

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS

Title 3, California Code of Regulations

Section 3700 (b)

Oak Mortality Disease Control

INITIAL STATEMENT OF REASONS/
PLAIN ENGLISH POLICY STATEMENT OVERVIEW

The California Department of Food and Agriculture (Department) adopted Section 3700 to provide authority to the State to mitigate the effects of oak mortality disease (Sudden Oak Death or “SOD”) on the agricultural industry and native tree stands, by establishing a program to arrest the artificial spread of the disease to additional areas; this protects California’s agricultural industry and environment. Subsection (b) lists the counties within the state of California that are quarantined (regulated areas) to prevent spread of the pest, its hosts, and possible carriers. Del Norte County was added to the list of regulated areas in 3700 (b) on an emergency basis. This emergency amendment went into effect on November 3, 2020. The current rulemaking action will add Del Norte County to the regulated areas on a permanent basis.

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 to protect the agricultural industry from the movement and spread of injurious plant pests within California.

Purpose

This regulation amends the list in Section 3700 (b) to add Del Norte county to the list of regulated areas.

Factual Basis

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

On August 26, 2020, (Pest and Damage Record #080P06904535) samples of suspected *Phytophthora ramorum*, the pathogen that causes SOD, were collected from dead tanoak trees in Del Norte County and sent to the CDFA lab for identification. The samples were confirmed as *Phytophthora ramorum* by both CDFA and USDA.

Since the mid-1990s, *Phytophthora ramorum* has killed millions of tanoak trees and several oak tree species (coast live oak, California black oak, Shreve oak, and canyon live oak), and caused twig and foliar diseases in numerous other plant species, including California bay laurel, Douglas-fir, and coast redwood.

The Department has determined that *Phytophthora ramorum* is a serious forest pest for which quarantine control is required to prevent further artificial spread and harm to forests, parks, commercial and urban landscapes, and watersheds. This disease is currently known to occur in 15 California counties. Oak mortality disease is serious due to the fact that it kills tanoak, coast live oak, and black oak trees. In addition, the pest has been confirmed as infecting non-oak species such as rhododendron, huckleberry, bigleaf maple, California buckeye, California coffeeberry, manzanita, toyon, and other hosts causing foliar and stem disease symptoms. *P. ramorum* has the capability of causing significant irreparable harm to California's agricultural industry and environment.

The United States Department of Agriculture (USDA) maintains a list of plants which are either proven hosts or plants associated with *Phytophthora ramorum* (Title 7, 301.92-2). The USDA has determined proven hosts to be those for which "Koch's Postulates" have been satisfied or plants which have been found naturally infected in the environment. The associated plants have been determined by the USDA as those which can be artificially inoculated to produce disease symptoms, but which have not fully satisfied "Koch's Postulates." These postulates are criteria that are followed to prove the pathogenicity of a microorganism. If the relationship between a pathogen and organism exhibits these criteria, then a pathogen is identified as the organism responsible for the disease.

The USDA does not have a standard for declaring less than a county as a quarantine area. Without a parallel State regulation for the intrastate movement of associated articles and host material that is substantially the same as the federal domestic quarantine and related federal

orders, the USDA cannot regulate less than the entire State. Additionally, the State has to add a regulated area to its regulation first before the USDA can add it to their regulation or federal order. Therefore, Del Norte County must be added to section 3700(b) in order to avoid the entire state being treated as a quarantine area by the USDA.

It is necessary to continue to have authority for an established statewide program in order to arrest the artificial spread of the disease to additional areas and harmonize the State's regulation governing the intrastate movement of nursery stock with applicable federal requirements that govern the interstate movement of California nursery stock and other host material. Immediate amendment of this regulation is necessary to mitigate the effects of this disease on the agricultural industry, which includes native tree stands.

Preventing the artificial spread of this pathogen through the movement of hosts and associated hosts from Del Norte County to other uninfested counties within California also prevents unnecessary damage to oak woodlands, timberland, hazards from falling trees, potential increases in fire danger, loss of heritage and shade trees, loss of soil stability, loss of habitat and food for wildlife, other ecological changes in impacted areas, aesthetic losses, increased use of pesticides, and cultural losses to indigenous tribes.

The sudden oak death (SOD) pathogen's behavior may be unpredictable if it infests a new unregulated county. The Sonoma County Department of Emergency Services and the University of California Cooperative Extension prepared a Sonoma County Sudden Oak Death Strategic Response Plan in January 2008. It stated that, over the previous three years, 7.5% of the land (75,000 acres) in Sonoma County had been affected by new SOD mortality. This was twice as many acres of new mortality than any other regulated county in California. The report highlighted the threats due to SOD, as enumerated above.

The California State Board of Forestry and Fire Protection (CAL FIRE) approved the establishment of a Zone of Infestation for SOD, which covers all counties listed under this regulation. Prior to tree harvest, each nonindustrial tree farmer must submit to CAL FIRE a Notice of Timber Operations to show that the operation has proper certification to harvest and their intent to do so pursuant to title 14 CCR, Section 1090.6. Each Notice of Timber Operations must identify and list feasible measures to mitigate the adverse infestation or infection impacts

of SOD from the timber operations within the regulated areas. Additionally, timber harvest plans must include a formal SOD survey at least once a year, and registered professional foresters are responsible for reporting any SOD infestations. By preventing the artificial spread of the SOD pathogen to new forested areas, this extra work does not have to be performed by those in the timber industry outside the regulated area. The Department has no way to monetarily quantify savings for the timber industry due to the industry not needing to perform surveys and mitigation measures outside the regulated area.

The USDA's Forest Service recognizes *Phytophthora ramorum* as a serious pest threat to California's and the nation's forests. Over the past ten years the USDA's Forest Service has distributed approximately \$11.5 million dollars to various scientists for research on the epidemiology and impacts of SOD in forests (<http://www.fs.fed.us/psw/partnerships/sod/>).

The SOD pathogen changes the forest's ecology. The pathogen attacks plants in both the over and understory. The disease is lethal to black oaks, coast live oaks, Shreve oaks and tanoaks. The disease also attacks Douglas-fir, grand fir, red fir, white fir and coast redwoods, California bay laurel and others.

California's total oak woodlands contain about 5 billion cubic feet of wood and the total California timberlands contain 5.8 billion cubic feet of oaks. In SOD regulated and unregulated areas of the state, oak products exported from California from 1996-2000 have averaged about \$45 million per year.

(https://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/pdf_files/pracphst-08.pdf)

Studies have shown that predominantly coast live oak forests may lose from 15 percent (in a low infestation area) to 69 percent (in a high infestation area) of their basal area (meters squared over hectare). These stands generally have California bay laurel present in them. There is evidence that the California bay laurel is increasing its dominance in these stands which may impact understory light levels and the ecology of existing understory shrubs and other plants. This forest dieback of coast live oak can result in changes in insect populations, impacting insectivorous birds by forcing them to switch prey, change foraging substrates or increase foraging time. This may lead to changes in the survivorship of nestlings. Studies suggest that

oak-dependent birds may decline in species richness and diversity by five to 15 percent. The changes in forest ecology will also lead to changes in the populations of small mammals, snakes, and amphibians.

Tanoaks suffer the highest mortality rates and scientists are concerned about being able to preserve adequate germplasm and ecosystems. The destruction of large tanoak stands by the *Phytophthora ramorum* could contribute to increased sediment input which is harmful to salmon, steelhead and sea run cutthroat populations, preventing them from being able to lay their eggs in suitable gravel beds. Additionally, this could also lead to bank failures along the river. Tanoak acorns are an important mast crop (having bumper years). In low mast years, bears are known to cause increased damage to conifers by stripping the bark for food.

There is evidence that widespread tree mortality due to *Phytophthora ramorum* reduces biodome production and carbon uptake and increases future carbon emissions from decaying and burning of the course, woody debris and dead trees.

Project Description

Del Norte County was added to the list of regulated areas in Section 3700 on an emergency basis. This emergency amendment went into effect on November 3, 2020 and will expire on September 1, 2021. The current rulemaking action will add Del Norte County to the regulated areas listed in 3700(b) on a permanent basis. This regulatory change will affect the intrastate movement of hosts and associated hosts from Del Norte County to the unregulated portions of the State. The hosts and associated hosts will have to be certified that they are free from the SOD pathogen before leaving Del Norte County.

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 California 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.

Anticipated Benefits from this Regulatory Action

Preventing the artificial spread of *Phytophthora ramorum* economically benefits all Californians and businesses involved in the production or sale of host material located outside the infested regulated area. Tourism in the unregulated area isn't negatively impacted by restrictions on access to parks and forests that would be necessary either to prevent disease spread or to ensure protection from hazardous trees, or due to loss of the host trees that would affect parks' and forests' visual aesthetic. Local governments do not face unexpected costs when they must remove infected dead or hazardous trees in parks, parkways, along roadsides or adjacent to public buildings. Homeowners do not have to use protective sprays to protect their specimen oaks or face costs for the removal of hazardous trees and loss of their property values.

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 environmental impacts and mitigation when implementing the Statewide Plant Pest Prevention and Management Program activities related to SOD.

The EIR may be accessed at the following website: <http://www.cdfa.ca.gov/plant/peir/>.

Mandate on Local Agencies or School Districts

The Department of Food and Agriculture has determined that Section 3700 does not impose a new mandate on local agencies or school districts, as the agricultural commissioner of a county under regulation uses their discretion to approve the quarantine in their county and consents to enforce it. No reimbursement is required under Section 17561 of the Government Code because the 16 affected agricultural commissioners requested that they be added to the existing regulation.

Economic Impact Analysis (Government Code 11346.3(b))

The Department's operational program costs for the implementation of the entire control program for fiscal year 2020/2021 is \$1,505,591. These funds comprise federal funding obtained by the Department under contract with the USDA in the Department's continued effort to prevent the artificial spread of the disease. The Department's program costs, including related to staff time and laboratory supplies, is derived from this source of funding. Additionally, the remaining federal funding is then dispersed by the Department to participating California county agricultural commissioners through cooperative agreements with each county. This money funds the commissioners to conduct required surveys and certification activities. No State General Fund money, other than staff dedicated to the promulgation of any regulation change, is

used to sustain this program. If the Department fails to amend this regulation, the federal funding to the individual counties would likely be lost, as the USDA would likely regulate the entire State. However, the Department and counties would still be obligated to provide certification for host material moving interstate or internationally, and thus, the Department's and counties' workloads would increase. Rather than having to provide certification for interstate and international shippers located in the 16 current regulated counties, certification would be necessary throughout the State and would lack reimbursement through federal funds.

Assessment

The Department has made an assessment that the adoption of the regulation would not 1) create or eliminate jobs within California; 2) create new business or eliminate existing businesses with California; or 3) affect the expansion of businesses currently doing business with California.

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

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.

The Department is the only agency that 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.

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 emergency regulation would expire, and the Department would not have regulatory authority under Section 3700 to

mitigate the effects of SOD in Del Norte County. Del Norte County must be added to Section 3700(b) in order to avoid the entire state being treated as a quarantine area by the USDA.

If the USDA 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 3700:

CDFA. 2020. "Pest and Damage Record # 080P06904535", California Department of Food and Agriculture, Plant Health and Pest Prevention Services

Email from Carolyn Lambert to Rachel Avila, dated 9/24/2020

For Information/Action, DA-2013-41, October 23, 2013, *Phytophthora ramorum* (ramorum blight, dieback, sudden oak death): Listing and Regulation of a Plant Species Reported to be Associated with *P. ramorum*, Osama El-Lissy, Deputy Administrator, Plant Protection and Quarantine and its attached federal order.

Riggs, J. 2020. Letter from Del Norte Agricultural Commissioner requesting emergency order for SOD quarantine. September 24, 2020.

The University of California Cooperative Extension, Sonoma County and the Sonoma County Department of Emergency Services Sonoma County Sudden Oak Death Strategic Response Plan, January 2008

USDA, Risk Analysis for *Phytophthora ramorum* Werres, de Cock & Man in't Veld, Causal Agent of Sudden Oak Death, Ramorum Leaf Blight, and Ramorum Dieback, January 25, 2008

https://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/pdf_files/pracphst-08.pdf

US Forest Service, Research Partnerships, Sudden Oak Death Research - Phytophthora
ramorum

<https://www.fs.fed.us/psw/partnerships/sod/>