

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS

Title 3, California Code of Regulations
Section 3591.12, Subsection (a)
Peach Fruit Fly Eradication Area

INITIAL STATEMENT OF REASONS/
PLAIN ENGLISH POLICY STATEMENT OVERVIEW

The California Department of Food and Agriculture (Department) adopted section 3591.12 to provide authority to the State to eradicate infestations of *Bactrocera zonata*, peach fruit fly, from within the declared eradication area by the established means and methods.

Description of Public Problem, Administration Requirement, or Other Condition or Circumstance the Regulation is Intended to Address

This regulation is intended to address the obligation of the Department to protect the agricultural industry from the movement and spread of injurious plant pests within California.

Purpose and Factual Basis

This regulation amends the list in section 3591.12(a) to add Madera county to the list of eradication areas.

The factual basis for the determination by the Department that the amendment of this regulation is necessary is as follows:

On September 29, 2020, (Pest and Damage Records #FR0P06853138 and #FR0P06853139) two adult peach fruit flies were taken from two traps in the City of Chowchilla, which is located within Madera County. This detection of adult peach fruit flies is indicative of a possible incipient infestation of the fly in Madera County.

Peach fruit fly is an insect pest which attacks the fruit of various plants including, but not limited to, apple, peach, pear, tomato and citrus. The female punctures host fruit to lay eggs which develop into larvae. The punctures admit decay organisms that may cause tissue breakdown, and

larval feeding causes further breakdown of fruit tissue. Fruits with egg punctures and larval feeding are generally unfit for human consumption. Pupae may be found in fruit, but normally are found in soil. The first California detection occurred in Los Angeles County in 1984, and since that time, several re-introductions have been delimited and successfully eradicated.

California is the number one economic citrus state in the nation. The USDA's Citrus Fruits 2019 Summary puts the value of citrus at \$2.10 billion (pg. 8). Per the 2018-2019 California Agricultural Statistics Review, California stone fruits (including peaches, plums, nectarines, apricots and cherries) were valued at nearly \$875 million in 2018. Additionally, tomatoes were valued at close to \$1.2 billion. If the fly is allowed to spread and become established in host fruit production areas, California's agricultural industry would suffer losses due to decreased production of marketable fruit, increased pesticide use, if other states or countries enact quarantines against California products, and loss of markets. Thus, this incipient infestation presents a clear, imminent danger to the agricultural industry in California.

This occurrence of peach fruit fly triggers the delimitation response as outlined in the United States Department of Agriculture's Cooperative Fruit Fly Emergency Response Triggers & Guidelines in Madera County. This response requires CDFA to have eradication authority in Madera County.

The implementation of this proposed regulatory action is necessary to prevent the United States Department of Agriculture's Animal and Plant Health Inspection Service (USDA APHIS) from designating the entire state as infested with peach fruit fly, rather than just Madera County. If USDA APHIS were to consider the entire state infested, there would likely be additional detrimental quarantine requirements directed against California host commodities by the USDA APHIS and our international trade partners.

This regulation will avoid harm to the public's general welfare by providing authority for the Department to perform detection, control, and eradication activities against peach fruit fly in Madera County long enough to ensure that eradication is effective. It is necessary to begin eradication activities to prevent spread of the fly to non-infested areas. In addition, now that a pathway for this pest into Madera County has been established, it may be more likely that infestations will occur in the future. The amendment will allow timely response to any future

detections of peach fruit fly in Madera County. Therefore, it is necessary to amend this regulation to allow for eradication activities in Madera County.

The entire county of Madera is being proposed as an eradication area because the utilization of these political boundaries will avoid frequent amendments to the regulation; if the peach fruit fly is detected elsewhere within this county, there will be no associated regulatory impacts in areas of the county where no flies are found. By the time there is a detection, flies which may have already spread naturally from the initially recognized infested area may have resulted in small infestations outside the current known infested area. Additionally, these fly finds may be linked to smuggled uncertified fruit shipments which have been distributed within the area. Only through the implementation of this regulation would the Department be able to rapidly treat these small infestations in the affected county as they are detected.

If the peach fruit fly were allowed to spread and become established in host fruit production areas, California's agricultural industry would suffer losses due to decreased production of marketable fruit, increased pesticide use, and, if other states or countries enacted quarantines against California products, loss of markets..

Current Laws & Regulations

Existing law, FAC Section 401.5, states: “the department shall seek to protect the general welfare and economy of the state and seek to maintain the economic well-being of agriculturally dependent rural communities in this state.”

Existing law, FAC section 403, provides that the department shall prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds.

Existing law, FAC section 407, provides that the Secretary may adopt such regulations as are reasonably necessary to carry out the provisions of this code which the Secretary is directed or authorized to administer or enforce.

Existing law, FAC section 5321, provides that the Secretary is obligated to investigate the existence of any pest that is not generally distributed within this State and determine the probability of its spread, and the feasibility of its control or eradication.

Existing law, FAC section 5322, provides that the Secretary may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in the Secretary's opinion necessary to circumscribe and exterminate or prevent the spread of any pest which is described in FAC section 5321.

Existing law, FAC Section 5761, provides that regulations adopted pursuant to FAC Section 5322 may proclaim any portion of the state to be an eradication area with respect to the pest, prescribe the boundaries of such area, and name the pest and the hosts of the pest which are known to exist within the area, together with the means or methods which are to be used in the eradication or control of such pest.

Existing law, FAC Section 5762, provides that any pest with respect to which an eradication area has been proclaimed, and any stages of the pest, its hosts and carriers, and any premises, plants, and things infested or infected or exposed to infestation or infection with such pest or its hosts or carriers, within such area, are public nuisances, which are subject to all laws and remedies which relate to the prevention and abatement of public nuisances.

Existing law, FAC Section 5763, provides that the director, in a summary manner, may disinfect or take such other action, including removal or destruction, with reference to any such public nuisance, which he thinks is necessary.

Existing law, FAC Section 5764, provides that, if an eradication area has been proclaimed with respect to a species of fruit flies and the removal of host plants of such species is involved, the director may enter into an agreement with the owner of such host plants to remove and replace them with suitable nursery stock in lieu of treatment. Any expenditures for the replacement nursery stock shall not exceed an amount which is budgeted for the purpose or approved by the Director of Finance.

Existing Law, Title 3 CCR Section 3591.12, lists the counties within the peach fruit fly eradication area, the plants within this area that are considered public nuisances if infested or exposed to infestation, and the means and methods by which the Department is authorized to carry out eradication.

This amendment provides the necessary regulatory authority to prevent the artificial spread of a serious insect pest, which is a mandated statutory goal.

Action Plan

This amendment will provide authority for the State to perform specific detection, control, and eradication activities against the peach fruit fly in Madera County. This authority includes the “search for all stages of peach fruit fly by visual inspection, the use of traps, or any other means” [3CCR 3591.12(c)(3)].” It is necessary to perform delimitation procedures within Madera County. These delimitation procedures are nationally and internationally accepted standards for establishing if there is an incipient infestation of peach fruit fly and its exact location.

Intensive Delimitation Trapping

Intensive trapping is triggered after a single fly is trapped by the Department. Following confirmation of the specimen through lab tests, trap densities in the core square mile are increased to 25 Jackson traps and 25 McPhail traps within 24 hours. In the remainder of the delimitation area, 81 square miles, traps are placed in densities of 5 Jackson traps per square mile within 72 hours of the find. Traps in the core will be checked daily during the first week. Traps in the first buffer zone, 8 square miles, will be serviced every two days; those in the remainder of the delimitation area are checked at least once during the first week. All traps in the delimitation zone will be checked weekly following a week of negative trap catches. For a single fly find, intensive trapping ends after the second complete life cycle following the fly find, and then trap densities revert to detection trapping levels. The length of the fly life cycle is determined by a temperature dependent developmental model run by program personnel in Sacramento.

If a second fly is found in the infestation zone, additional traps are deployed around the new fly find and trap servicing in the new core area will be daily for the first week and increased emphasis will be placed on servicing traps in the buffer areas in an effort to better delimit the

infestation. Traps in the eight-square miles around the core are serviced every two days, until eradication activities begin, at which time the trap inspection frequency changes to weekly. All traps are then serviced weekly for three life cycles of the last fly detected. Traps may be relocated to available preferred hosts as practical.

Following an eradication program, if no additional flies are trapped, intensive trapping ends after the third complete life cycle of the final fly find.

Larval Survey

Fruit on a property where a fly has been trapped may be inspected for possible larval infestation. Small circular oviposition scars are occasionally visible, indicating an infested fruit. In the absence of visible clues, 100 or more of the fruit on preferred hosts (if available) may be cut open at random and examined for larvae. First and second instar larvae are tiny and may be feeding immediately under the surface of the skin; therefore, fruit cutting should be left to experienced personnel. Fruit on properties adjacent to a trap catch may also be inspected.

If two or more flies are trapped in proximity, fruit cutting may be extended to all properties in a 200-meter radius of the finds, concentrating on preferred hosts. Fruit must be inspected on the property; it cannot be removed from an established quarantine area.

Eradication Activities

The Department begins an eradication project when it determines that a peach fruit fly infestation exists within the state. Although there is no debate that either criterion two or three of the below criteria indicate the presence of a breeding peach fruit fly population, criterion one below is often open to further review. The CDFA may take up to 10 days, after any one criterion is met, to further identify the presence and location of the infestation in order to better target eradication activities.

1. Two flies within three miles of each other and within a time period equal to one life cycle of the fly;
2. One mated female; or
3. Larvae or pupae.

After an infestation is determined to exist and, 24 to 72 hours later, a notification of treatment is issued, then treatment will begin. Treatment activities may include the following methods:

Male Attractant Technique

The male attractant technique makes use of small amounts of attractant (methyl eugenol) and pesticide (insecticide) to lure all the male flies in a population to bait stations. The insecticide/lure mixture is applied to utility poles, street trees, and other unpainted surfaces (such as fences) within public right of ways using pressurized tree-marking guns. The project boundaries will be nine square miles (3 mi. X 3 mi.) around each detection location. Project boundaries may be enlarged if the number of flies trapped warrants it. Application is made to at least 600 sites distributed evenly in each square mile. Treatment is repeated every two weeks. Treatment continues for one to two fly life cycles after the last fly was trapped, dependent on the severity of the infestation. If a quarantine was triggered under title 3 CCR Section 3424, treatment continues for two life cycles, if there was no quarantine, treatment continues for one life cycle.

Ground Bait Spray

If ground treatments using insecticide and bait are deemed necessary (immature stages, a mated female, or multiple adults are detected at a single site), the foliage of all shrubs and trees within a 200-meter radius of each infested property will be treated within 24 hours with insecticide/bait sprays using hydraulic spray equipment. Residents and tenants on affected properties will be notified in writing at least 48 hours prior to treatment. Completion notices are left following treatment that detail precautions to take and harvest intervals applicable to any fruit on the property. Treatments are repeated at five to 14-day intervals unless significant rainfall justifies re-treatment.

Fruit Stripping

All fruit will be stripped from all host trees on a known infested property and on all other properties within a minimum of 100 meters of the property. Fruit is placed in heavyweight plastic bags and removed to a landfill site to be buried under at least one foot of fill.

Anticipated Benefits from This Regulatory Action

The existing law obligates the Secretary to investigate and determine the feasibility of controlling or eradicating pests of limited distribution but establishes discretion regarding the establishment and maintenance of regulations to achieve this goal. The adoption of this regulation benefits industries and other host material services (nursery, fruit for domestic use and exports, packing facilities) and the environment (urban landscapes) by eradicating and preventing the artificial spread of peach fruit fly over long distances.

This regulation will benefit the public's general welfare by providing authority for the State to perform detection, control, and eradication activities against peach fruit fly in Madera County.

The implementation of this regulation will prevent:

- direct damage to the agricultural industry growing host fruits
- indirect damage to the agricultural industry growing host fruits due to the implementation of quarantines by other countries and loss of export markets
- increased production costs to the affected agricultural industries
- increased pesticide usage by the affected agricultural industries
- increased costs to the consumers of host fruits
- increased pesticide usage by homeowners and others
- the need to implement a State interior quarantine
- the need to implement a federal domestic quarantine

The overall California economy benefits by the adoption of this regulation, which is intended to allow a quick programmatic response to prevent peach fruit fly from becoming generally distributed in California and negatively impacting agriculture, a major state economic sector.

The state, national, and international consumers of California peach fruit fly host materials benefit by having high quality fruit, nuts, vegetables, and seeds available at lower cost than if damage were inflicted by the peach fruit fly and resultant increased production costs were passed on to the consumer.

The amendment of this regulation benefits homeowners who grow fruit, nuts, vegetables, and seeds for consumption and grow host material that is planted as ornamentals in various rural and urban landscapes. The homeowners benefit from the amendment because it will prevent damage to hosts that they grow and prevent the need for pesticide treatments of future peach fruit fly infestations.

Evaluation of Inconsistency/Incompatibility with Existing State Regulations

The Department is the only agency which can implement plant quarantines. As required by Government Code Section 11346.5(a)(3)(D), the Department has conducted an evaluation of this regulation and has determined that it is not inconsistent or incompatible with existing state regulations.

California Environmental Quality Act

A Statewide Plant Pest Prevention and Management Program Environmental Impact Report (EIR) was prepared by the Department as the lead agency under the California Environmental Quality Act. The EIR addresses the potential impacts and mitigations when implementing the Statewide Plant Pest Prevention and Management Program activities related to peach fruit fly.

The EIR may be accessed at the following website:

<http://www.cdfa.ca.gov/plant/peir/>.

Economic Impact Analysis (Government Code 11346.3(b))

The eradication and prevention of the spread of peach fruit fly in California through the amendment and implementation of this regulation economically benefits:

- the general public
- homeowners and community gardens
- the agricultural industry
- the State's general fund

These treatments are part of the Department's general exotic fruit fly treatment program. Addition of a county to the eradication area of peach fruit fly addresses the current infestation, it facilitates a fast and effective response if and when peach fruit fly is detected in the designated eradication area in the future.

Potential Impacts to General Fund and Welfare

Addition of the eradication area of peach fruit fly does not have immediate or definitive impact to the General Fund or general welfare. Rather, an addition of areas with a demonstrated pathway of the pest facilitates a fast and effective response if and when peach fruit fly is detected in the designated eradication area. Speed of response is key to eradicating an incipient peach fruit fly infestation. Programmatic delays potentially can lead to pest quarantines, as well as increased production costs and potential job loss. The agricultural industry is one of the economic engines in the State. Negative impacts to agriculture negatively impact the State's economic recovery; this would negatively impact the general welfare of the State. Additionally, any further job losses in this area would likely be felt by low-skilled workers whose employment options are already limited. The loss of any additional agricultural jobs would likely result in an increase in the State's public assistance obligations which would also negatively impact the State's economic recovery.

The Creation or Elimination of Jobs within the State

This amendment is designed to speed the response to an incipient infestation of peach fruit fly to ensure that the devastating damage caused by peach fruit fly is limited to the smallest area possible. Compliance activities are currently being performed by existing state staff throughout quarantine areas within the State. The Department has been conducting quarantine actions throughout the State for over 30 years without causing significant creation or elimination of jobs. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation or elimination of jobs in the State of California.

The Creation or Elimination of Businesses in California

This amendment is designed to minimize the spread of peach fruit fly to ensure that the devastating damage caused by peach fruit fly is limited to the smallest area possible. Compliance activities are currently being performed by existing state staff throughout quarantine

areas within the State. The Department has been conducting quarantine actions throughout the State for over 30 years without causing significant creation of new businesses. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation of new businesses in the State of California.

The Expansion of Businesses in California

This amendment is designed to minimize the spread of peach fruitley fly to ensure that the devastating damage caused by peach fruitley fly is limited to the smallest area possible. Compliance activities are currently being performed by existing state staff throughout quarantine areas within the State. The Department has been conducting quarantine actions throughout the State for over 30 years without causing significant creation of new businesses. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the expansion of businesses currently doing business in the State of California.

Benefits of the Health and Welfare of California Residents, Worker Safety, and the State's Environment

This regulation will benefit the public's general welfare by providing authority for the State to perform detection, control, and eradication activities against peach fruit fly in Madera County. The implementation of this regulation will prevent increased costs to the consumers of host fruits and increased pesticide usage by homeowners and others. Many of the host fruits attacked by the peach fruit fly are enjoyed by the home gardener and community gardens. If an infestation of peach fruit fly is not eradicated due to a delay in eradication efforts, then homeowners and community gardeners would be negatively impacted.

Disclosures Regarding the Proposed Action

A. Fiscal Effect on Local Government

The Department of Food and Agriculture has determined that Section 3591.12 does not impose a mandate on local agencies or school districts. All eradication activities shall be conducted by the Department. Therefore, no reimbursement is required under Section 17561 of the Government Code.

The Department also has determined that no reimbursable costs or savings under Part 7 (commencing with Section 17500) of Division 4 of the Government Code to local agencies or school districts and no nondiscretionary costs or savings to local agencies or school districts, will result from the amendment of subsection 3591.12.

There are no reimbursable costs or savings under Part 7 (commencing with section 17500) of Division 4 of the Government Code to local agencies or school districts and no nondiscretionary costs or savings to local agencies or school districts anticipated from the adoption of this amendment.

B. Significant, Statewide Adverse Economic Impact Directly Affecting Business

The Department has determined that the proposed actions will not have a significant adverse economic impact on housing costs or California business, including the ability of California businesses to compete with businesses in other states. The Department's determination that the action will not have a significant statewide adverse economic impact on business was based on the following:

The amendment of section 3591.12 will provide authority for the Department to conduct eradication activities against peach fruit fly in Madera County and there are no known private sector cost impacts.

C. Cost Impacts on Representative Private Person or Business

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. The amendment of section 3591.12 will provide authority for the Department to conduct eradication activities against peach fruit fly in Madera County and there are no known private sector cost impacts.

D. Effect on Small Business

The agency is not aware of any cost impacts that a small business would necessarily incur in reasonable compliance with the proposed action. The amendment of subsection 3591.12 will

provide authority for the Department to conduct eradication activities against peach fruit fly in Madera County and there are no known private sector cost impacts.

E. Housing Costs

The Department does not anticipate that these amendments will affect housing costs.

Alternatives Considered

The Department of Food and Agriculture must determine that no alternative considered would be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons than the proposed action.

The Department considered taking no action. If no action is taken, the Department would not have eradication authority for peach fruit fly in Madera County. However, the fruit fly finds in Madera County triggered the delimitation response as outlined in the United States Department of Agriculture's Cooperative Fruit Fly Emergency Response Triggers & Guidelines in Madera County. This response requires CDFA to have eradication authority in Madera County.

Without eradication authority to treat the fruit fly infestation in Madera County the Animal and Plant Health Inspection Service (USDA APHIS) could potentially designate the entire state as infested with peach fruit fly, rather than just Madera County. If USDA APHIS were to consider the entire state infested, there would likely be additional detrimental quarantine requirements directed against California host commodities by the USDA APHIS and our international trade partners. Therefore, this alternative was rejected.

Information Relied Upon

The Department relied upon the following studies, reports, and documents in the proposed adoption and subsequent amendment of Section 3591.12:

CDFA. 2000. "Action Plan for Methyl Eugenol Attracted Fruit Flies, Including the Oriental Fruit Fly, *Bactrocera dorsalis* (Hendel)," Revised April 2000, California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

CDFA. 2019. "California Agricultural Statistics Review, 2018-2019," California Department of Food and Agriculture.

CDFA. 2020. "Pest and Damage Record # FR0P06853138", California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

CDFA. 2020. "Pest and Damage Record # FR0P06853139", California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

Food and Agricultural Organization (FAO). 2000. "Action Plan, Peach Fruit Fly, *Bactrocera zonata* (Saunders)," May 2000, FAO, International Atomic Energy Agency.

National Agricultural Statistics Service (NASS). 2019. "Citrus Fruits: 2019 Summary," August 2019, United States Department of Agriculture