

City of Santa Barbara Fire Prevention Bureau High Fire Hazard Area Landscape Requirements Ordinance #5920

To incorporate fire resistant landscaping on all parcels within the high fire hazard area the following landscape requirements must be utilized. These requirements meet the Fire Department High Fire Hazard Area Defensible Space Requirements, per City Ordinance #5920, as outlined in Chapter 49 of the California Fire Code, 2019 Edition. These standards apply to all parcels within the high fire hazard area. Fire resistant landscaping with proper plant spacing and maintenance can impede the progress of a wildfire, reduce its intensity, and provide a safe buffer to protect a structure.

Incorporation of the High Fire Hazard Area Landscape Requirements into the review process will assist the City in complying with existing regulations for vegetation modification, balance the aesthetic beauty of our area, protect our resources, and reduce the risk associated with wildfire and habitat resources.

Vegetation installed within the high fire hazard area without an approved landscape plan shall be removed if in the opinion of the fire code official, it is capable of being ignited and endangering property.

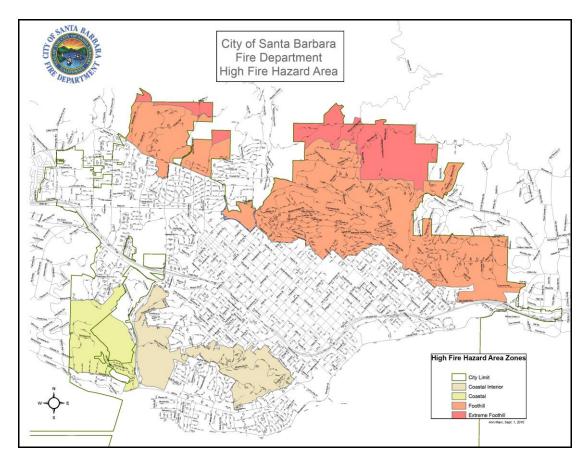
Requirements

Landscape plans submitted for review shall include the following:

- A vegetation plan that details existing native vegetation with species name and locations.
- Vegetation shown on the plan that will be removed or retained.
- The method that will be used to remove vegetation (exp. mechanical or hand cutting).
- Must include new plantings with the species name and the specific location of the plantings to scale.
- Recommendations for plant placement must be followed as outlined in Table 1.
- The City of Santa Barbara, Fire Department uses a four zone fire landscape concept. Landscape plans must delineate landscape zones around all structures based on the required defensible space for your property. Landscape zones are as follows:
 - Zone 1 (0-30 feet from structure)
 - Zone 2 (30 to 50 feet from structure)
 - Zone 3 (50 to 70 feet from the structure)
 - Zone 4 (70 to 100 feet from the structure in the Foothill Zone or 70 to 150 feet in the Extreme Foothill Zone)

Landscape plans are reviewed based on High Fire Hazard Area Defensible Space Requirements as follows;

Coastal Interior Zone 30 to 50 feet defensible space required from structure Coastal Zone 50 to 70 feet defensible space required from structure Foothill Zone 100 feet defensible space required from structure Extreme Foothill Zone 150 feet defensible space required from structure



Slopes over 30% are at increased risk from wildfire, therefore the Fire Department may require additional vegetation modification for a total distance of 150-300 feet from any structure. If required vegetation modification methods must be addressed on the plan.

All plantings along driveways and street access areas (on or adjacent to the property) must be shown on landscape plans and are required to have vegetation planted or trimmed to provide a vertical clearance of 13 feet 6 inches and a 10 foot horizontal clearance.

Vines and climbing ornamental plants on structures are prohibited within the high fire hazard area.

Rooftop gardens and landscaped roofs, also known as vegetated roofs, are prohibited in high fire hazard areas.

All landscape plant species must be fire resistant. See enclosed Desirable Qualities for Fire Resistant Landscape Plants (Table 2). Certain plant species shall not be planted in the high fire hazard area landscape. The enclosed list of Unacceptable Plant Species (Table 3) should not be planted within 150 feet of any structure, unless listed otherwise.

Many homes in the high fire hazard area do not have the space surrounding their property to obtain Defensible Space Requirements. Using the above zone concept becomes critical on these properties.

Table 1: Recommendations for Plant Placement

ZONE 1 0 – 30 feet	This area is closest to a structure. It provides the best protection against the high radiant heat that result during a wildfire. Plants should be low growing, irrigated plants. Focus should be on ground covers not more than 12 inches in height or succulents. Use non-flammable materials for paths, patios, and mulch. Trees (when the canopy is fully grown) shall not be planted closer than 15 feet from a structure. No plantings shall be connected or trellised to the structure.
ZONE 2 30 – 50 feet	Maintain a reasonably open character in this area. Plant low growing ground covers and succulents resistant to fire. Shrubs up to 3 feet can be planted but should have at least 18 feet spacing between other shrubs or other trees. Shrubs can be planted in clusters not more than 10 feet in diameter, but should have at least 18 feet between clusters. Do not plant shrubs underneath canopy of trees. Trees should be spaced at least 30 feet apart to prevent crowns from touching once fully grown.
ZONE 3 50 – 70 feet	This area should have native and Mediterranean plantings that require irrigation and should not be higher than 4 to 6 feet. Shrubs should be spaced at least 18 feet away from each other. Shrubs can be planted in clusters not more than 10 feet in diameter, but should have at least 18 feet between clusters. Trees should be spaced at least 30 feet apart to prevent crowns from touching once fully grown.
ZONE4 70 – 150 feet	This zone is furthest from the structure. Plantings once established need no irrigation. There is no limit to height. Shrubs planted in this area should have 18 feet spacing or be planted in clusters with at least 18 feet spacing. Trees can be planted in groups or with individual spacing at least 30 feet from other trees.
SLOPES>30%	If additional vegetation modification is required on slopes over 30% vegetation should be reduced through thinning of existing plants, pruning, removal of dead material, and removal of fire ladders (Fire ladders exist if a fire's flames can spread from the ground into shrubs and trees up to a house).

Table 2: Desirable Qualities for Fire Resistant Landscape Plants

Plant qualities that are desirable for fire resistant plants are:

- Ability to store water in leaves or stems.
- Produces limited dead and fine material.
- Extensive root systems for controlling erosion.
- Plant has high levels of salt or other non-resinous compounds within its tissues that can contribute to fire resistance.
- Ability to withstand drought.
- Plants that are low growing in form.
- Ability to withstand severe pruning.
- Low levels of volatile oils or resins.
- Ability of plant to sprout after a fire.

Table 3: Prohibited Plant List

Specific plants are considered to be unacceptable in the landscape due to their flammable characteristics within the high fire hazard area. These characteristics include; large amounts of dead material retained within the plant, rough or peeling bark, production of profuse amounts of litter and the presence of volatile substances such as oils, resins, wax, and pitch. Certain native plants species contain these characteristics.

Plants with these characteristics shall not be planted in high fire hazard areas. They are referred to as target species since their partial or complete removal is a critical part of hazard reduction.

The following is a list of plants that are not allowed to be planted within the high fire hazard area. It is highly recommended that these plants and trees be thinned and or removed from existing defensible space areas. In certain instances, the Fire Department may require the thinning and or removal.

This list was prepared by Hunt Research Corporation and Dudek & Associates, and reviewed by Scott Franklin Consulting Co, Please see notes after the list of plants.

BOTANICAL NAME	COMMON NAME	COMMENT*			
Trees					
Abies species	Fir	F			
Acacia species (numerous)	Acacia	F, I			
Agonis juniperina	Juniper Myrtle	F			
Araucaria species (A. heterophylla, A. araucana, A. bidwillii)	Araucaria (Norfolk Island Pine, Monkey Puzzle Tree, Bunya Bunya)	F			
Arbutus menziesii	Madrone	F			
Callistemon species (C. citrinus, C. rosea, C. viminalis)	Bottlebrush (Lemon, Rose, Weeping)	F			
Calocedrus decurrens	Incense Cedar	F			
Casuarina cunninghamiana	River She-Oak	F			

Cedrus species (C. atlantica, C. deodara)	Cedar (Atlas, Deodar)	F
Chamaecyparis species (numerous)	False Cypress	F
Chrysolepis chrysophylla	Giant Chinquapin	F
Cinnamomum camphora	Camphora	F
Cryptomeria japonica	Japanese Cryptomeria	F
Cupressocyparis leylandii	Leyland Cypress	F
Cupressus species (C. fobesii, C. glabra, C. sempervirens,)	Cypress (Tecate, Arizona, Italian, others)	F
Eucalyptus species (numerous)	Eucalyptus	F, I
Juniperus species (numerous)	Juniper	F
Larix species (L. decidua, L. occidentalis, L. kaempferi)	Larch (European, Japanese, Western)	F
Leptospermum species (L. laevigatum, L. petersonii)	Tea Tree (Australian, Tea)	F, I
Lithocarpus densiflorus	Tan Oak	F
Melaleuca species (M. linariifolia, M. nesophila, M. quinquenervia)	Melaleuca (Flaxleaf, Pink, Cajeput Tree)	F, I
Olneya tesota	Ironwood	F
Picea (numerous)	Spruce	F
Palm species (numerous)	Palm	F, I,
Pinus species (P. brutia, P. canariensis, P. b. eldarica, P. halepensis, P. pinea, P. radiata, numerous others)	Pine (Calabrian, Canary Island, Mondell, Aleppo, Italian Stone, Monterey)	F
Platycladus orientalis	Oriental arborvitae	F
Podocarpus species (P. gracilior, P. macrophyllus, P. latifolius)	Fern Pine (Fern, Yew, Podocarpus)	F
Pseudotsuga menziesii	Douglas Fir	F
Schinus species (S. molle, S. terebenthifolius)	Pepper (California and Brazilian)	F, I
Tamarix species (T. africana, T. aphylla, T. chinensis, T. parviflora)	Tamarix (Tamarisk, Athel Tree, Salt Cedar, Tamarisk)	F, I
Taxodium species (T. ascendens, T. distichum, T. mucronatum)	Cypress (Pond, Bald, Monarch, Montezuma)	F
Taxus species (T. baccata, T. brevifolia, T. cuspidata)	Yew (English, Western, Japanese)	F
Thuja species (T. occidentalis, T. plicata)	Arborvitae/Red Cedar	F
Tsuga species (T. heterophylla, T. mertensiana)	Hemlock (Western, Mountain)	F
Ground	lcovers, Shrubs & Vines	
Acacia species	Acacia (except dwarf/prostrate variety)	F
Adenostoma fasciculatum	Chamise	F
Adenostoma sparsifolium	Red Shanks	F
Agropyron repens	Quackgrass	F, I
Anthemis cotula	Mayweed	F, I
Arctostaphylos species	Manzanita. Also note that Eastwood Manzanita grows to 8'	F
Arundo donax	Giant Reed	F, I

Artemisia species (A. abrotanium, A. absinthium, A. californica, A. caucasica, A. dracunculus, A. tridentata, A. pynocephala)	Sagebrush (Southernwood, Wormwood, California, Silver, True tarragon, Big, Sandhill)	F
Atriplex species (numerous)**	Saltbush	F, I**
Avena fatua	Wild Oat	F
Baccharis pilularis	Coyote Bush	F
Bambusa species	Bamboo	F, I
Bougainvillea species	Bougainvillea	F, I, FR
Brassica species (B. campestris, B. nigra, B.	Mustard (Field, Black, Yellow)	F, I
rapa)	Wild Turnip	
Bromus rubens	Foxtail, Red brome	F, I
Bromus carinatus	California brome	Grows to 5', Dies if cut
Cardaria draba	Hoary Cress	I
Carpobrotus species	Ice Plant, Hottentot Fig	I
Ceonothus griseus "Louis Edmunds**	Louis Edmunds Ceanothus	Grows higher than 18"**
Ceonothus megacarpus**	Big Pod Ceonothus	Grows higher than 18"**
Cirsium vulgare	Wild Artichoke	F,I
Codariocalyx motorius	Telegraph Plant	F
Conyza bonariensis	Horseweed	F
Coprosma pumila	Prostrate Coprosma	F
Cortaderia selloana	Pampas Grass	F, I
Cytisus scoparius	Scotch Broom	F, I
Delosperma "alba"	White trailing Ice Plant	F
Dodonaea viscosa	Hopseed Bush	F
Drosanthemum Floribundum	Rosea Ice plant	F
Eriodictyon californicum	Yerba Santa	F
Eriogonum species (E. fasciculatum)	Buckwheat (California)	F
Fremontodendron species	Flannel Bush	F
Genista monspessulana	French Broom	F
Hedera species (H. canariensis, H. helix)	Ivy (Algerian, English)	I
Helix Canariensis	English Ivy	F, I
Heterotheca grandiflora	Telegraph Plant	F
Hordeum leporinum	Wild barley	F, I
Jasminum humile	Italian Jasmine	F
Juniperus species	Juniper	F
Lactuca serriola	Prickly Lettuce	I
Lamprathus aurantiacus	Bush Ice Plant	F
Lamprathus spectabilis	Trailing Ice Plant	F
Larix species (numerous)	Larch	F
Larrea tridentata	Creosote bush	F
Lepidium virginicum	Peppergrass	F
Leymus condensatus	Giant Wild Rye	Grows to 9' tall

Lolium multiflorum	Ryegrass	F, I
Lonicera japonica	Japanese Honeysuckle	F
Mahonia species	Mahonia	F
Miscanthus species	Eulalie Grass	F
Muhlenbergia species	Deer Grass	F
Nassella (stipa) leprida	Foothill needlegrass	Gets to 18" high. Can't cut to 4"
Nassella (stipa) pulchra	Purple needlegrass	Gets to 18" high. Can't cut to 4"
Nassella tenuissima	Mexican Feathergrass	F
Nicotiana species (N. bigelovii, N. glauca)	Tobacco (Indian, Tree)	F, I
Pennisetum setaceum	Fountain Grass	F, I
Perovskia atroplicifolia	Russian Sage	F
Phoradendron species	Mistletoe	F
Phyllostachys species	Bamboo	F, I
Pickeringia montana	Chaparral Pea	F
Pseudosasa species	Bamboo	F, I
Plumbago auriculate	Cape Plumbago	F
Rhus (R. diversiloba, R. laurina, R. lentii)**	Sumac (Poison oak, Laurel, Pink Flowering)	F - Poison oak presents a health hazard
Ricinus communis	Castor Bean	F, I
Rhus Lentii	Pink Flowering Sumac	F
Rosmarinus species	Rosemary (except dwarf/prostrate variety)	F
Salvia species (numerous)	Sage	F, I
Salsola australis	Russian Thistle	F, I
Senecio serpens	No common name	FR
Silybum marianum	Milk Thistle	F, I
Spartium junceum	Spanish Broom	F, I
Tecoma capensis	Cape Honeysuckle	F
Thuja species	Arborvitae	F
Urtica urens	Burning Nettle	F
Vaccinium Ovatum	Evergreen Huckleberry	F
Vinca major	Periwnkle	I

^{*}F = flammable, I = Invasive

Notes:

- 1. Use of plants and trees on this list must be specifically approved by the Fire Code Official. Landscape architects may submit proposals for use of certain vegetation on a project specific basis. They shall also submit justifications as to the fire resistivity of the proposed vegetation.
- 2. For the purpose of using this list as a guide in selecting plant material, it is stipulated that all plant material will burn under various conditions.
- 3. The absence of a particular plant, shrub, groundcover, or tree, from this list does not necessarily mean it is fire resistive and does not imply that a particular plant, shrub, groundcover, or tree will be approved by the Fire Code Official for landscaping in the High Fire Hazard Area.

^{** =} Certain species of Ceonothus, Saltbush and Sumac needs to be maintained free of dead materials, which builds up in the plant. Remove any poison oak (Sumac).

- Native and/or drought tolerant plants are encouraged unless they are on this Prohibited Plant List or otherwise known as flammable or Invasive.
- 5. Plants on this list that are considered invasive are a partial list of commonly found plants. There are many other plants considered invasive that shall not be planted within defensible space areas and they can be found on The California Invasive Plant Council's Website www.cal-ipc.org/p/inventory/index.php. Other plants not considered invasive at this time may be determined to be invasive after further study.
- 6. Other plants may be considered undesirable because of their ability to naturalize and become a pest. These types of plants should be avoided, especially in sensitive riparian or coastal areas where they could become established and compete with native vegetation.
- 7. On steep slopes care should be taken to avoid erosion problems created or enhanced by vegetation removal. Deep rooted ground covers and landscape plants should be utilized to hold soil in place. Avoid shallow rooted ground covers. For example, while ice plant is an effective ground cover on flat surfaces it would be undesirable on a steep slope because of its shallow rooted nature may increase erosion when the root zone becomes saturated during heavy rains, exposing bare soil.
- 8. In areas where target species make up the total area of vegetation, partial removal is recommended to obtain Fire Department Defensible Space Requirements.