**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**
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May 7, 2015

Dr. Keith Gilless, Chairman
State Board of Forestry and Fire Protection
P. O. Box 944246
Sacramento, CA 94244-2460

Re: Forest Practice Regulatory Relief for Drought Mortality

Dear Chairman Gilless:

**ISSUE:**

A significant number of dead and dying trees are appearing across forest lands of California as a result of either direct or indirect drought related mortality. The cost and time required to prepare a Timber Harvesting Plan may be a deterrent to private forest landowners in removing dead and dying trees at the scale of the current mortality. It is in the interest of the State to encourage private forest landowners to remove dead and dying trees on their timberland to reduce the fire risk, reduce the risk of hazard trees, and reduce or offset the release of greenhouse gases. It is therefore in the interest of the State to ease regulatory impediments which may deter private forest landowners from removal of dead and dying trees for commercial purposes while still maintaining appropriate environmental protections.

**BACKGROUND:**

Four years of drought combined with generally overstocked and unhealthy forests have allowed native Bark Beetle populations to reach endemic and in some cases epidemic levels, creating significant mortality on forest lands across many counties in California. Several species of Bark Beetles have been active including but not limited to *Ips, Dendroctonus,* and *Scolytus*. In addition, drought is, in some cases, causing mortality directly from moisture stress, as evidenced in the dying off of tree species not normally associated with insect infestation, such as Incense Cedar. Given the current level of infestation of bark beetles and drought related stressors, it is expected that the infestation and resulting mortality will accelerate dramatically in 2015 creating broad areas where dead and dying trees dominate the forest landscape.

The large number of dead trees creates a fire hazard in both the short and long term. In the short term, the dead pine needles create a receptive ignition bed for embers or any ignition source. Dead pine needles in the trees may be receptive to embers cast out in front of an actively burning fire, accelerating the spread of the fire and creating dangerous conditions for both civilians and firefighters. Once the needles fall off the trees, they create a fuel bed that is very receptive to ignition sources or ember cast from an active fire.

**FPC 3.3**

Needles that have fallen off trees and are now draping brush and lower vegetation significantly enhances the spread of an advancing wildfire. The standing dead trees are also more prone to burn out; losing structural integrity and falling to the ground endangering civilians and firefighters. In the long term, trees which die today will begin to deteriorate and fall to the ground in significant numbers in approximately 7-10 years. These falling trees represent a potential hazard to any life or property within reach of the falling tree. In addition, the falling trees will create an interlocked compact bed of fuel in which a fire will readily spread and generate substantial energy release creating high flame lengths and intense heat, both hindering control efforts. This fuel bed condition will also hinder the construction of fire line and lengthen mop-up time, slowing any effort to control a wildland fire in the dead material.

Trees that die and are left to burn or rot will ultimately result in the release of carbon and other greenhouse gases during combustion, decomposition or both. This will result in an earlier than normal release of greenhouse gases. Utilizing logs to create long lasting wood products or utilizing logs to produce energy to offset the consumption of fossil fuels has direct benefits to the State, which will help meet the goals within Executive Order B-30-15. While acknowledging the importance of snags and large woody debris for wildlife habitat, the scale of the drought related tree die off is producing dead and downed trees in a greater volume than necessary for optimal wildlife habitat.

Recent large wildfires and insect outbreaks have dramatically increased the number of logs from dead and dying trees available to the log market. The decrease in milling capacity over the last decade has created a situation where log supply exceeds demand. This over supply has lowered the value of logs delivered to available mills or ports, creating a market condition that may prevent any possibility of economic return to landowners with dead or dying trees. These marginal economic conditions may prohibit landowners from pursuing tree removal, especially when factoring the high cost of preparing timber harvesting plans.

For these reasons, it is in the interest of the state to encourage the removal of dead and dying trees to reduce the fire and falling hazard from dead and dying trees across the state. It is also in the interest of the state to encourage long term carbon sequestration by retaining the carbon held in the tree in some form of value added product, or to offset the consumption of fossil fuels by utilizing the available carbon in trees for energy production.

**DISCUSSION:**

Private forest landowners removing dead and dying trees on their property and utilizing the material for personal use are not required to file any harvest documents with CAL FIRE. As per PRC 4527(a)(2), landowners commercializing logs, lumber, or other wood products offered for sale, barter, exchange, or trade are using the material for commercial purposes and are conducting timber operations. As per PRC 4581, timber operations cannot be conducted without a timber harvest document, therefore land owners must file either a Timber Harvesting Plan, a Nonindustrial Timber Harvest Plan, an Exemption Notice (14 CCR § 1038), or an Emergency Notice (PRC 4592).

The harvesting of trees under a timber harvesting plan (THP) or nonindustrial timber harvest plan (NTMP) can be cost prohibitive when the desire of the landowner is solely to remove dead or dying trees. These documents often cost a forest landowner $30,000 dollars or more to prepare.

Because of the cost, complexity and the time required to prepare and review these plans, the ability to capture the mortality while the trees still have sound wood will, in most cases, be lost.

Under the 14 CCR § 1038 exemptions, three are most likely to be used by a private landowner to remove dead and dying trees: (1) 14 CCR § 1038(b) *Christmas Tree; Dead, Dying Or Diseased; Fuelwood Or Split Products Exemption*; (2) 14 CCR § 1038(c) *Removal Of Fire Hazard Trees Within 150 Feet Of A Structure Exemption*; (3) 4 CCR § 1038(d) *Substantially Damaged Timberlands Unmerchantable As Sawlog Exemption*. In addition, a Notice of Emergency Timber Operations, under 14 CCR § 1052-1052.3 may also be filed to remove dead and dying trees.

Under 14 CCR § 1038(b), harvesting is limited to less than 10% of the average volume per acre which will preclude the use of this exemption in many pockets of mortality that currently exist or are developing.

Under 14 CCR § 1038(c), harvesting is limited to trees within 150 feet of a legally permitted structure. This would preclude the harvesting of dead and dying trees beyond 150 feet from a permitted structure.

Under 14 CCR § 1038(d), harvesting is limited to dead trees which are unmerchantable as sawlog-sized timber from substantially damaged timberland. This requires certification by a Registered Professional Forester (RPF) that the land is substantially damaged and that no conditions exist that would result in significant adverse impacts as long as the Forest Practice Rules are complied with. This would potentially preclude harvest material from going to a "highest, best" use as sawlogs and incur the expense of hiring an RPF to certify the substantially damaged timberlands and sign the exemption.

A 14 CCR § 1052 Emergency Notice (EM), requires an RPF to prepare the EM and requires a Confidential Archaeological Letter (CAL) if the harvest area is 3 acres or more. The cost of the RPF to prepare the EM, request information from one of the Archaeological Information Centers and prepare a CAL would be an additional expense to a landowner, potentially adding up to $1,000 in costs.

Under statute, PRC 4584 does not limit the Board's discretion to increase the percentage of volume per acre that can be removed under an exempt activity specifically to remove dead, dying or diseased trees. The 10% specificity appears to have been determined by the Board during the rule making process. The 10% limit has been in place for decades with the premise that the light level of harvest would not contribute to significant adverse impacts on the environment; however, this logic should be less applicable today since it does not consider the standard operational restrictions that have been adopted via the 2012 *Anadramous Salmonid Protection Rules*, and the more recently adopted 2013 *Road Rules*.

Request the Board of Forestry and Fire Protection (BOF) undertake emergency rule making to:

> Add a new subsection under 14 CCR § 1038, 14 CCR § 1038(k), which does not limit the percent volume removed per acre when removing dead and dying trees due to drought related stress. This code would mirror 14 CCR § 1038(b) except for the 10% limitation on average volume per acre and does not include diseased trees.

The proposed language is a follows:

***(k)*** *Harvesting dead or dying trees, as a result of drought related stress, of any size, fuelwood or split products when the following conditions are met:*

***(1)*** *No tractor or heavy equipment operations on slopes greater than 50%.*

***(2)*** *No construction of new tractor roads on slopes greater than 40%.*

***(3)*** *Timber operations within any Special Treatment Area, as defined in 14 CCR § 895.1, shall comply with the rules associated with that Special Treatment Area.*

***(4)*** *No tractor or heavy equipment operations on known slides or unstable areas.*

***(5)*** *No new road construction or reconstruction, as defined in 14 CCR § 895.1.*

***(6)*** *No heavy equipment operations within the standard width of a watercourse or lake protection zone, as defined in 14 CCR § 916.4 [936.4, 956.4](b), except for maintenance of roads and drainage facilities or structures.*

***(7)*** *No known sites of rare, threatened or endangered plants or animals will be disturbed, threatened or damaged.*

***(8)*** *No timber operations within the buffer zone of a sensitive species, as defined in 14 CCR § 895.1.*

***(9)*** *No timber harvesting within the standard width of a watercourse or lake protection zone, as defined in 14 CCR § 916.4 [936.4, 956.4](b), except sanitation-salvage harvesting, as defined in 14 CCR § 913.3 [933.3,953.3] <u>excluding diseased trees</u>, where immediately after completion of operations, the area shall meet the stocking standards of 14 CCR § 912.7 [932.7,952.7](b)(2), or, except the removal of dead or dying trees where consistent with 14 CCR § 916.4 [936.4,956.4] (b). Trees to be harvested shall be marked by, or under the supervision of, an RPF prior to timber operations.*

***(10)*** *No timber operations on any site that satisfies the criteria listed in 895.1 for a significant archaeological or historical site. Information on some of these sites may be available from the Information Centers of the California Historical Resources Information System within the Department of Parks and Recreation.*

While not provided in the draft rule language above, the Board might also consider placing even aged restrictions on operations that result in post-harvest stocking standards below the commercial thinning standards.

Sincerely,

DUANE SHINTAKU
Deputy Director
Resource Management

cc: Keith Larkin, Northern Region Chief
Dale Hutchinson, Southern Region Chief