A Guide to
DEFENSIBLE SPACE
Ornamental Vegetation Maintenance

Los Angeles County Fire Department
Ornamental Vegetation Maintenance

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Hardening your home and addressing ornamental vegetation adjacent to your structure are critical elements in structure survivability.

Defensible Space requirements are outlined in the Fire Code, but there is more to defensible space than clearing or maintaining native brush. Many homeowners have increased their fire risk by planting or not maintaining their ornamental landscape. Creating and maintaining defensible space is essential for increasing your home’s chance of surviving a wildfire. It’s the buffer that homeowners are required to create on their property between a structure and the plants, brush, and trees or other items surrounding the structure that could catch fire. This space is needed to slow the spread of wildfire and improves the safety of firefighters defending your home. In high fire hazard areas, the maintenance requirements may extend to 200 feet from structures.

Preventing conditions where fire can travel from adjacent fuels, through an ornamental landscape to your structure, is the key to creating defensible space. Fire spreads through convection, conduction, radiation, and embers. Proper maintenance of ornamental vegetation reduces ember production, fire propagation, intensity, and duration of the approaching flames.

This brochure visually details the most critical landscape conditions and clarifies what should be done to prepare your home for the greatest chance of survival. If any of these conditions are impacting your home, follow these guidelines to properly prepare and pass your next wildfire safety inspection (Annual Defensible Space Inspection).
Fuel Ladders

The concept of fuel ladders is crucial to planning a firewise landscape. No matter what plants are chosen, providing adequate and definite separation between ground covers, shrubs and trees is the most critical consideration in the design/plant selection process. Do not use large shrubs beneath trees. Choose plants that mature to a height of no more than two feet beneath trees, rather than using pruning to maintain plants at that height. Do not plant continuous hedgerows that lead directly to structures.

Native Plants

In the past, the use of California native plants were unfortunately discouraged. The key to using California natives effectively is to choose low-growing varieties of all plants to be used within 20 feet of the structure. Use herbaceous plants, succulents and small grasses closest the structure. Working out from the structure, you can begin to introduce low-growing woody plants, such as the Pigeon Point Coyote Bush in the foreground. Using slightly taller plants sparingly as accents will provide plenty of interest. As you move further away from structures, larger trees and shrubs can be used as long as you do not create fuel ladders.

Vegetation Conditions:

1. **Trees touching/overhanging structure**: Remove limbs within five feet of any structure, and within 10 feet from any chimney outlet. Trim trees up to six feet or one third their height.
2. **Vines and climbing plants**: Remove from all structures.
3. **Hedges and screens between homes**: Reduce and maintain to a height of no greater than eight feet.
4. **Large shrubs under windows**: Maintain 12-inch separation under windows.
5. **Ground cover**: Maintain at 18-inch maximum height.
6. **Dead vegetation**: Remove all dead material within 100 feet of structures.

Specific Plants:

1. **Italian Cypress**: Remove if center of trunk is within 10 feet of any structure.
2. **Junipers**: Remove within 10 feet of any structure.
3. **Bougainvillea**: Remove from all structures.
4. **Wisteria/Trumpet Vines/Creeeping Fig, etc.**: Remove from all structures.
5. **Palms**: All palm trees should be free of dead or dying fronds. Consider removing unmaintained trees.
6. **Pines**: Maintain all pines free of dead material.

Additional Resources:

**Department Resources**

- **Ready! Set! Go!**
  https://www.fire.lacounty.gov/rsg
- **Fuel Modification Guidelines**
  http://www.fire.lacounty.gov/forestry-division/forestry-fuel-modification/
- **Brush Clearance Inspection Video**
  http://www.fire.lacounty.gov/forestry-division/fire-hazard-reduction-programs/

**Additional Resources**

- **Wildfire in the West Video**
  https://ucanr.edu/sites/safelandscapes/
How to choose plants

Choose a palette with predominantly low-growing plants, mixed with succulents and herbaceous ground covers, which are ideal when designing a fire-wise landscape. This minimizes maintenance, such as regular pruning and leaf litter removal. It is best to choose plants that mature to the desired heights rather than using pruning as an alternative. Use small trees (less than 20 feet tall) sparingly as focal points within 20 feet from structures.

Trees touching or overhanging structures

Trees must be pruned back to provide a five-foot minimum separation from the roof. Chimneys require a 10-foot separation.

Vines and climbing plants

All plants must be removed from any structure.

Hedges and screens

Reduce any hedges or screens to a maximum height of eight feet. A five-foot wide walking path must be provided around the entire structure.

Hardscape

Locating hardscape features, such as walkways, patios and driveways abutting structures, is the best way to eliminate receptive fuel beds against structures. Ideally, eliminating anything flammable within five-feet of any structure is best. When not possible, gravel mulch and low-growing herbaceous plants and succulents can be used against structures. Keep woody shrubs and perennials away from structures.
**Landscaping Tips**

**Landscape Design**
When designing a new landscape or maintaining an established landscape, remember to address everything surrounding the structure. View it from all angles. The shrubs and trees on the side of this home and in the front yard and the backyard present specific challenges as they continue to grow. Misplaced trees and large shrubs should be considered for removal. These plants can contribute to a leaf litter accumulation against the structure as well as on the roof.

**Maintaining Trees**
Even existing pine trees can be maintained to reduce their potential hazard. Meticulous needle removal from the ground, roof and rain gutters is most effective if done every two weeks. Proper watering and pruning to maintain overall health greatly reduces the hazard this pine could present. Never top trees; always seek services from certified arborists for recommendations related to pruning.

**Trees and shrubs between homes**
Plants must be pruned back to prevent overhang onto any structure. Provide five-foot breaks in horizontal continuity where appropriate (near the end of structures).

**Maintain ground cover**
Ground cover must be maintained at a maximum height of 18 inches and be kept free of dead material.

**Maintain shrubs free of dead wood**
Remove all dead wood and provide a minimum space of 12 inches under windows. Prune trees to provide five feet of separation from the structure.
Ornamental Landscaping Recommendations

Remove Junipers
Clear Junipers from within 10 feet of any structure.

Remove Italian Cypress
Remove any plants where the center of the trunk is located within 10 feet of any structure.

Palm fronds
Remove dead or dying palm fronds from trees and consider tree removal.

Maintain all trees within 100 feet of structures
Remove all dead wood, especially from pine and eucalyptus trees. Remove any portion that is within five feet of any structure.

Bougainvillea, Trumpet Vines, Creeping Fig and Wisteria
Remove any plants that are attached to combustible structures.

Trees along fire access streets or driveways
Trees must be maintained to provide a minimum of 16 feet of vertical clearance. Oak trees may be maintained at 13 1/2 feet.