

PORTOLA RANCH ASSOCIATION

**FIRE RISK
MANAGEMENT
GUIDELINES**

**Take steps to protect your home—
and our neighborhood!**

Adopted October 24, 2019

Table of Contents

Table of Contents	1
Glossary	2
Section 1—Introduction.....	5
Section 2—Goals and Objectives.....	5
Section 3—Maintenance Obligations	6
Section 4—Fire Safety Zones.....	7
4.1 What is the Home Ignition Zone?	7
4.2 Emergency Ingress and Egress.....	7
4.3 Immediate Zone	8
4.4 Intermediate Zone	10
4.5 Extended Zone	11
4.6 Fire Safety Maintenance in All Zones.....	11
Section 5—Additional Considerations	13
5.1 Mowing	13
5.2 Disposal	13
5.3 Sudden Oak Death (SOD)	14
5.4 Firewood	14
5.5 Flammable Materials and Equipment.....	15
Section 6—Resources	16
Portola Ranch Association Land Manager:	16
FRMC Members:	16
PVR Website:.....	16
Landscape Committee:	16
Design Committee:	16
Appendix 1—Procedures to Complete Fuel Reduction for Non-responding Homeowners	17
Appendix 2—Annual Fuel Reduction Essentials	18
Know Your Zones!	18
Guidelines for Zones	18
Appendix 3—25 Big Fire Risks You Can Fix Now	20

Glossary

- **ANNUAL REPORTING**—The formal report of each Homeowner certifying that fuel reduction on the Homeowner's property has been reviewed and completed for that year in accordance with these Fire Risk Management Guidelines. The required form is distributed in July and must be completed by September 15.
- **CC&Rs**—One of the governing documents of the Portola Ranch Association, formally titled “Third Restated Declaration of Covenants, Conditions and Restrictions of Portola Ranch Planned Development.” The CC&Rs cover the rights of the Association and of its members.
- **DEFENSIBLE SPACE**—The area immediately surrounding a structure (house, garage or building) that must be kept sufficiently free of fuel to provide safe access for residents or firefighters to defend the structure during a fire. This includes the "Immediate Zone," "Ingress and Egress," "Intermediate Zone," and "Extended Zone." It may encompass a Homeowner's entire property.
- **DESIGN GUIDELINES**—One of the governing documents of the Portola Ranch Association. The Design Guidelines establish the standards for the exterior conditions of homes.
- **EMERGENCY INGRESS AND EGRESS**—A 15-foot corridor at the roadside edge and property entrance, enabling fire response vehicles to enter and residents to evacuate. This zone includes the driveway and any walkway or stairway to the main entrance of the house.
- **EXTENDED ZONE**—The space 30 to 100 feet from structures or to property boundary. This area should be thinned to keep flames smaller and on the ground and to prevent the spread of fire into the Intermediate and Immediate Zones, adjacent properties, or open space.
- **FIRE WEATHER WATCH AND RED FLAG WARNING**—The National Weather Service alerts fire departments of the onset of critical weather and dry conditions that could lead to rapid or dramatic increases in wildfire activity. A **Fire Weather Watch** is issued when weather conditions could exist in the next 12–72 hours. A **Red Flag Warning** is issued for weather events that will occur within 24 hours. **A Red Flag Warning is the highest alert.** When a Red Flag warning is issued, residents must stop any use of machinery which could create a spark (i.e. chain saw and weed whackers) after 11 AM until the warning is lifted. Any roof work involving tar pots must be postponed. Please also see entry for “High Fire Danger Warning.”

- **FIREWISE DAY**—An annual community-wide event that is required for certification as a Firewise Community. It is a time to share information and best practices and increase community involvement in fire safety.
- **FIREWISE USA (FORMERLY FIREWISE COMMUNITIES)**—A program of the National Fire Protection Association [NFPA]—co-sponsored by the USDA Forest Service, the US Department of the Interior, and the National Association of State Foresters—that recognizes communities where Homeowners have met specific requirements for reducing the risk of wildfire, including an assessment, community investment, evaluation, collaboration with local firefighters, and holding an annual Firewise Day.
- **FUEL**—Any material that may catch fire and burn.
- **FUEL LADDER**—Any fuel (vegetation or other combustible material) that can carry fire vertically between two types of fuel (e.g. grass to shrub, shrub to tree, tree to adjacent structure), including leaf litter and duff, grasses, shrubs, limbs close to the ground, firewood, brush piles, etc.
- **FUEL LOAD**—The amount of flammable material within any specified area.
- **FUEL REDUCTION**—The process of removing or reducing the fuel load in order to prevent the spread of fire.
- **HIGH FIRE DANGER WARNING**—Notification from the Woodside Fire Protection District that fire season has begun and extra measures must be taken to protect lives and property. When this notification is received, three signs are posted: one at each end of the traffic island between the Corte Madera School entrance and Horseshoe Bend and one inside the entrance to Saddleback. Homeowners and residents are responsible for using tools in a safe manner and advising all contractors to do the same. Please also see entry for “Fire Weather Watch and Red Flag Warning.”
- **HOMEOWNER**—Any person or persons who own a specific property governed by the Portola Ranch Association. The Homeowner may or may not be a resident.
- **IMMEDIATE ZONE**—The 5 feet immediately around any structure that should be kept completely free of flammable material: grass, mulch, plantings, etc. This is the most important zone in which to take immediate action, as it is the most vulnerable to embers. It’s most effective to start with the house itself and then move into the landscaping section of the Immediate Zone.
- **INTERMEDIATE ZONE**—The area 5 to 30 feet from structures (house, garage, carport) or property boundary. Fuel reduction in this zone is critical to the survival of the structures.
- **LAND MANAGEMENT PLAN**—An Association document that intends to provide a framework for land management at the Ranch today. It includes ecological calendars,

maps, lists of invasive species, and more. It also offers resources to homeowners as well as best practice guidelines in managing their own properties.

- **NFPA**—The National Fire Protection Association, "a global nonprofit organization, established in 1896, devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards."
- **RESIDENT**—Any person or persons who reside at a specific address within Portola Ranch Association. The resident may or may not be a Homeowner.
- **RULES FOR CONTRACTORS**—An Association document that is intended for homeowner distribution to contractors who are working on Ranch properties.
- **WUI**—The Wildland/Urban Interface is where urban or suburban dwellings meet open space without any transition zone. In California, this area is identified by the State as a "fire hazard severity zone" where specific restrictions apply.

Section 1—Introduction

The Portola Ranch Association property, often referred to as “Portola Valley Ranch,” is located in what firefighters call “the wildland urban interface,” or “WUI.” In this zone the value of trees, woodland, and wildlife habitat is great, and the likelihood of wildfire is high. We live with the risk that a wildfire could occur at any time, and its rapid spread could cost our lives and our homes. Each Homeowner must balance fire safety with aesthetic, ecological, and other concerns.

Preventive measures can greatly reduce the likelihood of ignition and the damage done by wildfire. The Association requires all Homeowners and residents to actively manage vegetation and reduce combustible fuels around our homes. **Please note that this includes completing an annual reporting requirement by September 15 of each year.** We also have specific resources available to assist you in these efforts as outlined below.

Not all risks can be completely eliminated, and some of these fuel reduction procedures may be costly. A thorough job of risk reduction requires time and cooperation with neighbors. Catastrophic fires across the state each season remind us that the stakes are high, and doing nothing can prove the most expensive path of all.

We urge you to begin (or continue) this work, to plan ahead so that costs can be spread over time, and to join us as we review progress annually. Plants grow back and must be pruned; older ones die or outgrow their space and must be removed or replaced. Fuel reduction is an **ongoing** process.

Homeowners may also find this guide useful with respect to Homeowner’s insurance. In 2010 the Association was awarded **Firewise Community** status by the National Fire Protection Association, and this status has been renewed every year since. Maintaining this status requires, among other things, that we hold an annual Firewise Day to share information and best practices. Help us continue this good work!

Section 2—Goals and Objectives

The goal of this guide is to **reduce the risk of fire at Portola Valley Ranch and reduce the harm to lives and property** in the event that a fire does occur.

The objectives of the guide are to:

- Increase awareness of the risk of fire.
- Educate Homeowners and residents about how to protect themselves and the Ranch community as well as the importance of doing so.
- Encourage and facilitate compliance of Homeowners and residents with rules supporting fire risk management.

Section 3—Maintenance Obligations

Homeowner obligations, as stated in Section 3.1 of the Association Design Guidelines, are as follows:

Homeowner lots consist of E-1 areas, which contain the building envelope and improved landscaping, and E-2 areas, which are subject to easements in favor of the Association and the Town of Portola Valley. The E-1 area is where a Homeowner may install approved plants, lighting, irrigation, hardscape or other improvements.

The Homeowner is required to maintain the fire safety and ecological health of their lot (E-1 and E-2). This may include, but is not limited to: controlling invasive plants, removing deadwood and reducing fire hazards, mowing, and preventing or reducing soil erosion.

If a Homeowner does not perform required maintenance (see 3.1.3.2) on their Homeowner Lot, the CC&Rs authorize the Association to do so, and to charge the Homeowner for the cost of such maintenance.

Homeowners are also responsible for the fire safety of their contractors. Please see PRA's Rules for Contractors for more information.

Additional information on the ecological best practices in fuel reduction can be found in the Association Land Management Plan.

Section 4—Fire Safety Zones

4.1 What is the Home Ignition Zone?

The concept of the home ignition zone (HIZ) was developed by retired USDA Forest Service fire scientist Jack Cohen in the late 1990s, following breakthrough experimental research into how homes ignite due to the effects of radiant heat. The HIZ is divided into three zones; this section covers what proper fire safety maintenance looks like within the different zones and throughout a property. Vegetative fuel reduction should work from the house outward, the ground upward, and the road inward.



4.2 Emergency Ingress and Egress

Maintaining safe ingress and egress at your home during an emergency is important. The area within 15 feet of any roadway or driveway must be kept open, well maintained, and minimally vegetated so that you and emergency responders can come and go safely. Focus on the route between the street and the front door, exterior stairways, and any other exits from your home.

- Your house number must be visible from the street so that firefighters can identify it. Refer to the last item of Section 3.2.3 of the Design Guidelines for rules concerning house numbers.
- “Walls” of shrubby vegetation present a fire risk. Consider removing some vegetation to open up firebreak spacing and reduce the effect of a continuous mass of fuel.
- Vertical clearance of 13.5 feet must be maintained above steps, walkways, APES, driveways, and the roadway for all trees in this zone.
- Fires are most likely to start near a road due to the number of potential ignition sources on a road at any given time. As such, it’s imperative to keep vegetation pruned up or cleared away from this area.

4.3 Immediate Zone

The Immediate zone is the area 0–5 feet from the furthest attached exterior point of the home; it’s defined as a non-combustible area. In this zone, **start with the house itself**. This includes any garage/carport or any other attached structures such as decks or dog run fences. Then move into the landscaping section.

The House Itself

- Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration.
- Move any flammable material away from wall exteriors. Keep areas underneath decks, porches, or other cantilevered portions of structures free of all leaf litter, debris, or combustible materials.
- Clean roofs and gutters of dead leaves and debris that could catch embers.
- Vent openings in or near the foundation, on roofs, or in soffits should be covered with 1/8-inch metal screening. (Smaller openings may deter proper ventilation; larger ones can admit flying embers.)
 - Vents may be further screened with downward-facing flanged covers designed to deflect sparks (available at hardware stores or online).
 - Automatic closing vent covers operate on exposure to high temperature and are acceptable. These must be replaced after any event that forces them to close.
- Repair or replace damaged or loose window screens and any broken windows. Double-paned windows are safer.
 - Window sills and skylight perimeters are especially vulnerable to collection of debris and embers and should be kept clear at all times.

- The Town of Portola Valley no longer permits the installation of plastic skylights. All replacement skylights must be safety glass as they are more fire safe.
- Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- New building materials are evolving rapidly. Most of our houses were built of wood before the development of fire-retardant decking and siding materials. The Design Committee has investigated some new building materials and should be consulted on their potential use at the Ranch. The following are among more fire-safe materials now in use:
 - Metal deck railings
 - Ipe (South American hardwood) decking
 - Some synthetic decking materials and siding

Landscaping

- **There should be nothing combustible within 5 feet of any structure. This is the single most important thing you can do to keep your home safe.**
- Material adjacent to foundations should be fine gravel or bare earth. With Design Committee approval, earth color crushed stone or small gravel may be applied in sections around structures up to a width of 5 feet from the foundation, provided it is kept free of weeds and debris. These materials may also be used in areas under decks and cantilevered portions of structures, including carports and garages.
- Wood chip mulch or leaves may never touch wooden elements of structures such as siding, deck posts, or stairs.
- When a structure's wood siding of any type is within a few inches of the ground, flammable mulch, leaves, or planting within 5 feet of the structure is especially dangerous. To improve safety, lower the soil level next to the siding so that more of the concrete foundation is visible above ground.
- Ideally, there should be no grass within 5 feet of structures. In all instances, grass adjacent to structures must be kept 4 inches or lower.
- Vines attached to structures (decks, stair cases, garages, entry ways) should be well watered, thinned, and cut back annually. Because vines can conduct flames upward, they represent fuel ladders and should be avoided unless essential for shade or privacy.
- A burning shrub can superheat a window, cracking it and allowing sparks to enter the structure. Shrubs screening windows should be no closer to windows than 5 feet, and not higher than the window being screened.
- Trees should be planted so that when mature, foliage will not be closer to structures than 5 feet.

- A deck built around an existing tree should have NO limbs beneath the deck, and branches must not touch the structure, including the roof.

4.4 Intermediate Zone

The Intermediate Zone is 5–30 feet from the furthest exterior point of the home. Employ careful landscaping or create breaks that can help influence and decrease fire behavior.

Hardscaping

- Create fuel breaks with driveways, walkways/paths, patios, and decks within Association Design Guidelines.

Landscaping

- Mulch and leaf litter should be kept to a depth of no greater than 3 inches. If your mulch or leaf litter is deeper than that, you can spread it out or dispose of it in your green bin.
- Shrubs in this zone may be used for privacy screening, shielding items such as air conditioners, providing a buffer between roads and structures, or softening edges or blank walls. Shrubs should be thin and wispy to minimize volume and at least 5 feet from the road, fences, or structures. Older, massive shrubs should be replaced with smaller ones that can be kept thin, wispy, and free of dead fuel.
- Horizontal separation in open areas without trees may be achieved with a mosaic of shrubby patches to accomplish fire safety, habitat protection, and aesthetic goals. Shrubs or shrub patches must be horizontally separated from each other by at least 2 times the height of the shrub or patch and must be separated from the edge of the tree canopy by at least 6 feet.
 - It is not desirable to remove all understory vegetation, but to trim back desirable species or selectively remove flammable ones to create separation and eliminate ladder fuels.
- Dead branches should be removed from within any desirable shrubs or trees; dead trees should be removed.
- Vegetation should be no closer than 10 feet to chimneys. Clear any vegetation from under large stationary propane tanks.
- Tree limbs and foliage in this zone should be between 5 and 8 feet above the ground or any shrubs below them. In young trees, prune branches on the lower third of the tree; do not disturb or thin the tree canopy.

4.5 Extended Zone

The Extended Zone is 30–100 feet out from the home. The goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground.

Landscaping

- Dispose of heavy accumulations of ground litter/debris.
- Remove dead plant and tree material.
 - Standing dead trees may be retained for habitat value. Permission to keep such trees must be obtained from the Design Committee. (Design Guidelines, <https://portolavrca.pilera.com/page/design>, Section 3.1.3.5, Removing Trees or Topping Trees)
- Keep in mind that your extended zone may be your neighbor's intermediate zone and should be generally maintained on an annual basis in order to keep not just yourself but your neighborhood safer.

4.6 Fire Safety Maintenance in All Zones

- Annually (no later than June 15), unless mowed by the Association, homeowners are required to mow all invasive grass within 100 feet of structures and within 15 feet of the road to no more than 4 inches high. See section 5.1 for more information on the annual mowing.
- "Volunteers" (trees that sprout from seeds or acorns without being planted) should be uprooted annually to prevent over-vegetation. Desirable volunteers may be kept provided that their spread when mature will not be within 5 feet of structures.
- Redwoods do not naturally grow in oak woodlands; they grow in areas where daily fog provides the large quantities of water necessary for their health. Within the Ranch, redwoods were planted when the houses were built and are often drought-stressed unless heavily irrigated. Seriously stressed trees should be removed. Redwoods that meet the following conditions may be maintained with the lowest point of their foliage at 2.5 feet clearance from the ground:
 - No dead material—which includes mulch, duff, needles, leaf litter, and twigs—exists under the tree canopy. (Note: Such treatment may require supplemental watering for the health of the tree.)
 - No dead material exists within 3 feet of the edge of the canopy
 - Mowed grass within 5 feet of the tree is kept shorter than 4 inches.
 - New sprouts must be removed annually from the base of the tree.

- Vegetation and trees may have specific seasonal requirements. Pruning oaks at the wrong time may damage them and can spread pathogens such as Sudden Oak Death. The Land Management Plan contains an ecological calendar with the best times to prune specific trees and plants. Generally, homeowners are encouraged to do fuel reduction work from September to November as it is the most ecologically appropriate time of year. Consult the Land Manager or the Landscape Committee for additional advice on this topic.
- Leave dusky footed wood rat nests, a protected species, with a protective buffer of vegetation around them. For information on this protected species, see the Land Management Plan.

Section 5—Additional Considerations

5.1 Mowing

- Ranch Association mowing begins no later than June 15 of each year, and the Association will complete the mowing of grass on both Homeowners' and Association property. Annually (no later than June 15), unless mowed by the Association, homeowners are required to mow all invasive grass within 100 feet of structures and within 10 feet of the road to no more than 4 inches high.
- A second round of mowing may be performed in seasons where late rains cause a significant regrowth of grass.
- Protecting native grasses and wildflowers, garden beds, and other special concerns may require flagging by the Homeowner to avoid confusion.
- Some Homeowners may choose to mow before the Association mowing begins. In such cases, please notify the Ranch Office that you are doing your own mowing.
- Homeowners who maintain garden plots on their property should expect mowing to be done to the edge of each plot. Please contact the Ranch Office *before* mowing begins to discuss any concerns.

5.2 Disposal

- Yard waste such as leaf litter, dead twigs, grass, and trimmings small enough to fit into your yard waste container may be placed at the curb on garbage day and will be collected along with the garbage. For questions, contact Greenwaste at 650-568-9900.
- Woodside Fire Protection District provides two annual Chipper Days, usually in May and August, and the Association will sometimes offer a third Chipper Day in November. These are FREE opportunities to dispose of fallen limbs and pruned branches. It should be placed at the curb prior to the announced Chipper Day date, which is published in the Ranch Post Newsletter. Chipper Day comes with the following requirements:
 - Do not make piles at the curb more than 2 weeks before the announced date.
 - The chipper cannot chip eucalyptus bark or poison oak.
 - Materials cannot contain nails or screws, as they can damage the chipper and any personnel operating it.
 - Fuels such as brush and tree limbs are accepted. Branches with diameters up to 8 inches are acceptable.

- Branches need to be stacked in a neat pile with all of the cut ends facing the road.
- Piles are limited to 10 feet wide by 10 feet long.
- Brush will be chipped back on site with the exception of certain areas. Once it is chipped back onto the property, it should be raked out to be no deeper than 3 inches.
- Do not make piles under, or within 5 feet of, trees or shrubs.
- Piles should not be made earlier than 2 weeks in advance of the date.
- Large logs and branches greater than 8 inches in diameter are not easily ignited and may be left on the ground until rotted provided they are isolated from kindling-sized dead branches and not located under any tree canopy. Such material may only be left within the extended zone, at least 30 feet away from structures.

5.3 Sudden Oak Death (SOD)

- Sudden Oak Death is a waterborne pathogen. In our area, it is spread from the leaves of the California bay laurel to the trunks of coast live and black oaks, often causing mortality. Portola Valley Ranch is in a Sudden Oak Death (SOD) Zone, and care must be taken when attending to fire risk management tasks so as to not further spread the pathogen (thus creating more fire risk).
 - Especially consider prioritizing the removal of bay laurel trees in fire risk management planning and **not** pruning coast live or black oaks during winter or spring. They should be pruned in the driest months, when the pathogen is not reproducing.
- For more information, see the Land Management Plan's Ecological Calendar, or contact the Land Manager or Landscape Committee.

5.4 Firewood

- Ideally, firewood should be placed at least 30 feet from any structure, roadway or property boundary.
- When this is not possible, firewood should be covered with a flameproof tarp and kept free of windblown leaves and debris, or placed inside a metal container with a lid.
- Firewood should never be stored underneath decks or cantilevered portions of structures.

5.5 Flammable Materials and Equipment

- **Barbecues**—Propane, charcoal, and natural gas barbecues are allowed for use outdoors. The grill should be placed well away from the home, deck, railings, and out from under eaves and overhanging branches. A fire-resistant grill pad is recommended.
- **Flammable Materials**—As per section 12.07 of the CC&Rs, gasoline and propane storage is acceptable as needed for use in generators, gardening equipment, and grills. Paint Storage is also allowed.
- **Gas Powered Equipment**—Motor equipment should not be refilled on dry grass, and vehicles should not be parked on it. Any other garden or construction equipment that could potentially cause a spark should be handled with great care. See the Association’s Rules for Contractors for more information on this topic.
- **Generators**—Homeowners may install generators with Design Committee and Town approval. See section 3.6.5.2 of the Design Guidelines for details.
- **Heat Lamps**—Heat lamps are allowed but should be placed well away from the home, deck, railings, and out from under eaves and overhanging branches.
- **Seasonal Lights**—Seasonal decorations are allowed for festive occasions. They should be removed within one month of installation as per Section 3.9.6 of the Design Guidelines.

Section 6—Resources

Portola Ranch Association Land Manager:

PRA's Land Manager is available to advise individual Homeowners on vegetative fuel reduction issues, best practices in planning fuel reduction, and general guidance on the location of property lines between homes. Contact the Land Manager via email at landmgr@pvranch.org or at the PRA Office, 650-851-1811.

FRMC Members:

Members of the Fire Risk Management Committee are also available to advise individual Homeowners on fuel reduction issues. Contact the office for a current list of members.

PVR Website:

The PVR website lists arborists and gardeners under "Recommended Vendors" (<https://portolavrca.pilera.com/page/contractorsvendors>). A document listing arborists who have taken the Land Manager's course in fuel reduction, titled "Finding a Contractor for Your Fuel Reduction Work," can be found in the Committee Resources folder of the Pilera Document Library as well.

Landscape Committee:

For issues involving choice of plants or trees, members of the PVR Landscape Committee are available for consultation. Note also the Native Plants Policy and Guidelines and the Approved Native Plant List that are available online: <https://portolavrca.pilera.com/page/landscape>. Only plants from this list may be planted in the ground at PVR.

Design Committee:

When planning any extensive landscaping project, consult the PVR Design Committee before beginning. The Design Guidelines contain an extensive section on rules concerning landscaping projects and can be found online at <https://portolavrca.pilera.com/page/design>.

Appendix 1—Procedures to Complete Fuel Reduction for Non-responding Homeowners

1. **Notification of Inspection**—The names of homeowners who have not responded to the Fuel Reduction Survey, or those who have filled out the survey but whose properties are still in violation of the Fire Risk Management Guidelines, will be submitted to the PVR board in October of each calendar year. After review, the board will authorize access to the lots in accordance with paragraph 5.07 of the CC&Rs. The PVR office will provide forty-eight (48) hours' prior written notice to the lot owners that their property will be inspected for compliance with the Fire Risk Management Guidelines.
2. **Inspection and Bids**—Inspection tours will be led by the Association Manager or their designate. Fire Risk Management Committee (FRMC) members or contractors may be included as required. Contractors may be included to eliminate the need for return visits. A fuel reduction bid will then be prepared for those Lots requiring more than minimal work.
3. **Notice of Violation**—If a lot is found to be in violation of the Fire Risk Management Guidelines, the owner shall be given written notice, along with a copy of the bid (if any). The owner shall be informed of their obligation to remedy such lack of compliance within thirty (30) days after the notice.
4. **Board Hearing**—Those owners who have not brought their lot into compliance at the end of the thirty (30) day notice period shall be asked to attend a board hearing regarding the violation. At the conclusion of the hearing, the board will determine whether to have the work done and assess the cost to the owner.
5. **Work Completion**—The owners will be given forty-eight (48) hours' written notice prior to the commencement of the work on their Lot. Work on each lot will be performed consecutively to reduce costs and disruption. Upon completion, the work will be inspected by the Association manager or their designate.
6. **Billing**—The total contractor cost for the necessary fuel reduction work will be billed to the Association, and the Association will then assess each of the individual owners for the cost of the remedial work on their lot.

Appendix 2—Annual Fuel Reduction Essentials

A few simple rules can help save your house and your life in a major wildfire. Evaluating and updating your fuel reduction EVERY SINGLE YEAR can keep you and your neighbors safe—fire is a communicable disease! Fuel reduction forms are due by September 15th.

Know Your Zones!

Emergency Ingress and Egress:

A 15-foot corridor at the roadside edge and property entrance, enabling fire response vehicles to enter and residents to evacuate. This zone includes the driveway and any walkway or stairway to the main entrance of the house.

Immediate Zone:

The five feet around the house and garage, called the “Immediate Zone” is the most important area to maintain for safety from wildfire. Ideally, this is a non-combustible zone. Mulch up against wood shingles and dried leaves under wood decks or cantilevered areas of homes may represent one of the most crucial fire risk management issues on homeowner lots. The five feet around the structures should have little-to-no debris, leaves, dead wood, or fine fuels. Foliage for screening should be thin, wispy, and pruned for maximum clearance from windows.

Intermediate Zone:

The 30 feet around structures, called the “Intermediate Zone,” is also important and should have trees pruned, mulch kept to a minimum, and deadwood regularly removed. Fuel ladders, in which vegetation connects from ground to understory to canopy, should be pruned to create separation between plants.

Extended Zone:

The 30 to 100 feet from the house or garage is called the “Extended Zone.” Grass here should be mowed annually, especially if the property is on a hill.

Guidelines for Zones

Decks and Roof

- No vegetation or flammable material below decks or cantilevered portions of structures.
- Clear all leaves and other litter from roof and gutters.

Dead Wood and Litter

- Remove all dead wood less than 8 inches in diameter from the property. Exception: Wood rat nests.
- Clear leaf litter and mulch to no more than 3 inches in depth.

Grass

- Ranch Association mowing begins no later than June 15 of each year, and the Association will complete the mowing of grass on both Homeowners' and Association property. Annually (no later than June 15), unless mowed by the Association, homeowners are required to mow all invasive grass within 100 feet of structures and within 10 feet of the road to no more than 4 inches high.

Shrubs

- Reduce shrub height under trees to 18 inches or a 6-foot separation from tree branches, to eliminate fuel ladders.
- Shrubs must not touch decks or structures. 5-foot clearance is advisable.
- Clear dead material from within or underneath shrubs.
- Break up large masses of shrubs, creating fire breaks between clusters.
- Trim all shrubbery so that it does not overhang APES or roadways.

Redwood Trees

- Remove branches within 2.5 feet of the ground, OR
- Clear all material and vegetation under trees if branches are within 8 feet of ground.

Other Trees

- Remove branches smaller than three inches in diameter, from the ground to a height of 5–8 feet or one third of the tree's height, whichever is greater.
- Trim back all branches at least 5 feet from roof (edges and surface) and 10 feet from chimneys.
- Remove dead branches less than 3 inches in diameter.
- Prune all branches overhanging APES and roadways to at least 13.5 feet above road surface.

Appendix 3—25 Big Fire Risks You Can Fix Now

1. **ENTRY/EXIT:** The entry or exit to your house is how you would escape or rescuers would enter during a fire. Burning vines, shrubs, or other foliage around or over it might interfere with your safety.

Remedy: Keep vines off the roof, well-watered, thinned, and minimal. Prune trees and shrubs away from entry, walkways, driveway, and roadway. Keep spaces under stairs and entry decks clear of all leaves and debris, and keep leaves off deck.

2. **FIVE-FOOT PERIMETER AROUND HOUSE AND GARAGE/CARPORT:** This space is the most likely place for fire or embers to set your house afire.

Remedy: Rake all grass and mulch away from the foundation. If necessary, lower the dirt level to prevent structural wood from touching the ground. Prune vegetation 5 feet back from all walls and windows. Make sure that vents are properly covered.

3. **FOUNDATION VENTS:** Flying embers from a wildfire can enter through vents, smolder (and heat the flooring above), and burst into flame, setting your house on fire.

Remedy: Cover all vents with 1/8-inch screen (any larger admits embers; any smaller prevents ventilation). Cover screen with downward-facing flanged covers, or install heat-activated, self-closing vents. Keep crawl spaces clear of flammable material.

4. **VENTS IN SOFFITS, OVERHANGS, AND ROOF:** Like foundation vents, these are points of entry for embers.

Remedy: Cover with 1/8-inch screening and flanged covers, as in 3, above.

5. **ROOFS AND GUTTERS:** Gutters and corners allow leaves and debris to collect; flying embers smolder there and catch fire, igniting the roof.

Remedy: Clear roofs and gutters frequently, especially in fire season. Gutter guards add protection but must also be cleaned.

6. **OLD, DRY WOOD SHAKE SIDING:** Wood shakes, because of their small size and many crevices, are especially vulnerable in a large fire.

Remedy: Treat them every few years to protect their surfaces from deterioration. Consider replacing them with alternative siding that is more fire-resistant.

7. **WINDOWS:** In high heat, windows can break, allowing flames to enter house.

Remedies: Install double-paned windows. Prune trees and shrubs back from windows (at least 5 feet). Plants screening windows should be no higher than the window and no closer than 5 feet. Window screens should be metal and should fit securely.

8. **PLASTIC SKYLIGHTS:** Falling embers can melt holes in plastic skylights, allowing sparks to enter structures.

Remedy: Replace plastic skylights with new ones made of safety glass (now required for all replacements and new constructions by the Town of Portola Valley).

- 9. PROPANE TANKS:** If stored outside (including on decks), these can explode in a wildfire.

Remedy: Store in a safe place indoors, away from exterior walls and well away from people.

- 10. DECKS:** Flying embers can light anything that will burn.

Remedy: Clear leaves and debris from surfaces and corners regularly. Flammable items on decks (furniture, cushions, mats) should be brought indoors when you're away. Do not leave propane canisters or firewood on deck when not in use. Treat deck surface regularly to maintain its strength and resistance.

- 11. SPACES UNDER DECKS OR CANTILEVERED PORTIONS OF STRUCTURES:** Leaves and other flammable materials here can ignite and heat the structure above, causing it to catch fire.

Remedy: Keep these areas free of anything that can burn. Do not store anything underneath, and blow or rake leaves frequently.

- 12. SIDING TOO CLOSE TO GROUND (NO CONCRETE SHOWING):** Soil and mulch gradually build up against foundations, bringing the siding into contact with the ground and making it more accessible to fire.

Remedy: Remove a few inches of soil from areas that are close, exposing more concrete.

- 13. GRASS OR MULCH AGAINST SIDING:** Fire spreading through grass or mulch can more easily ignite structures if it makes direct contact with siding.

Remedy: Pull grass and mulch back, leaving 5 feet of clear space or fine gravel next to a structure.

- 14. THICK MULCH, WOOD CHIP PILES, DENSE MATS OF NEEDLES OR LEAVES:** These provide places where embers can smolder, sometimes for hours, before suddenly bursting into flame and spreading quickly.

Remedy: Spread chips as soon as they're produced. Regularly rake or spread mulch and thin leaves and needles to a depth of no more than 3 inches.

- 15. FIREWOOD PILES:** Firewood itself is for burning; leaves or debris underneath acts as kindling, and firewood can be kindling if it touches a structure.

Remedy: Store firewood well away from structures (30 feet recommended). If not possible, cover it securely with flameproof tarp and check regularly to eliminate any windblown debris.

- 16. THICK MASSES OF SHRUBBERY:** Large, thick masses of shrubbery make it easier for fire to spread and flames to grow longer.

Remedy: Produce fire breaks by creating separations of 5 feet (or twice shrub height, whichever is greater) between small groups of shrubs.

- 17. SHRUBS HANGING OVER CURB OR INTO ROADWAY:** Sparks from vehicles and machinery are a major cause of wildfire.

Remedy: Keep shrubs pruned back from roads and driveways (minimum of 5 feet).

- 18. FUEL LADDERS:** Plants under shrubs that touch trees or structures can lead flames upward and cause a crown fire or ignite structure.

Remedy: Eliminate fuel ladders. Create both vertical and horizontal spacing between plants close to structures (5 feet or twice the plant's height, whichever is greater).

- 19. LIMBS TOO CLOSE TO GROUND:** Tree limbs near the ground can conduct fire upward to ignite trees or structures.

Remedy: Remove limbs smaller than 3 inches in diameter, up to at least 5 feet (minimum), preferably 8 feet (recommended). Especially important for trees between adjacent structures or on slopes.

- 20. LIMBS TOUCHING OR CLOSE TO CHIMNEY:** Sparks from a chimney can easily ignite leaves or needles in close proximity.

Remedy: All foliage and limbs should be at least 10 feet away from chimneys.

- 21. LIMBS HANGING OVER APES & ROADWAY:** Low-hanging limbs are hazardous to large vehicles such as fire trucks and are prohibited by the Town. They could prevent easy access to your home for firefighters.

Remedy: Prune limbs above APES and roadways to a minimum of 13.5 feet (Portola Valley ordinance requirement).

- 22. DEAD WOOD:** Dead wood on the ground is ready fuel in a grass fire.

Remedy: Unless it's more than 8 inches in diameter, remove it. Place it in a yard waste bin for weekly collection.

- 23. AGING, DYING PLANTS:** Some shrubs—coyote brush and some sages, for example—become leggy or woody with age and are more fire-prone. Others, especially manzanita, have finite life spans.

Remedy: Coppice coyote brush (cut it to the ground) in late fall or early winter; it will come back to life with spring. Cut back or replace aging sage. Don't cut manzanita back, but prune out dead wood in hot, dry weather.

- 24. DROUGHT-STRESSED REDWOODS:** Redwood trees that show brown "flags" (dead tips and areas of drying or absent foliage) are drought-stressed and more likely to burn.

Remedy: Provide supplemental water (redwoods need large quantities in our area). Consider removing some trees if they don't improve quickly.

25. RED FLAG DAYS: Declaration of a red-flag day by Cal Fire or the Woodside Fire Protection District means that weather conditions make wildfire risk especially high.

Remedy: Stop weed-whacking and use of power tools that might cause sparks, especially chain saws, after 11 a.m. Delay any projects involving tar pots. Alert all contractors, household workers, and family members. Monitor weather news and wildfire alerts.