

CONTROL ZONES

5082

(November 1988)

The department can perform insect and disease control work on state-owned (non-CDF), and private lands only within the boundaries of a declared zone of infestation. Insect infestations and/or diseases are declared by law to be a public nuisance that should be abated. The law provides that the Director or his/her agents may go upon private property to conduct abatement work when such work is determined to be necessary for the welfare of adjacent landowners. The law respects the privilege of a single landowner to allow an infestation or infection to exist unabated if it does not menace the forest values of his/her neighbors. The law also requires precise delineation of a zone boundary declared by the Director and approved by the Board of Forestry before the zone can come into existence.

REQUESTS TO TAKE CONTROL ACTION

5082.1

(November 1988)

The unit ranger is the primary responsible agent of the department within his/her administrative unit. For the purpose of insect or disease control, this unit includes private and state lands within national forest boundaries. The unit ranger normally makes the preliminary investigation of the infestation or infection and reports to the region chief if he/she considers control action necessary.

Where land is not under the direct fire control jurisdiction of the department, the region office (rather than the ranger) may assume primary administrative direction of forest insect and/or disease control projects.

The region chief makes an evaluation of the proposed control project. Assistance may be obtained from the Director's office upon request. When control action is deemed necessary, the region chief submits an itemized breakdown of the cost of the project, setting forth the amount of insect funds needed.

MORE THAN ONE PROJECT WITHIN A ZONE

5082.2

(November 1988)

Some zones of infestation will overlap more than one unit. Usually control projects should cover the entire zone as one project. However, projects can be reduced to unit size. Obtain permission to do so from the Director's office. Thereafter, each unit keeps its own cost records.

INSECT AND/OR DISEASE CONTROL OPERATIONS

5082.3

(November 1988)

No control work involving state personnel or state expenditures will be undertaken except in a duly declared zone.

CONTROL ZONE ESTABLISHMENT

5082.4

(November 1988)

To establish a control zone, the field official in the area of infestation or infection prepares a written request and sends it through channels to the Director. The field official also conducts necessary field examinations and sampling and prepares a full statement of facts, including the following:

- A map delineating the proposed zone area and including enough surrounding area to identify the general location of the project.
- A legal or other acceptable description of the proposed zone. The area should be so described that it will embrace a logical unit.
- Land ownership information - estimated numbers of owners and acres.
- Estimated size of zone in acres.
- Description of terrain and cover in respect to difficulty of control work.
- Estimated number, size, range, and species of infested trees requiring treatment.
- Description of insects and/or diseases involved, including present and predicted development, which emphasizes the importance of the time element (where applicable).
- Control methods proposed and anticipated participation and number of landowners.
- Estimated control costs, including an itemized breakdown of anticipated expenditure (by expenditure code) chargeable to insect control funds.

The Director determines if a control zone should be established; he declares and secures the approval from the Board of Forestry, informs the region chief, and furnishes copies of the Board's resolution. If the necessary information required above has been submitted, the notification that insect/disease funds have been allocated will be furnished at the same time. Otherwise, notification will be delayed pending submission of required information. The same procedure applies to an amendment of zone boundaries.

CONTROL ZONE ABOLISHMENT

5082.5

(November 1988)

Control zones remain in effect until dissolved by the Director's formal declaration, which is approved by the Board of Forestry. The region chief should make recommendations to dissolve zones when they are no longer needed.

COST-SHARING AGREEMENTS

5082.6

(November 1988)

On normal control projects, the state can absorb 50 percent of the cost of control on private land. However, under certain extraordinary circumstances, the state can absorb up to 100 percent of the pest control costs. Refer to the board policy for further description of cost allocation. Under no circumstances will the state pay the landowner if he/she does the work.

In the absence of other governmental agencies offering to contribute portions of the control costs, field officials may make tentative calculations in negotiating with owners upon a 50 percent sharing of costs between the state and cooperators. It is, however, recognized that the preliminary steps to initiate a cooperative control project must originate on the ground and the field officer must have some fairly solid foundation upon which to stand.

Always inform the potential cooperator of how the costs are determined, the method of performing control work, and the lack of any guarantee that 100 percent elimination of insects or disease will be accomplished. Also, inform the cooperator that control efforts by the state do not include the felling or disposal of snags, damaged or killed trees, from which insects have emerged, but that treatment is restricted to host trees in an active stage of infestation or infection.

PRIVATE COOPERATOR AGREEMENTS

5082.6.1

(November 1988)

When a cooperator is asked to contribute a definite proportion of the cost of a project, give him/her assurance that there is a positive limit to his/her potential indebtedness. This limit is the estimate of maximum expenditures that the owner will incur and is entered in the agreement between the state and the cooperator. However, since actual costs cannot be determined until completion of the project, the estimate should not be too low to cover the cooperator's share of control costs nor so high as to discourage control cooperation.

The law provides for the Director to enter into agreements with practically any person, group, or agency to accomplish forest insect or disease control work. The Department of General Services and the Department of Finance approve most insect and/or disease control agreements. However, if the cooperator has signed the typical

agreement and if all necessary approval to begin work has been received by the field officer, the control work may be started even though the agreement has not been fully approved by the state. Be sure that the agreement is correct regarding the cooperator's share, i.e., one-fourth or one-half.

Submit six signed copies of the agreement to the Director. A fully executed copy will be returned through channels for delivery to the cooperator, as well as two confirmed copies for the region office and unit. The maximum amount the cooperator is willing to pay must be shown in the required space before signing.

Termination date for work accomplished only in the fall should be the end of the calendar year. Work accomplished in both fall and spring, or spring only, should be terminated at the end of the fiscal year.

COST ASSUMED BY OTHER THAN LANDOWNERS **5082.6.2** (November 1988)

County governments or legal districts may provide matching funds for insect and/or disease control projects. The region chief should prepare and submit the necessary agreement with the particular agency for the control project. The agreement will conform to previous similar agreements. Obtain assistance on form and language from the Director's office. Make sufficient copies of the document so that the state receives three executed copies for Sacramento use in addition to the number of executed copies desired by the cooperating agency.

OWNER RELEASE **5082.6.3** (November 1988)

When a political entity is paying for the private landowner's share, it is not necessary to obtain written permission from the landowner before doing control work (PRC Section 4716). However, several measures must be taken first:

- The Director must determine that there exists an area which is infected or infested with plant pests which are a threat to timber or timberlands of adjacent owners.
- The Director must declare the existence of a zone of infestation and gain approval of this by the Board of Forestry.

Thereafter the Director or his/her agents may enter state and private lands within the zone to do control work.

Appropriate press releases concerning control work will be made in newspapers of general circulation to provide notice to landowners. It is always advisable to contact local owners before control action is taken on their property.

TIME IS OF THE ESSENCE

5082.7

(November 1988)

Time is an important element in insect and disease control work. Work must be started and finished within a time period controlled by nature. Fiscal and administrative authorities sometimes fail to appreciate this situation unless it is brought to their attention. Field officials should do advance planning and push the fieldwork at a pace that will not allow for failure because wrong timing or too little time interfered with success.

JOB PERFORMANCE

5082.8

(November 1988)

Control methods will conform to technical standards and advice of forest entomologists and/or forest pathologists. A map spotting all infested or infected trees or areas in need of control is highly desirable. If spotting infested or infected trees on control projects can be accomplished inexpensively and efficiently by aircraft, this method may be used. However, prior approval from the Director's office is required. All results of aerial flights require some ground checking.

All trees or areas to be treated on an ownership should be marked prior to having a control force move into the area. Supervisors will be trained to recognize infested or infected trees. Where several control forces are involved, one person will be in charge of coordinating their movements to prevent lost time.

The size of the force will depend upon the type of control project. Small units have proven more efficient when chemicals are used. When the treatment is piling and burning, a larger crew can be used. Care will be taken in the latter method not to destroy or injure green trees.

The control of some insects like defoliators may require spraying of insecticides by hired aircraft. The Director's staff will confer with the region chief when arranging such control jobs. Some ground work by field personnel may be needed for sampling insect development, loading of aircraft, flagging of flights, checking on coverage of insecticide, and sampling insect mortality.

CHEMICALS

5082.9

(November 1988)

Clear all use of pesticides with the County Agricultural Commissioner and other agencies of concern such as the California Department of Fish and Game. Also advise the owners, their neighbors, and the local public of the land being treated with chemicals. Supervisors of projects involving pesticides will be vigilant about the following:

- Storing chemicals away from children, unauthorized personnel, animals, food, and also properly disposing of containers.
- Paying careful attention to manufacturers' labels, technical advisers, and control agencies.
- Using the right equipment, mixture, and application rate with proper timing, placement, checking, and worker safety regulations.
- Determining the toxicity category of the materials being used.
- Applying restricted materials only by a person holding a Restricted Pesticide Applicator's Certificate or by a person working under the supervision of the certificate holder.
- Reporting the use of all pesticides in accordance with state laws.

Make every effort to avoid accidents and damage from pesticides. Immediately report accidents and known damage to the Director's office.

SALVAGE LOGGING

5082.10

(November 1988)

The department encourages insect and/or disease control by sanitation-salvage methods wherever practical. This avoids costly direct control and is a conservation measure of utilization rather than waste. Direct control projects involving salvage require employees to remember that the basic goal of the project is to control the insects or disease. The salvage program must not jeopardize this goal. Time and method of salvage can be coordinated within the control program.

Advise the cooperator that the cost of salvage is not a proper offset contribution. Costs such as limbing, bucking, skidding, loading, and hauling are recovered from the value of the wood project. However, such costs as felling, piling of slash (if material is to be burned), or spraying can be used as offset costs. A clear understanding by the cooperator of this breakdown before the project begins prevents many problems that could arise later.

Do not allow green logs from control projects to remain in the woods where they may become infested. If infestation should happen, it may become necessary to treat the infested logs with chemicals.

CONTROL COSTS

(November 1988)

5082.11

Maintain costs of control projects to determine pro rata sharing of costs between the state and cooperators. The costs include salaries and wages, various operating expenses, and property and equipment, whether chargeable against regular support or insect or disease control funds. In the case of cooperative projects with other agencies, the provisions of the agreement apply.

CHARGEABLE ACCOUNTS

(November 1988)

5082.11.1

Many expenses peculiar to the project over and above normal operations are chargeable to the special account for insect or disease control funds. Calculations of the control cost include all reasonable expenses, regardless of source, incurred in the project. These expenses consist of, but are not limited to, the following:

- A. Salaries and wages of employees hired specifically to work upon the project, which are over and above the normal support allotment. These are computed at fire cost reimbursement rates. (Insect/Disease Funds)
- B. Salaries and wages of regular personnel (excluding the fire crew supervisor working directly with an inmate crew). These are computed at fire cost reimbursement rates. (Support)
- C. On control projects involving federal cost-sharing and the use of conservation camp crews, only the salary and transportation costs are charged to and from the project for the fire crew supervisor (at fire cost reimbursement rate). When no federal cost sharing is involved, conservation camp crews are charged as established under PRC Section 4953. (Support)
- D. Equipment assigned exclusively to the project (excluding transportation of conservation camp crews), including vehicles, chain saws, etc., is charged at fire cost reimbursement rates. Gas and oil consumption of vehicles and other equipment should be recorded so that a purchase can be made chargeable to Insect/Disease Funds to reimburse Support Funds for the amount utilized. Since the equipment rates in fire cost reimbursement include charges for gas, oil, etc., these purchases should not be included in the cost of the project. (Insect/Disease Funds)
- E. Maintenance and repairs to vehicles, tools, and equipment, which are included in the fire, cost reimbursement rate. (Insect/Disease Funds)

- F. Purchases of small tools not normally within the department's complement, insecticides, and special supplies necessary for the project, which are charged at actual cost. (Insect/Disease Funds)
- G. Rent of aircraft and special equipment, which is charged at actual cost. (Insect/Disease Funds)
- H. Travel expenses related to the project for fire control (not administrative) personnel assigned to the project. (Insect/Disease Funds)
- I. Food storage, housing supplies and services, light, heat, power, and telephone, when a special base camp is maintained. It is presumed that regular food costs (if any) will be offset by meal cost deductions. However, visitors' meals should be charged when personnel assigned to the project are on a travel status. (Insect/Disease Funds)
- J. Cost of use of any property or equipment purchased especially for the project, which is charged at the fire cost reimbursement rate.
- I. If no rate is established for the particular item, the Director will assign a rate. (Item may be purchased from Insect/Disease Funds.)
- K. The administrative charge made on all expenses incurred under items A through J. This administrative charge is the same as that charged on Schedule A contracts and will vary from one fiscal year to another.

Do not calculate any charges for periodic services of pest specialists and administrative personnel of the department, nor for their incidental travel expenses during supervisory or inspection trips. However, if such personnel are assigned full time to the project, charge their time at the fire cost reimbursement rates.

OFFSET COSTS - OWNER'S CONTRIBUTION

5082.11.2

(November 1988)

When a land or timber owner has agreed to make payment under the terms of an insect or disease control agreement, he/she will be billed in accordance with departmental fiscal procedures upon the conclusion of the project. When the owner has agreed to make a contribution in labor or by furnishing supplies or equipment, the local field official supervising the project will keep a running record of such contributions so that the records may be audited.

The value of contributed material or effort should be actual, if known, or the most practical, if an estimate. For instance, the personal labor of an owner should be worth as much as a salaried state employee performing comparable work. All costs and effort must be recorded to calculate a relatively true "per tree or other unit cost" for the control work. Be sure that cooperators understand what labor and equipment can be charged and at what rate. Before computing costs, the department and cooperator should agree as to the amount of the cooperator's contribution. Costs for equipment should be in accordance with fire cost reimbursement rates.

Keep the various costs of control separately by zone, unit, or region, whichever is appropriate. In other words, the cost to be shared by cooperators may be computed and applied separately by the units if more than one is involved in control operations. However, care should be taken so that costs per unit treated between units are equitable to cooperators.

COST PER UNIT TREATED

5082.11.3

(November 1988)

Experience indicates that on bark beetle projects, generally the most satisfactory segregation of cost effort is by actual "treated tree" count. To use this system, it is necessary to keep two records, as follows:

- The total number of trees treated on each ownership.
- The total cost effort from all sources, including the estimated value of contributions within the unit.

If an owner agreed to assume 50 percent of total cost, for example, his/her billing can be established by the following formula:

$X = (CxN) / 2 - P$
When:
X = billing
C = average cost per tree in entire project including all contributed labor
N = number of treated trees on owner's land
P = value of owner's contribution in labor and material

If an owner's contribution in labor and/or material exceeds the billing figures, there can be no reimbursement made by the state. Submit the cost information to the Director for fiscal and billing purposes.

This system of cost per tree is applicable in most control projects, particularly those where direct control measures are applied, such as in the control of bark beetles. However, if other arrangements to compute costs (on an area or other basis) are

necessary to handle special insect control projects, contact the Director's office.

REPORTS (November 1988)

5082.12

As soon as practical (within but no later than 60 days) after the completion of an insect or disease control project within a control zone, submit a combined report for the region, in duplicate, to the Director's office. If the work was done for the department by another agency, such as the U.S. Forest Service, the region chief should obtain the essential information from the forest supervisor (or comparable official).

Reports are needed for fiscal purposes, for the information of the California Forest Pest Council and other interested parties, for department information and records, and for guidance in future projects. Facts and figures are more important than lengthy comment.

This report also is used for billing cooperators for their share. It is advisable prior to submission of the report to review it with the cooperator to be sure that all costs and contributed labors have been entered. Questions of billing raised by cooperators after they have been billed are extremely difficult to resolve.

CONTENTS OF PROJECT REPORT (November 1988)

5082.12.1

The final report will conform to the following outline (see Section 5082.12.2):

- A. Identification of Project
 - 1. Name of project
 - 2. Zone
 - 3. CDF region
 - 4. Unit or forest

- B. Introduction
 - 1. Control agency
 - 2. History of infestation
 - 3. Size and extent of infestation
 - 4. Host trees

- C. The Infestation or Infection
 - 1. Causal insects or disease
 - 2. Patterns of attack
 - 3. Control period

4. Treatment method
 5. Insect and/or disease trends
- D. Organization and Control Work
1. Organization of project
 2. Manpower - types and amounts
 3. Spotting
 4. Supervision
 5. Cooperators
- E. Statistics for Fiscal Year
1. Total acres in zone
 2. Acres of private timber
 3. Number of trees and acres spotted
 4. Number of trees and acres treated
 5. Trees abandoned
 6. Percent of trees treated
 7. Average DBH in inches
 8. Average cost per tree
- F. Cost-sharing (show for each cooperator)
1. Acreage involved in
 2. (a) control agreement and
(b) treatment need
 3. Number of trees or acres treated
 4. Cost per tree or acre
 5. Total control costs for property
 6. State and federal share for property
 7. Cooperator's share
 8. Cooperator's contribution
 9. Net cost to cooperator

SAMPLE REPORT

(November 1988)

5082.12.2

1969 - 70 F.Y.
SAN JACINTO INSECT CONTROL PROJECT REPORT
SAN JACINTO ZONE OF INSECT INFESTATION
RIVERSIDE UNIT
REGION III

Introduction

This report covers bark beetle control work accomplished by the Department of Forestry within the San Jacinto zone of insect infestation during the 1969-70 fiscal year. The zone encompasses the timbered area from the San Jacinto Mountains to the Santa Rosa Mountains. Most of the private land belongs to absentee owners. The first insect control work in this zone began in 1946.

During 1969-70, CDF treated infested trees on the 15,520 acres of private timber. This included Vista Grande, Pine Cove, Idyllwild, Mountain Center, Mt. Baldy, May Valley, Garner Valley, and the Santa Rosa Mountain area. The host trees are ponderosa, Jeffrey, and coulter pines.

The Infestation

The California Flathead borer caused almost all mortality. Most attacks were single trees in a scattered pattern throughout the zone. A year-round chemical maintenance control program was used. Ips activity and twig girdlers may increase due to a dry winter.

Organization and Control Work

Puerta La Cruz Conservation Camp did CDF work on private land. Unit personnel, regional office staff, and conservation camp personnel did spotting and quality control.

CDF operated on private land under authority of a cooperative agreement with zone 4 of the Riverside County Flood Control and Water Conservation District, the USFS and CDF matching funds.

Statistics for 1969-1970

Total acres in zone	108,610
Private timber in zone	15,520
Acres spotted	320,000
Trees treated	1,127
Trees abandoned	35
Percent of infested trees treated	97%
Average DBH in inches	16.50
Average cost per tree	\$14.25

Labor

Fire Crew Foremen			
Range	Hours	Wage	Salary
A	565.7	\$6.20	\$3507.34
B	888.0	\$7.13	<u>\$6331.44</u>
Total			\$9838.78

Equipment

Tool	Hours	Rate per Hour	Cost
Chainsaw	605.75	\$1.20	\$726.90
Sprayrig	59.17	\$2.20	130.17
Chipper	29.90	\$3.75	<u>112.13</u>
Total Cost			969.20

Materials & Supplies

Items	Cost
Miscellaneous Climbing Gear and Materials	\$335.14
Stamps	120.00
GSA Requisitions	187.35
Stationery and Drafting Supplies	135.61
Maps	143.50

Chemicals Used from Stock and Other Sources:

Item	Gallons	Cost per Gallon	Total
Lindane	202	\$4.6800	\$945.36
Diesel	3,757	\$0.1352	507.94
EDB spray	40	\$6.1600	<u>246.40</u>
Subtotal			<u>\$2,621.30</u>
Cumulative			\$13,429.28

Administration

12.8%	GRAND TOTAL	<u>\$ 15,148.23</u>
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Cost Distribution

Recipient	Amount
California Department of Forestry and Fire Protection	\$ 7,574.11
U.S. Forest Service	3,787.06
Cooperator	3,787.06

FORMS AND/OR FORMS SAMPLES: RETURN TO ISSUANCE HOME PAGE FOR FORMS/FORMS SAMPLES SITE LINK.

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