

DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS
Title 3, California Code of Regulations
Section 3591.12, subsection (a) and subsection (b)
Peach Fruit Fly Eradication Area
INITIAL STATEMENT OF REASONS/
POLICY STATEMENT OVERVIEW

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 of Food and Agriculture (Department) to protect the agricultural industry from the movement and spread of injurious plant pests within California.

Specific Purpose and Factual Basis

The specific purpose of Section 3591.12 is to provide authority to the Department to perform eradication activities against peach fruit fly, *Bactrocera zonata*, in the counties listed in the regulation.

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

On September 8, 2016, peach fruit fly, *Bactrocera zonata*, was trapped in the San Mateo area of San Mateo County. This is the first time peach fruit fly has been detected in San Mateo 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. Larval feeding causes 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 detection of an adult peach fruit fly meets the State's, national and international standards that mandate intensive delimitation efforts to determine if an incipient infestation of the fly exists in these areas. The detection of two adult flies within one life cycle within a three-mile radius meets the State's, national and international standards to trigger an eradication program.

The immediate implementation of this proposed regulatory action was necessary to prevent the USDA, APHIS from considering the entire state as infested with peach fruit fly, rather than just the current area of San Mateo County. If this were to occur, 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 *Bactrocera zonata* in San Mateo County. To prevent spread of the fly to noninfested areas to protect California's agricultural industry, it was necessary to immediately begin eradication activities. Therefore, it was necessary to amend this regulation as an emergency action.

Action Plan

This amendment will provide authority for the State to perform specific detection, control and eradication activities against the peach fruit fly in San Mateo County. This authority includes, "The searching for all stages of the fly by visual inspection, the use of traps, or any other means." It is immediately necessary to perform delimitation procedures within the San Mateo area of San Mateo County. These delimitation procedures are nationally and internationally accepted standards for establishing if there is an incipient infestation of peach fruit fly and exactly where it is. If it is confirmed that an incipient infestation is present, then a quarantine is established using a 4.5-mile radius surrounding the epicenter of the infestation. If delimitation procedures are not implemented, then by default the national and international standards would require a quarantine on the State for peach fruit fly. Minimally, this would be the entire county of San Mateo because the

Department would not be able to demonstrate any part of this county was free from peach fruit fly without delimitation activities.

Through delimitation, eradication treatment procedures would occur upon the detection of a second fly within three miles and one life cycle and a quarantine would not be implemented until the accepted quarantine trigger is reached (six adult flies within three miles and one life cycle or a mated female or pupa or larva).

The peach fruit fly is a methyl eugenol attracted fruit fly. The protocol for peach fruit fly delimitation is as follows:

The core square mile, surrounding each detection site, is of 0.5 mile radius and will be sampled with 25 methyl eugenol Jackson traps and 25 McPhail traps.

The first buffer is eight square miles surrounding the core and will be sampled with five methyl eugenol Jackson traps per square mile.

The second buffer is 16 square miles surrounding the core and will be sampled with five methyl eugenol Jackson traps per square mile.

The third buffer is 24 square miles surrounding the core and will be sampled with five methyl eugenol Jackson traps per square mile.

The fourth buffer is 32 square miles surrounding the core and will be sampled with five methyl eugenol Jackson traps per square mile.

The total radius of the delimitation area is 4.5 miles from each detection site, and the total area is 81 square miles centered on each detection site. The traps are placed working from the core outward through each buffer area. The methyl eugenol traps use a pheromone attractant and the McPhail traps use a food attractant for the peach fruit fly.

The entire county of San Mateo 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 and there are no associated impacts with the regulation if no flies are found. The existing regulation covers the entire counties of Alameda, Fresno, Los Angeles, Napa, Riverside, San Bernardino, Santa Clara, San Joaquin, and Solano. Fruit may have already been moved from the infested area to another portion of the county and flies which may have already spread naturally from the infested area may have already 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 State. Only through the implementation of this regulation would the Department be able to rapidly treat these small infestations in the affected county.

To prevent spread of the fly to noninfested areas in order to protect California's agricultural industry and urban environment, if necessary, treatment activities against the fly would have to begin upon the detection of a second life stage of the fly within three miles and within one life cycle. After the eradication trigger is met, treatments are to begin as soon as the Notice of Treatment is approved, generally within 72 hours. However, "The searching for all stages of the fly by visual inspection, the use of traps, or any other means" must begin immediately to determine if there is an incipient infestation.

California Environmental Quality Act

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

The PEIR may be accessed at the following website:

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

Economic Impact Analysis

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
- Agricultural industry
- The State's general fund

The Department's operational program cost for the implementation of this control program for fiscal year 2016/2017 is \$50,000 for the San Mateo County area.

All previous introductions of peach fruit fly into the US have been eradicated. A May 2006 introduction of peach fruit fly into the Fresno area of Fresno and Madera counties was declared eradicated in July 2006. Peach fruit fly was introduced into Florida in November 2010 and the Florida Department of Agriculture and Consumer Services immediately began an eradication project and declared eradication in April 2011.

Potential Agricultural Industry Impacts

If the 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 loss of markets if other states or countries enacted quarantines against California products.

Per the 2014-2015 California Agricultural Statistics Review, California stone fruits (including peaches, plums, nectarines, apricots and cherries) were valued at \$811,835,000; and out of the top 20-California commodities, tomatoes ranked 8th – at over \$1.6 billion and almonds ranked 2nd – at over \$5.8 billion.

California is the number one economic citrus state in the nation, with the USDA putting the value of California citrus at \$1,131,851,000 (Federal Register Vol. 71 No.83; published May 1, 2006; pg 25487). A 2002 report by the Arizona State University School of Business indicates that there is at least \$825.6 million of direct economic output and another \$1.6 billion when all upstream suppliers and downstream retailers are included. This represents over 25,000 direct and indirect employees. To protect this source of economic activity, California must do everything possible to eradicate peach fruit fly from the State.

The European Union, Japan, Mexico, South Korea, Central and South American countries all consider peach fruit fly a pest of quarantine concern and California exports host commodities to these countries. If peach fruit fly was not eradicated then these exports would be negatively impacted.

Other listed hosts are being grown as specialty crops in California. These niche markets would also be negatively impacted.

Potential Impact to Homeowners and Community Gardens

Many of the host fruit attacked by the peach fruit fly are favorites for the home gardener and community gardens. Therefore, if peach fruit fly is not eradicated homeowners and community gardeners would be negatively impacted.

Potential Impacts to General Fund and Welfare

The negative impacts to agriculture would in turn negatively impact the State's economic recovery which would negatively impact the general welfare of the State. Just for citrus, a 2002 report by the Arizona State University School of Business indicates that there is at least \$825.6 million of direct economic output and another \$1.6 billion when all upstream suppliers and downstream retailers are included. This represents over 25,000 direct and indirect employees.

California's unemployment rate in March 2015 dropped to 6.5 per cent. During the preceding 12 months prior to March 2015, agricultural employment was up by 5.1 per

cent. The agricultural industry is one of the economic engines which is lowering the State's unemployment rate. Additionally, any job losses in this area would likely be felt by low-skilled workers whose employment options are already limited. The loss of any 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.

Anticipated Benefits from This Regulatory Action

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.

The existing law obligates the Secretary to investigate and determine the feasibility of controlling or eradicating pests of limited distribution but establishes discretion with regard to the establishment and maintenance of regulations to achieve this goal. This amendment provides the necessary regulatory authority to prevent the artificial spread of a serious insect pest which is a mandated statutory goal.

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 San Mateo 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 use by the affected agricultural industries
- Increased costs to the consumers of host fruits
- Increased pesticide use by homeowners and others
- The need to implement a State interior quarantine
- The need to implement a federal domestic quarantine

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.

Estimated Cost of Savings to Public Agencies or Affected Private Individuals or Entities

The Department of Food and Agriculture has determined that subsection 3591.12(a) and subsection 3591.12(b) does not impose a mandate on local agencies or school districts and no reimbursement is required under Section 17561 of the Government Code.

The Department also has determined that no savings or increased costs to any State agency, 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, no nondiscretionary costs or savings to local agencies or school districts, and no costs or savings in federal funding to the State will result from the amendment of subsection 3591.12(a) and subsection 3591.12(b).

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 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 subsection 3591.12(a) and subsection 3591.12(b) will provide authority for the Department to conduct eradication activities against peach fruit fly in San Mateo County and there are no known private sector cost impacts.

Assessment

The Department has made an assessment that the amendment of the regulation would not 1) create or eliminate jobs within California; 2) create new business or eliminate existing businesses within California; or 3) affect the expansion of businesses currently doing business with California. The Department has been conducting eradication projects throughout the State without creating or eliminating businesses.

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 and less burdensome to affected private persons than the proposed action.

Information Relied Upon

The Department relied upon the following studies, reports, and documents in the proposed amendment of subsection 3591.12(a) and 3591.12(b):

"Pest and Damage Record # 410P06096314", California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

“Action Plan, Peach Fruit Fly, *Bactrocera zonata* (Saunders),” May 2000, Food and Agricultural Organisation, International Atomic Energy Agency.

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

“California Agricultural Statistics Review, 2014-2015,” California Department of Food and Agriculture.