

SOUTHERN MARIN FIRE PROTECTION DISTRICT



SOUTHERN MARIN
FIRE DISTRICT
FIRE PREVENTION DIVISION

Fire Protection Standard 220

Date: 07/01/2020

VEGETATION MANAGEMENT PLAN

Revision: _____

Approved by: _____
Christian Tubbs, Fire Chief

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PREFACE

Included in Standard 220 are the requirements for preparing and submitting a Vegetation Management Plan (VMP) (pages 1-4), the Vegetation Management Plan Content (220-A: pages 5-8), and an example graphic plan (220-B: page 9). Standard 220 has been developed collaboratively with Fire Departments and Fire Districts throughout Marin County with the intent of providing a comprehensive and consistent application of regulations outlined in the California Code of Regulations Title 24, Part 9 (California Fire Code), Government Code, Title 5, Division 1, Part 1, Chapter 6.8, Section 4290 and 4291 of the Public Resources Code, the International Wildland Interface Code and locally adopted ordinances.

Please contact the Fire Prevention Division if you have any questions or require clarification.

WHAT IS A VEGETATION MANAGEMENT PLAN?

A Vegetation Management Plan (VMP) is the assessment of your properties fire hazard related to topography, aspect and vegetation, a proposal for mitigation of those hazards, and a prescriptive plan for future maintenance and care of the area surrounding your home.

Components of your VMP may include, but not be limited to: identification of hazards, survey of vegetation, proposed modification of hazards and vegetation, reduction and/or removal of fuels, fire safe landscaping, creating defensible space, shaded fuel breaks, fire breaks, maintenance of access and egress components, and other prescriptive measures needed to mitigate the hazards of wildfire.

WHEN IS A VMP REQUIRED?

A Vegetation Management Plan (VMP) is required for all new homes and structures, subdivisions, and those buildings that are undergoing substantial remodel that are located within the Wildland-Urban Interface as defined by the Southern Marin Fire Protection District.

ADJACENT PROPERTY

In the event minimum required defensible space crosses property lines, the property owner will be required to obtain a “defensible space easement” from the adjoining property owner. If this cannot be obtained, the proposed structure may be required to be re-sited or other feasible mitigation measures shall be required to reduce the risk of ignition or spread of wildfire to the structure(s).

For existing structures, additional fire protection measures may be required to mitigate a reduction in the required defensible space. To provide maximum wildfire protection for your home, a combination of near-home vegetation management, appropriate building materials, and related design features must be used.

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If the property for which the VMP is being prepared is adjacent to Open Space land owned publicly or privately, make note of this fact in the VMP. You may be required to submit the VMP to the owner for review. Any limitations set by the Public or Private land owner, shall be incorporated into your proposed VMP.

DEFINITIONS

Defensible Space

Defensible space is the buffer you create and maintain between buildings, structures of access points on your property and vegetation including grass, trees, and shrubs.

Defensible space is provided to help slow or stop the spread of wildfire and protect your home from catching fire, either from direct flame contact or radiant heat. Defensible space is also important to help protect firefighters when they are defending your home.

Home Ignition Zones (HIZ)

Another term used in the context of defensible space planning is the "Home Ignition Zone". The HIZ reduces a home's ignition potential based on the proximity to available fuel types within 100 feet or more from a home. More defensible space may be necessary if your home is on a steep slope or in a windswept exposure. For a description of plan requirements for each zone, please see VMP Standard 220-A, or visit <http://www.firesafemarin.org/defensible-space>.

Immediate Zone (ZONE 0): 0'-5'

The Immediate Zone extends 0-5' from your house. It's the area closest to your house, including the structure itself, decks, outdoor furniture, and the outside walls and coverings. This area is most vulnerable, and should be most aggressively maintained for fire resistance.

Intermediate Zone (ZONE 1): 5'-30'

The Intermediate Zone from 5' to 30' out from buildings, structures, decks, etc. Keep this area "Lean, Clean, and Green" and employ careful landscaping to create breaks that can help influence and decrease fire behavior.

Extended Zone (ZONE 2): 30'-100'

The extended zone from 30' to 100' (or more, if required due to steep slopes, nearby vegetation conditions, and/or your local fire department). The goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground.

Access Zone (Zone 4): 0'-10'

The access zone extends 10 feet horizontally from the edge on either side of the road or driveway and shall not extend within the 14 foot vertical clearance above the surface of the

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roadway or driveway, as required for emergency access. All landscape shall meet the requirements for separation as stated in the Zone 1 above.

Fire Safe Landscaping

Fire safe landscaping uses fire-resistant designs and materials in conjunction with carefully selected plants, to strategically resist the spread of fire to your home. For more information please visit <http://www.firesafemarin.org/landscaping>.

WHAT IS REQUIRED TO BE INCLUDED IN THE VMP?

At a minimum, the VMP shall contain the information listed below:

SITE PLAN- The site plan shall include the following:

1. Site plans shall be drawn to a conventional scale.
2. The name, address, and phone number of the plan preparer shall be included on the plans.
3. A vicinity map shall be shown on the site plan that clearly shows the subject property and surrounding roads.
4. The site plan must show all existing and proposed lot lines, labeled with their metes and bounds, open space, and the boundaries of existing and proposed easements and rights of way.
5. The footprints of all existing and proposed structures and buildings on the subject property must be indicated and drawn to scale.
6. Their use, location, and setbacks to all property lines must be indicated.
7. The minimum setbacks from the exterior walls of the buildings to each HIZ must be dimensioned on the plans.
8. The footprint of existing structures on adjacent properties within the extended 100' HIZ (Zone 3)

NARRATIVE- Vegetation Management Plan "Narrative" shall describe:

1. The existing property conditions including existing plants/shrubs/trees and hardscape
2. The proposed scope of the work
3. A disclaimer for future plantings
4. The description and requirements for all Home Ignition Zones (Zone 0 –Zone 3).
5. A description of long term maintenance and safety practices
6. (Please see Standard 220-A for example language)

GRAPHIC PLAN- The plan sets shall be required to include the following graphic detail:

1. All building(s), structure(s), property lines, and access/egress roads or driveways.
The plan shall graphically indicate the extents of each home ignition zones (Zones 1,2 & 3)
2. The location and configuration of existing plants/shrubs/trees
3. The location of the existing plants/shrubs/trees planned to be removed and/or modified
4. The location and configuration of plants/shrubs/trees to be planted
5. The location and type of mulche and ground cover material (organic and inorganic)

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6. (Please see Standard 220-B for a plan example)

ADDITIONAL INFORMATION

1. The plan shall include a schedule/list of plants to be used and/or retained.
2. The plan shall include a schedule/list of fire prone plants. See Standard 220-B for an example of a plant list.
3. Irrigation details, if applicable. Remember, while all plants will eventually burn, healthy ones with high moisture content will be more difficult to ignite.

PERMIT APPLICATION & REVIEW

Please submit the plan in a PDF electronically, along with a Plan Check Application, to prevention@smfd.org. All plan submittals will require a Southern Marin Fire Protection District permit application. An invoice will be emailed after the submittal is received. For more information about plan submittals, please visit www.smfd.org/prevention/plan-submittal.

Landscape plans will be deemed incomplete if they fail to meet the minimum submittal information required by this standard.

The VMP shall be submitted to the Fire Code Official for review prior to implementation. The VMP shall include line drawings and a text narrative describing specific and applicable contributing factors in the selection and design of the plan.

Once approved, the required VMP mitigation shall begin prior to construction. All work prescribed in the VMP shall be complete prior to the completion of the project and request for clearance of final fire holds.

Exceptions to requirements set forth in this Standard shall be at the discretion of the AHJ.

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The following information is provided to assist you in the evaluation of the vegetation on your property, and creating a vegetation management plan and narrative for plan submittal. Please note all properties are different and may require additional details or explanation. Please consult with your Fire Department or District to identify specific detail requirements for your property/project. See Standard 220 for requirements, intent, and definitions and Standard 220-B for an example VMP graphic plan.

REQUIREMENTS AND PRESCRIPTIONS PER ZONE

The following information will help identify prescriptive measures in each of the Home Ignition Zones. The VMP shall identify compliance with the requirements for each zone. Check with your local fire department or district for any additional defensible space or weed abatement requirements. FIREsafe MARIN and the NFPA Firewise USA Program are great resources for additional design information.

Immediate Zone (ZONE 0): 0'-5'

The Immediate Zone extends 0-5' from your house. ZONE 0 is the area closest to your house, including the structure itself, decks, outdoor furniture, and the outside walls and coverings. This area is most vulnerable, and should be most aggressively maintained for fire resistance.

- Remove any combustible outdoor furniture.
- Replace jute or fiber door mats with fire resistant materials.
- Remove or relocate all combustible materials, including garbage and recycling containers, lumber, trash, and patio accessories.
- Clean all fallen leaves and needles regularly. Repeat often during fire season.
- No vegetation is recommended within 5' of structures.
- Remove tree limbs that extend into this zone. Fire-prone tree varieties should be removed if they extend within 5' of structures..
- Do not store firewood, lumber, or combustibles here, even (especially) under decks or overhangs. Move stored combustibles inside, or at least 30' away from structures.
- Use only inorganic, non-combustible mulches such as stone or gravel.

Intermediate Zone (ZONE 1): 5'-30'

The Intermediate Zone from 5' to 30' out from buildings, structures, decks, etc. Keep ZONE 1 "Lean, Clean, and Green" and employ careful landscaping to create breaks that can help influence and decrease fire behavior.

- Remove all dead plants, grass, and weeds (vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
- Remove vegetation and items that could catch fire from around and under decks.
- Remove fire-prone plants, and choose only fire-resistant varieties. Irrigate regularly.
- Remove limbs to a height of 10' above the ground (or 1/3 the height of the tree) to provide clearance and to eliminate a "fire ladder".
- Use only inorganic, non-combustible mulches such as stone or gravel. Composted mulch and large bark and chips (greater than 1/2" diameter) may be OK.

Extended Zone (ZONE 2): 30'-100'

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The extended zone from 30' to 100' (or more, if required due to steep slopes, nearby vegetation conditions, and/or your local fire department). The goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground. This zone should include at a minimum:

- Cut or mow annual grass down to a maximum height of 4 inches.
- Create horizontal spacing between shrubs, trees and vertical spacing between grass, shrubs and trees.
- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 3 inches if erosion control is an issue.

Access Zone (ZONE 3): 0'-10'

Extends 10 feet horizontally from the edge on either side of the road or driveway.

- Within this zone, plantings shall be fire resistant and shall not extend within the 14 foot vertical
- Clearance above the surface of the roadway or driveway, as required for emergency access.
- All landscape shall meet the requirements for separation as stated in the Zone 2 above

VEGETATION MANAGEMENT PLAN: PLANT LIST

FIREsafe Marin maintains a list of approved fire resistant plants at www.firesafemarin.org/plants. Other plant species not listed or named shall require approval by the Fire Code Official. All VMP's shall include a legend/list of all plants that are existing, that will be added, or will be removed as part of the VMP process.

EXAMPLE OF A PLANT LIST

| Symbol | Common Name | Latin Name | QTY | Fire Resistant | Type | (New or Existing) | Remarks |
|---------|--------------------------------|--------------------------------|-----|----------------|-----------|-------------------|-----------|
| DIE IRI | Fortnite Lily | <i>Dietes iridioides</i> | 10 | Yes | Perennial | Existing | Prune |
| ECH SEC | Hen and Chicks | <i>Echevaria secunda</i> | 25 | Yes | Perennial | new | Irrigated |
| SEN SER | Blue Chalk Stick | <i>Senecio serpens</i> | 15 | No | Perennial | Existing | Remove |
| CAR CAL | Bush Anemone | <i>Carpenteria californica</i> | 5 | Yes | Shrub | New | Irrigated |
| HYD MAC | Hydrangea | <i>Hydrangea macrophylla</i> | 10 | Yes | Shrub | New | Irrigated |
| TIB URV | Princess Flower | <i>Tibouchina urvilleana</i> | 2 | Yes | Shrub | New | Irrigated |
| LIG TEX | Japanese Privet | <i>Ligustrum japonicum</i> | | No | Shrub | Existing | Prune |
| SAL WAV | Waverly Sage | <i>Salvia leucantha</i> | 14 | No | Shrub | Existing | Remove |
| COY BSH | Coyote Brush | <i>Baccharis spp</i> | 10 | no | Shrub | Existing | Remove |
| FES ELI | <i>Festuca glauca</i> | Common Blue Fescue | 55 | Yes | Grass | New | Irrigated |
| MUH CAP | <i>Muhlenbergia capillaris</i> | Pink Muhly | 15 | Yes | Grass | New | Irrigated |
| EUC | Eucalyptus | <i>Eucalyptus Spp.</i> | 4 | No | Tree | Existing | Prune |
| CYP | Cypress | <i>Cupressus Spp.</i> | 11 | No | Tree | Existing | Remove |
| ASH | Ash | <i>Fraxinus Spp.</i> | 6 | Yes | Tree | New | |

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VEGETATION MANAGEMENT PLAN NARRATIVE

The following “example” narrative language is provided to illustrate typical language and details that shall be included in your plan. Please note all properties are different and may require additional details or explanation.

1. Existing Conditions

- a. There are currently mature coast live oaks, redwood trees, eucalyptus trees and a few other miscellaneous native shrub species located throughout the property.

2. Proposed Scope

- a. The intent of this plan is to properly maintain the mature live oak and redwood trees with selective pruning and removal of all dead material per firewise standards. The eucalyptus trees will be removed. Fire prone species including scotch broom and juniper will be removed. The existing shrubs will be thinned or removed to provide a fire break from 0’-30’ from the home.

3. Future Planting

- a. Any future plantings throughout the site will include fire-resistant, irrigated shrubs, perennials, and ground covers as in the FIREsafe Marin planting lists located at www.firesafemarin.org/plants

4. Long Term Maintenance Schedule and Safety Practices

- a. All fire prone fuels and dead material will be removed within 100’ of the home.
- b. Remove branches beneath large trees for a 6-foot minimum clearance.
- c. Live plants, bushes, shrubs, and trees shall be maintained. Dead vegetation and debris shall be removed from within and around the living plant, bush, shrub, and/or tree.
- d. Needles and leaves and other combustible debris and litter shall be removed from roofs and gutter at minimum twice yearly.
- e. All weeds and grasses shall be cut regularly to a height of 4” or less.
- f. Vegetation shall be trimmed to within 10’ horizontally of roadways, and trees shall be trimmed as not to overhang roadways and provide 14’ of clearance vertically.
- g. All dead and dying vegetation shall be removed seasonally to reduce vegetation volume and ladder fuels.
- h. Coordinate with adjacent property owners to maintain tree canopies, vegetation and ladder fuels on an annual basis.
- i. No native grasses shall be planted within Home ignition zones 1 and 2.
- j. All planted areas inside Home ignition zones 1 and 2 shall be irrigated.
- k. All plantings shall be selected in coordination with the FIREsafe Marin planting list located at www.firesaemarin.org/plants. Other fire resistant plants can be utilized with prior approval of the Fire Code Official.
- l. Regardless of plant selection, shrubs shall be spaced so that no continuity exists between ground fuels and tree crowns, such that a ground fire will not extend into the tree canopy.

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Design Information Resources

FIRESafe Marin

FIRESafe Marin (FSM) is Marin County's Fire Safe Council. FSM promotes public and private partnerships to enhance wildfire safety and build Firewise Communities. FSM is a nonprofit organization with the dual mission of reducing wildland fire hazards and improving fire-safety awareness in Marin County. FSM maintains a wealth of fire preparedness information including fire resistant plant listing, defensible space information, living with fire resources, emergency planning information, and home hardening tips.

<https://www.firesafemarin.org/preparedness>

National Fire Protection Agency (NFPA), Firewise USA

NFPA's Firewise USA program teaches people how to adapt to living with wildfire and encourages neighbors to work together and take action now to prevent losses. Information includes details for homeowners to prepare their homes to withstand ember attacks and minimize the likelihood of flames or surface fire touching the home or any attachments.

<https://www.nfpa.org/Public-Education/By-topic/Wildfire/Preparing-homes-for-wildfire>

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The following plan is provided as an example of a Vegetation Management Plan. Please note all properties are different and may require additional details. Please consult with you Fire Department or District to identify specific detail requirements for your property/project.
 See Standard 220-A for example language.

