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NATIVE PLANTS AND FIRE SAFETY POLICY

Adopted by CNPS Chapter Council March 13, 2010

The Policy

Statement:

The California Native Plant Society opposes the unnecessary destruction of California's native plant heritage for the purpose of wildfire fuel management. The California Native Plant Society supports protecting human lives, property and California's native plants from poor fuel management practices. California's superbly diverse native plants are its most valuable resource for erosion control and water conservation, and are vital to the long-term health of California.

Intent:

To provide an authoritative policy that California Native Plant Society and others can use to persuade legislators and regulators to approve fire-safe practices that maximize conservation of native plants and native plant ecosystems, while protecting citizens, firefighters and property.

Supporting Materials

Rationale:

Siting development in or adjacent to native plant communities increases the risk to structures from wildfire, the potential for additional human-caused ignitions, and the need for more fuel management. The best land-use planning practices minimize placing development in locations that increase the risk of property exposure or of ignitions. The best fire-safe building codes reduce the risk of the structure being ignited, or spreading fire, in a wildfire.

Fuel management practices to protect urban development generally have been ineffective and/or counterproductive, severely impacting that native vegetation. Public ordinances and bureaucratic regulations often require fuel-removal practices in excess of 2006 California Public Resource Code 4291, causing severe damage to native plant ecosystems without reducing wildfire risk. These requirements should be replaced with proven fuel-management practices that minimize the wildfire threat and do not devastate native plant ecosystems.

California is large and diverse, and different fuel systems require different solutions for minimizing the impacts of fuel management and fire control practices on native vegetation. That diversity, as exemplified in two cases noted here, require the development of implementation guidelines that fit the affected area.
Examples:

- In some areas, especially shrublands, shortened fire-return cycles have converted native plant communities into non-native grasslands. These faster-burning invasive non-native plant species in turn fuel early-season wildfires, preventing regrowth of native vegetation and diminishing resource value.

- In certain forested areas, wildfire-suppression has caused a lengthened fire-return cycle, which can allow an accumulation of dead material and an increased likelihood of high-intensity wildfires. This modification of natural cycles has led to losses in native forest species diversity, erosion, increased wildfire management costs, and greater risks to property and people.

Implementation:

The California Native Plant Society supports:

- Fuel management plans that minimize the risk to human life and property while maximizing protection of native plants and their habitats. These plans should be locally-adapted and account for all combustible

materials, including building materials, ornamental vegetation, other landscaping materials, and adjacent native plant ecosystems.

- Building codes and ordinances that require structures and landscaping in high fire risk areas to be situated, constructed, retrofitted and maintained using materials and practices that minimize the ignition and spread of wildfires.

- The creation of laws, regulations and land use policies that discourage new development in areas of high fire danger.

There are many different fire environments and property-development settings throughout the state. The California Native Plant Society will develop specific guidelines for implementation, supported by current applicable fire science and botanical knowledge, to fit the particular wildfire environment and property-development patterns of a given area. These detailed guidelines will be supplemental to this policy, and can be created, modified, or removed by approval of the California Native Plant Society Chapter Council.

Definitions codified in State law or local ordinances:

Brush – All native vegetation (especially shrubs), all vegetation in undeveloped lands. ***Sources***: California FAIR Plan 2010; Los Angeles City Fire Department 2010.

Brush areas – Wildlands, undeveloped lands. ***Synonyms***: Brush hazard areas, brush/wildfire areas. ***Source***: California FAIR Plan 2010.
Brush clearance – Treatments or thinning of vegetation to reduce fire hazards. ***Synonyms***: Fire clearance, fuel clearance. ***Source***: Los Angeles City Fire Department 2000.

California FAIR Plan – "The California Fair Access to Insurance Requirements ('FAIR') Plan was created by state legislation in July, 1968 following the 1960's brush fires and riots. It is an insurance pool established to assure the availability of basic property insurance to people who own insurable property in the State of California and who, beyond their control, have been unable to obtain insurance in the voluntary insurance market. The FAIR Plan is a private association based in Los Angeles comprised of all insurers licensed to write property insurance in California. The FAIR Plan is not a state agency." ***Source***: California FAIR Plan 2010.

Defensible space – An area extending 100 feet from a structure in which "Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure." (PRC 4291). The defensible space zone consists of an innermost 30 feet in which the fuels are maintained as "lean and green", and an outermost 70 feet as the "reduced fuel zone" in which fuels are reduced, limbed up, and thinned. ***Sources***: Cal Fire 2010a.

Public Resource Code 4291, Excerpt from General Guidelines (pages 5-6) –
"**C. Fuel Treatment Guidelines**
The following fuel treatment guidelines comply with the requirements of 14 CCR 1299 and PRC 4291. All persons using these guidelines to comply with CCR 1299 and PRC 4291 shall implement General Guidelines 1., 2., 3., and either 4a or 4b., as described below.
General Guidelines:
1. Maintain a firebreak by removing and clearing away all flammable vegetation and other combustible growth within 30 feet of each building or structure, with certain exceptions pursuant to PRC §4291(a). Single specimens of trees or other vegetation may be retained provided they are well spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.
2. Dead and dying woody surface fuels and aerial fuels within the Reduced Fuel Zone shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches. This guideline is primarily intended to eliminate trees, bushes, shrubs and surface debris that are completely dead or with substantial amounts of dead branches or leaves/needles that would readily burn.
3. Down logs or stumps anywhere within 100 feet from the building or structure, when embedded in the soil, may be retained when isolated from other vegetation. Occasional (approximately one per acre) standing dead trees (snags) that are well-space from other vegetation and which will not fall on buildings or structures or on roadways/driveways may be retained.

4. Within the Reduced Fuel Zone, one of the following fuel treatments (4a. or 4b.) shall be implemented. Properties with greater fire hazards will require greater clearing treatments. Combinations of the methods may be acceptable under §1299(c) as long as the intent of these guidelines is met.

4a. Reduced Fuel Zone: Fuel Separation

In conjunction with General Guidelines 1., 2., and 3., above, minimum clearance between fuels surrounding each building or structure will range from 4 feet to 40 feet in all directions, both horizontally and vertically. Clearance distances between vegetation will depend on the slope, vegetation size, vegetation type (brush, grass, trees), and other fuel characteristics (fuel compaction, chemical content etc.). Properties with greater fire hazards will require greater separation between fuels. For example, properties on steep slopes having large sized vegetation will require greater spacing between individual trees and bushes. Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant. For example, three individual manzanita plants growing together with a total foliage width of eight feet can be 'grouped' and considered as one plant and spaced according to the Plant Spacing Guidelines in this document.

4b. Reduced Fuel Zone: Defensible Space with Continuous Tree Canopy

To achieve defensible space while retaining a stand of larger trees with a continuous tree canopy apply the following treatments:

• Generally, remove all surface fuels greater than 4 inches in height. Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.

• Remove lower limbs of trees ('prune') to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees). Properties with greater fire hazards, such as steeper slopes or more severe fire danger, will require pruning heights in the upper end of this range." ***Source***: Cal Fire. 2006

Glossary of terms:

Community – Any ecologically integrated group of species of microorganisms, plants, and animals inhabiting a given area. ***Source***: Purves, Orians, Heller, Sadava. (1998)

Ecosystem – The organisms of a particular habitat, together with the physical environment in which they live. ***Source***: Purves, Orians, Heller, Sadava. (1998)

Environment – An organism's surroundings, both living and nonliving; includes temperature, light intensity, and all other species that influence the focal organism. ***Source***: Purves, Orians, Heller, Sadava. (1998)

Fire management – Strategies for controlling and extinguishing fires/wildfires. ***Source***: Carle (2008).

Fire-safe landscaping – Designing a defensible space by using well-spaced fire-resistant plants and hardscape elements such as brick or stone walls to prevent heat and flames from reaching the structure. ***Source***: SAFE Landscapes (2009).

Fuel – Any combustible material, both man-made – such as wood fences, lumber, furniture, plastic, awnings, and cloth – and vegetative – such as grass, leaves, ground litter, plants, shrubs, and trees – that feed a fire. ***Sources***: for vegetation: Carle (2008); for man-made materials as fuel: Los Angeles City Fire Department (2000).

Fuel management – Manipulating fuels to reduce the likelihood of ignition, reduce fire behavior, and/or lessen potential damage and resistance to control. ***Synonyms***: fuel modification, fuel reduction, wildfire fuel management. ***Source***: Carle (2008).

Habitat – The environment in which an organism lives. ***Source***: Purves, Orians, Heller, Sadava. (1998)

Native – Occurring naturally in an area, not as either a direct or indirect consequence of human activity; indigenous; not alien. ***Source***: Hickman (1993). Note: Plants documented or assumed to have been in California at the advent of European exploration of the west coast of North America – around 1500 A.D. – are generally considered to be "native plants".

Plant community – An assemblage of individuals of one to many plant species distinct in structure and composition from other adjacent such groupings. ***Source***: Sawyer, Keeler-Wolf, and Evens (2009).

Vegetation – All the plant species in a region and the way they are arranged. ***Source***: Sawyer, Keeler-Wolf, and Evens (2009).

Vegetation management – Manipulation of plant species by humans to attain a goal or goals such as esthetics, economics, maintenance, restoration, pest/weed eradication, and/or fuel modification. ***Sources***: Carle (2008); Sawyer, Keeler-Wolf, and Evens (2009).

Wildland-urban interface (WUI) – The area where structures and other human development meet undeveloped wildlands and their fuels. ***Source***: Carle (2008). Note: WUI is easy to define qualitatively but it is so site-specific that WUI cannot be used to create qualitative regulations defining the width of fuel clearance zones in general.

Source references for legal definitions and glossary of terms:

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General references:

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End of Policy