **Garden Grove City Hall**  
Thu 8/5/2021 9:14 am PDT

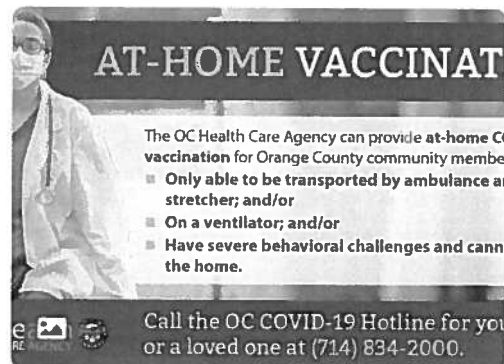
We make it work. 🙌🏻 The OC Health Care Agency can provide at-home COVID-19 vaccinations for OC residents. Please loo...



Impressions	1,535
Reach	1,503
Engagements	11
Engagement Rate (per Impressi...	0.7%

 **@CityGardenGrove**  
Thu 8/5/2021 9:15 am PDT

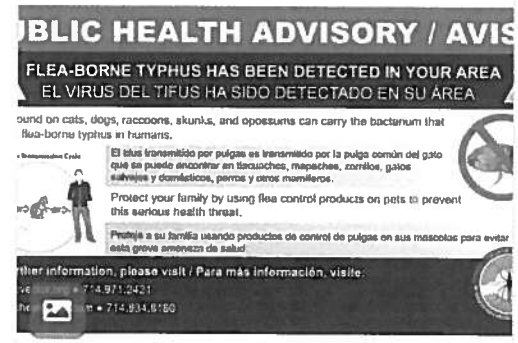
We make it work. 🙌🏻 The OC Health Care Agency can provide at-home COVID-19 vaccinations for OC residents. For more...



Impressions	381
Potential Reach	4,371
Engagements	8
Engagement Rate (per Impressi...	2.1%

 **Garden Grove City Hall**  
Thu 8/5/2021 12:30 pm PDT

⚠️ Beware of fleas... The Orange County Mosquito and Vector Control District has a warning for you about flea-borne typhus...



Impressions	4,761
Reach	4,626
Engagements	414
Engagement Rate (per Impressi...	8.7%

**G Garden Grove City Hall**  
Thu 8/5/2021 3:30 pm PDT

Business owners: Need help promoting your products? 📺 📧 The California Small Business Development Center's Digital...



**Marketing Lab**

Contact Roger Lloyd  
Lloyd\_Roger@rscctd.edu  
714-564-5203


<b>01</b> Competitor Online Analysis	<b>02</b> Search Engine Optimization	<b>03</b> Website Audit	<b>04</b> Digital Marketing Services
-----------------------------------------------	-----------------------------------------------	-------------------------------	-----------------------------------------------

Whether you're a start up or a small to medium size business we can support you with our marketing services. Would you like to know what your competitors are doing online or what key words are critical to driving traffic?

Impressions	<b>587</b>
Reach	<b>585</b>
Engagements	<b>5</b>
Engagement Rate (per Impression)	<b>0.9%</b>

**G Garden Grove City Hall**  
Fri 8/6/2021 8:39 am PDT

Vaccines will bring us closer to reconnecting with our loved ones. ❤️ That's right! Vaccines are safe, free,...



**Let's Get Vaccinated**  
Protect & Reconnect with the ones you love

- All individuals over the age of 12 are eligible to receive a COVID-19 vaccine.
- For more information, and to schedule an appointment, visit covidvax.ca.gov
- If you need help registering for an appointment, call 714-834-3333
- Follow us on Facebook for more updates & information.

Safe. Free. Effective.

Impressions	<b>417</b>
Reach	<b>417</b>
Engagements	<b>2</b>
Engagement Rate (per Impression)	<b>0.5%</b>

**G @CityGardenGrove**  
Fri 8/6/2021 8:42 am PDT

Vaccines will bring us closer to reconnecting with our loved ones. ❤️ That's right! Vaccines are safe, free, effective, ...



**Let's Get Vaccinated**  
Protect & Reconnect with the ones you love

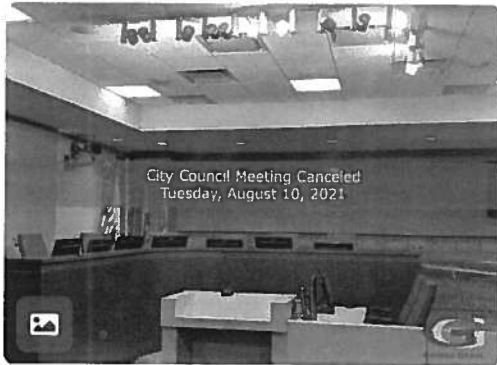
- All individuals over the age of 12 are eligible to receive a COVID-19 vaccine.
- For more information, and to schedule an appointment, visit covidvax.ca.gov
- If you need help registering for an appointment, call 714-834-3333
- Follow us on Facebook for more updates & information.

Safe. Free. Effective.

Impressions	<b>409</b>
Potential Reach	<b>4,371</b>
Engagements	<b>7</b>
Engagement Rate (per Impression)	<b>1.7%</b>

 **Garden Grove City Hall**  
Fri 8/6/2021 10:37 am PDT

Please note that the council meeting on Tuesday, August 10, is canceled. The next meeting will be on Tuesday, August 24,...



Impressions	<b>550</b>
Reach	<b>539</b>
Engagements	<b>0</b>
Engagement Rate (per Impression)	<b>0%</b>

 **Garden Grove City Hall**  
Fri 8/6/2021 3:30 pm PDT

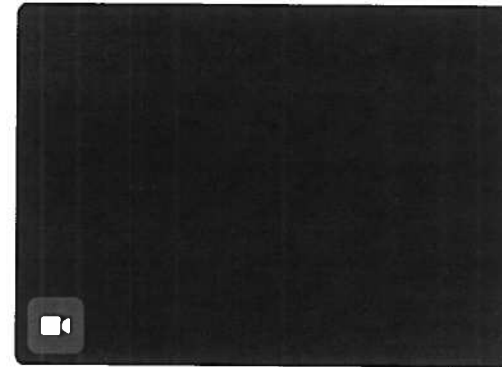
What can you say about a Garden Grove organization that is a safe haven and has helped over 25,000 people in need? If y...



Video Views	<b>155</b>
Impressions	<b>421</b>
Reach	<b>404</b>
Engagements	<b>17</b>
Engagement Rate (per Impression)	<b>4%</b>

 **gardengrovecityhall**  
Fri 8/6/2021 3:30 pm PDT

Garden Grove's Magnolia Park Family Re...  
What can you say about a Garden Grove organization that is a safe haven and ha...



Video Views	<b>164</b>
Impressions	<b>592</b>
Reach	<b>547</b>
Engagements	<b>7</b>
Engagement Rate (per Impression)	<b>1.2%</b>



**Garden Grove City Hall**

Mon 8/9/2021 8:32 am PDT

Still need to get vaccinated? We got you!  
 📍 The County of Orange will open a mobile COVID-19 vaccine clinic on Mond...



Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—



**Garden Grove City Hall**

Mon 8/9/2021 8:40 am PDT

Still need to get vaccinated? We got you!  
 📍 The County of Orange will open a mobile COVID-19 vaccine clinic on Mond...

Impressions	501
Reach	489
Engagements	7
Engagement Rate (per Impression)	1.4%



**@CityGardenGrove**

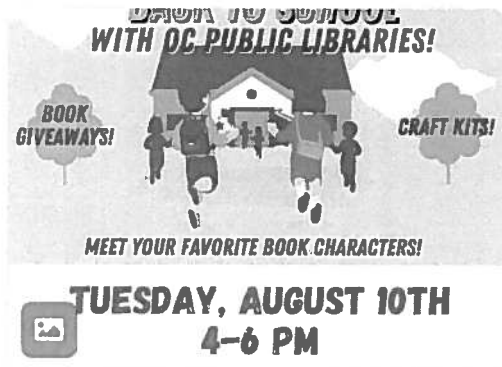
Mon 8/9/2021 8:42 am PDT

Still need to get vaccinated? We got you!  
 📍 The County of Orange will open a mobile COVID-19 vaccine clinic on Mon,...

Impressions	356
Potential Reach	4,372
Engagements	11
Engagement Rate (per Impression)	3.1%

**G** Garden Grove City Hall  
 Mon 8/9/2021 12:30 pm PDT

School is almost in session. The library is here to help you prepare! 📖 The Garden Grove Main Library, located on 11200...



Impressions	<b>2,059</b>
Reach	<b>2,038</b>
Engagements	<b>55</b>
Engagement Rate (per Impressi...	<b>2.7%</b>

**G** Garden Grove City Hall  
 Mon 8/9/2021 4:00 pm PDT

This just in... 🚓👮 The Garden Grove Police Department added three new Officers to their ranks. They graduated from the...



Video Views	<b>54</b>
Impressions	<b>705</b>
Reach	<b>669</b>
Engagements	<b>66</b>
Engagement Rate (per Impression)	<b>9.4%</b>

**G** @CityGardenGrove  
 Mon 8/9/2021 4:00 pm PDT

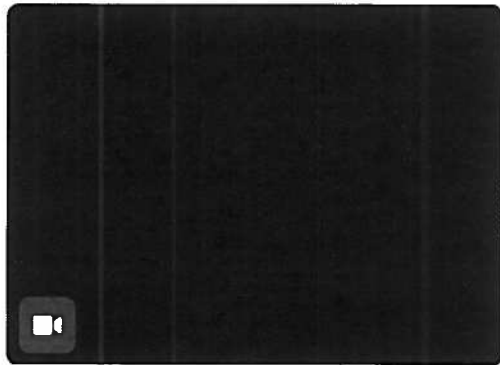
This just in... 🚓👮 The Garden Grove Police Department added three new Officers to their ranks. GGTV3 Reporter Arti Nehru has the details. 📺 Watch the full video now! Please like GGTV3's Facebook page and subscribe to their YT channel at [youtube.com/watch?v=NBxZZf...](https://www.youtube.com/watch?v=NBxZZf...) #GG1956



Post Link Clicks	<b>1</b>
Impressions	<b>377</b>
Potential Reach	<b>4,370</b>
Engagements	<b>7</b>
Engagement Rate (per Impressi...	<b>1.9%</b>

 **gardengrovecityhall**  
Mon 8/9/2021 4:15 pm PDT

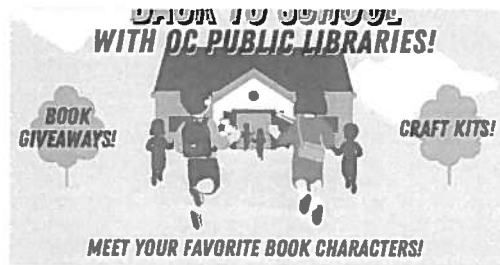
Garden Grove Police Department's New ...  
This just in... 🚓👮 The Garden Grove Police  
Department added three new Officers to...



Video Views	<b>259</b>
Impressions	<b>716</b>
Reach	<b>660</b>
Engagements	<b>18</b>
Engagement Rate (per Impression)	<b>2.5%</b>

 **@CityGardenGrove**  
Mon 8/9/2021 5:00 pm PDT

School is almost in session. The library is  
here to help you prepare! 📖 The GG Main  
Library is hosting a back-to-school event...

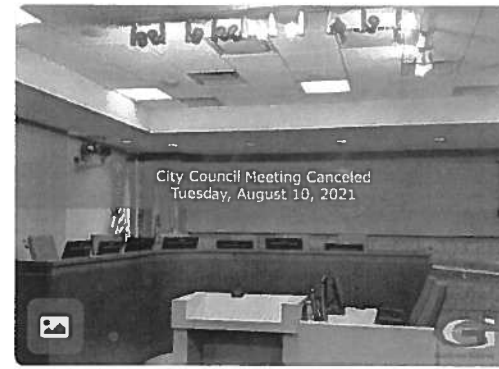


 **TUESDAY, AUGUST 10TH**  
**4-6 PM**

Impressions	<b>344</b>
Potential Reach	<b>4,370</b>
Engagements	<b>6</b>
Engagement Rate (per Impression)	<b>1.7%</b>

 **Garden Grove City Hall**  
Tue 8/10/2021 8:33 am PDT

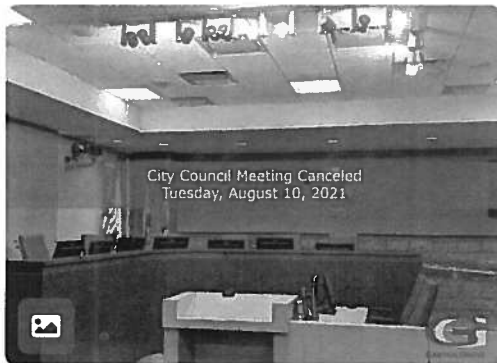
FRIENDLY REMINDER 🗣️ The council  
meeting on Tuesday, August 10, is  
canceled. The next meeting will be on...



Impressions	<b>451</b>
Reach	<b>451</b>
Engagements	<b>0</b>
Engagement Rate (per Impression)	<b>0%</b>

  @CityGardenGrove  
Tue 8/10/2021 8:34 am PDT

FRIENDLY REMINDER! The council meeting on Tuesday, August 10, is canceled. The next meeting will be on...



Impressions	337
Potential Reach	4,370
Engagements	4
Engagement Rate (per Impressi...	1.2%

  Garden Grove City Hall  
Tue 8/10/2021 12:41 pm PDT

Seniors! The H. Louis Lake Senior Center invites you to join the "Let's Chat about it Wednesdays" from 10:30 A.M. to 11:30...



Impressions	647
Reach	643
Engagements	5
Engagement Rate (per Impression)	0.8%

  @CityGardenGrove  
Tue 8/10/2021 12:42 pm PDT

Seniors! The H. Louis Lake Senior Center invites you to join the "Let's Chat about it Wednesdays" from 10:30 A.M. to 11:30...



Impressions	293
Potential Reach	4,370
Engagements	4
Engagement Rate (per Impressi...	1.4%

 **Garden Grove City Hall**  
Tue 8/10/2021 3:36 pm PDT

The Orange County Mosquito and Vector Control District (OCMVCD) has confirmed the first mosquito samples to test posi...



Impressions	<b>550</b>
Reach	<b>550</b>
Engagements	<b>1</b>
Engagement Rate (per Impression)	<b>0.2%</b>

 **@CityGardenGrove**  
Tue 8/10/2021 3:40 pm PDT

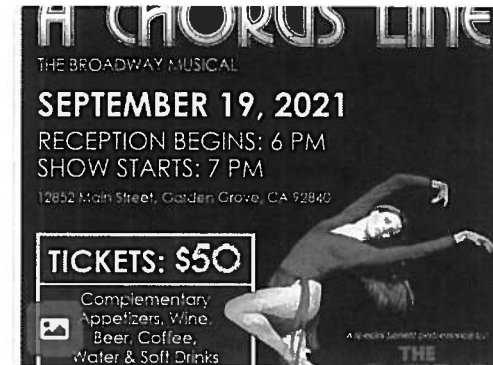
The OCMVCD has confirmed the 1st mosquito samples to test positive for West Nile virus (WNV). The samples were...



Impressions	<b>306</b>
Potential Reach	<b>4,389</b>
Engagements	<b>3</b>
Engagement Rate (per Impression)	<b>1%</b>

 **@CityGardenGrove**  
Wed 8/11/2021 8:30 am PDT

It's Broadway time! 🎭 The GG Rotary Club invites you to join in a special fundraising production of the smash Broadway...

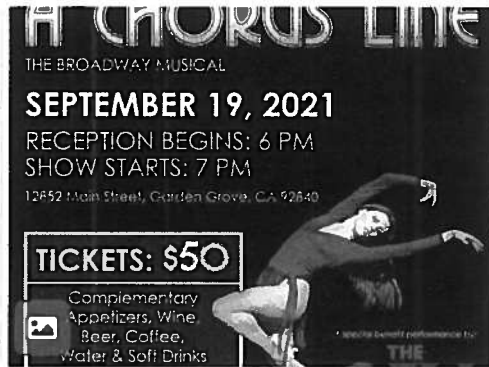


Impressions	<b>297</b>
Potential Reach	<b>4,370</b>
Engagements	<b>5</b>
Engagement Rate (per Impression)	<b>1.7%</b>



 **Garden Grove City Hall**  
Wed 8/11/2021 8:30 am PDT

It's Broadway time! 🎭 The Garden Grove Rotary Club invites you to join in a special fundraising production of the smash...



Impressions	1,145
Reach	1,136
Engagements	18
Engagement Rate (per Impressi...	1.6%

 **@CityGardenGrove**  
Wed 8/11/2021 12:30 pm PDT

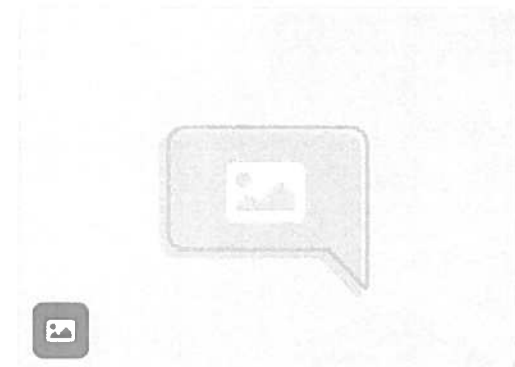
Books and outdoor fun are coming your way 📖☀️ The GG Main Library is hosting outdoor storytime events on Thursdays ...



Impressions	—
Potential Reach	4,370
Engagements	—
Engagement Rate (per Impressi...	—

 **Garden Grove City Hall**  
Wed 8/11/2021 12:30 pm PDT

Books and outdoor fun are coming your way 📖☀️ The Garden Grove Main Library, located on 11200 Stanford Ave, is hostin...



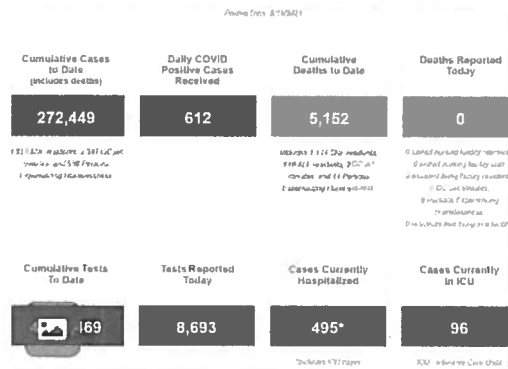
Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—



**Garden Grove City Hall**

Wed 8/11/2021 2:44 pm PDT

! Today's reported #OCCOVID19 positive case counts are shown below. ochealth records 612 new cases in #orangecount...



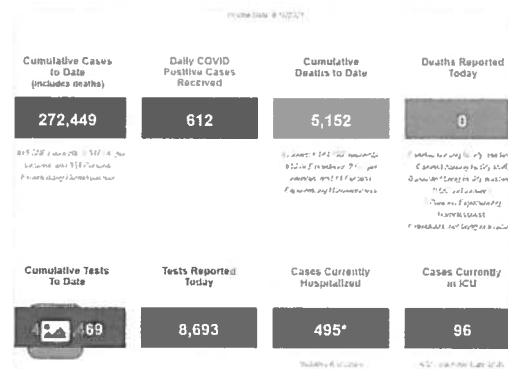
Impressions	<b>1,622</b>
Reach	<b>1,622</b>
Engagements	<b>56</b>
Engagement Rate (per Impressi...	<b>3.5%</b>



**@CityGardenGrove**

Wed 8/11/2021 2:46 pm PDT

! Today's reported #OCCOVID19 positive case counts are shown below. @ochealth records 612 new cases. 🙏 If you're not...



Impressions	<b>313</b>
Potential Reach	<b>4,371</b>
Engagements	<b>24</b>
Engagement Rate (per Impressi...	<b>7.7%</b>



## Post Performance

August 5, 2021 - August 11, 2021

Review the lifetime performance of the posts you published during the publishing period.

**Included in this Report**

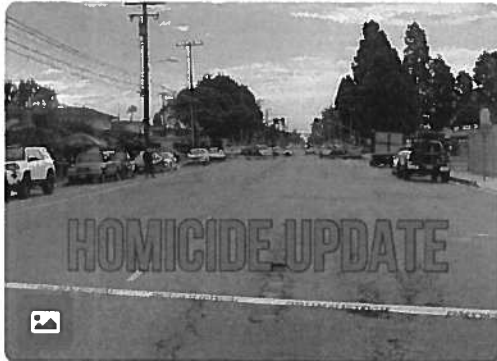
 Garden Grove Police Department     ggpdk9unit



**Garden Grove Police Depa...**

Wed 8/11/2021 3:06 pm PDT

This morning, August 11, 2021, at 1:22 AM, #GardenGrovePD officers responded to a residence on the 8000 block of...



Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—



**Garden Grove Police Depa...**

Tue 8/10/2021 9:00 am PDT

Not all heroes wear capes, some wear headsets. If you can already multi-task, keep calm under pressure, type faster th...



Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—



**Garden Grove Police Depa...**

Fri 8/6/2021 6:15 pm PDT



Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—

 **Garden Grove Police Depa...**  
Fri 8/6/2021 6:15 pm PDT




Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—

 **Garden Grove Police Depa...**  
Fri 8/6/2021 6:15 pm PDT

Thank you to everyone who attended our #NationalNightOut2021. We had a great time meeting our #community...



Impressions	<b>8,873</b>
Reach	<b>6,885</b>
Engagements	<b>591</b>
Engagement Rate (per Impression)	<b>6.7%</b>

 **Garden Grove Police Depa...**  
Fri 8/6/2021 6:15 pm PDT



Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—



**Garden Grove Police Depa...**

Fri 8/6/2021 6:15 pm PDT



Impressions	—
Reach	—
Engagements	—
Engagement Rate (per Impression)	—



**Garden Grove Police Depa...**

Thu 8/5/2021 3:01 pm PDT

#DidYouKnow #GardenGrovePD has a Volunteers In Policing (VIP) program? The program was started in 1994 to help...



Impressions	5,228
Reach	5,228
Engagements	340
Engagement Rate (per Impression)	6.5%



## Post Performance

August 5, 2021 - August 11, 2021

Review the lifetime performance of the posts you published during the publishing period.



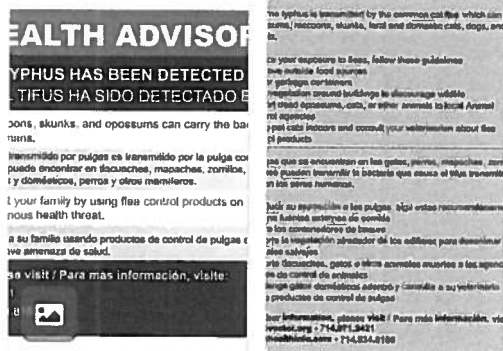
**Included in this Report**

 @GardenGroveTV3

 Garden Grove TV 3

 **@GardnGroveTV3**  
Thu 8/5/2021 1:00 pm PDT

Beware of fleas The OCMVCD warns you about flea-borne typhus. OCMVD staff found Flea-borne Typhus positive fleas in...




Impressions	19
Potential Reach	426
Engagements	0
Engagement Rate (per Impression)	0%

 **@GardnGroveTV3**  
Thu 8/5/2021 3:30 pm PDT

Business owners: Need help promoting your products? The SBDC's Digital Marketing Lab is offering a no-cost prod...



Impressions	28
Potential Reach	426
Engagements	0
Engagement Rate (per Impression)	0%

 **Gardn Grove TV 3**  
Fri 8/6/2021 3:30 pm PDT

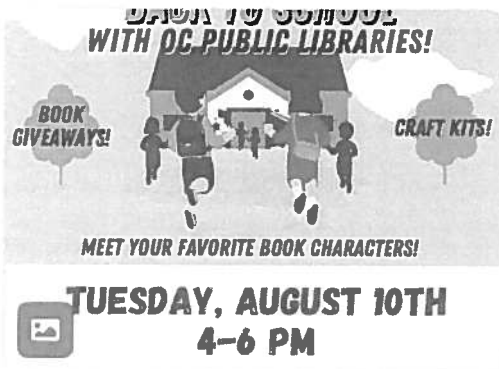
What can you say about a Garden Grove organization that is a safe haven and has helped over 25,000 people in need? If y...



Video Views	15
Impressions	34
Reach	29
Engagements	3
Engagement Rate (per Impression)	8.8%

 **@GardenGroveTV3**  
Mon 8/9/2021 12:30 pm PDT

School is almost in session. The library is here to help you prepare! 📖 The GG Main Library is hosting a back-to-school event...



Impressions	13
Potential Reach	426
Engagements	0
Engagement Rate (per Impression)	0%

 **Garden Grove TV 3**  
Mon 8/9/2021 4:00 pm PDT

This just in... 🚓👮 The Garden Grove Police Department added three new Officers to their ranks. They graduated from the...



Video Views	14
Impressions	57
Reach	55
Engagements	10
Engagement Rate (per Impression)	17.5%

 **@GardenGroveTV3**  
Mon 8/9/2021 4:00 pm PDT

This just in... 🚓👮 The Garden Grove Police Department added three new Officers to their ranks. GGTV3 Reporter Arti Nehru has the details. 📺 Watch the full video now! Please like our Facebook page & subscribe to our YT channel at [youtube.com/watch?v=NBxZZf...](https://youtube.com/watch?v=NBxZZf...) #GG1956



Post Link Clicks	0
Impressions	25
Potential Reach	426
Engagements	1
Engagement Rate (per Impression)	4%

**WEEKLY MEMO 8-12-2021**

# **NEWS ARTICLES**

## In Orange County, reactions run the gamut to new vaccine mandate for teachers

With Delta reaching kids, many — but not all — parents express relief that rules are tighter.



California will become the first state in the nation to require all teachers and school staff to get vaccinated or undergo weekly COVID-19 testing, Gov. Gavin Newsom announced Wednesday. In this file photo, first grade teacher Mary Samis gives students instructions on the first day of in-person classes at Arroyo Vista Elementary School in Rancho Santa Margarita, CA on Tuesday, September 29, 2020. (Photo by Paul Bersebach, Orange County Register/SCNG)

By ROXANA KOPETMAN | rkopetman@scng.com | Orange County Register

PUBLISHED: August 11, 2021 at 7:29 p.m. | UPDATED: August 11, 2021 at 8:36 p.m.

Gov. Gavin Newsom's new order requiring teachers and employees to be vaccinated or undergo weekly COVID-19 testing was welcomed by many Orange County educators and parents as a necessary tool in protecting students – and lambasted by others as government overreach.

"I am thrilled that he is mandating this for school personnel because they are in a public place and I am worried about their health, as well as the health of the kids who are too young to be vaccinated," said Kimberley Harvie, a Laguna Hills mom of an incoming second-grader at Oxford Preparatory Academy in Mission Viejo.

"Thrilled" was a common adjective used by many Wednesday when asked about the new order, believed to be the nation's first Covid vaccination mandate for school employees. With the Delta variant spreading quickly and driving up the number of

children who test positive, parents worry about the risk their kids might face by returning to in-class school.

“Requiring vaccines and masks should really be a low threshold for school to mandate and meet. It’s the literal bare minimum, and it won’t stop the spread completely,” said Lyndsey Lefebvre, a La Habra resident who has a son entering La Sonora High School, a mostly indoor campus where she said students don’t have the same opportunities to be outdoors as they do on other campuses.

Teachers like Krissy Brownell agreed. A Los Alamitos mom of four and a teacher at Westminster High, Brownell said the new mandate offers some peace of mind.

“I am relieved at the mandate. I was terrified to think I was sending my children into a classroom with unvaccinated students and teachers. This takes a tiny weight off of my shoulders,” she said.

“All the teachers I am friends with believe in science and are vaccinated. There are a handful of teachers at my school site that are unvaccinated and proud of it, which honestly makes me nervous to sit at a staff meeting.”

But parents like Stacy Day, a parent at Capistrano Unified School District, said she worried this would be the next stepping stone toward mandating COVID-19 vaccines for students once the vaccinations receive final approval by federal authorities.

“I think this is an overreach on so many levels. It’s still an experimental vaccine. And weekly testing for what? False positives?” said Day, who pulled her four children from Capistrano Unified schools last year because she wanted to offer them more consistency and was concerned over mandatory face mask rules

David Melendez, a father of two at Orange Unified, said it makes no sense to have only unvaccinated school staff tested weekly.

“We’re told that vaccinated people spread the virus also,” Melendez said. “If we’re going to test, test (everyone)... That would give us a better picture of what’s going on.”

And Lynn Groff, a parent with an incoming freshman at Pacifica High in Garden Grove, called Newsom’s move “political.”

“With all the (federal Covid money) and teachers union contributions, they should be building those employees a wheeled Plexiglas rolling bubble cart to teach and interact from if they’re so afraid of the virus,” said Groff, who also opposes mandating face masks on campuses and is spearheading an anti-mask rally Friday afternoon near the Garden Grove Unified district office.

California’s largest teacher unions came out in favor of Newsom’s plan, saying it will help ensure the safety of staff as well as students.

“Educators want to be in classrooms with their students. And the best way to make sure that happens is for everyone who is medically eligible to be vaccinated, with robust testing and multi-tiered safety measures,” said E. Toby Boyd, president of the California Teachers Association, which reported that nearly 90 % of educators have already been vaccinated.

In Orange County, Angie Cencak, president of the Fullerton Secondary Teachers Organization, said she’s pleased with Newsom’s announcement. “It will give us some peace of mind going forward.”

Grant Schuster, president of the Anaheim Secondary Teachers Association, said his union was already in talks with Anaheim Union looking at the possibility of doing something similar in the district.

“We were eager to look at something to encourage teachers to be vaccinated but also allow those who are concerned about the emergency use authorization, and who want to wait, to be tested on a regular basis,” Schuster said.

“It’s really important for schools to focus on the safety of our children as they’re the last ones left to be vaccinated. And this step would be part of that process,” Schuster said.

Details about how the new mandate will play out were unclear on Wednesday.

Last spring, the Orange County Department of Education helped coordinate a push to get teachers vaccinated. Christine Olmstead, an associate superintendent, said similar discussions will soon be taking place with officials from the county’s 28 public school districts, as well as private schools and all charter schools.

Officials from several school Orange County school districts, including Laguna Beach Unified, Irvine Unified and Tustin Unified, said details of the vaccine rules will have to be ironed out.

Some, like Santa Ana Unified School District, said they are looking to offer the weekly Covid-19 tests on campuses to reduce disruption for teachers employees and students.

Gina Clayton-Tarvin, a School Board member at Ocean View School District in Huntington Beach and a teacher in Cerritos, said Newsom’s mandate offers staff a choice.

“We need to have schools open, and in person, and the only way we can do it and protect the children is to...get the vaccines or be tested regularly,” she said.

School employees must be vaccinated or begin the weekly testing by Oct. 15.

## Man shot, killed in Garden Grove

By NATHANIEL PERCY | [npercy@scng.com](mailto:npercy@scng.com) | Daily Breeze

PUBLISHED: August 11, 2021 at 2:31 p.m. | UPDATED: August 11, 2021 at 7:04 p.m.

A 33-year-old man was shot and killed in front of a home in Garden Grove Wednesday, Aug. 11, and police were searching for the shooter, authorities said.

Officers were called to the 8000 block of Lampson Avenue, near the city's border with Stanton, just past 1:20 a.m. after a caller reported gunshots, Garden Grove Sgt. Evan Beresford said.

Officers found the man, a Garden Grove resident, in front of the home with multiple gunshot wounds, Beresford said. Police attempted life-saving measures, but the man died.

It wasn't immediately known if the suspect fled on foot or in a vehicle.

The victim's identity was withheld by police pending notification of his relatives.

Further information regarding the circumstances of the shooting was not immediately available.



## **MISCELLANEOUS ITEMS**

**August 12, 2021**

1. Calendar of Events
2. Minutes from the August 12, 2021 Zoning Administrator special meeting.
3. Agenda for the August 19 Planning Commission meeting.
4. League of California Cities, "CalCities," from August 6, 2021 to August 12, 2021; including the Guide to Local Recovery Update.



## CALENDAR OF EVENTS

August 12, 2021 – October 7, 2021

Thursday	August 12		\$2 Casual Dress Day
Friday	August 13		City Hall Closed – Regular Friday Closure
Tuesday	August 24	5:30 p.m. 6:30 p.m.	Closed Session, CMC Housing Authority, CMC Sanitary District Board, CMC Successor Agency Meeting, CMC City Council Meeting, CM
Thursday	August 26	11:30 a.m. -1:00 p.m.	Employee Appreciation Luncheon, CMC, AB Room
Friday	August 27		City Hall Closed – Regular Friday Closure
Thursday	September 2	7:00 p.m.	Planning Commission Meeting, CMC
Monday	September 6		City Hall Closed - Labor Day
Tuesday	September 7	6:00 p.m.	Traffic Commission Meeting, CMC
Thursday	September 9	9:00 a.m.	Downtown Commission Meeting, CMC
Friday	September 10		City Hall Closed – Regular Friday Closure
Tuesday	September 14	5:30 p.m. 6:30 p.m.	Closed Session, CMC Successor Agency Meeting, CMC City Council Meeting, CM
Thursday	September 16	6:00 p.m.	Planning Commission Meeting, CMC
Thursday	September 23		\$2 Casual Dress Day
Friday	September 24		City Hall Closed – Regular Friday Closure
Tuesday	September 28	5:30 p.m. 6:30 p.m.	Closed Session, CMC Housing Authority, CMC Sanitary District Board, CMC Successor Agency Meeting, CMC City Council Meeting, CM
Thursday	October 7	6:00 p.m.	Planning Commission Meeting, CMC

GARDEN GROVE ZONING ADMINISTRATOR MEETING  
Garden Grove Community Meeting Center  
11300 Stanford Avenue, Garden Grove, CA 92840

Special Meeting Minutes  
Thursday, August 12, 2021

CALL TO ORDER: 9:00 a.m.

PUBLIC HEARING – CONDITIONAL USE PERMIT NO. CUP-208-2021

Applicant: Young Park  
Location: 8100 Garden Grove Boulevard  
Date: August 12, 2021

Request: To operate a new adult daycare center, Garden Grove ADHC in Buildings "A" & "B". A separate request, to modify Conditional Use Permit No. CUP-188-2020, will reduce the floor area of Sierra States University in Building "B", from 6,765 square feet to 3,304 square feet, to allow Garden Grove ADHC to partially occupy Building "B". The site is in the GGMU-1 (Garden Grove Boulevard Mixed Use 1) zone. In conjunction with the request, the Zoning Administrator will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 – Existing Facilities – of the State CEQA Guidelines.

Action: Public Hearing Held. Speaker(s): Hyung Jin Seo

Action: The Zoning Administrator adopted Decision No. 1804-21.

PUBLIC HEARING – CONDITIONAL USE PERMIT NO. CUP-188-2020 (REV. 2021)

Applicant: Young Park  
Location: 8100 Garden Grove Boulevard  
Date: August 12, 2021

Request: To modify Conditional Use Permit No. CUP-188-2020, to reduce the square footage of an existing college, Sierra States University at 8100 Garden Grove Boulevard, Building "B". The floor tenant space in which the university currently operates will be reduced from 6,765 square feet to 3,304 square feet. Concurrently, is a request to operate a new outpatient adult daycare facility, Garden Grove ADHC, in Buildings "A" and "B". The site is in the GGMU-1 (Garden Grove Boulevard Mixed Use 1) zone. In conjunction with the request, the Zoning Administrator will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 – Existing Facilities – of the State CEQA Guidelines.

Action: Public Hearing Held. Speaker(s): Hyung Jin Seo

Action: The Zoning Administrator adopted Decision No. 1805-21.

Zoning Administrator Minutes

PUBLIC HEARING – CONDITIONAL USE PERMIT NO. CUP-185-2020 (REV. 2021)

Applicant: Tina Nguyen  
Location: 10130 Garden Grove Boulevard  
Date: August 12, 2021

Request: To modify the floor plan of an existing restaurant, Oc & Lau, which was approved under Conditional Use Permit No. CUP-185-2020, to expand into the adjacent tenant space increasing the square footage from 2,500 to 3,500 square feet. The restaurant currently operates with an Alcoholic Beverage Control (ABC) Type "47" (On-Sale, General, Eating Place) License. The site is in the GGMU-1 (Garden Grove Boulevard Mixed Use 1) zone. In conjunction with the request, the Zoning Administrator will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 – Existing Facilities – of the State CEQA Guidelines.

Action: Public Hearing Held. Speaker(s): Tina Nguyen

Action: The Zoning Administrator adopted Decision No. 1806-21.

ORAL COMMUNICATIONS – PUBLIC: None.

ADJOURNMENT: The Zoning Administrator adjourned the meeting at 9:16 a.m.

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Judith Moore  
Recording Secretary



## AGENDA

### GARDEN GROVE PLANNING COMMISSION

#### REGULAR MEETING

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August 19, 2021

COMMUNITY MEETING CENTER – COUNCIL CHAMBER  
11300 STANFORD AVENUE

Members of the public who wish to comment on matters before the Commission, in lieu of doing so in person, may submit comments by emailing [planning@ggcity.org](mailto:planning@ggcity.org) no later than 3:00 p.m. the day of the meeting. The comments will be provided to the Commission as part of the meeting record. Members of the public are asked to consider very carefully before attending this meeting in person and are encouraged to wear face masks and maintain a six foot distance from others. Please do not attend this meeting if you have had direct contact with someone who has tested positive for COVID-19, or if you are experiencing symptoms such as coughing, sneezing, fever, difficulty breathing or other flu-like symptoms.

#### REGULAR SESSION – 7:00 P.M.

ROLL CALL: CHAIR PEREZ, VICE CHAIR LINDSAY  
COMMISSIONERS ARESTEGUI, CUNNINGHAM, LEHMAN, RAMIREZ,  
SOEFFNER

Members of the public desiring to speak on any item of public interest, including any item on the agenda except public hearings, must do so during Oral Communications at the beginning of the meeting. Each speaker shall fill out a card stating name and address, to be presented to the Recording Secretary, and shall be limited to five (5) minutes. Members of the public wishing to address public hearing items shall do so at the time of the public hearing.

Meeting Assistance: Any person requiring auxiliary aids and services, due to a disability, should contact the Department of Community & Economic Development at (714) 741-5312 or email [planning@ggcity.org](mailto:planning@ggcity.org) 72 hours prior to the meeting to arrange for special accommodations. (Government Code §5494.3.2).

All revised or additional documents and writings related to any items on the agenda, which are distributed to all or a majority of the Planning Commissioners within 72 hours of a meeting, shall be available for public inspection (1) at the Planning Services Division during normal business hours; and (2) at the City Community Meeting Center Council Chamber at the time of the meeting.

Agenda item descriptions are intended to give a brief, general description of the item to advise the public of the item's general nature. The Planning Commission may take legislative action it deems appropriate with respect to the item and is not limited to the recommended action indicated in staff reports or the

#### PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA

A. ORAL COMMUNICATIONS - PUBLIC

B. APPROVAL OF MINUTES: August 5, 2021

C. CONTINUED ITEM (Authorization for the Chair to execute Resolution shall be included in the motion.)

C.1. SITE PLAN NO. SP-104-2021  
INTERPRETATION OF USE NO. IOU-004-2021

APPLICANT: 1784 CAPITAL HOLDINGS, LLC

LOCATION: NORTHWEST CORNER OF CHAPMAN AVENUE AND  
WESTERN AVENUE AT 7441 CHAPMAN AVENUE

REQUEST: Site Plan approval to demolish an existing two-story industrial/office building, and in its place, construct a new 158,694 square foot, six-story self-storage facility on a 1.26-acre site. Also, a request for an Interpretation of Use to determine the compatibility of the proposed self-storage use within the Planned Unit Development No. PUD-103-76 (REV. 2018) zone. In conjunction with the request, the Planning Commission will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15332 - In-Fill Development Projects.

PLANNING COMMISSION RECOMMENDATION: Adopt a Resolution denying Interpretation of Use No. IOU-004-2021 and Site Plan No. SP-104-2021 pursuant to the Planning Commission's direction at the August 5, 2021 meeting.

D. MATTERS FROM COMMISSIONERS

E. MATTERS FROM STAFF

F. ADJOURNMENT



# Guide to Local Recovery Update: August 11

*Aug 11, 2021*

This week, the U.S. Senate passed the Infrastructure Investment and Jobs Act, a significant step forward on \$550 billion in new federal infrastructure investments.

The League of California Cities also submitted a support letter for Senator Alex Padilla's Amendment #2584. New resources are available for cities as well, including new information about the Coronavirus State and Local Fiscal Recovery Funds recipient reporting portal.

## **Cal Cities Applauds Senate for Advancing Bipartisan Infrastructure Bill**

On Tuesday, the U.S. Senate passed a bipartisan infrastructure bill, the Infrastructure Investment and Jobs Act, which represents a significant step forward on \$550 billion in new federal investments for our nation's infrastructure that cities and towns can benefit from. The bill now moves to the U.S. House of Representatives, where it will be debated and decided whether to proceed to a vote or to wait for a reconciliation bill from the Senate.

The League of California Cities [\(/docs/default-source/advocacy/league-of-ca-cities-re\\_amendment-2584-8-5-2021.pdf?Status=Master&sfvrsn=17648971\\_3\)](/docs/default-source/advocacy/league-of-ca-cities-re_amendment-2584-8-5-2021.pdf?Status=Master&sfvrsn=17648971_3) submitted a [letter \(/docs/default-source/advocacy/league-of-ca-cities-re\\_amendment-2584-8-5-2021.pdf?Status=Master&sfvrsn=17648971\\_3\)](/docs/default-source/advocacy/league-of-ca-cities-re_amendment-2584-8-5-2021.pdf?Status=Master&sfvrsn=17648971_3) voicing its strong support for Amendment #2584 to the Infrastructure Investment and Jobs Act, which was sponsored by California Senator Alex Padilla. This amendment would provide

state and local officials with additional flexibility to responsibly invest their allocations of COVID-19 relief dollars.

Cal Cities will continue to engage in advocacy on this bill as it heads to the House of Representatives.

## **Coronavirus State and Local Fiscal Recovery Funds (SLFRF) recipient reporting**

The U.S. Department of the Treasury released

[https://home.treasury.gov/system/files/136/SLFRF\\_Treasury-Portal-Recipient-Reporting-User-Guide.pdf](https://home.treasury.gov/system/files/136/SLFRF_Treasury-Portal-Recipient-Reporting-User-Guide.pdf) **new information about its Coronavirus State and Local Fiscal Recovery Funds recipient reporting portal**

[https://home.treasury.gov/system/files/136/SLFRF\\_Treasury-Portal-Recipient-Reporting-User-Guide.pdf](https://home.treasury.gov/system/files/136/SLFRF_Treasury-Portal-Recipient-Reporting-User-Guide.pdf) . The User Guide contains detailed guidance and instructions on how to create and submit Interim Reports, Project and Expenditure Reports, and Recovery Plans as required by Treasury Department's Interim Final Rule. This information functions as a supplement to the

<https://home.treasury.gov/system/files/136/SLFRF-Compliance-and-Reporting-Guidance.pdf> **Compliance and Reporting Guidance**

<https://home.treasury.gov/system/files/136/SLFRF-Compliance-and-Reporting-Guidance.pdf> issued by Treasury on June 17, 2021.

## **Rental Assistance Finder**

The Consumer Financial Protection Bureau (CFPB) introduced a new **[“Rental Assistance Finder” tool](https://www.consumerfinance.gov/coronavirus/mortgage-and-housing-assistance/renter-protections/find-help-with-rent-and-utilities/)** (<https://www.consumerfinance.gov/coronavirus/mortgage-and-housing-assistance/renter-protections/find-help-with-rent-and-utilities/>), which supports individuals looking for help with housing costs. Tenants and landlords can use this tool to learn about emergency rental assistance being distributed by state and local organizations.





# Cities should talk with investor-owned utilities about recent Rule 20 changes and work credits

*Aug 11, 2021*

On June 3, the California Public Utilities Commission (CPUC) issued a decision that revises their Electric Rule 20 program, which lays out guidelines and procedures for undergrounding overhead electric facilities.

The decision will have significant impacts for cities moving forward. This decision made a number of changes to the program, including:

- Discontinuing new work credit allocations for Electric Rule 20A projects
- Clarifying Electric Rule 20A project eligibility criteria and work credit transfer rules
- Enhancing program oversight

The decision also requires investor-owned utilities (IOUs) to contact cities within their service territory that participate in the Rule 20 program about their Rule 20 status, whether they are considered “active” or “inactive,” and what their remaining work credit balance is. Cities are encouraged to discuss these items with their appropriate IOU before the end of the year.

If you have any questions about the CPUC’s decision from a policy perspective, please contact Cal Cities Environmental Quality lobbyist **Derek Dolfie**

**(mailto:ddolfie@calcities.org)** or read our **previous, in-depth story**

**(<https://www.calcities.org/detail-pages/news/2021/04/21/cpuc-issues-tentative-decision-on-rule-20-program-pertaining-to-undergrounding-electric-utility-lines>)** about CPUC’s

tentative decision. All other questions about the decision should be directed to IOU representatives.

1400 K Street, Suite 400  
Sacramento, CA 95814

P: (916) 658-8200

F: (916) 658-8240