THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: AGRICULTURAL COMMISSIONER

BOARD AGENDA # *B-1

Urgent ____ Routine XX

AGENDA DATE May 8, 2001

CEO Concurs with Recommendation YES ____ NO ____
(Information Attached)

4/5 Vote Required YES ____ NO X

SUBJECT: APPROVAL OF REVISED GLASSY-WINGED SHARPSHOOTER CONTRACT FOR FISCAL YEAR 2000/01 WITH THE CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

STAFF RECOMMENDATIONS:

1. APPROVE AND AUTHORIZE THE CHAIR TO SIGN THE REVISED FISCAL YEAR 2000/01 GLASSY-WINGED SHARPSHOOTER CONTRACT

2. SUBMIT A CERTIFIED COPY OF THE BOARD RESOLUTION AUTHORIZING THE CONTRACT.

FISCAL IMPACT:

This revised Glassy-Winged Sharpshooter (GWSS) contract consists of a "County Workplan" that is required by the State of California to be approved by the County Board of Supervisors. All items contained within the workplan have been previously reviewed by the Board. No dollar amount is associated with this revision.

BOARD ACTION AS FOLLOWS:

No. 2001-343

On motion of Supervisor Blom, **Seconded by Supervisor** Caruso
and approved by the following vote,
Ayes: Supervisors: Mayfield, Blom, Simon, Caruso, and Chair Paul
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) ____ **Denied**
3) ____ **Approved as amended**

Motion:

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk **By:** **Deputy** **File No.**

DISCUSSION:

The Glassy-Winged Sharpshooter program in Stanislaus continues to be critical for the protection of agriculture–Stanislaus County's number one industry.

The current contract revision reflects a state requirement that the "County Workplan" be packaged and approved by the County Board of Supervisors. The materials contained within the workplan have been previously reviewed by County Counsel and approved by the Board of Supervisors. There are no monetary or workload changes associated with this contract revision.

The following is a brief chronology of previous Board actions in the Glassy-Winged Sharpshooter program.

June 13, 2000: The Stanislaus County Board of Supervisors approved the Glassy-Winged Sharpshooter (GWSS) contract with the California Department of Food and Agriculture. This contract provided reimbursement to the County for GWSS program costs in the amount of $306,643.

July 11, 2000: The Stanislaus County Board of Supervisors approved an amended GWSS contract containing an Equipment Clause defining the terms of state vehicle use in the GWSS program. No dollar amount was associated with this revision.

August 8, 2000: The Stanislaus County Board of Supervisors approved a revised GWSS contract increasing state funding of the GWSS program by $168,192 for a total of $472,835. This increased amount was requested by the Ag Commissioner's Office to the State of California as a result of an overwhelming amount of GWSS program activities.

December 19, 2000: The Board of Supervisors designated the Agricultural Commissioner's Office as the local public agency responsible for conducting the County's GWSS/Pierce' Disease Control Program, as required by the State of California.

Current Request: Approval of the revised contract is requested to ensure the continued performance of the Glassy-Winged Sharpshooter program in Stanislaus County.

POLICY ISSUE:

Approval of the revised Glassy-Winged Sharpshooter contract is consistent with the Board Priorities for a Safe and Healthy Community and represents Multi-Jurisdictional Cooperation and Protection of Economic Development.

STAFFING IMPACT:

None.

STATE OF CALIFORNIA
STANDARD AGREEMENT
STD. 213 A(NEW 02/98)

BOARD OF SUPERVISORS

2001 [illegible] A 10: 33

AGREEMENT NUMBER	AMENDMENT NUMBER
99-0818	3

1. This Agreement is entered into between the State Agency and the Contractor named below

STATE AGENCY'S NAME
DEPARTMENT OF FOOD AND AGRICULTURE

CONTRACTOR'S NAME
County of Stanislaus

2. The term of this Agreement is: March 1, 2000 through June 30, 2001

3. The maximum amount of this Agreement is: $ 472,835.00
Four Hundred Seventy-Two Thousand Eight Hundred Thirty-Five Dollars and No Cents

4. The parties mutually agree to this amendment as follows. All actions noted below are by this reference made a part of the Agreement and incorporated herein:

The agreement is amended to incorporate the workplan for fiscal year 2000/2001.

Exhibit A (Scope of Work) is hereby amended to add the workplan for fiscal year 2000/2001 as shown in the County of Stanislaus's "Pierce's Disease Control Program 2000/01 Workplan" which is hereby incorporated by reference and hereto made a part of this agreement as if attached hereto.

Exhibit B is amended to include the amended budget for fiscal year 2000/2001 in order to implement the program and is hereby incorporated and hereto made a part of this agreement.

APPROVED AS TO FORM
STANISLAUS COUNTY COUNSEL
BY [signature] 4-26-01

All other terms and conditions shall remain the same.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR

CONTRACTOR'S NAME *(If other than an individual, state whether a corporation, partnership, etc.)*
County of Stanislaus

BY *(Authorized Signature)* [signature]
DATE SIGNED *(Do not type)* 5-8-01

PRINTED NAME AND TITLE OF PERSON SIGNING
PAT PAUL, CHAIR - STANISLAUS COUNTY BOARD OF SUPERVISORS

ADDRESS
3800 Cornucopia Way, Suite B
Modesto, CA 95358

STATE OF CALIFORNIA

AGENCY NAME
DEPARTMENT OF FOOD AND AGRICULTURE

BY (Authorized Signature) [signature]
DATE SIGNED *(Do not type)* 5/21/01

PRINTED NAME AND TITLE OF PERSON SIGNING
SANDI CONRY, ACQUISITIONS MANAGER

ADDRESS
1220 N STREET, ROOM 100, SACRAMENTO, CA 95814

CALIFORNIA
Department of General Services
Use Only

APPROVED
[illegible] 23 2001
DEPT OF GENERAL SERVICES

☐ Exempt per ______

Contractor

Agreement No. 99-0818-3
Exhibit B Amendment #0

ITEM H

Stanislaus County Glassy-winged Sharpshooter/Pierce's Disease Program

Contract # 99-0818

2000/2001 BUDGET/FISCAL DISPLAY

SURVEY ACTIVITIES			
Personnel Services	**Salary Rate**	**No. of Hours**	**Total**
Permanent Salaries			
Agricultural Inspector	$ 21.57	2,080	$ 44,865.60
Clerical			
Supervisor			
(Deputy Agricultural Commissioner)			
		Subtotal	$ 44,865.60
Temporary Salaries			
Agricultural Aid	$ 13.91	16,640	$ 231,462.40
Staff Benefits			
Permanent @ 36.4% rate)			$ 16,348.80
Temporary @ 2.66% rate			$ 6,156.80
		Subtotal	$ 22,505.60
		TOTAL PERSONNEL SERVICES	**$ 298,833.60**
Operating Expenses			
General Expense/Supplies (general office and field supplies)			$ 500.00
Cell Phones (purchase/service)			$ 2,255.01
Vehicle Expense			
County @ .31/mile	63,484 miles		$ 19,680.04
State @ .17/mile	78,535 miles		$ 13,350.95
Indirect Cost (25% of total Personnel Services)			$ 74,708.40
		TOTAL OPERATING EXPENSES	**$ 110,494.40**
		TOTAL SURVEY ACTIVITIES	**$ 409,328.00**
REGULATORY/TREATMENT ACTIVITIES			
Personnel Services			
Agricultural Inspector			$ -
Staff Benefits			
Permanent @ % rate)			
		TOTAL PERSONNEL SERVICES	$ -
		TOTAL REGULATORY/TREATMENT	$ -
GRAND TOTAL			**$ 409,328.00**

Stanislaus County Department of Agriculture and Weights & Measures

3800 Cornucopia Way Suite 'B'
Modesto, CA 95358
Phone (209) 525-4730
FAX (209) 525-4790

PIERCE'S DISEASE CONTROL PROGRAM

2000/01 WORKPLAN

Local Assistance

County of STANISLAUS

Agreement No. 99-0818

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ITEM A

PIERCE'S DISEASE CONTROL PROGRAM

MINUTE ORDER OF BOARD OF SUPERVISORS DESIGNATING LOCAL PUBLIC ENTITY PURSUANT TO FOOD AND AGRICULTURAL CODE SECTION 6046(f)

(See Attachment 1)

ITEM B

PIERCE'S DISEASE CONTROL PROGRAM

LOCAL PUBLIC ENTITY'S DESIGNATED PIERCE'S DISEASE CONTROL PROGRAM COORDINATOR AND CONTACT INFORMATION

Name:	**Donald O. Cripe** **Agricultural Commissioner/Sealer of Weights & Measures**
Address:	**3800 Cornucopia Way, Suite B** **Modesto, CA 95358**
Phone Number:	**(209) 525-4730**
Fax Number:	**(209) 525-4790**
e-mail Address:	**agcom50@mail.co.stanislaus.ca.us**

ITEM C

PIERCE'S DISEASE CONTROL PROGRAM

RESPONSE/CONTROL PROGRAM FOR PIERCE'S DISEASE AND ITS VECTORS

STANISLAUS COUNTY

September 1, 2000

Objective

To implement an intergovernmental, coordinated state and community-wide plan to provide detection and delimitation of the glassy-winged sharpshooter (GWSS) in Stanislaus County and suppress or eradicate any populations as rapidly as possible.

RESPONSIBILITIES

Lead Agency

The Stanislaus County Department of Agriculture (SCDA) is the lead agency and is designated by the Stanislaus 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 SCDA, the State PDCP Science Advisory Panel, officials in affected counties, the Stanislaus County PDCP Task Force, and other interested parties in implementing this plan. The CDFA will provide biological control program guidance and support to Stanislaus County as favorable agents become available.

County Responsibilities

- To act as lead agency for the PDCP activities occurring within the jurisdiction of the county.
- To act as lead liaison to local City Councils, the County Board of Supervisors, county legal counsels, and other county agencies, regarding the PDCP activities.
- To promptly conduct all delimitation and intensive surveys in the county. Additional survey staff may be contracted from the California Conservation Corps. The CDFA will provide on-site expertise, as needed.
- To provide status reports on the results of all surveys, including detailed maps of the surveyed area and infested properties.
- Selection of an appropriate treatment, for notification of residents, and for identification of any sensitive sites within the proposed treatment area.
- Pesticide applications will be made under the direction of the SCDA.
- Post-treatment monitoring.

ELEMENTS

Delimitation Survey

The SCDA will immediately conduct a delimitation survey upon discovery of an infestation. The purpose of the survey is to quickly determine the extent of the infestation. The survey will be conducted in accordance with established CDFA protocols (Attachment 2). Records of properties surveyed and results of the survey (both positive and negative) will be accurately kept.

Intensive (Property-by-Property Survey)

Following the delimitation survey, the SCDA will complete an intensive survey of all properties within the delimited area to identify the full extent of the infestation.

- Develop and maintain working host records during this intensive survey.
- Develop detailed maps or block folders (property-by-property) of the surveyed and infested area.

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 SCDA 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.

Threatened/Endangered Species/Environmentally Sensitive Areas

The SCDA, in conjunction with the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the CDFA will identify any threatened/endangered species and/or environmentally sensitive areas within the proposed treatment area before treatments begin. Appropriate mitigation measures will be taken in these sensitive areas. The SCDA will notify all registered beekeepers near the infested area of the GWSS treatment activities.

Public Outreach

The SCDA will act as lead spokesperson for the PDCP activities within the County. The SCDA, 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. Non-English 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 SCDA will contact the Stanislaus County Health Officer (SCHO) with details of any proposed treatment. If the SCHO has questions about public health aspects of the program, Dr. Peter Kurtz, CDFA's Senior Medical Coordinator can be contacted at (916) 654-1211.

Questions relating to Animal Health will be referred to CDFA's Animal Health and Food Safety Services at (916) 654-1447. 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 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 SCDA. Pesticides will be used according to registration and label directions. Sound pesticide safety procedures will be followed.

- Number of applications: Minimum of two.
- 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 SCDA will ensure that all treatment activities are in compliance with all pesticide laws and regulations.

Environmental Monitoring

The CDFA, in cooperation with SCDA, will arrange for environmental monitoring to be conducted by the California Department of Pesticide Regulation (CDPR), Environmental Monitoring/Pest Management Branch. The SCDA 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 SCDA.

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).

NURSERY --- Upon detection and confirmation of any viable lifestage of GWSS within a nursery, the entire nursery will be inspected to determine if the source of the find is within the confines of the nursery. Once the determination has been made that the initial

find was as a result of an infestation of GWSS within the nursery, the nursery will be put under hold order and all host material within the nursery will be treated with a properly registered pesticide to control GWSS. A follow-up survey will be completed before the nursery is allowed to sell or ship any treated stock. Surveys may be completed every other month to ensure the infestation has not spread within the nursery or to surrounding areas. When any viable lifestage of GWSS is found in a commercial nursery setting during visual inspection, the owner will be notified of the positive find. If an infestation is determined, the nursery will be treated by the nursery owner with a properly registered pesticide to control GWSS. A post-treatment, follow-up survey will be completed prior to the release and sale of any treated GWSS host material. All nurseries treated for GWSS will be inspected to ensure the GWSS-free status of its host material is maintained. When any viable lifestage of GWSS is detected in a commercial nursery, the trapping density will be increased from two (2) traps per acre to ten (10) traps per acre. These traps will be serviced biweekly.

CROPLAND --- Upon detection and confirmation of any viable lifestage of GWSS on a crop, the grower/owner of the crop will be notified that GWSS has been found. Mandatory treatments will commence when an infestation has been determined through visual survey and/or trapping. The crop will be treated by the grower/owner of the property with a registered pesticide to control GWSS. In cases where the grower/owner refuses to treat the property, summary abatement action may be taken to reduce the threat of GWSS establishment in an agricultural area.

ITEM D

PIERCE'S DISEASE CONTROL PROGRAM

SURVEY PLAN

The Stanislaus County Agricultural Commissioner will utilize the CDFA GWSS Survey Guidelines (See Attachment 3) as its survey protocol.

PIERCE'S DISEASE CONTROL PROGRAM

ENFORCEMENT MECHANISMS

Enforcement Options for Nursery Stock

Effective July 25, 2000, Pierce's Disease Control Program (PDCP) regulations were adopted and include the standards for the movement of nursery stock from infested areas to non-infested areas (Section 3658, Title 3, California Code of Regulations), certification requirements (Section 3659, T. 3, CCR), and exemptions (Section 3660, T. 3, CCR). These regulations are intended to prevent the artificial spread of glassy-winged sharpshooter (GWSS).

The statutory authority for these regulations is Sections 6045, 6046, and 6047, Food and Agricultural Code (FAC). To enforce these provisions, the Secretary or Agricultural Commissioner is empowered to conduct inspections and investigate any suspected violations; each Commissioner is an enforcing officer for all laws and regulations to prevent the spread of plant pests and to certify shipments of plant material as to its pest freedom.

The FAC provides several options for enforcement of the requirements of the PDCP. This flexibility allows enforcement actions chosen as a result of a violation(s) to be proportionate to the nature/severity of the violation with progressive enforcement for repeat violators.

- Any violation of applicable provisions of FAC Division 4, Plant Quarantine and Pest Control, is an infraction punishable by a fine of not more than $1,000 for the first offense and a misdemeanor for a second or subsequent offense within three years (Section 5309, FAC).

- Except where otherwise expressly provided, a violation of any provision of this division is a misdemeanor (Section 5027, FAC). In addition to other remedies provided, any person violating the PDCP regulation requirements can be civilly liable up to $10,000 for each violation; in lieu of any civil action, the Secretary or Commissioner may level a civil penalty for up to $2,500 for each violation (Section 5310, FAC).

- Anyone who negligently or intentionally violates a regulation and imports a GWSS-infested plant that results in an infestation, or the spread of an infestation may be civilly liable in an amount up to $25,000 for each violation [Section 5028(c), FAC].

- It is unlawful to sell any nursery stock without a valid nursery license (Section 6721, FAC). The Secretary can revoke or suspend a nursery license if a nursery has willfully refused to comply with all laws and regulations relative to any pest that might be carried by nursery stock (Section 6761, FAC).

- It is unlawful for anyone to ship, sell, deliver or transport nursery stock in California without either a Hold for Inspection ("blue tag") or a valid nursery stock certificate (Sections 6922 and 6923, FAC). The Commissioner may revoke or suspend the right to use any nursery stock certificate or other shipping permit because of non-compliance (Section 6968, FAC). It is unlawful to alter or otherwise misuse any shipping permit or nursery stock certificate (Section 6927, FAC).

- Any one receiving or moving any nursery stock must notify the Commissioner immediately upon arrival and hold the nursery stock for inspection unless it is accompanied by a valid nursery stock certificate. Some counties have elected to waive that exemption and require GWSS host plant material entering the county (or non-infested area of a county) to be accompanied by a Warning Hold For Inspection certificate (Section 6505, FAC). In this case, it is unlawful even to move nursery stock within a county without forwarding a manifest specified by Section 6925 and 6926, FAC.

- To facilitate the investigation of violations, proof of ownership is required of any person buying, selling, or transporting a shipment of plant material intended for commercial sale and it is unlawful for any person to alter any proof of ownership document (Sections 5030 and 5031, FAC).

- Under the PDCP regulations, all host plants of GWSS moving from an infested area to a non-infested area must be certified free of GWSS (Section 5721, FAC; Sections 3060.2, 3060.4 and 3659, CCR). Certification can be based on surveys confirming non-infested status, inspection, or by approved treatment. It is unlawful to alter or otherwise wrongfully use a certificate (Section 5208, FAC).

- The Secretary or Commissioner may enter into compliance agreements to facilitate the movement of host plant material. The compliance agreement provides the survey, treatment, and handling requirements necessary to assure freedom from GWSS. Violation of the provisions of a compliance agreement is unlawful and any person that violates the provisions of a compliance agreement can also be held liable civilly for up to $10,000. Remedies provided here do not supercede or limit any and all other remedies available to the State (Section 5705, FAC).

- If a shipment of nursery stock moving *intrastate* is found to be infested with GWSS, or there is reasonable cause to believe that the shipment may be infested, a warning hold order may be placed on the shipment (Section 6521, FAC) specifying the treatment, abatement or return requirements. Similarly, a warning hold may be placed on a shipment *entering* the state if it is found to be infested with GWSS, or there is reasonable cause to believe that the shipment may be infested, with GWSS. It is unlawful, except by written permission, to move or divert, any plant shipment placed under a warning hold order without written permission. It is unlawful to remove, destroy, or otherwise alter any warning hold order (Section 6303, FAC).

- If or when GWSS is found infesting any location, the Secretary or Commissioner may require that any plant, or other GWSS host, be held at that location, and may require any host within five miles of that location be held as well (Section 5701, FAC). It is unlawful to move any plant or host in violation of a hold order.

- Any location, plants, or other things found infested with GWSS can be considered a public nuisance and may be prosecuted as such and any remedies provided by law for the prevention and abatement of a public nuisance will apply. It is unlawful for

any person to maintain a public nuisance. The remedies provided here are in addition to any other applicable remedies (Sections 5401 and 5402, FAC).

ITEM F

PIERCE'S DISEASE CONTROL PROGRAM

STANDARDS AND RESTRICTIONS

This workplan does not include any variations from the standards set by law. If the Stanislaus County Department of Agriculture (SCDA) and the Stanislaus County PDCP Task Force find that there is clear and convincing evidence to support a more stringent standard than is set by regulation, then the SCDA will notify the CDFA and provide detailed justification as to the need for the more stringent standard.

ITEM G

PIERCE'S DISEASE CONTROL PROGRAM

WORKPLAN ASSURANCES

1. The Stanislaus County Department of Agriculture's planned producer outreach and training program in accordance with Food and Agricultural Code Section 6046(h)(1) - (See Attachment 3) will be coordinated with CDFA. The development and delivery of producer outreach information and training to local communities, groups, and individuals will be done through public meetings and the local PDCP task force. Efforts will be directed towards raising awareness regarding Pierce's disease and its vectors and workplan involvement through direct mailing, local media, and press releases.

2. The Stanislaus County Department of Agriculture's training plan for the Agency's employees in accordance with Food and Agricultural Code Section 6046(h)(2) - (See Attachment 3) will be coordinated with CDFA. The biology, survey, and treatment of Pierce's disease and its vectors will be the basic components of the training. Scientific Advisory Panel discussions on GWSS and Pierce's disease will be included in this training for key Agency employees. The University of California Cooperative Extension will be a local resource for training and information for this program.

3. The Stanislaus County Department of Agriculture plans to fully participate in the development and implementation of a data collection system in accordance with Food and Agricultural Code Section 6046(h)(5) - (See Attachment 3). These activities will be coordinated through CDFA. The data collection system will make it possible to track and report new infestations of Pierce's disease and its vectors in a manner respectful of property and other rights of those affected.

4. The Stanislaus County Department of Agriculture will provide monthly program reports via the Internet and financial progress reports as per CDFA guidelines.

Attachment 3

PIERCE'S DISEASE CONTROL PROGRAM STATUTES
Food and Agricultural Code

6045.

(a) The Legislature hereby finds and declares that the plant killing bacterium, *Xylella fastidiosa* and the resulting pathogen, Pierce's disease, and its vectors present a clear and present danger to California's fifty billion dollar grape industry, as well as to many other commodities and plant life.

(b) There exists an ongoing need for at least fifteen million dollars ($15,000,000) annually in research and programs to combat Pierce's disease and its vectors in California.

6046.

(a) There is hereby created in the Department of Food and Agriculture the Pierce's Disease Control Program.

(b) The Governor shall appoint a statewide coordinator, and the secretary shall provide an appropriate level of support staffing and logistical support for combating Pierce's disease and its vectors.

(c)

(1) There is hereby created the Pierce's Disease Management Account in the Food and Agriculture Fund.

(2) The account shall consist of money transferred from the General Fund under subdivision (d) and money made available from federal, industry, and other sources. Money made available from federal, industry, and other sources shall be available for expenditure without regard to fiscal year for the purpose of combating Pierce's disease or its vectors. State general funds to be utilized for research shall only be expended when the secretary has received commitments from nonstate sources for at least a 25-percent match for each state dollar to be expended.

(d)

(1) The sum of six million nine hundred thousand dollars ($6,900,000) is hereby appropriated from the General Fund to the account created by this article in the Department of Food and Agriculture Fund and shall be available for expenditure by the department without regard to fiscal year for the purpose of combating Pierce's disease or its vectors.

(2) It is the intent of the Legislature that a total of thirteen million eight hundred thousand dollars ($13,800,000) be made available from the General Fund for purposes of providing funding to the program established by subdivision (a). Therefore, it is further the intent of the Legislature, in addition to the appropriation in paragraph (1), to appropriate six million nine hundred thousand dollars ($6,900,000) from the General Fund in the Budget Act of 2000 to the department for the purpose of funding the program established by subdivision (a).

(e) The funds appropriated pursuant to this section to the Food and Agriculture Fund for the purpose of combating Pierce's disease and its vectors shall be used for costs that are incurred by the state or by local entities during and subsequent to the fiscal year of the act that added this section for the purpose of research and other efforts to combat Pierce's disease and its vectors.

(f) Whenever, in any county, funds are allocated by the Department of Food and Agriculture for local assistance regarding Pierce's disease and its vectors, those funds shall be made available to a local public entity, or local public entities, designated by that county's board of supervisors.

(g) Funds appropriated for local assistance shall not be allocated to the local public entity until the local public entity creates a Pierce's disease workplan that is approved by the department. Any funds allocated by the department to a designated local public entity or designated local public entity shall be utilized for activities consistent with the local Pierce's disease workplan or other programs or workplans approved by the department. It shall be the responsibility of the designated local public entity to develop and implement the local Pierce's disease workplan. Upon request, the department shall provide consultation to the local public entity regarding its workplan.

(h) The workplan created by the designated local public entity shall include, but is not limited to, all of the following:

(1) In coordination with the department, the development and delivery of producer outreach information and training to local communities, groups, and individuals to organize their involvement with the workplan and to raise awareness regarding Pierce's disease and its vectors.

(2) In coordination with the department, the development and delivery of ongoing training of the designated local public entity's employees in the biology, survey, and treatment of Pierce's disease and its vectors.

(3) The identification within the designated local public entity of a local Pierce's disease coordinator.

(4) The proposed treatment of Pierce's disease and its vectors. Treatment programs shall comply with all applicable laws and regulations and shall be conducted in an environmentally responsible manner.

(5) In coordination with the department, the development and implementation of a data collection system to track and report new infestations of Pierce's disease and its vectors in a manner respectful of property and other rights of those affected.

(6) On an annual basis, while funds appropriated by this section are available for encumbrance, the department shall review the progress of each local public entity's activities regarding Pierce's disease and its vectors and, as needed, make recommendations regarding those activities to the local public entity.

(i) Notwithstanding Section 7550.5 of the Government Code, the department shall report to the Legislature on January 1, 2001, and each January 1 while this section is operative, regarding its expenditures, progress, and ongoing priorities in combating Pierce's disease and its vectors in California.

(j) This article shall become inoperative on January 1, 2006, and as of January 1, 2007, is repealed, unless a later enacted statute that is enacted before January 1, 2007, deletes or extends the dates on which it becomes inoperative and is repealed.

6047. The secretary may establish, maintain, and enforce regulations consistent with the intent of the Legislature as expressed in this article as may be necessary to interpret, clarify, or implement this article. This authority shall be liberally construed to effectuate the intent of this article.

ITEM H

Stanislaus County Glassy-winged Sharpshooter/Pierce's Disease Program
Contract # 99-0818
2000/2001 BUDGET/FISCAL DISPLAY

SURVEY ACTIVITIES			
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	TOTAL PERSONNEL SERVICES		**$ 298,833.60**
Operating Expenses			
General Expense/Supplies (general office and field supplies)			$ 500.00
Cell Phones (purchase/service)			$ 2,255.01
Vehicle Expense			
County @ .31/mile	63,484 miles		$ 19,680.04
State @ .17/mile	78,535 miles		$ 13,350.95
Indirect Cost (25% of total Personnel Services)			$ 74,708.40
	TOTAL OPERATING EXPENSES		**$ 110,494.40**
	TOTAL SURVEY ACTIVITIES		**$ 409,328.00**
REGULATORY/TREATMENT ACTIVITIES			
Personnel Services			
Agricultural Inspector			$ -
Staff Benefits			
Permanent @ % rate)			
	TOTAL PERSONNEL SERVICES		$ -
	TOTAL REGULATORY/TREATMENT		$ -
GRAND TOTAL			**$ 409,328.00**

ITEM I

PIERCE'S DISEASE CONTROL PROGRAM

LOCAL APPEAL PROCESS

Pursuant to Section 3651 (c) (3) of the regulations, the Stanislaus County Department of Agriculture's Pierce's Disease 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.

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: AGRICULTURAL COMMISSIONER

Urgent_____ Routine XX

__O Concurs with Recommendation YES X NO___
(Information Attached)

BOARD AGENDA # *B-1

AGENDA DATE December 19, 2000

4/5 Vote Required YES___ NO___

SUBJECT:

DESIGNATION OF THE STANISLAUS COUNTY AGRICULTURAL COMMISSIONER'S OFFICE AS THE LOCAL PUBLIC AGENCY RESPONSIBLE FOR CONDUCTING STANISLAUS COUNTY'S GLASSY-WINGED SHARPSHOOTER/PIERCE'S DISEASE CONTROL PROGRAM

STAFF RECOMMENDATIONS:

1. DESIGNATE THE STANISLAUS COUNTY AGRICULTURAL COMMISSIONER'S OFFICE AS THE LOCAL PUBLIC AGENCY RESPONSIBLE FOR CONDUCTING STANISLAUS COUNTY'S GLASSY-WINGED SHARPSHOOTER/PIERCE'S DISEASE CONTROL PROGRAM.
2. SUBMIT A FORMAL MINUTE ORDER REFLECTING THIS DESIGNATION.

FISCAL IMPACT:

The designation of the Agricultural Commissioner's Office as the local public agency responsible for conducting Stanislaus County's Glassy-Winged Sharpshooter/Pierce's Disease Control Program requires minimal cost, however, if not approved, then the County will not receive $472,835 in State funding.

BOARD ACTION No. 2000-1000

On motion of Supervisor Simon, Seconded by Supervisor Blom,
and approved by the following vote,
Ayes: Supervisors: Paul, Mayfield, Blom, Simon, and Chairman Caruso
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None
1) X Approved as recommended
2) ____ Denied
3) ____ Approved as amended
Motion:

I hereby certify that the foregoing is a full, true and correct copy of the Original entered in the Minutes of the Board of Supervisors.
REAGAN M. WILSON
Clerk of the Board of Supervisors of the County of Stanislaus, State of California
By ____

BOARD OF SUPERVISORS * STANISLAUS COUNTY CAL. DEC 19 2000

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
STATE OF CALIFORNIA

Date: December 19, 2000 No. 2000-1000

On motion of Supervisor Simon, Seconded by Supervisor Blom,
and approved by the following vote,
Ayes: Supervisors: Paul, Mayfield, Blom, Simon, and Chairman Caruso
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

*B-1

THE FOLLOWING RESOLUTION WAS ADOPTED:

RESOLUTION IN SUPPORT OF DESIGNATION OF THE STANISLAUS COUNTY AGRICULTURAL COMMISSIONER'S OFFICE AS THE LOCAL PUBLIC AGENCY RESPONSIBLE FOR CONDUCTING STANISLAUS COUNTY'S GLASSY-WINGED SHARPSHOOTER/PIERCE'S DISEASE CONTROL PROGRAM

WHEREAS, the California State Legislature enacted statues (California Food & Ag Code, Sections 6045 to 6047) declaring Pierce's Disease and its vectors a clear and present danger to many of California's agricultural commodities, especially grapes; and,

WHEREAS, these statutes created and provided funding to be conducted at the state and local levels; and,

WHEREAS, the Secretary of Agriculture has the authority to establish, maintain, and enforce regulations consistent with the intent of the Legislature to interpret, clarify and implement the statute; and,

WHEREAS, these regulations (Sections 3650 to 3660 of the California Code of Regulations) became effective July 2000; and,

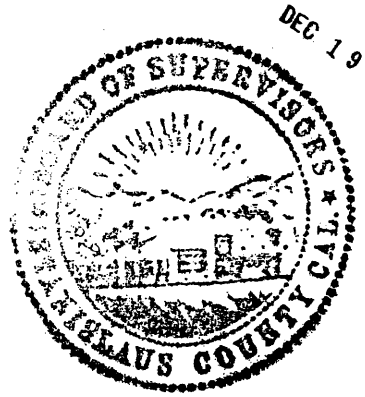
WHEREAS, the Agricultural Commissioner's Office is the lead agency for Stanislaus County's Glassy-Winged Sharpshooter (GWSS)/Pierce's Disease Program; and,

WHEREAS, designation of the Stanislaus County Agricultural Commissioner's Office as the local public agency responsible for the Glassy-Winged Sharpshooter (GWSS)/Pierce's Disease Program is required to receive funding per State statute,

NOW, THEREFORE, BE IT RESOLVED that the Stanislaus County Board of Supervisors does hereby unanimously order and designate the Stanislaus County Agricultural Commissioner's Office as the local public agency responsible for conducting Stanislaus County's Glassy-Winged Sharpshooter/Pierce's Disease Control Program.

DEC 19 20

I hereby certify that the foregoing is a full, true and correct copy of the Original entered in the Minutes of the Board of Supervisors.
REAGAN M. WILSON
Clerk of the Board of Supervisors of the County of Stanislaus, State of California
By



ATTEST: REAGAN M. WILSON, Clerk
Stanislaus County Board of Supervisors,
State of California,

By: Deputy

File No.

GLASSY-WINGED SHARPSHOOTER

DELIMITATION SURVEY GUIDELINES

GWSS Delimitation Grid

Grid is four square miles centered on the original detection site
Each square mile is subdivided into 16 subunits.
64 subunits in a four square mile area

(1) CENTER GRID = 1/16 SQUARE MILE (40 acres)
- Contains approximately 80-120 properties (assuming 2-3 properties/acre)
- Survey door to door: start on properties surrounding adjacent properties first; if additional GWSS found move to peripheral properties and sample back towards center.
- If GWSS found on periphery, no need to sample remaining properties (i.e. assume center grid is infested.)

(2) FIRST BUFFER= ¼ of square mile or 160 acres
- Actual size is 3/16 of a square mile [center grid=1/16 of a square mile]
- Each block with "2" is 10 acres.

- Survey (visually) two properties in each 10 acre block.

(3) REMAINDER OF GRID=3¾ square miles
- Composed of 60 (40 acre) blocks.
- Sample (visually) this area by searching alternate grid.
- Sample four properties in each designated block by inspecting one (1) property in each of the subgrids.

Visual inspections approximately maximum of 250 properties as follows:
Center grid ~ 100 residences.
First Buffer = 2 X 2 = 48 residences
Remainder of grid = 3-X4 = 120 residences

When selecting survey properties outside the grid, use biological bias by targeting properties which have:

- Citrus and a diversity of other evergreen/deciduous host plants (i.e. oaks, crepe myrtle, eucalyptus, grapes, Punus spp, etc.)
- Plants which have upright (vertical) flush (new) growth which can be sampled with a beating sheet or a sweep net (eight feet high or lower).

Supplemental Yellow Panel Trapping (Optional)

- Place one yellow panel trap (in citrus) in each of the subunits not designated for visual survey.
  Total = 30 traps

Service traps at least twice during course of visual survey. (Traps could be rotated between the four subunits 910 acre) every 1-2 weeks to sample 120 sites over a 4-8 week period.

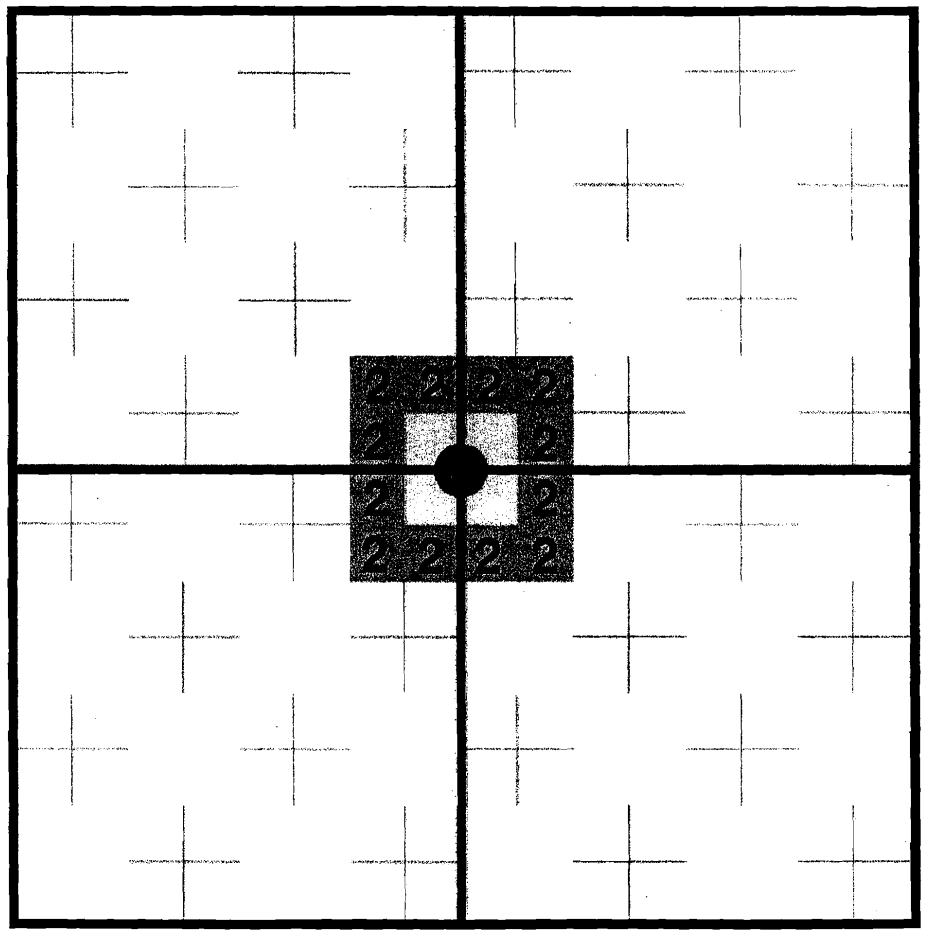
Note: Pattern of finds will determine subsequent survey in the grid. (i.e. May want to survey in previously non-designated grids or those surveyed to help define the boundaries of the infestation.)

4 Square Mile Survey Grid
For Glassy-winged Sharpshooter

4 Square Mile Survey Grid
For Glassy-winged Sharpshooter

Notes:

- Total samples per square mile outside of core = 34
- Total samples per four-square-mile grid = 136 properties
- Bio-bias to: citrus, flush growth, sucker growth, oaks, grapes, crape myrtle



Original Find Site
100% Sampling

2

1st buffer around core
Sample at 2 properties per 10 acres

40 Acres
Sample at 1 property per 10 acres

1,320 feet

Attachment 3

GLASSY-WINGED SHARPSHOOTER

SURVEY GUIDELINES

Statewide Survey

Initial County Survey

Nursery Survey for Infested Counties

California Department of Food and Agriculture

Plant Health and Pest Prevention Services

March 2000

INTRODUCTION AND TABLE OF CONTENTS

The Glassy-Winged Sharpshooter (GWSS) Survey Guidelines provide basic information regarding survey areas, methods, hosts, specimen collection and identification for surveying of nurseries, urban areas, and crop production areas. The Department greatly appreciates the contributions of R. A. Redak, J. A. Bethke, T. D. Paine, J. N. Kabashima, and M. Blua, University of California, Riverside, in preparing the guidelines for the •Monitoring for GWSS in Commercial Nurseries.•

SECTIONS

I. GWSS Statewide Survey Recommendations and Guidelines

II. Initial County GWSS Survey

III. Nursery Survey for GWSS Infested Counties

APPENDICES

A. Glassy-Winged Sharpshooter Oviposition anı Food Hosts

B. Monitoring for GWSS in Commercial Nurseries

C. Map

California Department of Food and Agriculture
Plant Health and Pest Prevention Services
March 2000

GLASSY-WINGED SHARPSHOOTER STATEWIDE SURVEY RECOMMENDATIONS AND GUIDELINES[1]

The glassy-winged sharpshooter (GWSS), *Homalodisca coagulata*, first reported in California in the early 1990's, is currently known to be widely distributed in the south coastal region of the State. Infested south coastal counties include Santa Barbara, Ventura, Los Angeles, Orange, San Diego, and adjacent inland areas of western San Bernardino and Riverside Counties. In the summer of 1998, GWSS was detected in commercial citrus and grape plantings located southeast of Bakersfield in Kern County. During the early 1990's, high GWSS populations were associated primarily with citrus along the coast. Recently, this sharpshooter has become locally abundant further inland (Riverside and San Diego Counties) where it has been implicated as the primary vector in a Pierce's Disease epidemic in the Temecula Valley.

Potential Range in California

There is currently no methodology available to predict the potential range of GWSS in California. Methodology development has been identified as a research priority by the California Department of Food and Agriculture (CDFA) Glassy-Winged Sharpshooter/Pierce's Disease Task Force. Although the distribution of citrus may be predictive of the sharpshooter's range in the San Joaquin Valley and Southern California, there is the possibility that other widely distributed native plants (such as oaks) may play a significant role in reservoiring GWSS populations along the central and northern coasts and in the Sacramento Valley. Given this possibility, the potential range of this insect may encompass most of the major agricultural production regions of the State. As such, GWSS may represent a significant statewide threat to grape, peach and almond growers because of its ability to effectively vector various strains of the bacterium *Xylella fastidiosa*.

Survey Area

The crops listed above are grown commercially in many California counties in which GWSS has not been detected (Appendix C). Limited infestations occur in two commercial production counties, Kern and Santa Barbara. Some highly urbanized counties are adjacent to commercial production areas and might serve as introduction sites for GWSS, such as Marin and San Francisco. The following 43 counties are recommended for survey:

Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Humboldt, Imperial, Kern, Kings, Lake, Madera, Marin, Mariposa, Mendocino, Merced, Monterey, Napa, Nevada, Placer, Sacramento, San Benito, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba (Appendix C).

[1] Recent changes are indicated with double underlining.

Available Survey Methods

Visual Searches - Visual searches can be conducted to find adults, nymphs, nymphal cast skins, egg masses, and egg scars. When searching for active life stages on individual plants, certain behavioral characteristics of the sharpshooter can be used to increase the probability of detection. Important traits to be considered are: 1) adults and older nymphs are primarily stem feeders; 2) new flush growth is preferred; and 3) on trees, the insects usually select shoots that are growing upward (vertically oriented as opposed to horizontal twigs). GWSS selects southern exposures.

Host searches should be enhanced by using nets (aerial and sweep) and beating sheets. The effectiveness of these collection devices is largely dependent on the types and density of life stages present. When populations are large and well established, adults are often the easiest life stage to detect because they are highly visible when flying around or between their host plants. Flight activity is most pronounced during the late morning and afternoon hours, therefore, surveys should be conducted during the warmer parts of the day, if practical. Correct timing is particularly critical if adult numbers are low. At low densities and during cooler times of the day, nets may be used to agitate foliage causing cryptic adults to take flight. Either aerial or sweep nets can be used to capture adults, but the former are often more effective since they are lighter, more maneuverable, have larger openings, and are often equipped with longer handles. Retrieval of specimens from aerial nets is also more efficient as captured individuals are always visible. Sweep nets are constructed of sturdy durable materials and designed to quickly sample a wide variety of short (generally four feet or less in height), woody, and herbaceous plants, such as those found in nurseries. However, care must be exercised when using these nets so that certain tender plants are not injured. Beating sheets are also an excellent tool because they: 1) are more effective (as compared to a sweep net) in direct sampling of highly suspect plant parts, such as erect flush growth; and 2) permit the rapid discovery of nymphs and their cast skins. They also help facilitate the capture of nymphs because unlike adults, which often fly before or immediately after landing, the immatures often will remain on the sheet long enough to allow collection. Beating sheets are most effective early in the day when temperatures are low and the insects are less active.

Traps - Yellow sticky panels measuring a minimum of 5" X 9" are the trap of choice for GWSS. Of the commercially available ones, unbaited Pherocon AM traps are the best suited for survey, as they are relatively inexpensive, have a moderately large sticky surface, and can be easily deployed in a wide variety of hosts, either by hand or with the use of a trapping pole. GWSS has also occasionally been recovered from the sticky inserts in Jackson traps, indicating that other trap types containing sticky components may yield specimens.

Hosts

The GWSS feeds on and oviposits in a wide variety of plants. The hosts listed in Appendix A are a compilation of plant species with which GWSS has been associated in

California and the southeastern United States. Undoubtedly, this list will continue to expand.
Citrus is a favored host in Southern California but very high sharpshooter populations have also been observed on avocado, crape myrtle, and several species of woody ornamentals. Other favored introduced plants include Eucalyptus and various members of the rose and mallow plant families. Native hosts include both evergreen and deciduous oaks, sycamore and laurel sumac.

Seasonality

GWSS has two generations per year. Studies in Southern California have shown that, although adults are present and must feed throughout the year, egg laying activities are either absent or reduced to very low levels during the winter months of December, January, and February. During this same period, the numbers of over-wintering adults also decreases. Egg laying resumes in late February and continues through May. The first generation completes development from late May to late August. Adults from this generation lay egg masses from mid-June through late September, which give rise to over-wintering adults. This developmental pattern results in overlapping generations in which each life stage reaches its highest levels at some time from June through October. Conducting surveys during this five-month period should optimize the probability of detection of established populations in urban/residential and cropland environments. In the case of mobile hosts (such as nursery stock), the timing of surveys may be dictated by the shipment schedules.

Sites at Risk Due to Natural Dispersal

There are two natural dispersal pathways by which the GWSS could expand its range northward into non-infested areas of the state. One is along the coast from Santa Barbara County. The other is through the San Joaquin Valley from the infested area in southern Kern County.

Recommendation: Systematic grid searches should be conducted in these two counties to accurately determine the limits of the current infestations. Although the sharpshooter has been known from Santa Barbara County for a number of years, it appears to be restricted to the urbanized coastal areas south of the Santa Ynez Mountains, between Goleta and Carpenteria. Transect surveys need to be conducted along the 101 corridor from Goleta north to Buellton, along Highway 1 to Lompoc, and along Highway 154 from Santa Barbara into the Santa Ynez Valley. Five sites per lineal mile should be surveyed along these routes utilizing both visual searches and yellow panel traps. Besides providing useful distributional information, these surveys may also provide some insights as to the suitability of native coastal plant species as hosts for GWSS. In addition to these transects, systematic visual grid surveys of dooryards and public use areas (parks, greenways, etc.) should be undertaken in the cities of Santa Ynez, Solvang, Lompoc, Vandenberg Village, Orcutt, and Santa Maria. In southern Kern County, transect surveys should be conducted from the Grapevine area north to Arvin, in citrus plantings along Highway 166 southeast of Maricopa, and in the citrus belt which extends along the western foothills of the Sierras from northern Kern County into Southern Fresno County. The western and northern boundaries of the Kern County infestation also

need to be more accurately delimited. This will require systematic grid searches of each of the one-mile sections lying entirely or partially within the incorporated areas of Bakersfield and Oildale.

Sites at Risk Due to Artificial Dispersal

Nurseries

Out-of-state nursery stock, infested with GWSS eggs, has been implicated as the possible source of the original California infestation. Egg masses have also been found on nursery stock grown in infested areas of the State. This indicates that nursery stock represents a viable pathway for introduction and intrastate movement of this insect pest.

Recommendation: Nurseries, which could potentially receive and disseminate GWSS infested plants into non-infested counties of California, should be identified and surveyed.

Nursery Surveys - The following protocols represent a compilation of a series of observations made during a recent survey of a limited number of wholesale nurseries in Southern California by California Department of Food and Agriculture entomologists and guidelines provided by University of California research scientists.

1. Adult surveys. Sweep nets should always be used to augment the visual examination of plant materials. It is advisable to survey all stock in the nurseries by this method, since adults may be widely scattered and resting on non-host plants. Sweeping is most likely to capture adults and/or nymphs when temperatures are below 60°F. As temperatures warm, adults are less likely to be caught by sweeping but this activity will cause adults to fly, making them easier to see. Adults can also be stirred up by agitating foliage with net handles or lightly jarring pots or containers. Adults are usually difficult to net in flight, so they should be followed to their landing site, knocked into either a sweep or aerial net, and then collected into alcohol.

2. Egg mass and nymphal surveys. These are best restricted to known ovipositional hosts within the nursery (Attachment A). Old egg scars are the easiest to detect since egg deposition sites are visible on both leaf surfaces. This is not always the case with newly laid eggs, as the raised surface blister (and characteristic waxy covering) is only visible on the undersides of the leaves. Consequently, a representative sample of leaves should be turned over and examined for egg masses. Backlighting against a sunny sky will also help in finding egg masses. Nymphs, and their cast skins, are best detected by using a beating sheet. Beating sheets permit the selective sampling of smaller, rapidly growing plants or regions of vigorous upright growth (such as the terminals and suckers) on large shrubs and trees.

3. Yellow sticky traps have also been found useful in nurseries and have occasionally detected the presence of sharpshooters when other survey techniques have failed. Based on limited observations in Southern California, traps can be

used to successfully monitor GWSS populations as long as they are strategically and properly placed (i.e., in areas containing a variety of known feeding hosts). Yellow sticky traps should be placed at about canopy height at a density of not less than one per one-half acre. If multiple canopies are present, then traps should be used to detect insects in each of the canopies present. Traps should be placed well within the nursery and never in the windrow or at the fence (property) line. Traps deployed in individual host plants should be positioned in a highly visible position (not hidden in the foliage), and placed in or near an area of vigorous upright growth on the warmest side of the tree. If plants are short, Japanese beetle rods, or wooden stakes or poles can be used to position traps at the proper height. Traps should be serviced every two weeks and remain in place for a minimum of ten (10) weeks.

4. Survey crews should have at least one person who can recognize a wide variety of plants and is familiar with the common and botanical names of ornamental plants. This is important because many nurseries do not label their stock or have maps showing where plant species are distributed on the property.

Urban/Residential Areas

Since the GWSS has been present in Southern California for at least a decade, it is possible that it has already been introduced into residential areas within the survey area. Regions most at risk would be new (10 years old or less) housing and commercial developments.

Recommendation: After removal from the field, all insect detection traps within the survey area should be routinely screened for GWSS. This includes all traps deployed for detection of exotic pests in urban areas including the sticky inserts from Jackson traps, Pherocon AM traps, ChamP traps and Japanese beetle traps.

Recommendation: AM traps should be "piggybacked" on the Mediterranean fruit fly (Medfly) trap sites in the geographic area identified above. Traps should be placed at the same per-square-mile density as the Medfly traps, up to a density of 5 AM traps per square mile. Multiple host sites with citrus and other seasonal pome and stone fruits would be targeted. Traps would be placed in citrus, whenever possible, left on-site for six weeks, and follow the Medfly Jackson traps throughout the trapping season.

Recommendation: Visual surveys for all life stages should be conducted in all larger ornamental plantings containing GWSS hosts. Areas to be examined would include landscaped median strips, border plantings along major urban thoroughfares, rights-of-way along major state highways and interstates, and in parks, industrial parks, golf courses, and cemeteries.

Cropland

• If the GWSS is going to invade croplands, the most probable routes will be: (1) via spread from nearby infested urban areas; or (2) by the use of egg infested stock to establish new citrus plantings. Also since citrus groves are capable of generating large numbers of individuals, and sustaining sharpshooter populations throughout the year,

such plantings should be targeted for detection of GWSS throughout the major agricultural production areas of the state.

Recommendation: Commercial crop survey shall be prioritized as follows: (1) all commercial plantings of *Citrus* spp., *Vitis* and *Prunus* spp. which fall entirely or partially within a ½mile radius of residential areas or other known GWSS reservoirs (i.e., riparian habitats and/or oak woodlands; (2) all new citrus plantings; and (3) all the remaining citrus groves in each county.

Survey Guidelines—Priorities 1 and 2: Visual searches for all life stages shall be conducted throughout each block where the borders of the block are within the above radius. Yellow panel traps may be used to augment visual searches. If traps are utilized, they should be deployed at a minimum density of one per 120 acres. Trap from April through October, relocating the trap into a new 20-acre subquadrant every six weeks. Service every two to three weeks. Use a new trap at the time of each relocation; replace traps as needed. Traps deployed in *Citrus* and *Prunus* should be placed in the upper canopy near flush foliage in exposed positions (not inside the foliage). Smaller rapidly growing trees inter-planted within groves of mature trees have also been observed with high numbers of adult GWSS and may represent the best sites for visual inspections or trap deployment. Observations in the southeastern U. S. also indicate that peach trees in a weakened condition or even single limbs dying from severe scale infestations or those prematurely defoliated due to other natural causes are particularly attractive and often act as a congregation site for large numbers of adults. Deployment of traps in or near stressed trees may enhance the probability of detection. In vineyards, poles/stakes should be used to suspend yellow panel traps just above the grape canopy. Deployment in perimeter rows or along heavily traveled routes within the planting should be avoided.

Priority 3: Deploy traps at a minimum density of one per 240 acres using the above guidelines for citrus. Trap from April through October, relocating the trap into a new 40-acre subquadrant every six weeks. Service every two to three weeks. Use a new trap at the time of each relocation; replace traps as needed.

- Other tree crops should be surveyed using "in-place" traps in the same manner as those used for detection of exotic pests in rural settings.

Recommendation: All traps used by county, university extension and research personnel, private contractors and consultants (Pest Control Advisors), and growers for monitoring, controlling or certification of freedom from, orchard, vineyard, and ornamental crop pests should be screened for adult sharpshooters. Traps which should be inspected include, but are not restricted to, those used for apple maggot, walnut husk fly, olive fruit fly, Mediterranean fruit fly, Oriental fruit moth, peach twig borer, and codling moth. Physical devices such as "hopper tape" used to control grape and variegated leafhoppers should also be examined especially when deployed in vineyards bordering potential reservoir habitats such as citrus groves, housing developments, etc.

Hitchhiking Adults

It has been suggested that adult GWSS may be transported to winery locations by hitchhiking on gondolas of harvested grapes.

Recommendation: Survey high-risk locations and their immediate environs. High risk wineries are those which: (1) receive either large volumes of grapes from a variety of locations within a single county or from several counties; (2) receive grapes from within or near locations known to be infested by GWSS; and (3) allow unprocessed loads of grapes harvested at night to be present at the crushing location until midday of the following day. During grape harvest, such locations should be continuously trapped and visually inspected at least once.

Specimen Collection and Identification

All glassy-winged sharpshooter suspects shall be submitted to the Plant Pest Diagnostics Center in Sacramento or submitted to the local county agricultural commissioner for submission to the Center for confirmation. This is particularly important for specimens which represent new distributional and host records and those which will be used as the basis for regulatory actions.

Specimen Collection and Submission of Samples – Leaves with suspect **egg masses** and/or egg scars should be placed in sealed plastic bags. Free-living **adults and nymphs** should be killed by placing them in vials containing 70% alcohol. These containers should have tight fitting corks or screw top lids to prevent/minimize the loss of specimens or preservative during transit to the laboratory. Suspect adults on sticky traps can be submitted by either sending the entire trap or by cutting out and sending the portion of the trap containing the suspect sharpshooter. Prior to shipment yellow panel traps should be reversed so that the sticky surfaces are on the inside and a rubber band placed around the outside to hold the two halves in position. Care should be taken to insure that the sticky surfaces are not in contact. Do not submit traps covered with clear plastic. Sticky traps should be placed in sealed plastic bag(s) before packaging. "Cut-outs" should be placed in dry plastic vials and sized to fit tightly inside so that neither the specimen nor the "stickem" comes in contact with the inner surface of the container. Use a Standard Form 65-020, "Pest and Damage Record" (PDR), when sending specimens for identification.

INITIAL COUNTY GLASSY-WINGED SHARPSHOOTER SURVEY[1]

An initial county survey is the minimum survey determined to be necessary to evidence that a county is apparently free from glassy-winged sharpshooter (GWSS). This survey must be completed prior to a county request to the Department for approval of adoption of a county ordinance for protection against the glassy-winged sharpshooter, as provided in Section 5305, Food and Agricultural Code.

In addition to the initial county survey, each county adopting an ordinance against GWSS must also complete all remaining statewide survey recommendations. This may be done concurrently.

This survey program shall include visual and trapping surveys of nurseries, urban or residential areas, and croplands in each county requesting ordinance approval.

- **Nurseries**

All nurseries in the county, which receive nursery stock from outside the county, should be contacted and the sources of imported plant materials determined. Those nurseries receiving or which have received (within the past five years) host plants from the known infested counties should be considered high-risk establishments and surveyed using the recommended survey methods* (sweep survey; visual surveys of ovipositional hosts for nymphs, egg masses and egg scars; trapping at the rate of two yellow panel traps per acre for a minimum of four weeks).

Approximately 10% of the other nurseries in the county should be randomly surveyed using the same methods.

- **Urban or Residential Areas**

Yellow panel traps deployed at a density of up to five per square mile; traps placed in citrus or other favored ornamental hosts; with negative catches for four to six weeks.

All exotic insect detection traps deployed in the county should be checked for one month with no adult GWSS found.

Visual surveys completed on 10% of public and commercial ornamental plantings determined to represent the greatest risk. These would include those that transect through, or are a part of, housing tracts, shopping malls and industrial parks landscaped within the last five years.

[1] Recent changes are indicated with double underlining.

- **Croplands**

Complete initial visual searches of 25% of all blocks of commercial citrus and 10% of all grape vineyards and *Prunus* spp. orchards, the borders of which fall within a ¼mile radius of urban or commercial sites landscaped within the past five years.

Complete initial visual searches of at least 25% of all new (five years old or less) citrus plantings.

Trap the remaining citrus acreage at a minimum density of one yellow panel trap per 240 acres of host trees for a minimum of four to six weeks; inspect each trap at least every three weeks.

*** Recommended Survey Methods**

Visual Searches - Visual searches can be conducted to find adults, nymphs, nymphal cast skins, egg masses, and egg scars. When searching for active life stages on individual plants, certain behavioral characteristics of the sharpshooter can be used to increase the probability of detection. Important traits to be considered are: 1) adults and older nymphs are primarily stem feeders; 2) new flush growth is preferred; and 3) on trees, the insects usually select shoots that are growing upward (vertically oriented as opposed to horizontal twigs).

Host searches should be enhanced by using nets (aerial and sweep) and beating sheets. The effectiveness of these collection devices is largely dependent on the types and density of life stages present. When populations are large and well established, adults are often the easiest life stage to detect because they are highly visible when flying around or between their host plants. Flight activity is most pronounced during the late morning and afternoon hours, therefore, surveys should be conducted during the warmer parts of the day, if practical. Correct timing is particularly critical if adult numbers are low. At low densities and during cooler times of the day, nets may be used to agitate foliage causing cryptic adults to take flight. Either aerial or sweep nets can be used to capture adults, but the former are often more effective since they are lighter, more maneuverable, have larger openings, and are often equipped with longer handles. Retrieval of specimens from aerial nets is also more efficient as captured individuals are always visible. Sweep nets are constructed of sturdy durable materials and designed to quickly sample a wide variety of short (generally four feet or less in height), woody, and herbaceous plants, such as those found in nurseries. However, care must be exercised when using these nets so that certain tender plants are not injured. Beating sheets are also an excellent tool because they: 1) are more effective (as compared to a sweep net) in directed sampling of highly suspect plant parts, such as erect flush growth; and 2) permit the rapid discovery of nymphs and their cast skins. They also help facilitate the capture of nymphs because unlike adults, which often fly before or immediately after landing, the immatures often will remain on the sheet long enough to allow collection. Beating sheets are most effective early in the day when temperatures are low and the insects are less active.

Traps - Yellow sticky panels measuring a minimum of 5" X 9" are the trap of choice for GWSS. Of the commercially available ones, unbaited Pherocon AM traps are the best suited for survey, as they are relatively inexpensive, have a moderately large sticky surface, and can be easily deployed in a wide variety of hosts, either by hand or with the use of a trapping pole. GWSS has also occasionally been recovered from the sticky inserts in Jackson traps, indicating that other trap types containing sticky components may yield specimens.

SECTION III

NURSERY SURVEY FOR GLASSY-WINGED SHARPSHOOTER (GWSS) INFESTED COUNTIES

The following guidelines are intended for use in either a voluntary nursery program or a program necessitated by county ordinances or other restrictions for the shipment of GWSS-free nursery stock to locations outside the known infested areas of California.

- The "Monitoring for GWSS in Commercial Nurseries" Guidelines prepared by R. A. Redak, J. A. Bethke, T. D. Paine, J. N. Kabashima, and M. Blua, Department of Entomology, University of California (**Appendix B**), shall be followed by any nursery planning to ship nursery stock to counties outside the known GWSS infested area.

- The production nursery shall enter into a compliance agreement with the origin county agricultural commissioner which sets forth the monitoring and/or treatment requirements, establishes the types of nursery stock to which the agreement applies, and to authorize the nursery to use a method of evidencing compliance with said agreement which is acceptable to the destination counties.

- County agricultural commissioners shall monitor compliance with the agreement on a regular basis, with a minimum of one bimonthly inspection.

- Nurseries maintaining or shipping nursery stock of the kinds covered by the agreement which is determined to be infested with GWSS are in violation of their compliance agreement and shall immediately discontinue shipments under the agreement. Appropriate corrective action shall be taken by the origin county agricultural commissioner.

APPENDIX A

GLASSY-WINGED SHARPSHOOTER

OVIPOSITION(*) AND FOOD HOSTS

Woody Plants:

Almond	*Prunus amygdalus*
Apple	*Malus sylvestris*
Apricot	*Prunus armeniaca*
Arborvitae	*Thuja* spp.
Ash*	***Fraxinus* spp.**
Avocado*	***Persea* spp.**
Birch	*Betula* spp.
Blackberry	*Rubus* spp.
Blackgum	*Nyssa sylvatica*
Bottlebrush*	***Melaleuca* spp.**
Bougainvillea	*Bougainvillea* spp.
Boxwood	*Buxus* spp.
Camellia	*Camellia japonica*
Camphor tree*	***Cinnamomum camphora***
Carob*	***Ceratonia spp.***
Carrot wood*	***Cupaniopsis anacardioides***
Catalpa	*Catalpa bignonioides*
Cherry	*Prunus avium*
Cherry laurel	*Prunus caroliniana*
Chinese Elm	*Ulmus parvifolia*
Chinaberry	*Melia azedarach*
Citrus*	***Citrus* spp.** (Note: GWSS is known to oviposit on lemon peel)
Coral tree*	***Erythrina caffra***
Cotoneaster	*Cotoneaster* spp.
Crape myrtle*	***Lagerstroemia* spp.**
Elaeagnus	*Elaeagnus* spp.
Elderberry*	***Sambucus* spp.**
Escallonia*	***Escallonia* spp.**
Eucalyptus*	***Eucalyptus* spp.**
Euonymus*	***Euonymus* spp.**
Fig	*Ficus* spp.
Grape*	***Vitis* spp.**
Hardenbergia*	***Hardenbergia* spp.**

Heavenly bamboo*	***Nandina domestica***
Holly	*Ilex* spp.
Japanese jasmine	*Jasminum mesnyi*
Laurel sumac*	***Rhus* spp.**
Loquat*	***Eriobotrya japonica***
Macadamia*	***Macadamia* spp.**
Magnolia*	***Magnolia* spp.**
Maidenhair-tree	*Ginkgo biloba*
Mulberry*	***Morus* spp.**
Myoporum*	***Myoporum* spp.**
Oak*	***Quercus* spp.**
Oleander	*Nerium* spp.
Orchid tree*	***Bauhinia purpurea***
Peach	*Prunus persica*
Pear	*Pyrus communis*
Philodendron	*Philodendron* spp.
Photinia*	***Photinia* spp.**
Pine	*Pinus* spp.
Pittosporum	*Pittosporum* spp.
Plum, chicksaw	*Prunus angustifolia*
Plum, cultivated	*Prunus* spp.
Podocarpus*	***Podocarpus* spp.**
Privet*	***Ligustrum* spp.**
Pyracantha/Firethorn	*Pyracantha coccinea*
Redbud*	***Cercis* spp.**
Sassafras	*Sassafras albidum*
Silk tree	*Albizia julibrissin*
Strawberry tree*	***Arbutus unedo***
Sumac*	***Rhus* spp.**
Sweetgum	*Liquidambar styraciflua*
Sycamore*	***Platanus* spp.**
Tristania*	***Tristania laurina***
Trumpet creeper	*Campsis radicans*
Trumpet flower*	***Gelsemium sempervirens***
Tung	*Aleurites fordii*
Tupidanthus*	***Tupidanthus calyptratus***
Umbrella tree*	***Schefflera* spp.**
Walnut	*Juglans* spp.
Willow, Corkscrew	*Salix matsudana 'Tortuosa'*
Wisteria	*Wisteria* spp.

Viburnum*	***Viburnum* spp.**
Yaupon	*Ilex vomitoria*
Yucca	*Yucca aloifolia*

Herbaceous Plants:

Asparagus	*Asparagus officinalis*
Boneset	*Eupatorium perfoliatum*
Cocklebur	*Xanthium* spp.
Coffeeweed*	***Cassia occidentalis, C. tora***
Corn	*Zea mays*
Cotton	*Gossypium* spp.
Cowpea	*Vigna sinensis*
Dogfennel	*Eupatorium capillifolium*
Evening-primrose	*Oenothera laciniata*
Gladiolus	*Gladiolus* spp.
Goldenglow	*Rudbeckia laciniata*
Goldenrod	*Solidago* spp.
Hibiscus*	***Hibiscus* spp.**
Hollyhock*	***Althaea* spp.**
Horseweed	*Erigeron canadensis*
Johnsongrass*	***Sorghum halepensse***
Lambsquarter*	***Chenopodium* spp.**
Lettuce, wild	*Lactuca canadensis*
Mallow	*Malva* spp.
Milkweed	*Asclepias* spp.
Okra*	***Hibiscus* spp.**
Philodendron	*Philodendron* spp.
Pigweed	*Amaranthus hybridus, A. spinosus*
Pokeweed	*Phytolacca americana*
Ragweed	*Ambrosia* spp.
Sowthistle	*Sonchus oleraceus*
Sunflower*	***Helianthus* spp.**
Tree Tobacco*	***Nicotiana* spp.**
Wild bergamot	*Monarda fistulosa*

California Department of Food and Agriculture
Plant Health and Pest Prevention Services
Permits and Regulations
March 5, 2000

APPENDIX B

Monitoring for GWSS in Commercial Nurseries

Guidelines prepared by

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March 24, 2000

1. **Be familiar with the basic identification of Glassywinged Sharpshooters**. You must be able to recognize egg masses, nymphs, and adults. Identification references can be obtained from the

    a. Online Media Kit from the University of California, Division of Natural Resources internet site (http://danrcs.ucdavis.edu/Special/gwss/default.shtml), also available from, UC County Extension Offices, County Agriculture Commissioner's Offices, and California Association of Nurserymen

    b. California Department of Food and Agriculture internet site (http://www.cdfa.ca.gov/gwss)

    c. California Department of Food and Agriculture publication, California Plant Pest & Disease Report Volume 18, Nos.3-4, June-September, 1999

    d. your local University of California, Cooperative Extension Farm Advisor.

2. **Know where you are**. If you are in a urban environment in Southern California or adjacent to citrus groves (in San Diego, Imperial, Riverside, Orange, Los Angeles, San Bernardino, Ventura, Santa Barbara, and Kern Counties, as of Jan. 20, 2000), you should assume your inventory has a high probability of carrying glassywinged sharpshooters and active monitoring and control procedures are warranted. This is especially true if your property is near or adjacent to housing developments, parks, agricultural, or natural areas planted with shrubs and trees. Glassywinged sharpshooters are strong flyers; they can easily disperse into nurseries from nearby trees and shrubs.

3. **Detection of Glassywinged Sharpshooters.** Currently, there are no satisfactory sharpshooter monitoring methods that are effective AND are easily adaptable for grower use. The following series of detection methods are suggested to monitor glassywinged sharpshooters in commercial nurseries.

    a. **Standard yellow sticky card insect monitoring traps.** Standard yellow sticky cards should be placed at approximately canopy height at a density of not-less than 1 card per one-half acre. If multiple plant canopies are present,

then multiple cards should be used to detect insects from each of the canopies present. Cards should be checked for sharpshooters no less than once per week. Sticky cards will only detect adult sharpshooters at relatively high population densities. Lack of detection on sticky cards DOES NOT necessarily mean that sharpshooters are not present, but trapped adults are solid evidence of a problem. Sticky card will not detect sharpshooters in the juvenile or egg stages nor are they likely to detect adult sharpshooters at low densities.

b. **Beat sheets, beat trays, or sweep nets**: When the ambient temperature is cool (below approximately 60°F), beat or sweep sampling may be an effective way to detect adult and juvenile sharpshooters. **For beat sampling,** place a white, two foot by two foot sheet of fabric, wood , stiff paper or other suitable material underneath the vegetation canopy to be sampled. Strike or shake vigorously the foliage overhanging the white sheet (be careful not to damage the foliage). Glassywinged sharpshooters will fall from the foliage and can be easily seen on the white sheet. Beat sampling will not detect sharpshooters in the egg stage, nor will it be effective at warmer temperatures. At warmer temperatures, the insects will either jump or fly away (and not fall onto the detection sheet) when disturbed. **For sweep sampling:** Simply sweep insect nets through foliage and examine bag contents. Detection of sharpshooters by sweep sampling may also be performed successfully during warmer (greater than 60°F) periods of time.

c. **Visual Inspections**: Visual inspections of foliage is perhaps the best method for detecting all stages of the sharpshooter. Carefully examine leaf petioles, twigs and small branches for the presence of nymph and adult sharpshooters. Be aware that the insects will try and hide from observation by moving to the far side of any available stem. Once scouts learn to recognize the characteristics, egg masses can easily be detected by visually inspecting the underside of leaves. Leaves should be backlit against a sunny sky to properly detect egg masses. All materials scheduled for transport out of Southern California should be closely examined.

4. **Disinfestation of Glassywinged Sharpshooter.** Upon detection, reasonable efforts should be made to eradicate all stages of the glassywinged sharpshooter on plant material scheduled to be shipped to areas north of Santa Barbara, Ventura, Los Angeles, Kern, and San Bernardino Counties. Three strategies should be considered for treating plant material infested with sharpshooters:

a. treating for active adult and juvenile infestations,

b. treating for juvenile infestations arising from egg hatch at point of destination,

c. treating for viable egg masses prior to shipment.

Treating for Active Adult and Juvenile Infestations:

As adults and juveniles may infest nursery material at any time, right up to the period of shipment, treatments for these stages of the insect should be performed as near to the time of shipping as is reasonably possible. **Any registered insecticide suitable for leafhopper control may be used. For any compound used, follow all label directions carefully.**

Treatments involving non-systemic materials should be thoroughly applied with a reasonable expectation that contact with the insect is made. Such treatments should be performed immediately prior to shipment. Following treatment, plants should be loaded (as rapidly as re-entry requirements allow) and shipped to prevent post-treatment infestation.

Treatments involving systemic insecticides must allow sufficient time for the distribution of the insecticide throughout the plant. Note, that several days to weeks (depending on compound) after treatment applications may be required to allow materials to distribute throughout the plant and achieve effective control.

Treatments for Juvenile Infestations Arising from Egg Hatch at the Point of Destination

If sharpshooter eggs masses are detected, plants should be treated with a systemic or long-acting insecticide so that newly hatched and feeding juvenile sharpshooters are killed. Again, from several days to weeks after the application has been made may be required for effective control. **For any compound utilized, follow all label directions carefully.**

Treatments for Viable Egg Masses prior to shipping

Currently, there are no registered insecticides that have been demonstrated to kill the egg masses of glassywinged sharpshooters. Studies are currently underway at the University of California to determine the efficacy of various insecticides against sharpshooter egg masses. As such information is developed, it will be released. Direct treatments of egg masses will reduce the need for systemic applications of materials to control juveniles emerging from egg masses at the destination point of the shipment.

Warning on the Use of Chemicals

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations printed on the container label. Confine chemicals to the property being treated. Never use chemicals in a manner that will result in runoff into storm or sewer drains, which will contaminate water supplies or natural waterways.

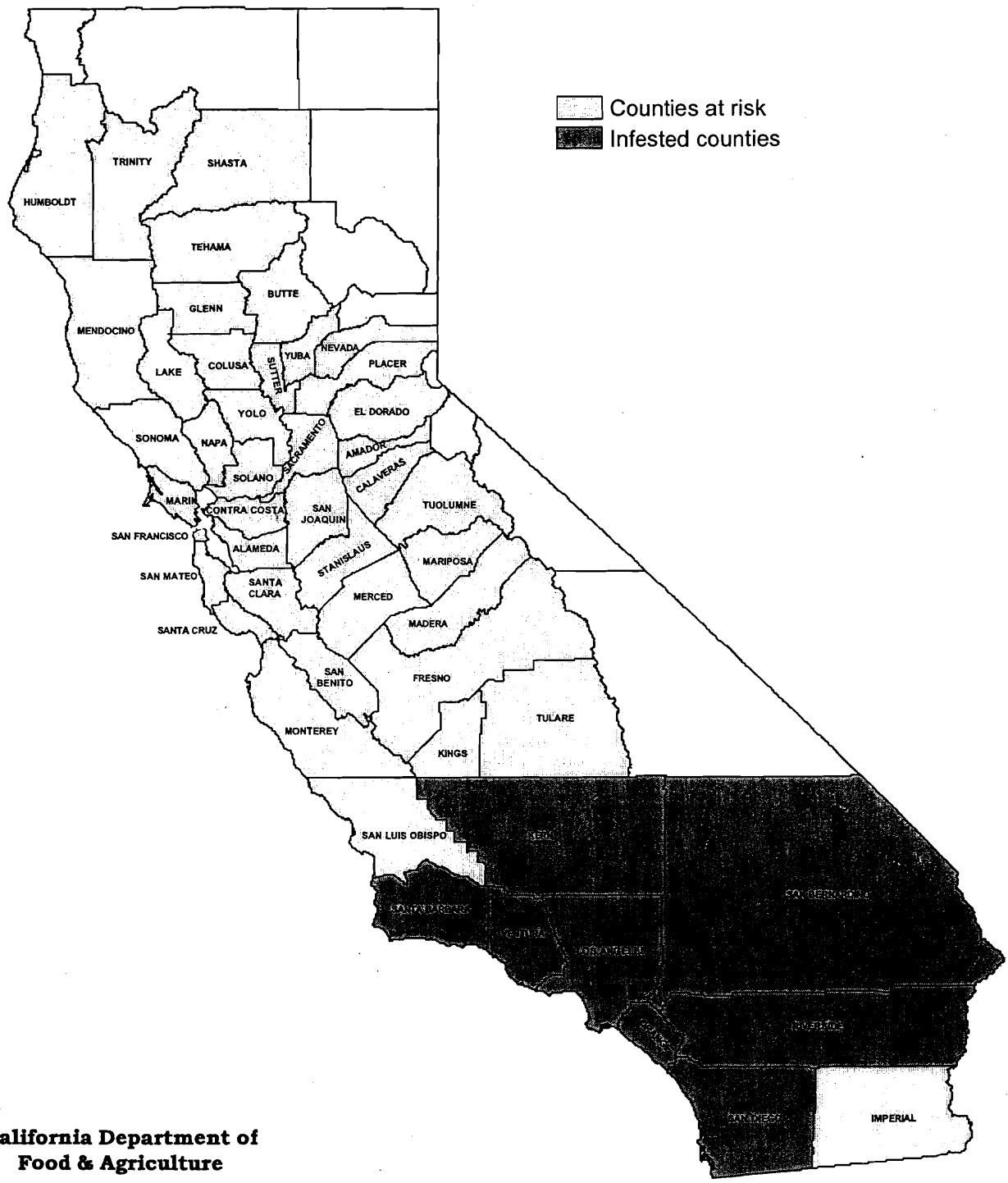
Dispose of empty containers carefully. Follow label instructions for disposal and never reuse containers. Make sure children and animals cannot reach empty containers. Do not pour unused or excess chemicals down the sink or toilet.

Consult your county agricultural commissioner for correct ways to dispose of excess pesticides. Never burn pesticide containers.

No endorsement of named or illustrated products is intended, nor is criticism implied of similar products that are not mentioned or illustrated.

APPENDIX C

Distribution of Glassy-winged Sharpshooter in California



California Department of Food & Agriculture

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