

FINDING OF EMERGENCY

The Secretary of the Department of Food and Agriculture finds that an emergency exists due to the detection of Japanese beetle, *Popillia japonica*, in California. On September 18, 2015 two adult Japanese beetles were unexpectedly trapped in Sunnyvale, Santa Clara County. Japanese beetle is one of the most destructive insect pests in the United States. The adult beetle is a gregarious and general feeder that causes serious damage to fruits, truck and garden crops, ornamental herbaceous garden plants, ornamental shrubs, trees and vines, and many other urban plants. The larvae feed extensively on the root systems of plants, particularly in grassy (sod/turf) areas such as parks, golf courses, etc.

The Secretary is proposing to amend this regulation pursuant to the authority in Food and Agricultural Code (FAC) Section 407, “the director may adopt such regulations as are reasonably necessary to carry out the provisions of this code which he is directed or authorized to administer or enforce,” and FAC Section 5322, “the director may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in his or her opinion necessary to circumscribe and exterminate or prevent the spread of any pest which is described in FAC Section 5321.”

Additionally, 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” and Section 403 states, “the department shall prevent the spread of injurious insect pests.”

Emergency Defined

“‘Emergency’ means a situation that calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare,” Government Code Section 11342.545. If a state agency makes a finding that the adoption of a regulation is

necessary to address an emergency, the regulation may be adopted as an emergency regulation, per Government Code Section 11346.1(b)(1).

In this document the Department is providing the necessary specific facts demonstrating the existence of an emergency and the need for immediate action to prevent serious harm to the general welfare of the citizens of California, pursuant to Government Code Section 11346.1(b)(2).

Government Code Section 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to the Office of Administrative Law, the adopting agency provide a notice of the proposed emergency action to every person who has filed a request for notice of regulatory action with the agency.

Government Code Section 11346.1(a)(3) provides that if the emergency situation clearly poses such an immediate, serious harm that delaying action to allow public comment would be inconsistent with the public interest, an agency is not required to provide notice pursuant to Government Code Section 11346.1(a)(2) (See Emergency Established).

The Secretary believes that this emergency clearly poses such an immediate, serious harm that delaying action to give the notice pursuant to Government Code Section 11346.1(a)(2) would be inconsistent with the public interest, within the meaning of the Government Code Section 11349.6(b).

The information contained within this finding of emergency also meets the requirements of Government Code Sections 11346.1 and 11346.5.

Treatment for this pest only occurs from mid-April to mid-May and is based on pest life cycles which is determined by temperature. Treating when this pest was first discovered in September would not be beneficial due to the finding of one adult. Treatments for

Japanese Beetle requires soil drench techniques and targeting the larvae. Therefore, providing an additional five days advance notice of an emergency rulemaking to interested parties delays being able to get this eradication regulation in place by an additional eight to ten days. This delay increases the chances of the Department's inability to prevent long distance artificial spread of Japanese Beetle.

California Environmental Quality Act

A Statewide Plant Pest Prevention and Management Environmental 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 Japanese beetle.

The EIR may be accessed at the following website:

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

Evidence of An Emergency

Both as adults and as grubs (the larval stage), Japanese beetles are destructive plant pests. Adults feed on the foliage and fruits of several hundred species of fruit trees, ornamental trees, shrubs, vines, and field and vegetable crops. Among the plants most commonly damaged are apple, pears, caneberries, pears, blueberries, cherries, plums, corn, rose, grape, crabapple, turf grass and beans. Adults leave behind skeletonized leaves and large, irregular holes in leaves. The grubs develop in the soil, feeding on the roots of various plants and grasses and often destroying turf in lawns, parks, golf courses, and pastures. Today, the Japanese beetle is the most widespread turf-grass pest in the United States. Efforts to control the larval and adult stages are estimated to cost more than \$460 million a year. Losses attributable to the larval stage alone have been estimated at \$234 million per year—\$78 million for control costs and an additional \$156 million for replacement of damaged turf (USDA Program Aid No. 1599, Managing the Japanese Beetle: Homeowner's Handbook, revised 2007). Additionally, as a general

feeder, the Japanese beetle likely poses a serious threat to the general environment and likely some of California's threatened and endangered species.

In order to prevent the spread of Japanese beetle through the movement of aircraft, the USDA maintains a Japanese Beetle Federal domestic Quarantine, 7 CFR 301.48 and a companion manual "Japanese Beetle Program Manual For Airports." The National Plant Board has representatives from each state's agricultural department. On March 4, 2016, it issued a revised "U.S. Domestic Japanese Beetle Harmonization Plan." This plan governs the movement of nursery stock between states to ensure Japanese beetle is not spread artificially spread. Finally the Department maintains the Japanese Beetle Exterior Quarantine, Section 3280, Title 3, California Code of Regulations, to prevent the artificial introduction of Japanese beetle into the State. In 2007 the Oregon Department of Agriculture conducted an economic risk analysis for the impact of Japanese beetle there and concluded the estimated crop damage costs to be \$32,110,400 and estimated quarantine costs to be \$2,312,832 if Japanese beetle was not controlled. As the value of California's affected industries are substantially larger than Oregon's the economic impacts would be substantially higher.

The planned production of trees (California Food and Agricultural Code (FAC) Sections 22 and 23), vines, rose bushes, ornamental plants, floricultural crops, and other horticultural crops whether in open fields or greenhouses (FAC Sections 23 and 23.6), and plants growing in native stands or planted for ornamental purposes (FAC Section 24.5) have all been declared by the Legislature to be part of the agricultural industry.

The production, processing, manufacture, and distribution of floriculture and nursery products constitute a paramount industry of this state which not only provides substantial and required revenues for the State and its political subdivisions by tax revenues and other means, and employment and a means of livelihood for many thousands of its population, but also furnishes substantial employment to related industries that are vital to the public health and welfare. The basic research and

development for floriculture and the nursery industries contribute substantially to food production in this State which is essential to the welfare and health of its citizens. It is a matter of legislative determination and declaration to exercise the power of this State to protect these agricultural industries to further the public health and welfare (FAC Section 24).

The Legislature has found and declared that plants growing in native stands or planted for ornamental purposes contribute to the environment and public health and welfare needs of the people of the State (FAC Section 24.5).

Japanese beetle poses a direct threat to these agricultural industries and therefore to the public health and welfare of the State as determined by the Legislature.

The national accepted response to the detection of one Japanese beetle is to immediately deploy a delimitation tapping array surrounding the find site until the flight season is over. The immediate implementation of this proposed regulatory action is necessary to prevent other states and the USDA from considering the entire State as infested with Japanese beetle. If this were to occur, there would likely be additional detrimental quarantine requirements directed against California host commodities by the other states and our international trade partners.

This regulation will avoid harm to the public's general welfare by providing authority for the State to perform detection, control and eradication activities against Japanese beetle in Santa Clara County. To prevent spread of the beetle to noninfested areas to protect California's agricultural industry, it is necessary to immediately begin delimitation activities.

Therefore, it is necessary to amend Section 3589(a) on an emergency basis.

Project Description

The CDFA begins an eradication project when it determines that a Japanese beetle infestation exists within the state.

Delimitation Trapping

Intensive trapping is triggered when one or more beetles are found in a trap. The objective is to determine the extent and epicenter of an infestation. The trap density is increased to 50 traps per square mile within one square-mile core surrounding each adult find. The trap density in the remainder of the delimitation area are increased outward from the core within 48 hours of the find to complete a 50-25-5-5 array. Traps near the core are monitored daily for a week and weekly thereafter.

General

Treatment will begin immediately after notification, within 24 to 72 hours after an infestation is determined to exist. Japanese beetle eradication programs rely on chemical treatment to two phases of the insect life cycle: larva and adult. Treatment areas, based on the known flight capabilities of the adult insect, are approximately a 200 meter radius from the source of an infestation, as determined by beetle finds. Foliar treatments of all host and suspected host material are made during the adult flight season if multiple adults are detected during a visual survey. Soil treatment is timed to kill larvae when they are actively feeding on grass roots in the spring and fall. Residents are notified at least 48 hours before the initial soil or foliar treatment except in isolated cases when immediate treatment is necessary.

Notification

The purpose of notification is to comply with state law and present accurate information in an understandable format to concerned groups. Local and state elected representatives of the residents in the treatment area will be notified and appraised on major developments before and during treatment. Any residents whose property will be treated with foliar sprays or soil treatment following the discovery of an infestation on or near the property will be notified in writing prior to treatment. Treatment notices include

the name of the pest to be eradicated, the material to be used, the boundaries, and a phone number to call in case of additional questions on project operations and the number for the medical hot line. Following treatment, a completion notice is left detailing any precautions the homeowner should take.

Treatment

In the event that one or more live adult beetles are found in the environment (i.e., not in a trap), a foliar treatment may be used to target adults. Foliar treatment uses an insecticide applied by hydraulic spray equipment to all potential host plants within the treatment area. Application is repeated at 15-21 day intervals during the adult flight season. Shorter application intervals may be needed during the peak growing season to adequately cover rapidly growing foliage. Soil pesticides are applied in the spring and fall. The pesticide is watered into the soil. The soil surfaces of grass turf areas and other ground cover plants are treated in order to target the young grubs. Additional finds of adult beetles found from July onward may trigger a soil treatment the following year.

Pesticide Monitoring

A pesticide monitoring program is used to evaluate program effectiveness and environmental impact. Pesticide monitoring is a cooperative effort involving federal, state, and county personnel. The evaluation must effectively address agency, cooperator, and public concerns.

In compliance with appropriate pesticide laws, the CDFA or agricultural commissioner's pesticide enforcement personnel will make regular inspections of treatment and mixing/loading equipment and activities, and pesticide container storage.

Pesticide residues in the environment will be monitored by the Department of Pesticide Regulation. Monitoring for detectable levels of pesticides in and around treatment areas may include sampling of air, foliage, food crops, water, soil, or other media. Monitoring results will indicate program effectiveness by measuring persistence of pesticides in

pest host materials, and show environmental impact by measuring residues in non-target environmental components.

Post-Treatment Monitoring

To ensure the success of an eradication program, intensive trapping continues for three years following the completion of treatment. Additional finds may trigger re-treatment.

The Department also relied upon the following documents for determining this proposed emergency rulemaking:

California Pest and Damage Record # SJOP06003018

“Action Plan for Japanese Beetle, *Popillia japonica* (Newman),” May 2000, California Department of Food and Agriculture, Plant Health and Pest Prevention Services (nine pages).

“Japanese Beetle Program Manual,” Fourth Edition Issued 2016. United States Department of Agriculture, Marketing and Regulatory Programs, Animal and Plant Health Inspection Service, Plant Protection and Quarantine.

“Economic Risk Analysis: Oregon and the Japanese Beetle (*Popillia japonica*) Newman,” 2007, Oregon Department of Agriculture.

“U.S. Domestic Japanese Harmonization Plan,” revised March 4, 2016 {}, National Plant Board.

USDA Program Aid No. 1599, “Managing the Japanese Beetle: Homeowner’s Handbook,” revised May 2015.

Authority and Reference Citations

Section 3589(a):

Authority: Sections 407 and 5322, Food and Agricultural Code.

Reference: Sections 5761, 5762, 5763 and 5764, Food and Agricultural Code.

Informative Digest

The department has a mandate to protect the agricultural industry of the state (FAC Section 401), prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds (FAC Section 403) and to execute the provisions of the FAC (FAC Section 404). The Secretary is proposing to amend this regulation pursuant to the authority in Food and Agricultural Code (FAC) Section 407, “the director may adopt such regulations as are reasonably necessary to carry out the provisions of this code which he is directed or authorized to administer or enforce,” and FAC Section 5322, “the director may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in his or her opinion necessary to circumscribe and exterminate or prevent the spread of any pest which is described in FAC Section 5321.

Additionally, 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” and Section 403 states, “the Department shall prevent the spread of injurious insect pests.”

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 she 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 her 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. The amendment of this regulation benefits the agricultural industry (which includes native and ornamental plants) by having an eradication program to prevent the artificial spread of the Japanese beetle over short and long distances.

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

This amendment will help 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.

The California, national and international consumers of California host commodities benefit by having high quality commodities available at lower cost. It is assumed that any increases in production costs will ultimately be passed on the consumer.

The amendment of this regulation benefits homeowners who grow their own host commodities for consumption and host material which is planted as ornamentals in various rural and urban landscapes.

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.

Section 3589(a). Japanese beetle Eradication Area.

This amendment will add the entire County of Santa Clara to the regulation as an additional area under the eradication area for Japanese beetle. The effect of the change is to provide authority for the State to conduct eradication activities against Japanese beetle in Santa Clara County.

Mandate on Local Agencies or School Districts

The Department of Food and Agriculture has determined that Section 39591.15(a) does not impose a mandate on local agencies or school districts. All eradication activities shall be conducted by the Department.

Cost Estimate

The Department has also 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 proposed action.