DEPARTMENT OF FOOD AND AGRICULTURE
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March 16, 2001

TO: Public Agencies, Private Business Organizations, and Interested Parties

SUBJECT: Notice of Preparation of an Environmental Impact Report for the Proposed Pierce's Disease Control Program.

The California Department of Food and Agriculture (CDFA) is preparing an Environmental Impact Report (EIR) for the proposed Pierce's Disease Control Program (PDCP). The goal of the proposed PDCP is to provide a coordinated statewide program that prevents severe agricultural and economic damage by Pierce's disease and its vector, the glassy-winged sharpshooter (an exotic insect in the leafhopper family). The program intends to contain the spread of the glassy-winged sharpshooter and the disease until researchers can find a treatment or cure.

Pierce's disease is caused by a strain of the bacterium *Xylella fastidiosa* that kills grapevines by clogging their water-conducting vessels (xylem). Several strains of this bacterium exist, attacking and causing damage to different host plants including grapes, citrus, stone fruits, almonds, oleander, and certain shade trees (including oaks, elms, maples and sycamore). There is no known cure for the disease. The glassy-winged sharpshooter is an aggressive exotic insect that feeds on the xylem fluid of over 700 plant species and has the ability to spread the bacterium that causes Pierce's disease. The transmission of *Xylella fastidiosa* by the glassy-winged sharpshooter constitutes an unprecedented threat to California's agricultural industry, particularly to California vineyards.

On May 16, 2000, the State Legislature passed emergency provisions (Senate Bill 671, Statutes of 2000, California Food and Agricultural Code, Sections 6045-6047) outlining specific requirements for county agencies, and authorizing the Secretary of Food and Agriculture to adopt program regulations. The proposed program to be evaluated in the EIR is an extension of the on-going emergency program and regulations. The CDFA is the agency responsible for developing the statewide comprehensive control program. The agricultural commissioner of each county would have the responsibility for local implementation of the program, with oversight by CDFA. The program has five central elements: public outreach, statewide survey and detection, contain the spread, local management areas and rapid response, and research.

A description of the proposed program, potential control approaches, and probable environmental effects are presented in the attached discussion of Project Data and Environmental Effects to be Examined in the EIR.

The CDFA is the Lead Agency for the PDCP and has prepared this Notice of Preparation (NOP) pursuant to Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. The Real Estate Services Division of the California Department of General Services is assisting CDFA in the performance of CEQA review of the PDCP. The purpose of the NOP is to inform agencies and the general public that an EIR is being prepared for this program and to invite specific comments on the scope and content of the EIR. To meet time limits established by state law, your comments must be received no later than April 23, 2001.

Comments should be addressed to:

Ms. Susan Stratton
Real Estate Services Division
Department of General Services
State of California
1102 Q Street, Suite 5100
Sacramento, CA 95814
(916) 323-6951

CDFA is scheduling public scoping meetings to give the public an opportunity to comment on the scope, focus, and content of the EIR. The meetings will be held in four locations in California:

Northern

April 10, 6:00 – 9:00 p.m.
Napa Valley Expo, Riesling Hall
575 Third Street
Napa, CA

Coastal

April 12, 6:30 – 9:00 p.m.
San Luis Obispo Veterans Hall
801 Grand Avenue
San Luis Obispo, CA

Southern

***April 18,** 6:30 - 8:00 p.m.
County Administrative Center
4080 Lemon Street, Room 13
Riverside, California
*(*Note: corrected date)*

Central

April 19, 6:30 – 8:00 p.m.
Tulare County Agriculture Department
2500 Burrell Avenue
Visalia, CA

Scoping meetings will be held during the second and third weeks of April. Any changes to the dates, times, and locations of the scoping meetings will be posted on CDFA's glassy-winged sharpshooter/Pierce's disease information web page at http://plant.cdfa.ca.gov/gwss/. If you would like to be put on the mailing list to receive any changes in the public scoping meeting schedule, please contact Susan Stratton at the phone number listed above.

Enclosure

I. PROJECT DATA

1.1 Project Title

Pierce's Disease Control Program

1.2 Lead Agency Name and Address (also project sponsor)

Department of Food and Agriculture
State of California
1220 N Street, Room 409
Sacramento, CA 95814

CEQA Review Contact: Ms. Susan Stratton
Real Estate Services Division
State of California
1102 Q Street, Suite 5100
Sacramento, CA 95814
(916) 323-6951

1.3 Project Location

The proposed Pierce's Disease Control Program (PDCP) would apply to all counties in California identified as potentially susceptible to Pierce's disease and all areas capable of supporting its vector, the glassy-winged sharpshooter (an insect in the leafhopper family).

County agricultural inspectors throughout the state have performed surveys to identify existing glassy-winged sharpshooter infestations and determine potential local control needs. The surveys revealed that Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties are generally infested with the glassy-winged sharpshooter. Limited infestations of glassy-winged sharpshooter occur in areas of Butte, Contra Costa, Fresno, Kern, Sacramento, Santa Barbara, and Tulare Counties. Other areas of these counties have been surveyed and were found apparently free of glassy-winged sharpshooter populations. If new infestations of the glassy-winged sharpshooter were found in other counties of the State, the PDCP would also apply to the newly infested areas. Nine counties (Alpine, Del Norte, Inyo, Lassen, Modoc, Mono, Plumas, Sierra, and Siskiyou) are deemed not at risk of becoming infested with glassy-winged sharpshooter due to unsuitable environments.

1.4 History of Pierce's Disease and the Glassy-winged Sharpshooter

Pierce's disease of grapevines was first noted in California near Anaheim in 1884. Since its discovery, Pierce's disease has spread to other areas of the State and is currently known to exist in 24 counties. There is no known cure for the disease. Pierce's disease is caused by a strain of the bacterium *Xylella fastidiosa* and kills grapevines by clogging up their water-conducting vessels (xylem). Several strains of this bacterium exist, attacking and causing damage to different host plants including grapes, citrus, stone fruits, almonds, oleander, and certain shade trees (including oaks, elms, maples and sycamore). The

name of the disease caused by *Xylella fastidiosa* varies for each host plant; for example, in oleanders, *Xylella fastidiosa* causes "oleander scorch."

The glassy-winged sharpshooter is an aggressive exotic insect accidentally introduced into Southern California in the late 1980s. It is native to the Southeastern U.S. and northern Mexico. The glassy-winged sharpshooter is a leafhopper[1] that feeds on the xylem fluid of over 700 species of crop and ornamental plants, and has the ability to spread the bacterium that causes Pierce's disease. The glassy-winged sharpshooter builds up large populations on a diverse array of host plants and is an aggressive flyer, traveling greater distances than sharpshooters native to California. Scientists believe that the glassy-winged sharpshooter has the potential to increase both the incidence and severity of Pierce's disease in California. The glassy-winged sharpshooter is prolific, disperses rapidly, and transmits the disease from vine-to-vine, resulting in an exponential, rather than linear, increase in Pierce's disease incidence in vineyards[2]. A significant loss of grapevines from Pierce's disease transmitted by this insect has occurred in the Temecula Valley (Riverside County). Over 200 acres of grapes have been destroyed and 300 more acres have been damaged and will likely be dead within the next two years.

The combination of Pierce's disease, which currently does not have a cure, and the glassy-winged sharpshooter, which has the ability to spread the disease at a much faster rate than other native insects, constitutes an unprecedented threat to California's agricultural industry. In California, grape production is a $3.4 billion industry and the wine grape industry alone contributes $33.7 billion to the California economy. In addition to grapes (886,000 acres), other crops such as almonds (573,000 acres), citrus (297,600 acres), peaches (66,3000 acres), nectarines (35,500), pears (19,300 acres), alfalfa, and ornamentals are vulnerable to the bacterium carried by the glassy-winged sharpshooter[3].

1.5 Legislative and Regulatory Actions Related to the Emergency Program

In response to the Temecula infestation in August 1999, the County of Riverside declared a local emergency. The California Department of Food and Agriculture (CDFA) developed an action plan and appointed a task force to develop long-term strategies and resources to combat the emerging threat. The Pierce's Disease Advisory Task Force and its subcommittees were established to review research proposals and develop management and control plans. On May 16, 2000, the State Legislature passed emergency provisions (Senate Bill 671, Statutes of 2000) that outline specific requirements for county agencies, and authorize the Secretary of CDFA to adopt program regulations.

The Legislature found and declared that Pierce's disease and its vectors present a clear and present danger to the State's grape industry, other agricultural commodities, and plant life. Under State law, the CDFA is responsible for protecting the agricultural industry of the State (Food and Agricultural Code, Section 401). The CDFA is obligated to prevent the introduction and spread of injurious insect and animal pests, plant diseases, and noxious weeds (Section 403). The CDFA Secretary has authority to establish, maintain and enforce quarantine, eradication, and other such regulations that are in his or her

[1] A leafhopper is any of a number of leaping insects that suck plant juices.

[2] CDFA, *Pierce's Disease Control Program Report to the Legislature, January 2001.*

[3] CDFA, *Draft California Action Plan for Pierce's Disease Control Program,* Sacramento, CA, Feb. 9, 2001

opinion necessary to circumscribe and exterminate or prevent the spread of any pest not generally distributed in California (Sections 5321 and 5322).

The Governor requested that the U.S. Department of Agriculture declare a state of emergency under federal law. A federal declaration of emergency was published in the Federal Register on July 7, 2000, with an effective date of June 23, 2000 (65 Federal Register 41930 (July 7, 2000).

On July 25, 2000, the CDFA, pursuant to legislative mandates, adopted emergency regulations for nursery stock and bulk grapes and coordinated statewide systems for compliance (Sections 3650-3660, Title 3, California Code of Regulations), as provided in the Administrative Procedure Act of the Government Code. On November 8, 2000, the CDFA adopted emergency regulations for bulk citrus movement, certification requirements and exemptions. Both sets of emergency regulations have been readopted one or more times. The regulations implement a Statewide response program for arresting the artificial spread of the glassy-winged sharpshooter and, where feasible, to eradicate it upon its detection in non-infested areas. Because the emergency regulations and response program were created in response to an emergency, the emergency program is exempt from the California Environmental Quality Act (CEQA Guidelines, Section 15269).

1.6 Other Public Agencies and Entities whose Review may be Required

California Department of Conservation
California Department of Fish and Game
California Department of Health Services, Environmental Health Investigations Branch
California Department of Parks and Recreation
California Department of Pesticide Regulation
California Department of Transportation
State Water Resources Control Board
State Lands Commission
U.S. Fish and Wildlife Service
U.S. Department of Agriculture
University of California
Agricultural Commissioners of Infested Counties

1.7 Program Goals

The goal of the proposed PDCP is to provide an intensive coordinated statewide program that prevents severe economic damage by Pierce's disease and the vector, the glassy-winged sharpshooter, while remaining responsive to local concerns. Program objectives to achieve this goal are listed below.

- Determine the current distribution of glassy-winged sharpshooter in California and establish a mapping and data collection system to track and report new detections and infestations.

- Develop and disseminate information about the nature, characteristics, and impact of the bacterium that causes Pierce's disease (*Xylella fastidiosa*), and the glassy-winged sharpshooter on various commodities as well as on the economy and quality of life in California.

- Provide training in biology, detection, and treatment of Pierce's disease and its vectors.

- Develop a research program that will aid in the management of and ultimately find a remedy for Pierce's disease and its spread by vectors.

- Contain the spread of glassy-winged sharpshooter and Pierce's disease until researchers can find a treatment or cure.

- Prevent artificial spread of glassy-winged sharpshooter through a coordinated program that involves regulating the movement of nursery stock, bulk citrus, bulk grapes, and other commodities that may carry the glassy-winged sharpshooter.

1.8 Description of the Proposed Pierce's Disease Control Program

The proposed program is a comprehensive, statewide extension of the on-going emergency regulations and response program currently being implemented. CDFA is the Lead Agency responsible for developing the statewide comprehensive PDCP. The county agricultural commissioner of each county would have the lead responsibility for local implementation of the program, with oversight by CDFA. The program has five central elements: public outreach, statewide survey and detection, contain the spread, local management/rapid response, and research, which are described in more detail below.

1.8.1 Public Outreach

Local task forces and county agricultural commissioners have primary responsibility for targeted public outreach about glassy-winged sharpshooter, Pierce's disease, and the PDCP. The local task forces would provide information about glassy-winged sharpshooter biology and detection, regulations that affect product shipment or processing, and treatment options. The CDFA would provide technical information, 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.

Prior to any treatment activity in urban areas, a telephone help line would be established to answer calls concerning PDCP activities. The help line would also include public health and animal health information. Informational meetings would be held to advise homeowners and other interested parties of treatment activities and to address their questions or concerns. Pre-treatment notification would be conducted through the local news media and by door-to-door notification of infested properties and adjacent properties. Notices would include information regarding materials used, precautions, date of application, and a telephone number and contact for the PDCP staff.

The responsible county agricultural commissioner would identify ethnic communities in glassy-winged sharpshooter-infested areas and provide information in their spoken languages. Non-English speakers would staff the help line, if needed, and CDFA would provide translations for treatment notification.

1.8.2 Statewide Survey and Detection

Statewide surveys would be conducted annually to identify and monitor glassy-winged sharpshooter infestations and populations through visual and trapping surveys of nurseries, croplands, and urban/residential areas. The CDFA would work with the agricultural commissioners, local entities, and other interested stakeholders of all counties to make them aware of the risk of the glassy-winged sharpshooter and establish a system to assure that all glassy-winged sharpshooter-related calls are investigated. Visual and trapping surveys in nurseries would be conducted year-round as part of the PDCP's nursery regulatory program to show a property is free from the glassy-winged sharpshooter. More information about the regulatory program is provided below.

1.8.3 Contain the Spread

The goal of this element of the PDCP is to prevent the glassy-winged sharpshooter and Pierce's disease from spreading into new areas of the State through biological and other control measures and regulating the movement of nursery stock, citrus, grapes, and other commodities, which may harbor the glassy-winged sharpshooter.

Biological Control Program

The goal of the biological control program is to reduce glassy-winged sharpshooter populations using natural enemies of the pest. In Southern California, the wasp *Gonatocerus ashmeadi* attacks and parasitizes glassy-winged sharpshooter egg masses, but this wasp alone does not reduce glassy-winged sharpshooter populations to acceptable levels. A suite of introduced and native natural enemies would increase the chances for effective biological control over a broader range of host plants and climatic zones.

As part of the emergency program, CDFA released the wasp, *Gonatocerus triguttatus*, in Riverside, Kern and Ventura Counties during summer 2000. This wasp is native to Mexico and, like *Gonatocerus ashmeadi*, also parasitizes glassy-winged sharpshooter eggs. Prior to the release, the wasp underwent an evaluation in a controlled laboratory environment to make sure that the parasite would attack the sharpshooter. Follow up studies will help determine if the new parasite significantly reduces glassy-winged sharpshooter populations. Concurrently with these studies, CDFA would release *G. triguttatus* and other parasites into a large number of locations throughout the entire distribution of the glassy-winged sharpshooter. Greenhouses and other facilities for rearing *G. triguttatus* would be constructed or leased to support this program. CDFA may also contract with private insectaries to supplement their rearing operations.

The biological control program also includes an ongoing search in the southeastern U.S., northern Mexico, and South America to find new predators or parasites that would be effective against the glassy-winged sharpshooter. If discovered, these natural enemies will be evaluated prior to any release.

Regulatory Actions

PDCP regulations include the standards, certification requirements, and exemptions for the movement of bulk grapes, bulk citrus, and nursery stock from infested areas to non-infested areas. The purpose of the regulations is to prevent the spread of the glassy-winged sharpshooter to new areas of the State by regulating shipments of host plants and plant materials. Surveillance for the glassy-winged sharpshooter would be strengthened at California's agricultural inspection stations and intrastate restrictions on those commodities that present a high risk of spreading glassy-winged sharpshooter would be enforced.

Any grape grower, citrus grower, or nursery located in a glassy-winged sharpshooter infested area planning to ship bulk grapes, citrus or nursery stock to counties outside the known infested area would be required to comply with glassy-winged sharpshooter monitoring and/or treatment requirements. The origin county's agricultural commissioner would enter into compliance agreements with growers and issue certification tags when certain conditions are met. These standards allow for inspection at the origin with certification of glassy-winged sharpshooter-free shipments using visual survey, trapping or approved pesticide treatment. Color-coded compliance certification tags accompany each load of bulk grapes and citrus and would be collected by the receiver. Regulations also may be to cover other commodities found to present a risk of moving the glassy-winged sharpshooter.

CDFA is in the process of evaluating a number of pesticides for use against the glassy-winged sharpshooter. When additional research is completed, regulatory officials would use the results as a basis for establishing approved regulatory treatments for use against glassy-winged sharpshooter. Materials are also being screened for use on organic crops. Until the tests are completed, any registered insecticide suitable for leafhopper control may be used (See Table 1.7-1). Currently, fenpropathrin and imidacloprid (as a foliar[4] application) are recommended as part of the emergency program for use on nursery stock moving out of the infested area. The criteria for pesticide selection by an individual grower or nursery will depend on their specific circumstances of harvest, worker re-entry, and/or shipment. Pesticides would be used according to EPA registration and label directions.

Table 1.7-1. Registered Insecticides Suitable for Leafhopper Control

Grapes	Citrus	Nursery Stock
Carbaryl	Carbaryl	Acephate
Endosulfan	Chlorpyriphos	Bifenthrin
Imidacloprid	Cyfluthrin	Carbaryl
Malathion	Imidacloprid	Chlorpyriphos
Naled	Methidathion	Cyfluthrin
	Methomyl	Deltamethrin
	Phosmet	Fenpropathrin
		Imidacloprid
		Methiocarb
		Permethrin

Source: Draft California Action Plan for the Pierce's Disease Control Program, CDFA, February. 2001.

[4] Treatments applied directly to plant leaves.

1.8.4 Rapid Response and Treatment

When a glassy-winged sharpshooter infestation is discovered, the agricultural commissioner's office would act as the lead agency for all response activities. Immediately following the discovery of one or more life stages of a glassy-winged sharpshooter not associated with a recent shipment of regulated products, the county agricultural commissioner's office would conduct a delimitation survey to determine the extent of the infestation.

The county agricultural commissioner would then coordinate the treatment of infested properties. The county agricultural commissioners, in conjunction with the CDFA, would consult with the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service, consistent with existing memoranda of understanding, to identify any threatened/endangered species and/or environmentally sensitive areas within proposed treatment areas before treatments begin. The agencies would then develop appropriate mitigation measures to be taken in these sensitive areas.

Upon detection of the glassy-winged sharpshooter within a nursery or on a crop, the grower/owner of the nursery or crop would be notified that the glassy-winged sharpshooter had been found. The nursery or crop would then be treated by the grower/owner of the property with a registered pesticide to control the glassy-winged sharpshooter. The State or county would provide guidance and information about registered pesticides shown to be effective against glassy-winged sharpshooter to the individual growers/owners. Growers/owners may apply treatments through foliar spraying, soil drenches, or aerial spraying. Pesticides would be used according to registration and label directions. Nurseries may be required to hold shipments until all host material within the nursery is treated by the nursery with a properly registered pesticide to control the glassy-winged sharpshooter.

Upon detection of a glassy-winged sharpshooter infestation in urban/non-agricultural areas, the county agricultural commissioner would contract with a certified pest control operator to treat the infested areas. The county agricultural commissioner would provide training to personnel and provide oversight to ensure that the contractor conducts the applications in accordance with all laws and regulations of the State of California. The county agricultural commissioners would designate properties that require treatment and the chemical(s) to be used, the rate(s) of application, the host(s) to be treated and any related protocols such as timing of treatments, number of applications, environmental restrictions, etc. Pesticides would be applied directly to the leaves of host plants, to soil, or through injection into trees. The decision to treat an urban area resides with the county agricultural commissioner, in consultation with CDFA. No aerial spraying would occur over urban areas. Over agricultural areas normally subject to aerial application, an owner/grower may choose to treat crops with aerial spraying, in accordance with existing regulations and permits, in coordination with the Pierce's Disease Control Program.

As described in Section 1.8.3 above, CDFA is in the process of evaluating a number of pesticides for use against the glassy-winged sharpshooter. While materials are still being reviewed, carbaryl presently has the widest glassy-winged sharpshooter host range and is known to be effective on other species of leafhoppers. Imidacloprid and cyfluthrin have also been used on ornamental plantings. Until the evaluation is completed, any registered insecticide suitable for leafhopper control may be used in the

rapid response and treatment program. All appropriate precautions, as specified on the product label, would be taken by applicators.

As described in Section 1.8.1, notification of treatment would be conducted through public information meetings, the news media, and door-to-door notices. The county agricultural commissioners also would notify registered beekeepers in or near the infested area of the glassy-winged sharpshooter treatment activities, if the label of the pesticide to be used indicates that the treatment may affect bee colonies.

Environmental monitoring of treatments would be arranged by CDFA and conducted by the California Department of Pesticide Regulations (DPR) to ensure proper application of the treatments. The Environmental Hazards Assessment Program (EHAP) of the DPR would conduct monitoring of selected treatments to provide information on the concentrations of the chemical in surface, irrigation, and storm runoff water, turf, soil and air. Additionally, representative backyard vegetables and fruits would be sampled. In the event that ecologically sensitive aquatic habitat is present, toxicity to aquatic organisms would also be determined in surface water. The monitoring data would be used by the CDFA to assess proper application rates and coverage and to estimate environmental impacts of the application. The county agricultural commissioners would also conduct monitoring to assess the impact of the treatment on the glassy-winged sharpshooter population. This monitoring would continue for one or more life cycles of the pest.

1.8.5 Research

The research component of the PDCP is a joint effort among the CDFA, California Department of Transportation, U.S. Department of Agriculture (USDA), University of California (UC), affected counties, and industry groups. It is a coordinated effort to meet the long-term goal to control Pierce's disease and short-term goal to control the glassy-winged sharpshooter. This effort is coordinated through the Research Subcommittee of the CDFA Secretary's Pierce's Disease Advisory Task Force. The subcommittee has representatives from the various grape-growing industries, citrus, nursery stock and almond growers, USDA and UC. There are currently over fifty scientists working on more than forty projects funded by the State and federal governments and private industry. Research goals include:

- Short-term research goals focus on finding the tools needed to reduce the natural and artificial spread of the sharpshooter, including understanding the biology of the pest and identifying biological control agents.

- Medium-term objectives include discovering how the sharpshooter selects its host plant, analyzing the epidemiology of the disease, and determining if cultural practices can reduce the disease infection rate.

- Long-term research focuses on Pierce's disease, including developing plant resistance to the disease.

II. ENVIRONMENTAL EFFECTS TO BE EXAMINED IN THE EIR

An EIR is a public document that identifies potentially significant environmental impacts of a project and measures to reduce these effects. The environmental factors discussed below have been identified for study in the EIR for the Pierce's Disease Control Program as possible environmental effects, in compliance with the required contents of an NOP. Certain aspects of the PDCP, such as monitoring and outreach activities, would not have environmental effects. Other aspects of the project may have environmental effects. Although the EIR will describe the entire PDCP, the EIR will focus on those aspects of the project with potential environmental effects. An economic or social change by itself is not considered a significant effect on the environment, and thus is not included in the scope of this EIR. Comments on the NOP will help further refine the scope of the EIR.

2.1 Land Use Disturbance

PDCP regulatory actions include restrictions on the movement of goods and vehicles out of an infested area to prevent the spread of the pest. For treatment activities, ground crews would need access to infested properties and land use activities may be suspended during the application. The biological control program of the PDCP would include leasing or construction of additional facilities for rearing natural predators of the glassy-winged sharpshooter.

In order to further evaluate these effects, the EIR will examine the potential for temporary disturbance to land uses when control measures are implemented. Furthermore, the potential for these land use disturbances to result in impacts to the environment will be examined.

2.2 Hazards

Registered pesticides would be used as part of the PDCP to control the spread of the glassy-winged sharpshooter. The county agricultural commissioners would coordinate treatment upon detection of the glassy-winged sharpshooter in nurseries, cropland, urban areas, and for shipments of bulk grape, citrus, or nursery stock from infested areas. Pesticides would be used according to registration and label directions and all appropriate precautions, as specified on the product label, would be taken by applicators.

The county agricultural commissioners would contract with a licensed pest control operator to treat urban areas infested with the glassy-winged sharpshooter. Pesticides would be applied directly to the leaves of host plants or soil in urban/residential areas by ground crews. Nurseries and crops in infested areas would be treated by the grower/owner of the property. CDFA and the county agricultural commissioners would provide the grower/owner with information about pesticides shown to be effective against glassy-winged sharpshooter. Growers/owners may apply treatments in agricultural areas by foliar spraying, soil drenches, or aerial spraying in agricultural areas.

CDFA and county agricultural commissioners would conduct public outreach activities to advise homeowners and other interested parties of treatment activities. Outreach activities would include a local telephone help line, informational meetings, and door-to-door pre-treatment notification for infested

properties and adjacent properties. Notices would include information regarding treatment materials used, precautions, date of application, and a telephone number and contact for PDCP staff.

The EIR will include an analysis of whether health risks or environmental hazards could occur from the proposed PDCP. This analysis will include air quality considerations. Information regarding the pesticides proposed for use will be included to describe whether risks are anticipated with their use. This information will include the regulatory background, pesticide registration process, pesticide data, and proposed program use restrictions.

2.3 Water Quality

Pesticides would be used according to registration and label directions and all appropriate precautions, as specified on the product label, would be taken by applicators. Label requirements include measures such as the avoidance of spraying over water.

To help evaluate the potential for water quality impacts to surface and ground waters, the EIR will include a description of applicable pesticide use restrictions, either through regulation or proposed by the program. The EIR will include an evaluation of potential water quality effects, in consideration of these restrictions and requirements.

2.4 Biological Resources

A Memorandum of Understanding between the CDFA and the CDFG establishes procedures for endangered and threatened species consultation to ensure that fish and wildlife resources are protected in conformance with the California Endangered Species Act (CESA). Prior to pesticide treatment, county agricultural commissioners, in conjunction with the CDFA, would consult with the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service, consistent with existing memoranda of understanding, to identify any threatened/endangered species in the area prior to treatment. The agencies would agree on appropriate mitigation measures to be taken in these sensitive areas.

Label requirements suggest environmentally protective measures, such as the avoidance of spraying blooming plants and avoidance of spraying during windy conditions. DPR, in coordination with CDFA, would conduct monitoring of selected treatments to provide information on the concentrations of the chemical in surface, irrigation, and storm runoff water, turf, soil and air. In the event that ecologically sensitive areas are present, toxicity to aquatic organisms would also be determined in surface water by DPR monitoring.

Past CDFA experience has shown that pesticides may have an impact on non-target insect populations. One of the pesticides identified for use in the PDCP, carbaryl, is known to have impacts upon non-target species, including beneficial insects, such as honeybees and predaceous and parasitic insects (native predators). Because not all insects are equally vulnerable, treatment might result in temporary changes in the composition of local insect populations.

Release of exotic predatory and parasitic insects, such as the wasp *Gonatocerus triguttatus* and others, may also be used to control the glassy-winged sharpshooter. Before these insects are released, they are evaluated in a controlled laboratory environment to determine whether they will attack the glassy-winged

sharpshooter. The insects are released after the U.S. Department of Agriculture issues a finding that they will not be a plant pest.

The EIR will include an analysis of potentially affected terrestrial and aquatic biological resources, including threatened and endangered species. The EIR will address whether pesticide treatments or release of biological control agents under the PDCP could affect native plants and animals, including non-target insects.