

# FOREST CARE MANAGEMENT STANDARDS

## Who may do the work?

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- Any work hired or contracted out must be conducted by an appropriately licensed Timber Operator (A or B licensed Timber Operator).
- The value of labor conducted by a landowner is not eligible for reimbursement.
- The value of any other labor, other than that of the above referenced Timber Operator is not eligible for reimbursement.
- Landowners are strongly encouraged to verify a contractor's liability insurance and workers compensation insurance before starting the job.
- A list of Contractors meeting minimum licensing standards and showing proof of liability and workers compensation insurance will be maintained by the Program for reference by landowners.

## Management Standards

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Minimum standards for acceptance of a completed project are as follows:

- Given that trees greater than 12 inches Diameter at Breast Height (DBH) will not be cut in the Program, overall stand density can not be completely controlled. The following standards for spacing shall be the target spacing excluding overstory trees and trees greater than 12 inches DBH. In stands that have trees greater than 12 inches DBH, the thinning shall be conducted to avoid trees less than 12 inches DBH remaining as ladder fuels to mid and upper level canopy trees.
  - Trees (including seedlings), less than 12 inches DBH shall be thinned to a minimum of 15 feet on center from adjacent trees.
  - Tree spacing may in some cases be less than 15 feet on center so long as the total trees per acre does not exceed 200 trees per acre.
- Trees shall be thinned as much as possible to retain a mixed aged class and mixed species composition in the residual stand.
- Trees shall be thinned so as to retain the best phenotypes that will promote a healthy vigorous stand.
- Trees shall be thinned so that residual trees and brush do not serve as ladder fuels for overstory. Minimum clearance to eliminate a ladder fuel effect shall generally be 3 times the height of the understory vegetation.
- Residual trees shall be pruned so that branches hang no lower than 8 feet above the ground on the uphill side. Trees shall not be pruned more than ½ of their total height.
- Thinning within 100 feet of a permitted structure shall meet all the state and local Defensible Space/Hazardous Fuels ordinances.
- **Slash Treatment:**
  - Slash shall be removed from the site.

- Where there is exposed soil, either as a result of operations or as a preexisting condition may be covered with up to 2 inches of wood chips.
- If wood chips are distributed on site, they shall be raked back a minimum of 3 feet from the bole of the tree.
- All work shall comply with California Forest Practice Rules. (See Below)
- Work shall comply with all State and Local regulations. (See Below)
- **Erosion Control Standards:**
  - On slopes of 30 percent or less, soil exposed or disturbed by tree removal work shall be covered with chips from a native source or sterile straw.
  - On slopes over 30 percent additional erosion control practices may be required by the inspector for CDF and SBNFA.
- **Stumps:**
  - All stumps greater than 6 inches diameter shall be treated within 6 hours of cutting with a registered borate compound for the prevention of Annosus Root Disease (*Heterobasidion annosum*). All treatments shall follow manufacturer specifications.
  - All stumps shall be cut as close to the ground as practical and in such a manner to prevent a sharp point from being left, especially on small diameter stems.
- **Equipment Limitations:**
  - Use of equipment shall follow all California Forest Practice Rules. This includes landowners conducting their own work and operating equipment.
- **Tree Size Limitations:**
  - No work done on thinning trees greater than 12 inches DBH shall be eligible for reimbursement. Trees greater than 12 Inches DBH are potentially commercial in size and this creates difficulty in calculating the value of the tree and subtracting it from the value of the reimbursement available from Forest Care.
  - Cutting trees larger than 12 inches DBH may require additional steps to comply with state forest practice rules.
  - Pruning trees larger than 12 inches DBH shall be eligible for reimbursement up to the maximum allowed.

## **State, Federal, and Local Regulations**

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The following regulations are summaries of the California Department of Forestry and Fire Protection requirements, California Forest Practice Rules, and the Public Resources Code Division 4 as they pertain to Forest Care. These rules must be followed by the contractor.

### **California Department of Forestry and Fire Protection Fire Prevention Requirements**

#### **IN THE EVENT OF A FIRE CALL 911 FIRST!**

- **Chainsaw Requirements**
  - One shovel, or fire extinguisher, located within 25 feet of the operating saw

- **Spark Arresters**
  - Internal combustion engines shall be equipped with functioning spark arresters, except for vehicles equipped with mufflers.
  
- **Fire Cache Requirements**
  - All tools must be contained in a sealed box.
  - One backpack, pump type fire extinguisher, filled with water.
  - Two axes (Pulaski's are an accepted alternative)
  - Two McLeod's
  - Enough shovels to provide one to each employee at the job site.
  
- **Mobile Equipment Requirements**
  - Passenger vehicles operated by the company must have one shovel and one axe
  - Tractors, loaders, cranes, skid-steers all need to have one shovel. (If shovel cannot be mounted to a piece of equipment, the operator shall be able to readily identify location of their shovel.)
  
- **Stationary Equipment Requirements**
  - One shovel
  - One backpack, pump type fire extinguisher, filled with water.
  - 10 feet of clearance around equipment.
  
- **Smoking**
  - Must be confined to areas of bare soil at least 3 feet in diameter.
  - Burning material shall be extinguished in such area prior to discarding.
  
- **Notes**
  - A shovel is defined as having a round point and a handle not less than 46" in length. Square point shovels will not meet the above requirements. Also, pressurized water fire extinguishers will not meet the requirements for the backpack pump type fire extinguisher.

## **California Forest Practice Rules**

(Adapted from Title 14 California Code of Regulations, for a complete set of rules go to: <http://www.fire.ca.gov/>)

- **95.1 Saturated Soil Conditions**
  - When soil has reached full saturation it means that soil is wet and muddied. Soil can be easily displaced during forestry operations. Reduced traction often is a sign of saturated or muddied soils. Operation during these periods should be completely avoided in order to prevent soil from entering nearby waterways through runoff.
  
- **954.1 Felling Practices**
  - Stumps must be kept as close to the ground as possible, and no higher than a height of 8" (measured on the uphill side) except where safety or embedded metal make this impractical.
  
- **954.6 Waterbreaks**

- If heavy machinery is being used during operations and soil compaction becomes severe, then waterbreaks in the compacted soils areas may be necessary to mitigate erosion on these sites. Waterbreaks are small swales on an impervious surface that help move water into an area where it can spread out evenly and seep into the ground preventing erosion. It is best to place waterbreaks in locations where the water will flow into a vegetated area. Use the information guide on erosion control practices included in this packet for further guidance if serious soil compaction occurs.
- **954.7 Winter Operation**
  - If implementing Forest Care measures during the winter, do not operate during fully saturated soil conditions. All bare soil must be covered or protected by erosion control measures if there is a 30% chance of rain before the next day. This is to prevent large amounts of sediments from entering roadways and eventually into waterways.
- **956.3 General Limitations Near Watercourses, Lakes, Meadows, and Wet Areas**
  - The timber operator shall not place, discharge or dispose of soil, silt, bark, slash, sawdust or petroleum in quantities that impact the use of the waterbody. If an accident does occur, it must be cleaned immediately.
- **1038 Dead, Dying, Diseased Exemptions Requirements**
  - No heavy equipment can operate on slopes greater than 50% or on known slides and unstable areas.
  - No known sites of rare, threatened or endangered plants or animals will be disturbed, threatened, or damaged.
  - No timber operations will occur within the buffer zone of a sensitive species.
  - No timber operations will occur on any site that meets the criteria for a significant archeological or historical site.

#### **Public Resources Code Division 4**

(Adapted from Chapter 6)

- **4442 Spark Arresters**
  - No operation of internal combustion engine (examples: chainsaw, auger, or drill) which uses hydrocarbon fuels can occur on any forest-covered land, brush-covered land, or grass-covered land unless the engine is equipped with a spark arrester, or the engine was specifically constructed, equipped, and maintained for the prevention of fire (pursuant to section 4443). A spark arrester is a device constructed of nonflammable materials specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels. Engines used to provide motive power for trucks, truck tractors, busses, and passenger vehicles (except motorcycles) are not subject to needing a spark arrester if the exhaust system is equipped with a muffler.