



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

OFFICIAL NOTICE FOR THE CITY OF SAN GABRIEL PLEASE READ IMMEDIATELY

AMENDMENT TO THE NOTICE OF TREATMENT FOR THE ASIAN CITRUS PSYLLID

Between August 3 and August 25, 2015, Asian citrus psyllids (ACP), *Diaphorina citri* Kuwayama, were identified from the city of San Gabriel, Los Angeles County. These detections indicate that a breeding population exists in the area. The infestation is within an area where the Huanglongbing disease has been detected and is susceptible to the California Department of Food and Agriculture's (CDFA) ACP treatment work plan, which includes treatment with foliar and soil-applied insecticides.

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 integrated pest management principles, the CDFA has evaluated possible treatment methods and determined that there are no physical, cultural, or biological control methods available to eliminate the ACP from this area.

The treatment plan for the ACP infestation will be implemented within an 800-meter radius of each detection site, as follows:

- Tempo® SC Ultra (cyfluthrin), a contact insecticide for controlling the adults and nymphs of ACP, will be applied from the ground using hydraulic spray equipment to the foliage of host plants; and
- Merit® 2F or CoreTect™ (imidacloprid), a systemic insecticide for controlling the immature life stages of ACP, will be applied to the soil underneath host plants. Merit® 2F is applied from the ground using hydraulic spray equipment, whereas CoreTect™, if used in place of Merit® 2F, is applied by inserting the tablets into the ground and watering the soil beneath the host plants.

Public Notification:

Residents of affected properties may be invited to a public meeting where officials from CDFA, the Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be available to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with the Food and Agricultural Code, Section 5779 and 5401-5404. 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. Treatment information is posted at http://cdfa.ca.gov/plant/acp/treatment_maps.html. 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.

Asian Citrus Psyllid
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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.

Enclosed are the findings regarding the treatment plan and a map of the treatment area.

Attachments

AMENDMENT TO THE FINDINGS REGARDING A TREATMENT PLAN FOR THE ASIAN CITRUS PSYLLID

Between August 3 and August 25, 2015, Asian citrus psyllids (ACP), *Diaphorina citri* Kuwayama, were identified from the city of San Gabriel, Los Angeles County. These detections indicate that a breeding population exists in the area.

ACP is an exotic insect that is originally from Asia. It has been introduced into 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, Texas, and California (Fresno, Imperial, Kern, Los Angeles, Madera, Orange, Riverside, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Tulare, and Ventura 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. The psyllids 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, which blocks sunlight from reaching the leaves. However, the most serious damage caused by ACP is due to its vectoring the phloem-inhabiting bacteria in the genus *Candidatus Liberibacter*, the causal agents of huanglongbing (HLB). HLB is considered one of the most devastating diseases of citrus in the world, because it causes trees to produce inedible fruit and results in the eventual death of infected trees. 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 making it inedible for human consumption. HLB is in some southeastern U.S. states such as Florida and Texas, as well as in central Mexico.

This pest presents a major threat to citrus grown within the State. California is the top citrus-producing state in the U.S., with total production valued at over \$2.2 billion. Recent studies in Florida have shown that the presence of HLB increases citrus production costs by up to 40 percent and has resulted in a loss of over \$7 billion and 6,600 jobs over the last five years. HLB has found in twice in California, and the infected trees were destroyed, but the threat of reintroduction is ongoing and allowing the establishment of ACP in this area of California could pave the way for HLB to spread rapidly once it reappears in the state. HLB would have severe consequences to both the citrus industry and to the urban landscape via the decline and the death of citrus trees.

This decision to proceed with treatment is based upon a realistic evaluation that it may be possible to eliminate the ACP from this area and prevent its spread using currently available technology in a manner that is based on an action plan developed by the United States Department of Agriculture (USDA), the CDFA and other scientists on the ACP Science Advisory Panel. In making this decision, the CDFA has evaluated possible treatment methods. In accordance with integrated pest management principles, the following is the list of options that I have considered for the treatment of this ACP infestation: 1) physical controls; 2) cultural controls; 3) biological controls; and 4) chemical controls.

Based upon input from my professional staff, including memorandums from the Primary State Entomologist and Primary State Plant Pathologist, and the input of experts familiar with ACP, I have concluded that there are no physical, biological, or cultural control methods that are effective to treat the ACP that allow the CDFA to meet its statutory obligations. To treat ACP in this area, I am ordering ground applications of pesticides be made to all ACP hosts within an 800-meter radius around the detection sites. The option selected is a chemical control measure that involves the use of insecticides targeting both the adult and immature stages of ACP. This option was selected based

upon biological effectiveness, minimal public intrusiveness, cost, and minimal impacts to the environment.

A Program Environmental Impact Report (PEIR) has been prepared which analyzes the ACP treatment program in accordance with Public Resources Code (PRC), Sections 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 at the program level and provides guidance on future actions against the ACP. It identifies feasible alternatives and possible mitigation measures to be implemented for individual ACP treatment activities. The ACP program has 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 treatment area has been reviewed by consulting the California Department of Fish and Wildlife's California Natural Diversity Database for threatened or endangered species. The CDFA also consults with 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 will be implemented as needed. The CDFA will not apply pesticides to bodies of water or undeveloped areas of native vegetation. All treatment will be applied to residential properties, common areas within residential development, non-agricultural commercial properties, and right-of-ways.

Work Plan

The proposed program area encompasses those portions of Los Angeles County which fall within a nine-square-mile area around the property on which the ACP has been detected and any subsequent detection sites within the program boundaries. A map of the program boundaries is attached. The work plan consists of the following elements:

1. **Delimitation.** Yellow panel traps will be placed throughout the program area to delimit the infestation and to monitor post-treatment ACP populations. Yellow panel traps are placed at a density of up to 100 traps in the core-square mile. Additional traps may be added to further delimit the infestation and to determine the efficacy of treatments. These traps will be serviced on a regular schedule for a period equal to two years beyond the date of the last ACP detection.
2. **Visual survey and tap sampling.** All host plants will be inspected at all locations where traps are placed. Host plants at other properties may be surveyed within an 800-meter radius around each detection site.
3. **Treatment.** Properties within 800 meters of each detection site will be treated according to the following protocol. Treatments will be repeated, if necessary, as per label instructions.
 - a. **Tempo® SC Ultra**, containing the contact pyrethroid insecticide cyfluthrin, will be applied by ground-based hydraulic spray equipment to the foliage of host plants for controlling the adults and nymphs of ACP. Treatment may be re-applied up to six times annually if additional ACPs are detected.

- b. Either Merit® 2F or CoreTect™, containing the systemic insecticide imidacloprid, will be applied to the root zone beneath host plants for controlling developing nymphs and providing long term protection against reinfestation. Merit® 2F is applied as a soil drench, while CoreTect™ tablets are inserted two to five inches below the soil surface and watered in to initiate tablet dissolution. CoreTect™ 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 may be re-applied once annually if additional ACPs are detected.

Public Information

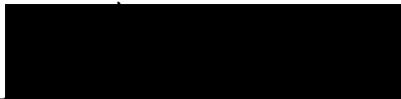
Residents of affected properties may be invited to a public meeting where officials from the CDFA, the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office will be present to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with the Food and Agricultural Code (FAC), Section 5779. After treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit. Information concerning the ACP program will be conveyed directly to local and State political representatives and authorities via letters, emails, and/or faxes. Treatment information is posted at http://cdfa.ca.gov/plant/acp/treatment_maps.html. 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.

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.

Duty to Act

Under my statutory authority, as Secretary of the California Department of Food and Agriculture, I have decided, based upon the likely environmental and economic damage that would be inflicted by an established infestation of the ACP in this area, that it is incumbent upon me to attempt to address this threat.

My duty to act, and this decision, is based upon authority set forth in Sections 24.5, 401.5, 403, 407, 408, 5401-5405, and 5761-5764 of the FAC, authorizing and mandating the Secretary to: thoroughly investigate the existence of the pest; determine the probability of the pest spreading to other areas; adopt regulations (Title 3 of the California Code of Regulations, Section 3591.21) as are reasonably necessary to carry out the provisions of this code; abate a pest from the established treatment area; and, to prevent further economic damage. The project work plan above describes the CDFA's actions that are necessary to mitigate the effects of this pest.


Karen Ross, Secretary

8/28/15
Date

Asian Citrus Psyllid (ACP) and Huanglongbing (HLB) Work Plan

I. Detection Trapping and Visual Survey

The California Department of Food and Agriculture (CDFA) maintains a cooperative state/county trapping program for Asian citrus psyllid (ACP) to provide early detection of any infestation. Traps are serviced by agricultural inspectors. The trap used for ACP detection is the yellow panel trap. The yellow panel trap is a two-sided board coated with stickum. ACP becomes entangled on the sticky capture surface. Yellow panel traps have proven successful at detecting infestations of ACP. Proper deployment enhances catch success.

At all locations where traps are placed, the host plant is visually inspected for ACP and for symptoms of the disease that it vectors; Huanglongbing (HLB). If there is evidence that ACP exists, the host will be sweep-netted for ACP samples. Any collected psyllid samples are preserved in alcohol and sent for HLB testing to CDFA Plant Pest Diagnostics Center (PPDC). If symptoms of HLB exist in the host plant, leaf and stem samples are collected and sent for testing to the PPDC.

Detection Survey

- 1) Yellow Panel Traps
 - a) Trap Density: 5 traps/square mile.
 - b) Trap Servicing Interval: Every two weeks.
 - c) Trap Relocation and Replacement: Traps are replaced and relocated every six weeks to another host at least 500 feet away if other hosts are available.
- 2) Visual Survey
 - a) Trap Sites: Visual surveys are conducted once at each trapping site when the trap is placed or relocated at that site.
 - b) Detection Survey: Using a risk-based model developed by the United States Department of Agriculture, up to 200 sites per square mile are visually inspected and two times annually. ACP and symptomatic plant tissue are collected and submitted to the PPDC for analysis.

II. Delimitation and Monitoring Survey Protocols

The protocols below are to be used upon the detection of a single HLB-positive psyllid or an HLB-positive tree.

ACP Monitoring Trapping

Any detection of HLB-positive ACP not associated with a new nursery or landscaping shipment from an infested area shall trigger a monitoring survey.

- 1) Yellow Panel Traps
 - a) Trap Density: Up to 100 traps per square mile in the core square mile (0.5 mile radius from detection site).
 - b) Trap Servicing Interval: Once every two weeks.

ACP and HLB Visual Survey

All properties within 800 meters of the initial detection shall be surveyed. Initial surveys should be door-to-door, moving outward in all directions from the original detection site. Additional detection locations shall be used as new epicenters to expand survey boundaries using an 800 meter radius.

If high or scattered HLB-infected trees are found in the initial inspections, a transect survey may be implemented to rapidly determine the extent of the infestation. This involves inspecting a minimum of 20 properties per square mile.

III. Treatment

ACP Treatment

Trigger: Treatment is warranted upon the detection of one or more psyllids.

Treatment Area: Treatments may extend to 800 meters around each detection site. Only host plants are treated.

Treatment Plan: Both foliar and systemic insecticides will be applied. Foliar insecticides are useful for immediate reduction of the adult population in order to eliminate dispersal, while systemic insecticides are necessary to kill the sedentary nymphs. The frequency of the treatments is dependent on the insecticide applied and severity of the infestation.

1) Foliar Treatment

Tempo® SC Ultra (cyfluthrin), a contact insecticide is used for controlling ACP adults and nymphs. Tempo® SC Ultra may be applied to the foliage of all host plants within an 800-meter radius of the detection sites, using hydraulic spray or hand spray equipment. Affected properties will be notified in writing at least 48 hours prior to treatment. Following treatment, completion notices are left with the homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property.

2) Soil Treatment

Merit® 2F or CoreTect® (imidacloprid), a systemic insecticide will be applied to soil beneath the drip line of host plants to control developing nymphs and adult psyllids. This material will be applied a minimum of one time to the soil of host plants at designated residential properties. Affected properties will be notified in writing at least 48 hours prior to treatment. Following treatment, completion notices are left with the homeowners detailing precautions to take and post-harvest intervals applicable to any fruit on the property.

HLB Treatment

Trigger: Treatment is warranted upon the detection of one or more HLB-infected host plants.

Treatment Area: Any HLB-infected host plant.

Treatment Plan: All host plants found to be infected with HLB will be removed and destroyed using mechanical means. Stumps may be physically removed or may be treated with Roundup® (containing glyphosate) in order to prevent re-sprouting.

IV. Quarantine

ACP Quarantine

Trigger: The detection of one or more psyllids.

Regulated Articles: All articles capable of harboring ACP shall be regulated in accordance with the most recent Federal Domestic Quarantine Order (USDA 2012) and the State Interior Quarantine 3435.

Quarantine Length: A minimum of two years past the last detection of ACP.

HLB Quarantine

Trigger: The positive confirmation of HLB in living host plant tissue.

Regulated Articles: All articles capable of harboring HLB shall be regulated in accordance with the most recent Federal Domestic Quarantine Order (USDA 2012) and the State Interior Quarantine 3439.

Quarantine Length: A minimum of two years past the last detection of HLB.

V. Outreach

Residents of affected properties are invited to a public meeting where officials from CDFA, the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the County Agricultural Commissioner's Office will be present to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with Food and Agricultural Code 5779. After treatment, completion notices are left with the residents detailing precautions to take and post-harvest intervals applicable to the citrus fruit.

Public information concerning the ACP/HLB project will consist of press releases to the public and direct notification of project developments to concerned local and State political representatives and authorities. Press releases are prepared by CDFA's information officer and the county agricultural commissioner, in close coordination with the project leader responsible for treatment. Either the county agricultural commissioner or the public information officer serves as the primary contact to the media.

**INTEGRATED PEST MANAGEMENT ANALYSIS OF ALTERNATIVE TREATMENT
METHODS TO ERADICATE THE HUANGLONGBING/CITRUS GREENING PATHOGEN,
Candidatus Liberibacter asiaticus
August 2015**

Below is an evaluation of alternative treatment methods to eradicate the Citrus Greening/ Huanglongbing (HLB) pathogen, *Candidatus Liberibacter asiaticus* (Las) which have been considered for treatment programs in California.

A. MECHANICAL CONTROL

Host Removal: including stump destruction.

All host plants found to be infected with HLB will be destroyed in order to stop the spread of the disease. Infected host plants will be removed and destroyed using mechanical means. Stumps may be physically removed or treated with Roundup® (containing Glyphosate) in order to prevent re-sprouting.

Root-grafted trees. In situations where the root systems of an infected tree and an adjacent tree of the same species are likely to have come into contact, such as where the two trees have overlapping canopy drip lines and root zones, trenching to a minimum depth of 24 to 30 inches between root-grafted trees to sever root-to-root contact, should be done to prevent the spread of the pathogen into the adjacent tree via grafted roots.

B. CULTURAL CONTROL

Cultural Control. Cultural controls involve the manipulation of cultivation practices including host selection to reduce the prevalence of pest populations. After an infected tree is removed, avoid replanting citrus and other Asian citrus psyllid (ACP) or HLB hosts on the same property. In addition, closely monitor remaining citrus on the property for the presence of ACP and for development of HLB symptoms. Immediately notify the California Department of Food and Agriculture (CDFA) or the County Agricultural Commissioner should symptoms develop, so sampling and testing of the newly symptomatic trees may be conducted. There are no citrus species currently known to be immune to HLB, so replanting with resistant citrus hosts is not an option.

C. BIOLOGICAL CONTROL

Microorganisms. There are no known biological controls currently available to eradicate the HLB pathogen from infected trees.

D. CHEMICAL CONTROL

Stump Treatment. A number of herbicides are used to kill stumps and root systems to prevent re-sprouting. Roundup®, which is a formulation of Glyphosate, is labeled for this application on citrus in California, using a 50% to 100% application to the cambium of the freshly cut stump. However, the herbicide moves systemically to kill the stump and roots of the infected tree. In situations where the root systems of an infected tree and an adjacent tree of the same species are likely to have come into contact, such as where the two trees have overlapping canopy drip lines and root zones, trenching between root-grafted trees to a minimum depth of 24 to 30 inches to sever root-to-root contact should be done to prevent movement of the herbicide from the infected stump and root system to the adjacent tree via the grafted roots. This action would

also have the added benefit of reducing the risk of future movement of the pathogen from the roots of the infected tree to the adjacent root-grafted tree.

Foliar Treatment: For protection of remaining citrus against the possible ACP vector dispersal caused by the tree removal process.

Because host removal could promote dispersal of female Asian Citrus Psyllids (ACP) in search of hosts outside of the treatment area, insecticide treatment of the infected plants should be done prior to host removal.

A number of contact insecticides have been researched for use against ACP elsewhere, particularly in Florida. The following types have been considered for use by CDFA; based on a combination of effectiveness against ACP, worker and environmental safety, and California registration status.

PyGanic®, an organic formulation of a pyrethrin, is registered for use on all host plants. However, PyGanic® alone is not effective in eradicating ACP. Researchers recommend that piperonyl butoxide, a synthetic insecticide synergist be combined with PyGanic® to enhance its effectiveness. Without piperonyl butoxide, environmental conditions may degrade the PyGanic® before an effect on ACP can occur. Piperonyl butoxide is not a certified organic substance; therefore, combining piperonyl butoxide with PyGanic® negates the organic certification. The Environmental Protection Agency classifies piperonyl butoxide as a group C carcinogen, a possible human carcinogen. For these reasons, PyGanic® is not an effective treatment against ACP.

Sevin® SL is a formulation of carbaryl which may be applied to the foliage of all host plants. Sevin® SL is effective against ACP. Sevin® SL is a wide-spectrum carbamate insecticide which controls hundreds of insect species, including beneficial insects. Sevin® SL requires an extended pre-harvest interval, which is not compatible with residential fruit-growing practices. For this reason, Sevin® SL is not the foliar insecticide of first choice for residential treatments. However, it remains a treatment option in particular situations where the preferred insecticide for foliar treatment, namely Tempo® SC Ultra, temporarily cannot be used because of label restrictions on annual usage amounts per property.

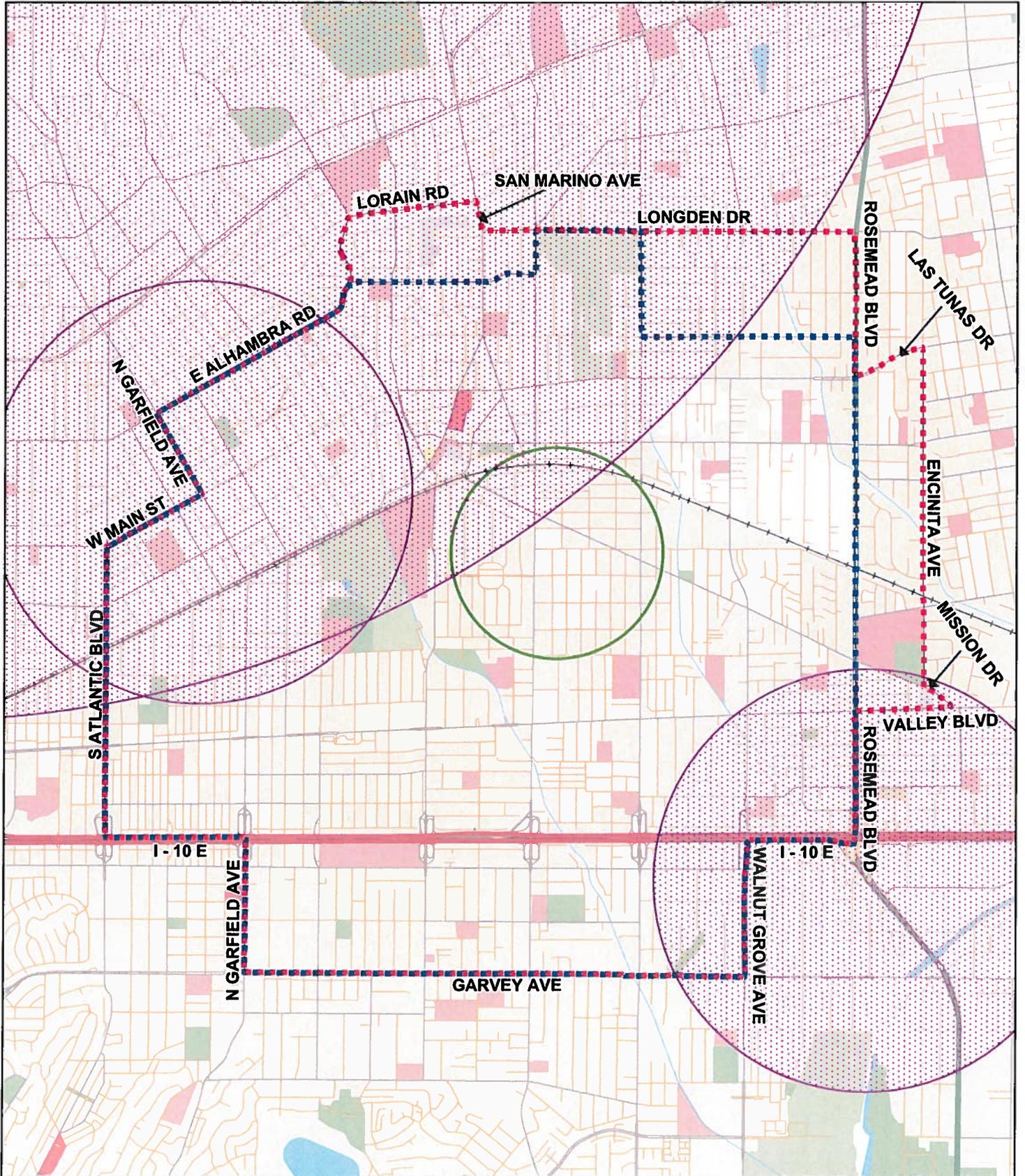
Tempo® SC Ultra is a formulation of cyfluthrin which may be applied to the foliage of all host plants. Tempo® SC Ultra is effective against ACP. Tempo® SC Ultra is a wide-spectrum synthetic pyrethroid insecticide which, like Sevin® SL, controls hundreds of insect species, including beneficial insects. Tempo® SC Ultra is preferentially used over Sevin® SL by CDFA because it has no pre-harvest interval, which makes it compatible with residential fruit-growing practices.

The chemical treatment program used by CDFA for control of ACP, *Diaphorina citri* (Hemiptera: Psyllidae), targets multiple life stages. A contact insecticide is used for an immediate control of adults in order to prevent spread, and a systemic insecticide is used to control developing 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, notably in Florida. The California Huanglongbing Task Force, a joint government, university, and industry group formed in 2007 to provide guidance to CDFA on matters pertaining to ACP and Huanglongbing, has endorsed the use of these chemicals in CDFA's treatment program.

F. RESOURCES

- Grafton-Cardwell, Elizabeth E., K. E. Godfrey, M. E. Rogers, C. C. Childers, and P. A. Stansly. 2006. Asian citrus psyllid. University of California, Division of Agriculture and Natural Resources Publication 8205. 8 pp. <http://www.anrcatalog.ucdavis.edu/pdf/8205.pdf>
- Noling, J.W. 2011. Citrus Root Growth and Soil Pest Management Practices. University of Florida Institute of Food and Agricultural Sciences Extension document ENY617 6 pp. <http://edis.ifas.ufl.edu>
- Rogers, M. E. and P. A. Stansly. 2009. Biology and Management of the Asian Citrus Psyllid, *Diaphorina citri* Kuwayama, in Florida Citrus. University of Florida Cooperative Extension Service, ENY-739. 7 pp. <http://edis.ifas.ufl.edu/pdffiles/IN/IN66800.pdf>.

**ASIAN CITRUS PSYLLID/HUANGLONGBING ERADICATION PROJECT (AMENDMENT)
 SAN GABRIEL, LOS ANGELES COUNTY
 2015**



- MAXIMUM PROGRAM BOUNDARY**
- ORIGINAL MAXIMUM PROGRAM BOUNDARY**
- PROPOSED 800M TREATMENT BOUNDARY**
- SENSITIVE ENVIRONMENTAL AREA / TREATMENT MITIGATIONS IN PLACE**



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

OFFICIAL NOTICE PLEASE READ IMMEDIATELY

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

On August 18, 2015, 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 city of San Gabriel, Los Angeles County. This detection is approximately 0.4 miles northeast of the HLB-infected citrus tree that was detected on July 10, 2015. HLB is a devastating disease of citrus worldwide 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 survey took place for several days over a one-square mile area, centered on the detection site. The results of this additional survey indicated that the infestation is sufficiently localized to be amenable for effective implementation of the CDFA's current ACP and HLB emergency response strategies, which include treatment and removal of the infected host plant.

HLB originated in Asia, and is considered the most devastating disease of citrus in the world. 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 making it unfit for human consumption. 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.

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 and spread by ACP. The emergency program is based on recommendations developed in consultation with the California HLB Task Force, the USDA, the Primary State Entomologist, and the Primary State Plant Pathologist. Based on these recommendations, the program requires removal of all HLB-infected trees. Pursuant to Sections 5401-5405 and 5761-5763 of the Food and Agricultural Code (FAC), 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 of the California Code of Regulations; Section 3591.21); abate the disease from the established treatment area; and, prevent further economic damage.

In accordance with integrated pest management principles, CDFA has evaluated possible eradication methods and determined that there are no biological or cultural control methods that are effective to eradicate HLB that allow CDFA to meet its statutory obligations. To comply with FAC mandates, the treatment plan for HLB eradication in Los Angeles County is removal of HLB-infected host plants. 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. Stumps may be physically removed or may be treated with Roundup® (containing glyphosate) in order to prevent re-sprouting.

Public Information:

Residents of affected properties will be invited to a public meeting where officials from CDFA, the Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the Los Angeles County Agricultural Commissioner's Office will be available to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with FAC Section 5779. After treatment, completion notices are left with the residents. Please contact CDFA's toll-free telephone number at 800-491-1899 and staff will be able to assist with any questions related to this project. This telephone number is also listed on all treatment notices.

Enclosed is the Proclamation of an Emergency Program, ACP/HLB Work Plan, a map of the treatment area, and alternative treatment methods analysis.

AMENDMENT TO THE PROCLAMATION OF AN EMERGENCY PROGRAM REGARDING THE HUANGLONGBING DISEASE

On August 18, 2015, 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 city of San Gabriel, Los Angeles County. This detection is approximately 0.4 miles northeast of the HLB-infected citrus tree that was detected on July 10, 2015. HLB is a devastating disease of citrus worldwide and is spread through feeding action by populations of the Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama. Based on the survey data, pest biology, information from California's Huanglongbing Task Force, recommendations provided to me by the Department's Primary State Entomologist and Primary State Plant Pathologist, and experience gained from the United States Department of Agriculture's (USDA) control efforts in the southeastern United States, I have determined that an infestation of HLB-infected ACPs and of HLB exists.

HLB originated in Asia, and is considered the most devastating diseases of citrus in the world. 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 making it unfit for human consumption. 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.

ACP is an exotic insect that is originally from Asia. It has been introduced into 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, Texas, and California (Fresno, Imperial, Kern, Los Angeles, Madera, Orange, Riverside, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Tulare, and Ventura 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. The psyllids cause direct 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, blocking sunlight from reaching the leaves. However, the most serious damage caused by ACP is due to its vectoring the bacterium that is the causal agent of HLB.

Under my statutory authority, as Secretary of the CDFA, I have decided, based upon the likely environmental and economic damage that would be inflicted by this detection of HLB, that it is incumbent upon me to address this threat. HLB presents a major threat to citrus grown within the State. California is the top citrus-producing state in the U.S., with total production valued at over \$1.8 billion. In a recent study in Florida, the presence of HLB increased citrus production costs by 40 percent (Irey et al. 2008). It is estimated that over the last five years in Florida, HLB has caused the loss of over 6,600 jobs, over \$1.3 billion in lost revenue to the citrus industry, and the loss of over \$3.6 billion in total economic activity (Hodges and Spreen 2012). Because HLB has been detected in Los Angeles County, the presence of ACP in California will pave the way for HLB to spread throughout

the state. HLB would have severe consequences to both the citrus industry and to the urban landscape via the decline and the death of citrus trees.

My duty to act, and this decision, is based upon authority set forth in Sections 24.5, 401.5, 403, 407, 408, 5401-5405, and 5761-5764 of the Food and Agricultural Code (FAC) authorizing and mandating the Secretary to: thoroughly investigate the existence of the HLB disease; to determine the probability that the disease will spread; to adopt regulations (Title 3 of the California Code of Regulations, Section 3591.21) as are reasonably necessary to carry out the provisions of this code; to abate the disease from the established eradication area; and, to prevent further economic damage. In order to determine the extent of the HLB infestation, and to define an appropriate response area, additional survey occurred for several days over a one-square mile area, centered on the detection site. The results of this additional survey indicated that the infestation is sufficiently localized to be amenable for effective implementation of CDFA's current HLB emergency response strategies, which include treatment. Emergency action is needed to protect California from the negative environmental and economic impact HLB will cause, should HLB-infected trees be allowed to remain in this area and spread via ACP. The enclosed project plan describes the actions that are necessary to mitigate the spread of HLB.

This decision, to proceed with a treatment program, is based upon a realistic evaluation that it may be possible to address the threat posed by HLB using currently available technology in a manner that is recommended by California's HLB Task Force. Treatment needs and environmental conditions are outlined in the attached work plan. In making this decision, CDFA has evaluated possible eradication methods. In accordance with integrated pest management principles, the following is a list of the options that I have considered for the eradication of the HLB infestation: 1) mechanical controls; 2) biological controls; and 3) cultural controls.

Based upon input from my professional staff, including memorandums from the Primary State Entomologist and Primary State Plant Pathologist, and the input of experts familiar with HLB, I have concluded that there are no biological, or cultural controls that are effective to eradicate HLB that allow CDFA to meet its statutory obligations. To eradicate HLB from this area, I am ordering the removal of all HLB-infected trees. If additional HLB-infected trees are detected in the survey area, the treatment area may expand to an 800-meter radius around any additional infected tree. A description of the alternative treatment methods considered for HLB, and methodologies chosen, is contained in the attached work plan.

Sensitive Areas

The treatment area has been reviewed by consulting the Department of Fish and Game's California Natural Diversity Database for threatened or endangered species. Mitigation measures will be implemented as needed. CDFA also consults with the U.S. Fish and

Wildlife Service and the National Marine Fisheries Service when rare and endangered species are located within the treatment area. CDFA will not perform eradication measures in undeveloped areas of native vegetation. All treatments will occur on residential properties, common areas within residential developments, and other non-commercial properties.

Treatment Plan

The proposed project area encompasses those portions of Los Angeles County which fall within an approximate one-square mile area around each property in which HLB has been detected. Activities will occur until negative survey data indicates that HLB is no longer present. At a minimum, this will be for a period of at least two years past the date of the last detection of HLB. The two year period is necessary to allow bacteria titers in any undiscovered asymptomatic HLB-infected host plants to build up to a detectable level. A map of the detection site with the project boundaries and the proposed treatment work plan is attached. In summary form, the treatment plan consists of the following elements:

1. **HLB Visual Survey.** All host plants will be inspected for HLB symptoms within an 800-meter radius around the detection site(s), at least twice a year. HLB-symptomatic plant tissue will be collected and forwarded to the CDFA Plant Pest Diagnostic Center (PPDC) for identification and analysis.
2. **HLB Disease Testing.** All collected symptomatic host tree tissues will be tested by the PPDC for the presence of HLB.
3. **HLB-infected Host Plant Removal.** All host plants found to be infected with HLB will be destroyed in order to stop the spread of the disease. Infected host plants will be removed and destroyed using mechanical means. Stumps may be physically removed or may be treated with Roundup® (containing glyphosate) in order to prevent re-sprouting.

Public Information

Residents of affected properties are invited to a public meeting where officials from CDFA, the California Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment, and the County Agricultural Commissioner's Office will be present to address residents' questions and concerns. Residents are notified in writing at least 48 hours in advance of any treatment in accordance with FAC Section 5779. After treatment, completion notices are left with the residents.

Public information concerning the HLB/ACP project will consist of press releases to the public and direct notification of project developments to concerned local and State political representatives and authorities. Press releases are prepared by CDFA's information officer and the county agricultural commissioner, in close coordination with the project

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leader responsible for treatment. Either the county agricultural commissioner or the public information officer serves as the primary contact to the media.

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.



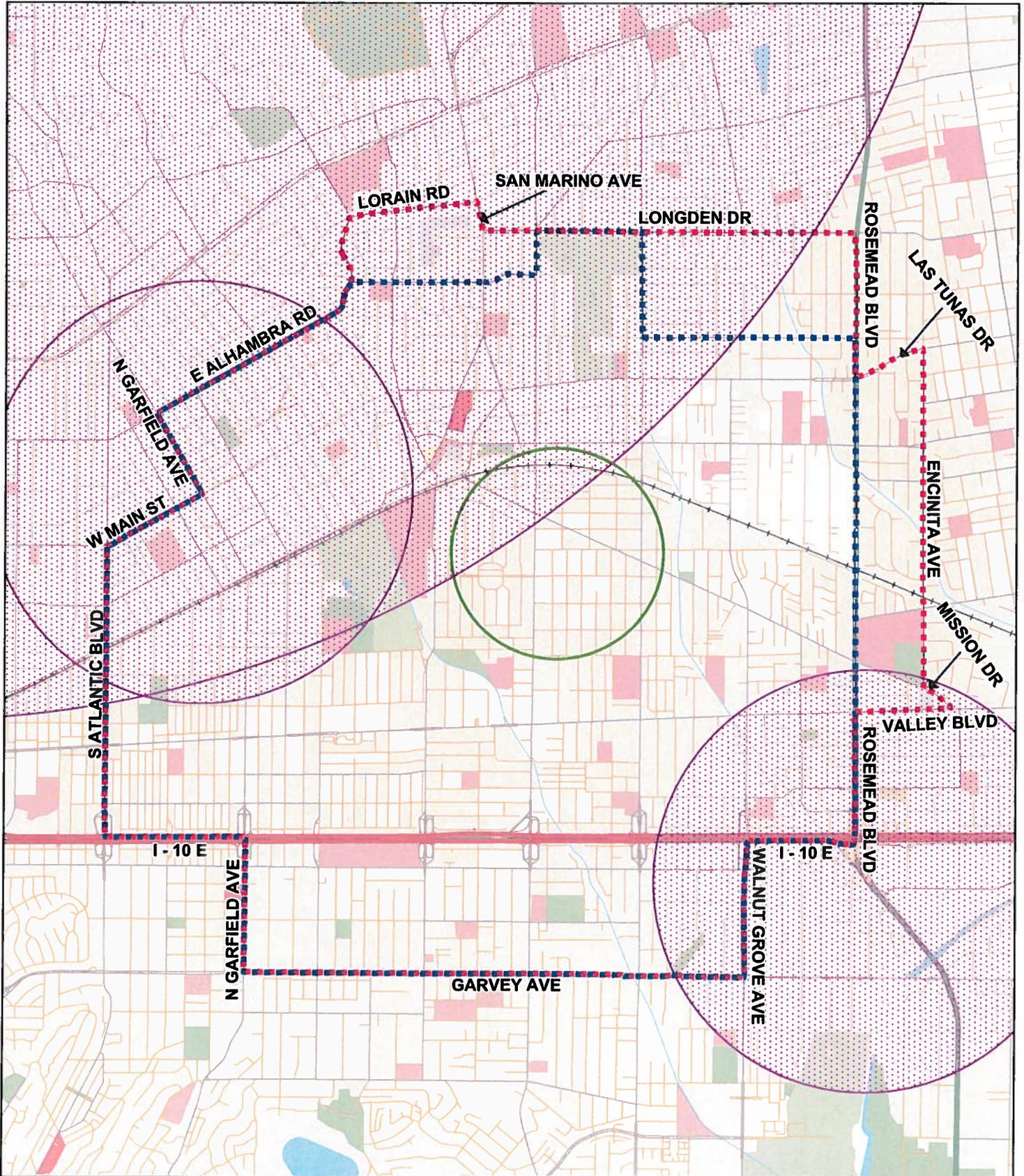
Karén Ross, Secretary

8/28/15

Date

Attachments

**ASIAN CITRUS PSYLLID/HUANGLONGBING ERADICATION PROJECT (AMENDMENT)
 SAN GABRIEL, LOS ANGELES COUNTY
 2015**



- - - - - **MAXIMUM PROGRAM BOUNDARY**
- - - - - **ORIGINAL MAXIMUM PROGRAM BOUNDARY**
- **PROPOSED 800M TREATMENT BOUNDARY**
- SENSITIVE ENVIRONMENTAL AREA / TREATMENT MITIGATIONS IN PLACE**