

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

PROCLAMATION OF AN EMERGENCY PROGRAM AGAINST THE GLASSY-WINGED SHARPSHOOTER

FOR THE AREA OF EL DORADO HILLS IN EL DORADO COUNTY

Since August 20, 2025, the California Department of Food and Agriculture (CDFA) confirmed the presence of the glassy-winged sharpshooter (GWSS), the invasive vector of the bacterium that causes Pierce's disease in grapes, in the area of El Dorado Hills, El Dorado County. Based on these detections and recommendations from CDFA GWSS staff entomologists, the CDFA concludes that an infestation of GWSS exists in the area. This pest presents a significant, clear, and imminent threat to the natural environment, agriculture, economy, and private and public property. Unless emergency action is taken during these GWSS' life cycles, there is high potential for sudden future detections in El Dorado County.

The GWSS is a dangerous, invasive, aggressive vector of Pierce's disease (PD). PD is considered one of the most devastating diseases of grapevines in the world. The bacterium that causes the disease, *Xylella fastidiosa*, kills grapevines within two to five years of infection. There is no cure for Pierce's disease. There are currently 274 properties of grape production within the county at risk from the recent GWSS detections. Over the last 11 years, El Dorado has seen grape values fluctuate between \$4.2 and \$12.1 million dollars. A total of 2,612 acres of grapes, valued at \$8,056,367, was grown in El Dorado County in 2024. In addition to grapevines, GWSS' hosts include over 360 genera of plants, which vary widely from woody plants to annual and perennial herbaceous plants.

PD threatens a crop production value of \$5.54 billion and associated economic activity within California of approximately \$73 billion. If unabated by the CDFA, the spread of GWSS in California would cause significant harm to the natural environment as it would lead to increased unmonitored use of pesticides by residents, and, where control and eradication measures are not used, increased disease in agricultural and landscape plants.

The recent detections of GWSS described above were sudden and now require immediate action to address the clear and imminent threat to California's natural environment, agriculture, economy, private and public property. Due to GWSS being a vector for the bacteria that causes PD and the pest's ability to overwinter in the adult life stage, there is a high potential for sudden future detections of GWSS in El Dorado Hills. Therefore, the Secretary is invoking Public Resources Code Section 21080(b)(4) to carry out immediate emergency action to prevent this loss and damage.

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 the Food and Agricultural Code (FAC); abate GWSS from the area; and prevent further economic damage. See FAC Sections 401, 403, 408, 5321-5323, 5401-5405, 5761-5763, 6047, 6047.1, and 6047.5, and Title 3 of California Code of Regulations (CCR) sections 3650-3654.

Based on the recent detections in El Dorado Hills, findings, and recommendations from GWSS staff entomologists, implementation of CDFA's rapid response strategies is necessary for eradication and control.

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In accordance with integrated pest management principles, CDFA has evaluated possible treatment methods and determined that there are no physical or cultural methods available to control GWSS in this area. Therefore, it is necessary to conduct chemical treatments and, in certain circumstances, biological controls, to abate this threat. The treatment plan for the GWSS infestation will be implemented from January 2026 through December 2028. Post treatment monitoring will resume in the spring of 2029 and will determine the necessity of additional treatments.

The treatment plan for the GWSS infestation shall be implemented within a 150-meter radius of each detection site, as follows:

- 1. Chemical Control. All properties with host plants within a 150-meter radius around each GWSS detection site may be treated according to the following protocol to control GWSS:
 - a. The pesticides Merit® 2F, 75WSP, 75WP, or CoreTect ®, (imidacloprid), may be applied to the root zone beneath GWSS host plants for controlling GWSS and providing long-term protection against reinfestation. Merit 2F, 75WSP, or 75WP may be applied as a foliar spray or soil drench, while CoreTect® tablets may be inserted two to five inches below the soil surface and watered in to initiate tablet dissolution. CoreTect may be used in place of Merit 2F, 75WSP or 75WP in situations where there are environmental concerns about soil surface runoff of the liquid Merit formulations, such as host plants growing next to ponds and other environmentally sensitive areas, or for hosts that aren't listed on the Merit label. The pesticide Tempo® SC Ultra or Ultra WP (beta-cyfluthrin) may be used as a foliar spray to control adult and nymphal stages of GWSS. The pesticide Altus™ (flupyradifurone) may be used as a foliar spray to control adult and nymphal stages of GWSS.
- 2. Biological Control. Biological control is a method of controlling target pests using other living organisms, such as predators, parasitoids, and pathogens. The biological control agents of GWSS used by the PDCP are stingless, minute (1/16 inch) parasitic wasps that specifically attack GWSS eggs (egg parasitoid). Female adult wasps deposit their eggs inside GWSS eggs and immature wasps develop inside the host eggs, with adult wasps eventually emerging from GWSS eggs. After mating, newly emerged wasps search for GWSS eggs to lay their eggs. Through this repeated life cycle, the parasitic wasps kill GWSS eggs and contribute to the suppression of GWSS populations. Depending on multiple factors, including but not limited to the proximity to other release sites and availability of parasitoids, additional biological control release sites may be used after treatments have been made.

Public Notification:

Residents of affected properties will be invited to a public meeting where officials from CDFA, the County Agricultural Commissioner's office, the Department of Pesticide Regulation, and the Office of Environmental Health Hazard Assessment, and the county agricultural commissioner's office shall be available to address residents' questions and concerns.

Except in circumstances where the County Agricultural Commissioner's office needs to execute an inspection or abatement warrant, residents will be notified in writing at least 48

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hours in advance of any treatment in accordance with the FAC Sections 5771-5779 and 5421-5436. For any questions related to this program, please contact the local County Agricultural Commissioner's office at the number listed on the treatment notice or the CDFA Pierce's Disease Control Program at 916-900-5024. Treatment information will be posted to the CDFA website.

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

Press releases, if issued, will be 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 GWSS eradication effort 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, a map of the treatment area, work plan, integrated pest management analysis of alternative treatment methods, and a pest profile.

Attachments

FINDINGS REGARDING AN EMERGENCY FOR THE GLASSY-WINGED SHARPSHOOTER Area of El Dorado Hills in El Dorado County Project PD-0034

The California Department of Food and Agriculture (CDFA) confirmed the presence of the glassy-winged sharpshooter (GWSS), *Homalodisca vitripennis*, in the area of El Dorado Hills, El Dorado County. These recent detections indicate that a breeding population exists in the area. Unless emergency action is taken during these GWSS' life cycles, then there is high potential for sudden future detections in El Dorado County. GWSS is an invasive pest which carries the deadly grapevine disease known as Pierce's disease (PD). GWSS is not established in this community and will cause harm to California's natural environment, agriculture, economy, and public and private property if allowed to become established.

Based on this detection and recommendations from CDFA GWSS staff entomologists, I have determined it is necessary to eradicate the infestation.

The Pierce's Disease Control Program (PDCP) has evaluated feasible treatment methods in accordance with integrated pest management (IPM) principles. As part of these principles, I have considered the following treatments for control of GWSS: 1) physical controls; 2) cultural controls; 3) biological controls; and 4) chemical controls. Upon careful evaluation of each these options, including input from PDCP, and using the experience gained from 18 previous successful eradication efforts, I have determined that there is a need to control this pest using available methods. These methods include treating GWSS host material with soil treatments and foliar treatments on and near properties where GWSS was found. These methods were selected based upon minimal impacts to the natural environment, biological effectiveness, minimal public intrusiveness, and cost. Depending on multiple factors, including but not limited to, proximity to other release sites and availability of parasitoids, additional biological control release sites may be used after treatments have been made.

Background

GWSS is an invasive and aggressive vector of Pierce's disease (PD). PD is considered one of the most devastating diseases of grapevines in the world. The bacterium that causes the disease, *Xylella fastidiosa*, kills grapevines within two to five years of infection. There is no cure for Pierce's disease.

GWSS was first reported in California in 1994 but probably arrived in the late 1980s. It is native to the southeastern United States and northeastern Mexico. The range of GWSS includes many habitats, including agricultural crops, urban landscapes, native woodlands, and riparian vegetation. The host list includes over 360 genera of plants, which vary widely from woody plants to annual and perennial herbaceous plants. Since the insect feeds on the nutrient-poor xylem fluid of the plant it must consume copious amounts of fluid in order to gain enough nutrition to grow and reproduce. Consequently, the adults and nymphs excrete large amounts of liquid while feeding, which gives the fruit and foliage a whitewashed appearance. Host preference changes according to the availability and nutritional value of host plants at any given time. GWSS builds up large populations on the diverse number of host plants that support it and is a strong flyer, traveling greater distances than native sharpshooters. While the native sharpshooters tend not to move much, GWSS can readily disperse out to 90 meters and up to 7 meters in height in a 6.7 MPH wind.

This insect pest presents a significant and imminent threat to the natural environment, agriculture, and economy of California. The disease that GWSS vectors threatens a crop production value of \$5.54 billion and associated economic activity within California of approximately \$73 billion. Other crop and ornamental plant resources such as almonds (valued at \$5.66 billion) and shade trees are also at risk from the Pierce's disease strain of the bacterium.

The GWSS typically has two generations per year and overwinters as an adult. These overwintering adults begin laying eggs the following spring. Eggs hatch in 10 to 14 days and the nymphs progress through five immature stages. In the summer, first generation adults begin to appear in May through July. Egg laying for the second generation occurs between mid-June and October. The nymphs emerging from these egg masses typically develop into overwintering adults. Because the GWSS detected between June and October will overwinter in the adult life stage, it is likely that there are additional GWSS in the environment that will spread and lead to future detections.

Additionally, if unabated by the Department, the spread of GWSS in California would cause significant harm to the natural environment as it would lead to increased, unmonitored use of pesticides by residents, and, where control and eradication measures are not used, increased disease in agricultural and landscape plants.

When GWSS arrived in California it had few natural enemies and its populations built up rapidly. California's first indication of the severe threat posed by this new disease and vector combination occurred in Temecula, Riverside County, in August of 1999, when over 300 acres of grapevines infested with the GWSS were infected with PD and ultimately destroyed. Between 1998 and 1999, the grape tonnage harvested in Temecula fell 36% with a lost production value estimated at \$15.2 million. With the introduction of GWSS into El Dorado County, viticulture in traditionally safe growing regions of the state is now at risk.

In 2000, the Legislature found and declared that PD and GWSS are a clear and present danger to California's grape industry, as well as many other commodities and plant life. The Legislature also declared that measures to prevent transmission of PD and control GWSS are in the public interest and an exercise of the police power of the State for the purpose of protecting the health, peace, safety, and general welfare of the people of California. In addition, the Legislature created the PDCP to combat PD. The PDCP implements five program elements to minimize the impacts of Pierce's disease and its vectors in California. PDCP's strategy is to slow or stop the spread of the GWSS while short and long-term solutions to Pierce's disease are developed. The five elements are:

1. Contain the Spread

Prevent the spread of GWSS to new areas of the state by regulating shipments of host plants and other host material, and suppressing populations to prevent natural spread.

2. Statewide Survey and Detection

Find new GWSS infestations quickly and confirm that uninfested areas remain free of infestation by conducting systematic trapping in uninfested at-risk areas.

3. Rapid Response

Respond quickly to detections of GWSS in new areas by intensively surveying the area and applying treatments if necessary.

4. Outreach

Raise awareness about Pierce's disease and its vectors while responding to the concerns of growers and the public by conducting outreach and education activities.

5. Research

Develop long-term, sustainable solutions to Pierce's disease and its vectors by sponsoring and facilitating research and development.

The PDCP is a cooperative effort that combines the resources and expertise of federal, state, and county agriculture departments, the University of California, and grape, citrus, and other agricultural communities. The Program works cooperatively with the county agricultural commissioners (CAC) to conduct most of the first four program elements discussed above through work plans that are established between PDCP and the CAC. PDCP accomplishes the fifth element (research) by supporting research at universities and other institutions.

Since the PDCP was established, the five-element approach has led to eradication of 18 incipient infestations in counties as diverse and varied as Imperial County in the south to Butte County in the north.

Based upon input from PDCP, I find there are no physical or cultural methods that are effective for controlling GWSS and that would allow CDFA to meet its statutory obligations to protect the agriculture and environment of the state. Therefore, it is necessary to conduct chemical treatments and, in certain circumstances, biological controls, to abate this threat. As a result, I am allowing PDCP, in coordination with the El Dorado County Agricultural Commissioner, to conduct chemical treatments for GWSS on host material using ground-based equipment within 150-meter radius around GWSS finds and any subsequent finds.

Sensitive Areas

CDFA will consult 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, and the National Marine Fisheries Service, to determine if rare and endangered species are located within the treatment area. Mitigation measures for rare and endangered species will be implemented. The CDFA, in coordination with the El Dorado County Agricultural Commissioner, shall not apply pesticides to bodies of water or undeveloped areas of native vegetation. All treatments will be applied in accordance with federal, state, and local pesticide application laws, rules, and guidelines.

Work Plan

The proposed treatment effort will encompass this portion of El Dorado County where GWSS has been detected, and any subsequent detection sites. The treatment plan for the GWSS infestation will be implemented from January 2026 through December 2028. This timeframe is necessary because once treatments are completed this year the post treatment monitoring will continue through November, then cease until warmer temperatures are achieved in the spring of 2029. Monitoring for GWSS becomes ineffective when temperatures are below the flight threshold for this insect, which is about 65°F. Post treatment monitoring will resume in the spring of 2029 and will determine the necessity of additional treatments. The plan will be implemented within a 150-meter radius of each detection site as follows:

1. GWSS Monitoring. Yellow panel traps may be placed in the area within one square mile of each GWSS detection site at a density of about 30 traps per square mile and will be initially serviced twice per week. After two weeks the inspection interval may be reduced to once per week. Once the delimitation has been completed, the general trap servicing cycle will revert to once every two or three weeks.

- 2. GWSS Visual Survey. Host plants may be inspected for GWSS within a quarter mile radius of find sites. GWSS suspects shall be collected and forwarded to the CDFA Plant Pest Diagnostic Center (Lab) for identification and analysis.
- 3. Chemical Control. Treatments will be made by ground equipment only and consist of applications to the rootzone of host plants to provide long-term, systemic protection against re-infestation of GWSS. Some properties may also receive a foliar treatment. All properties and adjacent properties with host plants within 150-meters of each GWSS detection will be treated according to the following protocol to control GWSS:

The pesticides Merit® 2F, 75WSP, 75WP, or CoreTect® (imidacloprid) may be applied to the root zone beneath GWSS host plants for controlling GWSS and providing long-term protection against reinfestation. Merit 2F, 75WSP, and 75WP may also be applied as a foliar spray or soil drench, while CoreTect tablets may be inserted two to five inches below the soil surface and watered in to initiate tablet dissolution. CoreTect may be used in place of Merit 2F, 75WSP or 75WP in situations where there are environmental concerns about soil surface runoff of the liquid Merit formulations, such as host plants growing next to ponds and other environmentally sensitive areas, or for hosts that aren't listed on the Merit label. The pesticide Tempo® SC Ultra or Ultra WP (beta-cyfluthrin) may be used as a foliar spray to control adult and nymphal stages of GWSS. The pesticide Altus™ (flupyradifurone) may be used as a foliar spray to control adult and nymphal stages of GWSS.

- 4. Biological Control. Biological control is a method of controlling target pests using other living organisms, such as predators, parasitoids, and pathogens. The biological control agents of GWSS used in PDCP are stingless, minute (1/16 inch) parasitic wasps that specifically attack GWSS eggs (egg parasitoid). Female adult wasps deposit their eggs inside GWSS eggs and immature wasps develop inside the host eggs, with adult wasps eventually emerging from GWSS eggs. After mating, newly emerged wasps search for GWSS eggs to lay their eggs. Through this repeated life cycle, the parasitic wasps kill GWSS eggs and contribute to suppression of GWSS populations. As a partially infested county there are already biological control release and monitoring sites in El Dorado County. Additional release sites could be added later, depending on multiple factors including, but not limited to, number of GWSS finds and their proximity to riparian habitat.
- 5. Post-Treatment Monitoring. An assessment of the GWSS populations will be conducted on a limited number of selected properties throughout the treatment area to determine the overall effectiveness of the treatments. Post-treatment sampling will be conducted using the same protocols as the pre-treatment sampling to ascertain effectiveness of the treatments.

Public Information

Residents of affected properties will be invited to a public meeting where officials from the CDFA, the County Agricultural Commissioner's Office, the California Department of Pesticide Regulation, and the Office of Environmental Health Hazard Assessment, will be present to address residents' questions and concerns.

Except in circumstances where the County Agricultural Commissioner's office needs to execute an inspection or abatement warrant, residents will be notified in writing at least 48 hours in advance of any treatment in accordance with the California Food and Agricultural Code (FAC) sections 5771-5779 and 5421-5436.

Following the treatment, completion notices will be left with the residents detailing any precautions to take and post-harvest intervals applicable to fruit bearing trees on the property.

Press releases, if issued, will be prepared by the CDFA Information Officer in consultation with the county agricultural commissioner and PDCP staff. Either the county agricultural commissioner or the CDFA Information Officer will serve as the primary contact to the media.

Information concerning the GWSS eradication effort shall be conveyed directly to Local and State political representatives and authorities via letters, emails, and/or faxes.

Treatment information will be posted to the website located at https://www.cdfa.ca.gov/pdcp/PD GWSS NOT Mtg.html. For any questions related to this program, please contact the local county agricultural commissioner's office listed on the treatment notice or the PDCP at 916-900-5024.

Findings

Due to the detection of GWSS, there exists a significant, clear, and imminent threat to California's natural environment, agriculture, public and private property, and its economy.

Unless emergency action is taken during the life cycles of recently detected GWSS, there is high potential for sudden future detections in El Dorado County.

The work plan involving chemical and biological control of this pest is necessary to prevent loss and damage to California's natural environment, agriculture, private and public property, and its economy.

Therefore, I am invoking Public Resources Code Section 21080(b)(4) to carry out immediate emergency action to prevent this loss and damage.

Му	decision	to adopt fi	ndings and	take action	on is bas	ed on Se	ections 24.5	, 401.5,	403, 4	07, 408,
532	21-5323,	5401-5405	, and 6045	-6047 of t	he FAC,	and Title	3 California	a Code	of Reg	ulations
Sec	ctions 36	50-3654.								

Karen Ross, Secretary	Date	

PIERCE'S DISEASE CONTROL PROGRAM

RESPONSE/CONTROL PROGRAM FOR PIERCE'S DISEASE AND ITS VECTORS, AND OTHER DESIGNATED PESTS AND DISEASES

EL DORADO COUNTY

The County agrees to perform the listed activities in order to:

- Implement an intergovernmental, coordinated state and community-wide plan to provide detection and delimitation of the glassy-winged sharpshooter (GWSS) and other designated pests and diseases in El Dorado County and suppress or eradicate any populations as rapidly as possible.
- Ensure the movement of products and commodities does not present a risk of moving GWSS to non-infested areas.

Designated Agency

The El Dorado County Department of Agriculture (County) is designated by the El Dorado County Board of Supervisors as the local public entity to conduct the Pierce's Disease Control Program (PDCP) within the County. The California Department of Food and Agriculture (CDFA) will work in cooperation with the County, the State PDCP Science Advisory Panel, officials in affected counties, the El Dorado County PDCP Task Force (if applicable), and other interested parties in implementing this plan.

RESPONSIBILITIES

CDFA Responsibilities

The CDFA shall:

- Provide training on management practices at least one week prior to any activity occurring.
- Provide biological control program guidance and support to the County as favorable agents become available.
- Provide on-site expertise, as needed.

County Responsibilities

The County shall:

- Act as local public entity for the PDCP activities occurring within the jurisdiction of the county.
- Act as lead liaison to local City Councils, the County Board of Supervisors, county legal counsels, and other county agencies, regarding the PDCP activities.
- Activities described in this workplan qualify for the exemption to CEQA under Public Resources Code Section 21080(b)(4). The County will complete tiering strategy checklists for inspection, trapping, and treatment (if applicable) and ensure all activities follow the CDFA Management Practices and Mitigation Measures.

- Conduct a GWSS detection trapping program in accordance with GWSS Statewide Detection and Delimitation Protocols (July 1, 2024). The County will submit a written request and justification to the PDCP if it wishes to deviate from the protocols.
- Upon discovery of a GWSS find in a non-infested area, promptly conduct all delimitation
 and intensive (property-by-property) surveys in the county in accordance with the GWSS
 Statewide Detection and Delimitation Protocols (July 1, 2024). Additional survey staff
 may be contracted from the California Conservation Corps upon approval by PDCP.
 Provide status reports on the results of all surveys, including detailed maps of the
 surveyed area and infested properties.
- Implement the CDFA GWSS Nursery Shipping Protocol, bulk citrus requirements, and all
 other commodity-movement protocols, as necessary, including associated compliance
 agreements and exhibits. The list of approved products for bulk citrus and nursery
 treatment and/or certification is listed in CDFA's Management Practices and Mitigation
 Measures. The County will submit a written request and justification to the PDCP if it
 wishes to deviate from the protocols.
- In the event of an infestation, conduct treatments in accordance with the CDFA GWSS Treatment Protocol. Monitor nurseries within the infested area for compliance.
- Take any necessary enforcement action to ensure regulatory compliance.
- Coordinate with CDFA to fully participate in the development and implementation of a
 data collection system in accordance with Food and Agricultural Code Section
 6046(g)(5). The data collection system will make it possible to track and report new
 infestations of Pierce's disease and its vectors, and other designated pests and
 diseases, in a manner respectful of property and other rights of those affected.

LOCAL APPEAL PROCESS

Pursuant to Section 3651(c)(3) in Title 3 of the California Code of Regulations, the El Dorado County Department of Agriculture's PDCP Coordinator shall conduct a hearing if any application of the workplan is appealed in writing to him/her or his/her agency. Once the Coordinator receives an appeal, he/she or his/her agent will respond within 10 days to the appellant. The appellant will be given notice as to the date and time for the hearing. At the hearing, the appellant will be given the opportunity to be heard by the Coordinator and to present evidence on matters concerning the application of the workplan. The Coordinator will render a decision and respond to the appellant in writing within 30 days of the hearing. The results of said hearing will be transmitted to CDFA.

GWSS TREATMENT PROTOCOL

Treatment Options

The following treatment information is based on the option of treating all known infested properties. It is intended as a guideline and may be modified to adapt to local and/or changing situations. At all stages of the program, an assessment will be made as to the probability of success. For example, if GWSS is found to be infesting a very large area or is infesting wide areas of sensitive habitat, the County will immediately consult with the CDFA to determine the preferred course of action.

Treatment Material Selection

A list of registered materials will be reviewed to determine the most appropriate to use based on: 1) registered use as a general treatment for residential plantings; 2) registered on most plant species known to be hosts (feeding and oviposition) for GWSS; and 3) known to control leafhoppers. The list of approved products for residential use is listed in CDFA's management practices and mitigation measures.

Threatened/Endangered Species/Environmentally Sensitive Areas

The County and the CDFA will identify any threatened/endangered species and/or environmentally sensitive areas within the proposed treatment area before treatments begin. If needed, appropriate mitigation measures will be developed, in consultation with the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, and the CDFA, for these sensitive areas. The County will notify all registered beekeepers near the infested area of the GWSS treatment activities.

Beekeeper Notification

The County will identify registered beekeepers in the treatment zone, in addition to the following:

- Notify registered beekeepers with information about the upcoming treatments.
- Notify ground personnel of any properties that are known to have bees.
- Identify potential unregistered beekeepers by educating ground personnel to be on the lookout for beehives.
- Educate ground personnel on how to handle bee encounters.
- Adhere to label requirements for pollinators.
- Adhere to label requirements for flowering hosts and bloom issues.

Public Outreach

The County will act as lead spokesperson for the PDCP activities within the County. The County, in cooperation with the CDFA, will generate press releases and distribute information to all affected communities.

- A telephone help line will be established and staffed to answer calls concerning the PDCP activities. Multi-lingual speakers may be required to adequately staff this help line. The help line will also be coordinated to include public health and animal health information.
- Informational meetings will be held to advise homeowners and other interested parties of treatment activities.

The CDFA will develop technical information and provide technical support and training, assist in the development and dissemination of literature, and act as a clearinghouse for information to the public and the press.

Medical/Veterinarian Information

The County will contact the County Health Officer (CHO) with details of any proposed treatment. If the CHO has questions about public health aspects of the program, please contact the Branch Chief of the Pierce's Disease Control Program at 916-900-5024.

Questions relating to Animal Health will be referred to CDFA's Animal Health and Food Safety Services at (916) 900-5002. A "Veterinary Fact Sheet" may be prepared and provided for questions relating to pets or livestock.

Pre-Treatment Notification

Pre-treatment notification will be conducted through the local news media and by door-to-door notification.

- Notices will be in languages appropriate to the affected community and will include information regarding material used, precautions, date of application, and a telephone number and contact for the PDCP staff.
- Notices will be given "door-to-door" to infested properties and adjacent properties.

General Treatment Procedures

Treatments will begin following the intensive survey and after all help lines are established and community relations measures have been taken. Maintenance of good community relations will be essential. All pesticide applications will be made by certified Pest Control Operators under the direction of the County, or by the County with agreement from the PDCP. Pesticides will be used according to registration and label directions. Sound pesticide safety procedures will be followed.

- Interval: As allowed by label.
- Rate: Follow label directions.
- Post-treatment notice with re-entry statement and pre-harvest interval for treated fruits/vegetables.
- Treatment crews will be properly trained and equipped according to established CDFA protocols for treatment of residential properties.
- Property treatment records will be kept.
- The County will ensure that all treatment activities are in compliance with all pesticide laws and regulations.

Environmental Monitoring

The CDFA, in cooperation with County, will arrange for environmental monitoring to be conducted by the California Department of Pesticide Regulation (CDPR), Environmental Monitoring/Pest Management Branch. The County personnel will work closely with environmental monitoring personnel to identify suitable sites. The following may be monitored:

- Surface water, turf, foliage, available fruits and vegetables, outside air and tank mix.
- Identified sensitive areas.

Additional monitoring may be necessary if needs are identified. However, if sufficient data are gathered indicating no adverse environmental impacts, the environmental monitoring may be modified or deleted from the program. This decision will rest with the CDFA and the County.

Post-Treatment Monitoring

An assessment of the GWSS populations will be conducted on a limited number of selected properties throughout the treatment area to determine the overall effectiveness of the treatments.

- Pre-treatment sampling will be conducted and counts of the GWSS will be made to determine numbers of the GWSS life forms.
- Post-treatment sampling will be conducted using the same protocols to ascertain effectiveness of the treatment(s).

PEST PROFILE

Common Name: Glassy-winged Sharpshooter

Scientific Name: Homalodisca vitripennis

Order and Family: Hemiptera, Cicadellidae

<u>Description</u>: The glassy-winged sharpshooter (GWSS) is a relatively large leafhopper, measuring about 0.5 inches long. Adult GWSS are generally dark brown to black when viewed from the top or side, with small yellow dots on the head and thorax. The nymphs look similar to adults except they are smaller, wingless, and grayish in color. Females lay their eggs in masses of about 10 to 12 eggs on the lower surface of leaves. The egg masses resemble green blisters.

<u>History</u>: Although it was first reported in California in 1994, GWSS likely arrived in the state in the late 1980s as egg masses on plants. In 1999, significant vineyard losses in Southern California were determined to be due to GWSS spreading Pierce's disease to grapevines. This was the first indication of the severe threat posed by this new invasive pest.

<u>Distribution</u>: GWSS is native to the southeastern United States and northeastern Mexico. Since its initial introduction into Southern California, GWSS has spread throughout most of Southern California and into parts of the southern San Joaquin Valley.

<u>Life Cycle</u>: GWSS typically has two generations per year and overwinters as an adult. Overwintering adults begin laying eggs in February, with most of egg laying occurring between late March and April. Nymphs hatch in 10 to 14 days and feed on young succulent stems while they progress through five nymphal stages. The first-generation adults appear in May through July, with egg laying occurring between June and October. The nymphs emerging from these egg masses develop into adults, which overwinter and lay eggs the following spring.

<u>Hosts, Range, and Economic Importance</u>: The range of GWSS includes many habitats, including agricultural crops, urban landscapes, native woodlands, and riparian vegetation. The host list includes over 360 genera of plants, and ranges widely from woody plants to annual and perennial herbaceous plants. Since the insect feeds on the nutrient-poor xylem fluid of the plant, GWSS must consume large amounts of fluid to gain enough nutrition to grow and reproduce. Consequently, the adults and nymphs excrete large amounts of liquid while feeding, which gives fruit and foliage a whitewashed appearance. Host preference changes according to the availability and nutritional value of host plants at any given time.

GWSS is a significant vector of *Xylella fastidiosa*, the bacterium that causes Pierce's disease of grapes. Although Pierce's disease has been in California for over 100 years, native vectors do not transmit the bacterium as extensively as GWSS. GWSS is a serious threat to California vineyards because it moves faster and flies greater distances into vineyards than native sharpshooters. It also builds up large populations and can feed on the tougher, lower parts of grapevine stems. When the GWSS feeds on a plant that is infected with *X. fastidiosa*, it acquires the bacteria, which multiplies within the insect's mouthparts. The sharpshooter then transfers the bacteria to other plants when it feeds. Symptoms include chlorosis and scorching of leaves, with entire grapevines dying within one to five years.

In California, in addition to the strains of *X. fastidiosa* that cause Pierce's disease, there are also strains that cause other plant diseases such as alfalfa dwarf, almond leaf scorch, mulberry leaf scorch, oleander leaf scorch, and sweetgum dieback. At this time there is no known cure for any of these diseases.

Host List:

Common Name	Scientific Name
Abelia	Abelia spp.
Acacia	Acacia spp.
Aeonium	Aeonium spp.
African tulip tree	Spathodea spp.
Agapanthus	Agapanthus spp.
Agave	Agave spp.
Albizzia	Albizia spp.
Alder	Alnus spp.
Aleurites	Aleurites spp.
Aloe plant	Aloe spp.
Amaranth	Amaranthus spp.
American linden tree	Tilia spp.
Ananas	Ananas spp.
Annona (cherimoya)	Annona spp.
Apple	Malus spp.
Aptenia	Aptenia spp.
Aralia ivy	Fatshedera spp.
Arborvitae	Taisnedera spp. Thuja spp.
Arizona rosewood	Vauquelinia spp.
Ash	Fraxinus spp.
Asparagus	Asparagus spp.
Aspidistra	Aspidistra spp.
Aucuba	Aspidistra spp. Aucuba spp.
Australian bluebell creeper	Sollya spp.
Australian tree fern	Alsophila spp.
Avocado	Persea spp.
Ayo ginger	неdychium spp.
Azalea	Rhododendron spp.
Baccharis	Baccharis spp.
Banana	Musa spp.
Barbados Gooseberry	Регезкіа spp.
Barberry	Регезкіа spp. Berberis spp.
Basket plant	Aeschynanthus spp.
Bauhinia	Bauhinia spp.
Bean	Phaseolus spp.
Beard-tongue Bee bee Tree	Penstemon spp.
	Tetradium spp.
Beech tree	Fagus spp.
Begonia	Begonia spp.
Bignonia	Bignonia spp.
Birch	Betula spp.
Bird-of-paradise	Strelitzia spp.
Blackberry	Rubus spp.
Blood-trumpet	Distictus spp.
Blue sky flower	Thunbergia spp.
Blueberry	Vaccinium spp.
Boneset	Eupatorium spp.

Bottle tree	Brachychiton spp.
Bottlebrush	Callistemon spp.
Bougainvillea	Bougainvillea spp.
Box tree	Lophostemon spp.
Box tree Boxleaf azara	Azara spp.
Boxwood	Buxus spp.
Brazilian dutchman's pipe	Aristolochia spp.
Brunfelsia	Brunfelsia spp.
Buckthorn	Rhamnus spp.
Bugleweed	Ajuga spp.
Butterfly bush	Buddleja spp.
Cactus	Opuntia spp.
Caesalpinia	Caesalpinia spp.
Calla lily	Zantedeschia spp.
Camellia	Camellia spp.
Canna	Canna spp.
Cape chestnut	Calodendrum spp.
Cardboard sago	Zamia spp.
Carob	Ceratonia spp.
Castanospermum	Castanospermum spp.
Castorbean	Ricinus spp.
Cat's claw	Macfadenya spp.
Catawba	Catalpa spp.
Ceratostigma	Ceratostigma spp.
Cestrum	Cestrum spp.
Champak	Michelia spp.
Chaste tree	Vitex spp.
Chinaberry	Melia spp.
Chinese tallow	Sapium (Triadica) spp.
Chinquapin	Castanopsis spp.
Chitalpa	Chitalpa spp.
Chokecherry	Aronia spp.
Christmas cactus	Schlumbergera spp.
Chrysanthemum	Chrysanthemum spp.
Cinnamomum	Cinnamomum spp.
Citrus	Citrus spp.
Cleyera	Cleyera spp.
Clytostoma	Clytostoma spp.
Cocculus	Cocculus spp.
Cocklebur	Xanthium spp.
Cocos	Cocos spp.
Coffee	Coffea spp.
Colleus	
Coneflower	Coleus spp.
	Rudbeckia spp.
Corol trop	Coprosma spp.
Coral tree	Erythrina spp.
Coreopsis	Coreopsis spp.
Cotoneaster	Cotoneaster spp.
Cotton	Gossypium spp.
Cottonwood	Populus spp.
Cranesbill	Geranium spp.
Crape myrtle	Lagerstroemia spp.
Crassula	Crassula spp.
Cupaniopsis	Cupaniopsis spp.
Cuphea	Cuphea spp.
Cycad	Cycas spp.

Date palm	Phoenix spp.
Daylily	Hemerocallis spp.
Deodar cedar	Cedrus spp.
Desert willow	
	Chilopsis spp.
Dianella	Dianella spp.
Dianthus	Dianthus spp.
Dietes	Dietes spp.
Dodonaea	Dodonaea spp.
Dogwood	Cornus spp.
Dracaena	Dracaena spp.
Elaeagnus	Elaeagnus spp.
Elaeocarpus	Elaeocarpus spp.
Elderberry	Sambucus spp.
Elephant Ear	Colocasia spp.
Elm	Ulmus spp.
Ensete	Ensete spp.
Eriobotrya	Eriobotrya spp.
Escallonia	Escallonia spp.
Eucalyptus	Eucalyptus spp.
Eugenia	Eugenia spp.
Euonymus	Euonymus spp.
Euphorbia	Euphorbia spp.
Euryops	Euryops spp.
Evening primrose	Oenothera spp.
Evergreen clematis	Clematis spp.
Evergreen grape	Rhoicissus spp.
Feijoa	Feijoa spp.
Fig	
Firewheel tree	Ficus spp.
	Stenocarpus spp.
Fishtail	Caryota spp.
Five finger	Pseudopanax spp.
Flax lily	Phormium spp.
Fleabane	Erigeron spp.
Floss-silk tree	Chorisia spp.
Foxglove	Digitalis spp.
Fringe tree	Chionanthus spp.
Frogfruit	Phyla spp.
Gardenia	Gardenia spp.
Gazania	Gazania spp.
Geijera	Geijera spp.
Giant turf lily	Liriope spp.
Giant turf lily	Lirope spp.
Ginger	Alpinia spp.
Ginko	Ginkgo spp.
Gladiolus	Gladiolus spp.
Gold cup	Solandra spp.
Gold dust plant	Aucuba spp.
Golden dewdrop	Duranta spp.
Golden-bells	Forsythia spp.
Golden-rain tree	Koelreuteria spp.
Goldenrod	Solidago spp.
Grape	Vitis spp.
Grape ivy	Cissus spp.
Green ebony	
Grewia	Jacaranda spp.
	Grewia spp.
Griselinia	Griselinia spp.

Guava	Psidium spp.
Guinea Gold Vine	Hibbertia spp.
Hardenbergia	Hardenbergia spp.
Hebe	Hebe spp.
Hibiscus	Hibiscus spp.
Holly	llex spp.
Hollyhock	Althaea spp.
Honey locust	Gleditsia spp.
Honey myrtle	Melaleuca spp.
Honeysuckle	Lonicera spp.
Hornbeam	Carpinus spp.
Horsechestnut	Aesculus spp.
	Hydrangea spp.
Hydrangea	
Hymenosporum	Hymenosporum spp.
Indian Rosewood	Dalbergia spp.
Indian snakeroot tree	Rauvolfia spp.
Itea	Itea spp.
lvy	Hedera spp.
Japanese aralia	Aralia spp.
Japanese fatsia	Fatsia spp.
Japanese Maple	Acer spp.
Japanese silvertree	Neolitsea spp.
Jasmine	Jasminum spp.
Jimsonweed	Datura spp.
Jojoba	Simmondsia spp.
Jujube	Ziziphus spp.
Juniper	Juniperus spp.
Kaffir lily	Clivia spp.
Kaffir plum	Harpephyllum spp.
Kalanchoe	Kalanchoe spp.
Kangaroo Paw	Anigozanthos spp.
Kumquat	Fortunella spp.
Lady palm	Rhapis spp.
Lambsquarter	Chenopodium spp.
Laurel	Laurus spp.
Leadwort	Plumbago spp.
Lemon verbena	Aloysia spp.
Leptospermum	Leptospermum spp.
Lettuce	Lactuca spp.
Leucodendron	Leucodendron spp.
Lilac	Syringa spp.
Lionstail	Leonotis spp.
Lippia	Lippia spp.
Liriope	Liriope spp.
Lithocarpus	Lithocarpus spp.
Locust	Robinia spp.
Loropetalum	Loropetalum spp.
Luma	Luma spp.
Lychee	Litchi spp.
Macadamia	Macadamia spp.
Madagascar jasmine	Stephanotis spp.
Madagascar periwinkle	Catharanthus spp.
Magnolia	Magnolia spp.
Majestic palm	Ravenea spp.
Mallow	Malva spp.
Mandevilla	Mandevilla spp.
MALIACYIIIA	manavina opp.

Mango	Mangifera spp.
Manzanita	Arctostaphylos spp.
Marigold	Tagetes spp.
Markhamia	Markhamia spp.
Matilija poppy	Romneya spp.
Maytenus	Maytenus spp.
Mesquite	Prosopis spp.
Metrosideros	Metrosideros spp.
Mexican bluebells	Ruellia spp.
Mexican Palo Verde	Parkinsonia spp.
Milkweed	Asclepias spp.
Milkwort	Polygala spp.
Mock orange	Philadelphus spp.
Monstera	Monstera spp.
Moringa	Moringa spp
Morning glory	Ipomoea spp.
Mother fern	
Mountain ash	Asplenium spp.
	Sorbus spp.
Mountain mahogany	Cercocarpus spp.
Mulberry	Morus spp.
Myoporum	Myoporum spp.
Myrsine	Myrsine spp.
Myrtle	Myrtus spp.
Nandina	Nandina spp.
Natal Plum	Carissa spp.
New Zealand laurel	Corynocarpus spp.
Oak	Quercus spp.
Oleander	Nerium spp.
Olive	Olea spp.
Orange Jessamine; curry leaf	Murraya spp.
Oregon grape	Mahonia spp.
Osmanthus	Osmanthus spp.
Osteospermum	Osteospermum spp.
Palms	Chamaedorea spp.
Palo Verde	Cercidium spp.
Pandorea	Pandorea spp.
Papaya	Carica spp.
Passion fruit	Passiflora spp.
Pear	Pyrus spp.
Pelargonium	Pelargonium spp.
Pepper plant	Piper spp.
Pepper, chile	Capsicum spp.
Periwinkle	Vinca spp.
Persimmon	Diospyros spp.
Peruvian lily	Alstroemeria spp.
Philodendron	Philodendron spp.
Phlox	Phlox spp.
Photinia	Photinia spp.
Pincushion	Leucospermum spp.
Pine	Pinus spp.
Pistachio	Pistacia spp.
Pithecellobium	Pithecellobium spp.
Pittosporum	Pittosporum spp.
Plectranthus	Plectranthus spp.
Podocarpus	Podocarpus spp.
Pokeweed	Phytolacca spp.
LOVEMBER	r nytolacca spp.

Polygonum	Polygonum spp.
Pomegranate	Punica spp.
Portulacaria	Portulacaria spp.
Powderpuff	Calliandra spp.
Privet	
Protea	Ligustrum spp.
	Protea spp.
Prunus	Prunus spp.
Pyracantha/Firethorn	Pyracantha spp.
Queen Palm	Arecastrum (Syagrus) spp.
Quince	Cydonia spp.
Ragweed	Ambrosia spp.
Raphiolepis	Raphiolepis spp.
Red emu bush	Eremophila spp.
Redbud	Cercis spp.
Redroot	Ceanothus spp.
Rock rose	Cistus spp.
Rose	Rosa spp.
Sage	Salvia spp.
Sapium	Sapium spp.
Sassafras	Sassafras spp.
Sawleaf Zelkova	Zelkova spp.
Scalebroom	Lepidospartum spp.
Schinus	Schinus spp.
Seaforthia	Archontophoenix spp.
Senna	Cassia spp.
Sentry palm	Howea spp.
Serviceberry	Amelanchier spp.
Shrub verbena	Lantana spp.
Snapdragon	Antirrhinum spp.
Solanum	Solanum spp.
Sonchus	Sonchus spp.
Sorghum	Sorghum spp.
Speedwell	Veronica spp.
Spider flower	Grevillea spp.
Spiderwort	Tradescantia spp.
Spurge	Pachysandra spp.
St. Bernard's lily	Chlorophytum spp.
St. John's-wort	Hypericum spp.
Staghorn fern	Platycerium spp.
Statice	Limonium spp.
Strawberry tree	Arbutus spp.
Sumac	Rhus spp.
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Sun king sophora Sunflower	Sophora spp. Helianthus spp.
Sweet box	Sarcococca spp.
Sweet gum	Liquidambar spp.
Sword fern	Nephrolepis spp.
Sycamore	Platanus spp.
Syzygium	Syzygium spp.
Tecomaria	Tecomaria spp.
Ternstroemia	Ternstroemia spp.
Texas Ranger	Leucophyllum spp.
Thornless hawthorn	Crataegus spp.
Threadleaf aralia	Aralia spp.
Ti	Cordyline spp.
Tipu Tree	Tipuana spp.

Toyon	Heteromeles spp.
Trachelospermum	Trachelospermum spp.
Transvaal daisy	Gerbera spp.
Tree fern	Dicksonia spp.
Tree tobacco	Nicotiana spp.
Tristania	Tristania spp.
Trumpet creeper	Campsis spp.
Trumpet tree	Tabebuia spp.
Tulbaghia	Tulbaghia spp.
Tulip tree	Liriodendron spp.
Tupelo	Nyssa spp.
Tupidanthus	Tupidanthus spp.
Umbrella catchbird tree	Pisonia spp.
Umbrella tree	Schefflera spp.
Umbrella wort	Mirabilis spp.
Viburnum	Viburnum spp.
Vigna	Vigna spp.
Violet	Viola spp.
Walnut	Juglans spp.
Washington palm	Washingtonia spp.
Water gum	Tristaniopsis spp.
White sapote	Casimiroa spp.
Wild bergamot	Monarda spp.
Willow	Salix spp.
Willow myrtle	Agonis spp.
Wind palm	Trachycarpus spp.
Wisteria	Wisteria spp.
Wollemia	Wollemia spp.
Woodbine	Parthenocissus spp.
Xylosma	Xylosma spp.
Yellow jessamine	Gelsemium spp.
Yellowbells	Tecoma spp.
Yucca	Yucca spp.
Zea	Zea spp.
Zinnia	Zinnia spp.

