## Defensible Space for Homeowners 2018 Fire Prevention Bureau Oakland Fire Department



#### History of Wildland Fires in the Oakland Hills

The Oakland Hills experienced a major fire event on average every 20 + years between 1923 and 1991. This year is the 26th anniversary of the Oakland Fire Storm of 1991. The fire of 1923 consumed 130 acres and 584 homes in the Panoramic Way neighborhood of Oakland and Berkeley. In 1946 1000 acres were burned in the vicinity of Buckingham Drive and Norfolk Road (Grizzly Peak Open Space). In 1970 another 37 homes were lost in that fire event at Buckingham Drive and Norfolk Road. The 1991 Firestorm began in this same area.

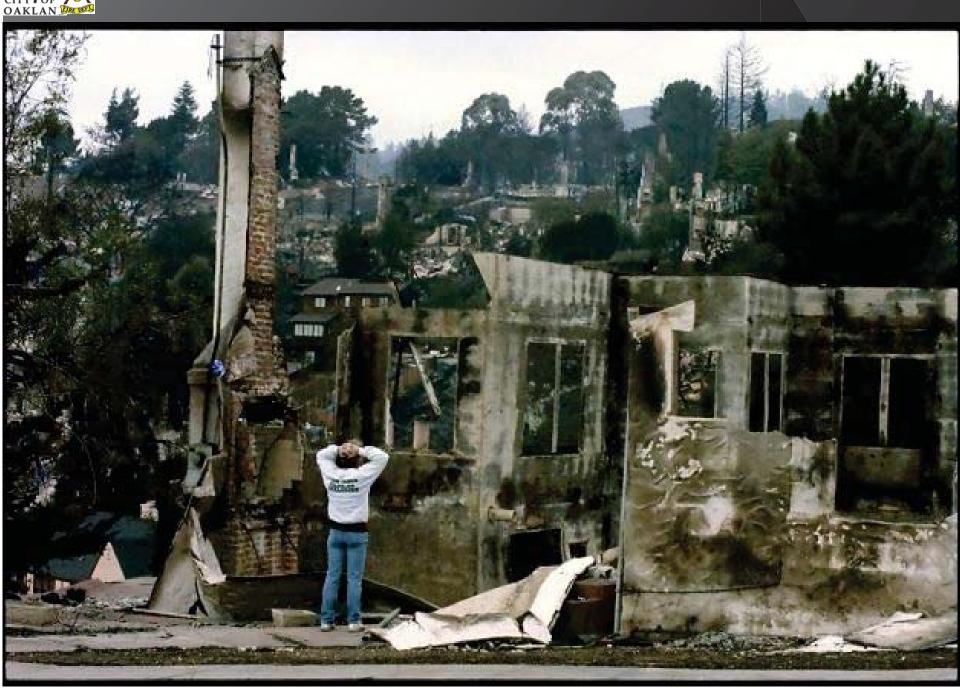


## Past Fires in the Oakland Hills

1923: 130 acres, 584 homes 1931: 1,800 acres, 5 homes 1933: 1,000 acres, 5 homes 1937: 700 acres 1940: 30 acres 1946: 1,000 acres 1955: 10 acres 1960: 1,200 acres, 2 homes 1961: 400 acres 1968: 150 acres 1970: 204 acres, 37 homes 1980: 2 acres, 5 homes 1990: 200 acres

## 1991: 1,700 acres, 3,000 homes















## The Oakland Hills designated High Fire Severity Zone 10,590 acres = 21% of the City's geographic area with over 21,000 homes.





- There are approximately 21,100 residential inspections to be completed by the Firefighters at Fire Stations located within the designated High Fire Severity Zone.
- We need the public's help to be in compliance the first time a property is inspected.
- Help our Oakland Firefighters and make your property safe from Wildfire so they can help keep your neighborhoods safe!
- RAINFALL THIS WINTER WILL RESULT IN TALLER GRASS AND WEEDS and GREATER RISK OF WILDFIRE THIS FIRE SEASON



- Properties must pass inspection the first time
- 30 days after 1<sup>st</sup> round inspections begin, Firefighters will return to properties that were not compliant on the first inspection. If your property did not pass on the first inspection, the homeowner will incur a RE-INSPECTION FEE

CO MANDATORY REVIEW:
Company Officer:

Oakland Fire Department, Fire Prevention Bureau 250 Frank H. Ogawa Plaza, Ste. 3341 - Oakland, CA 94612-2032 www.Oaklandnet.com/WildfirePrevention



#### Vegetation Management Inspection Report

Inspection Location: Owner Mailing Address:

Date:

APN: District: Station:

On the date of inspection, the parcel property is: Compliant Non-Compliant

#### Violations Noted During Inspection Shall Be Corrected Immediately

- 1. Maintain a 30-ft fuel reduction zone around all buildings and neighboring structures; more may be required due to
- steepness of terrain. (CFC 4907.2) Increase to 50-ft Increase to 100-ft or property line
- 2. Maintain a 10-ft minimum roadside clearance; additional may be required. (CFC 4907.3.2)
- 3. Remove all portions of trees within 10-ft of chimney and/or stovepipe outlets. (CFC 4907.3.1.2)
- 4. Maintain 10-ft of horizontal clearance for all trees from any structure. (CFC 4907.3.1.1)
- 5. Clear roof & rain gutters of leaves, needles or other dead & dying vegetation. (CFC 4907.1., CGC 51182 (a)(5))
- 6. Maintain trees adjacent to or overhanging any structure. Keep free of fallen and/or broken branches or other dead/dying vegetation. (CFC 4907.3.1.4)
- 7. Remove all tree limbs within 6-ft of the ground, or ¼ the height of the tree. (CFC 4907.3.1.3)
- 8. Remove dead/dying vegetation from property. (CFC 4907.1, CGC 51182(a)(2))
- 9. Provide street address numbers that are minimum 4 inches in height, legible, contrasting to background color and visible from the roadway in front of property. (CFC 505.1)
  10. Acrumulations of wastenaner wood hay straw week
  \*Refer to back of form for additional explanation\*
- 10. Accumulations of wastepaper, wood, hay, straw, weeds, litter or combustible / flammable waste or rubbish not permitted to remain on parcel. (CFC 304.1.1)
- 11. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises (CFC 304.1.2)

COMMENTS:

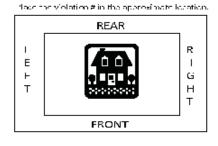


				Diagram indicates property boundaries (not to scale)			
Citizen Contact (Circle One):	Yes	No	360 Access (Circle One):	Yes	No	FPB/PG&E	
StationShiftOFD RepresentativeSignature:							
VEHICLES PARKED ON NARROW STREETS REDUCE EMERGENCY ACCESS - PLEASE PARK IN DRIVEWAY							
It is the mission of the Oakland Fire Prevention Bureau to protect all citizens within the City of Oakland from natural or man-made hazards which may cause both injury and lass of property.							
Distribution: Original-Address/O	wner, Ye	low-To be Mailed, F	Pink-Fire Prevention Bureau, Gold	lenrod-Eng	jine Company	(700-REV:Feb 2017)	

Code sections as adopted by the City of Oakland OMC Chapter 15

If no violations of the Fire Code were observed, then the property **PASSED** inspection

Violations observed will be checked and the Non-Compliant box checked as well.

The diagram box is used to indicate the approximate location of violations observed by placing the violation number in the appropriate area.

**Comments box** may provide more information; example: "prune back pine tree from roof by rear bedroom".



# **Compliance Standards**



Oakland, CA 94612-2032 ant com (WildErel

Presorted Standard U.S. Postage PAID Oakland, CA ERTIES REQUIRING Permit NO. 2508

#### ANNUAL INSPECTION NOTICE

With important tips to

YOU ARE REQUIRED TO KEEP YOUR PROPERTY IN COMPLIANCE YEAR ROUND

#### **INSPECTIONS BEGIN MID MAY 2017**



NOTICE: ALL

CHARGED A FEE.

Property Inspections are required by the City of Oakland, Ordinance No. 13401 and per the State of California. After an initial inspection, parcel owners will receive a Vegetation Management Inspection Report. Properties marked "Non-compliant" have failed inspection and shall correct ALL violations within 30 days as indicated on report by order of the Fire Marshal per section 104.5 CFC. A re-inspection will be conducted on or after 30 days from the date of the initial report. Properties requiring additional inspections will be assessed a re-inspection fee according to the current City of Oakland Master Fee Schedule and section 109.4 CFC

Be aware that all fees assessed by the City of Oakland, after a re-inspection and/or to perform abatement will be billed to the property owner of record. Any unpaid invoices will be forwarded to the City of Oakland's Finance Department, Revenue Management Bureau for legal action, which can include court judgment and/or property liens. QUESTIONS? Call 510-238-7388



WHAT TO DO:

Firehouses will raise a **RED FLAG DAYS!** RED FLAG to warn residents of increased danger of wildfire in the Oakland Hills.

#### DO NOT:

· Park cars in driveway or garage to provide access for first responders

- · DO NOT use lawn mowers that can set off sparks • DO NOT BBQ, have campfires or set off fireworks (\$1,000 fine) DO NOT discard cigarettes on roadside or dry grass

 Clear dead weeds and vegetation around structures and clear roofs and gutters of debris . DO NOT pull over or park on dry grass

· DO NOT have trailer chains drag on ground



ention/downloads/FHSZ

CAL FIRE: Fire Safety Education. http://www.fire.ca.gov/fire\_prev \_fact\_sheet.pdf

OAKLAND FIRESAFE COUNCIL: www.oaklandfiresafecouncil.org

DIABLO FIRESAFE COUNCIL: www.diablofiresafe.org

r or additional information on how you can make your property and neighborhood fire safe:

RESOURCES

CITY OF OAKLAND FIRE PREVENTION/ VEGETATION MANAGEMENT:

.com/wildfirep

www.oaklandnet (510) 238-7388

INSURANCE INSTITUTE FOR HOME AND BUSINESS SAFETY https://disastersafety.org/wildfire-page-example/

Visit the Demonstration Garden at the Gateway Emergency Exhibit Center above Highway 24 at Caldecott Lane for ideas on how to meet Oakland's

defensible space requirements.



ease contact WASTE MANAGEMENT for

9

**FREE Extra Yard Trimming Pick** 

waste

details about additional green

disposal options! 510-613-8710

# PLEASE HELP FIREFIGHTERS HELP YOU. NARROW STREETS REDUCE ACCESS, SO PLEASE PARK IN DRIVEWAY

The Wildfire Prevention Assessment District, approved by Oakland Voters in 2004, to assess a tax of property owners in the designated high fire severity zone within the City of Oakland. The parcel tax assessment expired in 2014 and is therefore no longer collected. The Conclusion of the WPAD

The WPAD funds supplemented costs of Fire Prevention, Suppression and Preparedness programs. The parcel taxes paid for Roving Fire Patrols, Public Outreach and Education, debris pile pick up, goat grazing and brush removal on City owned properties. WPAD Advisory Committee's final meeting is on Thursday June 15 2017 from 7-9 PM at Trudeau Training Center 11500 Skyline Blvd. Open to the

public.

#### YOU ARE REQUIRED TO KEEP YOUR PROPERTY IN COMPLIANCE YEAR ROUND

#### OAKLAND FIRE DEPARTMENT INSPECTIONS HELP TO ENSURE YOU ARE IN COMPLIANCE, BUT IT IS UP TO OWNERS TO UNDERSTAND AND IMPLEMENT THESE FIRESAFE PRACTICES

Your home and property may be your most important investment. Protect your investment and help give firefighters a fighting chance by maintaining good defensible space around your home all year.

#### ZONE 1: 0 - 5 FEET FROM BUILDINGS, STRUCTURES & DECKS, ETC.

#### Reduce the chance of wind-blown embers igniting materials near your home, exposing it to flame.

- Maintain and clear shrubs and brush of dead vegetation. (CFC 4907.2)
- Trim tree limbs within 10 feet of roof. (CFC 4907.3.1.1)
- Clear rain gutters of dead leaves and debris. (CFC 4907.2)
- Remove ivy and any vines climbing on house or trees, they act as a "fire ladder". (CFC 304.1.2)
- Spark arrestors are required on all fireplaces. (CBC 3102.3.8)
- Stored firewood at least 20 feet from structures. (CFC 4909.5)
- Your house number must be clearly visible from the street and at least 4 inches in height and in a contrasting color. (CFC 505.1)

#### ZONE 2: 5 - 30 FEET FROM BUILDINGS, STRUCTURES & DECKS, ETC.

Create a landscape that will not readily transmit fire to the home.

- Cut grass to six inches or less. (CFC 304.1.2)
- When clearing vegetation use care when operating electric and gas powered equipment such as lawnmowers, one small spark may start a fire; a string trimmer is much safer.
- Large trees do not have to be cut and removed as long as all of the plants beneath them are maintained to provide the appropriate spacing. This eliminates a vertical "fire ladder". (CFC 4907.3.1.3)
- Remove tree limbs within 6 feet from the ground. (CFC 4907.3.1.3)
- Wood chips must be less than 6 inches deep, no piles. (CFC 304.1.1)
- \*CFC, California Fire Code

\*CBC, California Building Code

These Fire Code sections are local amendments adopted by Oakland City Council and are found in Chapter15 of the Oakland Municipal Code.



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Illustration used with permission from CAL FIRE

WITHOUT VERTICAL CLEARANCE

FIRE CLIMBS FROM GROUND TO

TREES LIKE A LADDER

6 FOOT

CLEARANCE

Illustration used with permission from the insurance institute For Business and Home Safety

#### MINIMUM VERTICAL SPACING BETWEEN TREES AND SHRUBS

- Remove all tree branches at least 6 feet from the ground.
- If shrubs are under trees, additional vertical space may be needed. The lack of vertical space can allow a fire to move from the ground to the shrub to the tree like a ladder.

#### EXAMPLE:

A five foot shrub is growing under a tree.

5 x 3 = 15 feet of clearance needed between the top of the shrub and the lowest tree branch.

#### ZONE 3: 30 - 100 FEET FROM BUILDINGS, STRUCTURES & DECKS, ETC.

Reduce the energy and speed of the wildfire.

- Maintain plants and shrubs under trees to eliminate a vertical "fire ladder".
- Maintain a defensible space, clearing dead brush and debris.
- Be aware of the vertical and horizontal slopes on your property and use proper spacing to prevent "fire ladders".
- When clearing vegetation, use care when operating gas powered equipment, one small spark may start a fire.

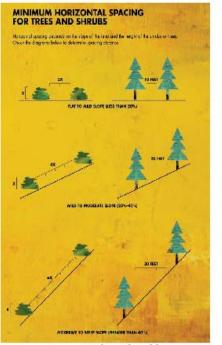


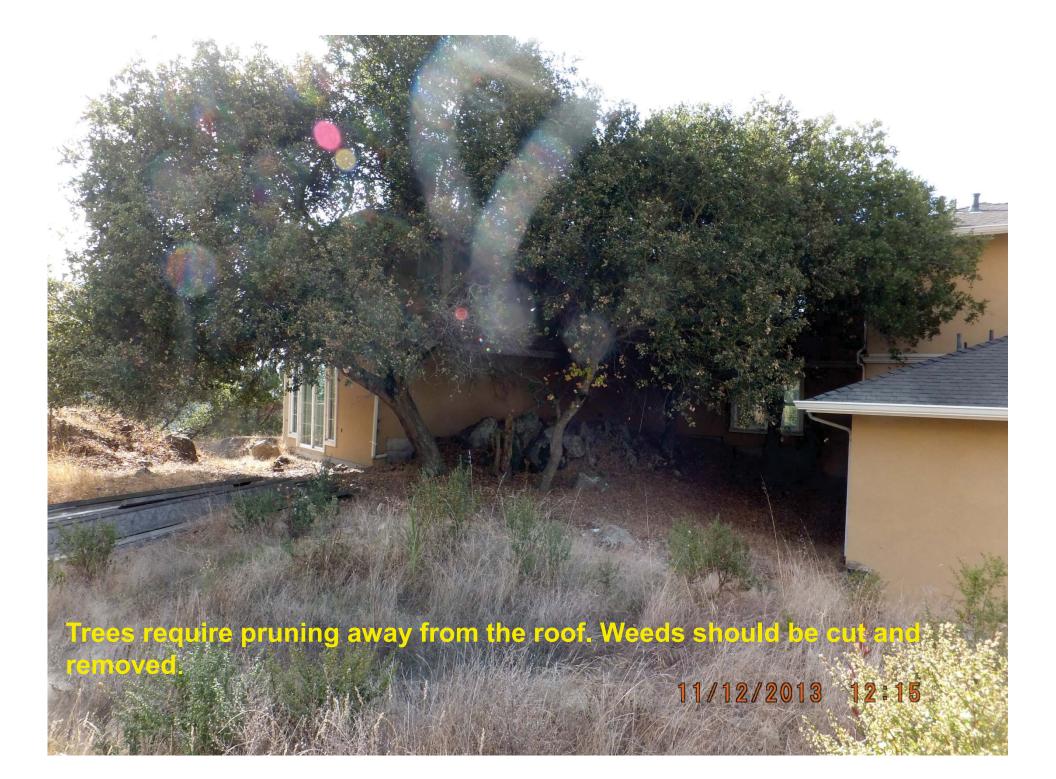
Illustration used with permission from CAL FIRE



## **Fuel Reduction Zone**

Maintain a minimum 30 foot fuel reduction zone around all buildings and/or structures.

- Additional distance may be required based on ground fuels present, size and the slope of the property. 50 or 100 feet options.
- Defensible Space or Fuels Reduction does not mean cutting down all shrubs and trees, or creating a bare ring of earth around the property.
- Fuel reduction means reducing grass, shrubs, ornamental plants, ivy, and other overgrown vegetation in a way that makes it difficult for fire to transfer from the ground to a structure or nearby trees. Our intent is to slow the spread of an exterior fire.
- Grasses and ground covers should not exceed 6 inches in height.
- Tree branches should be pruned away from the building & roof and not overhang the horizontal roof line within 10 feet. Limb trees up at least 6 feet or ¼ the height of the tree.

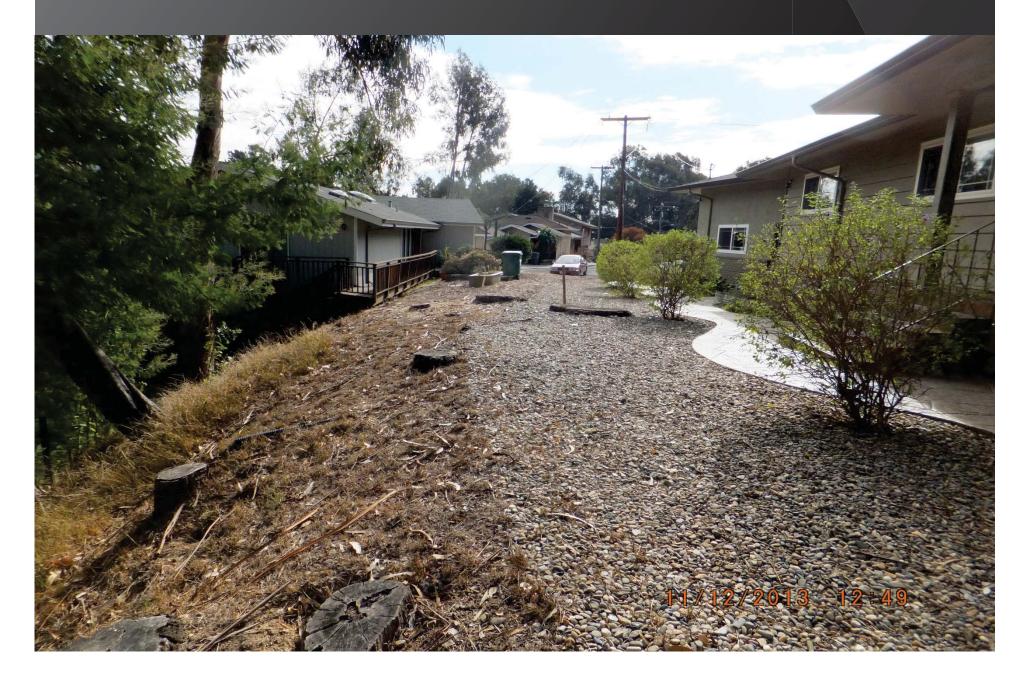


Fuel ladders from ground to shrubs to trees to house





#### **"PASSED"** Inspection! This is compliance done properly.







Fuel reduction zones work! Defensible space = home still standing



## **50 or 100 Foot Fuel Reduction Zones**

Increase fuel reduction zones when homes are located on large parcels greater than ½ acre or when situated on steep slopes. A mere 30 feet may not be sufficient to prevent the spread of fire.





## **50 or 100 Foot Fuel Reduction Zones**





## **Roadside Clearance**

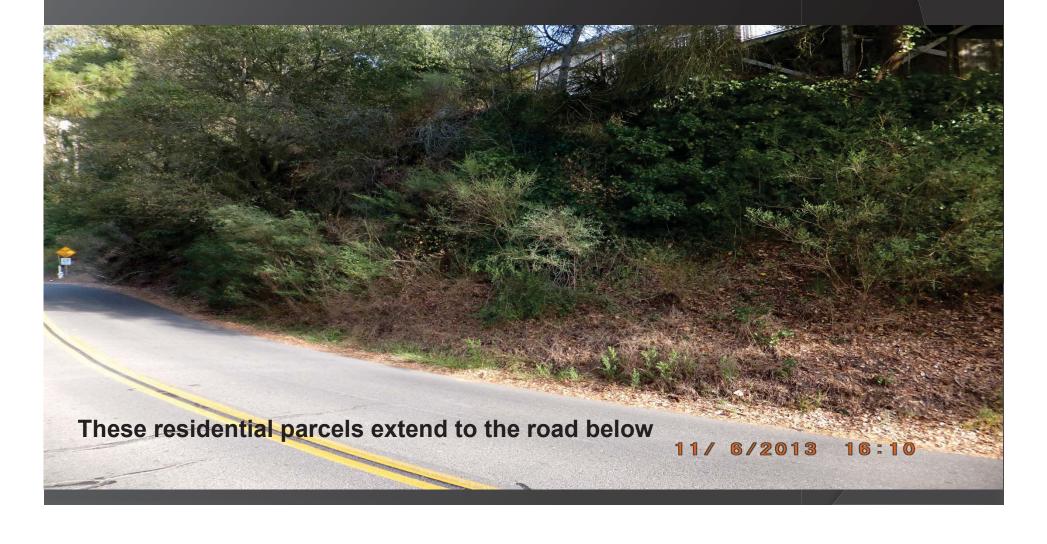
 Fires begin where human activity is present. Enforcing roadside clearances may prevent a fire event.





## **Roadside Clearance**

- Keep a 10-foot minimum clearance next to the roadside; more may be required
- Low-hanging tree limbs should be cleared so that larger private and emergency vehicles can travel through without overhead obstruction







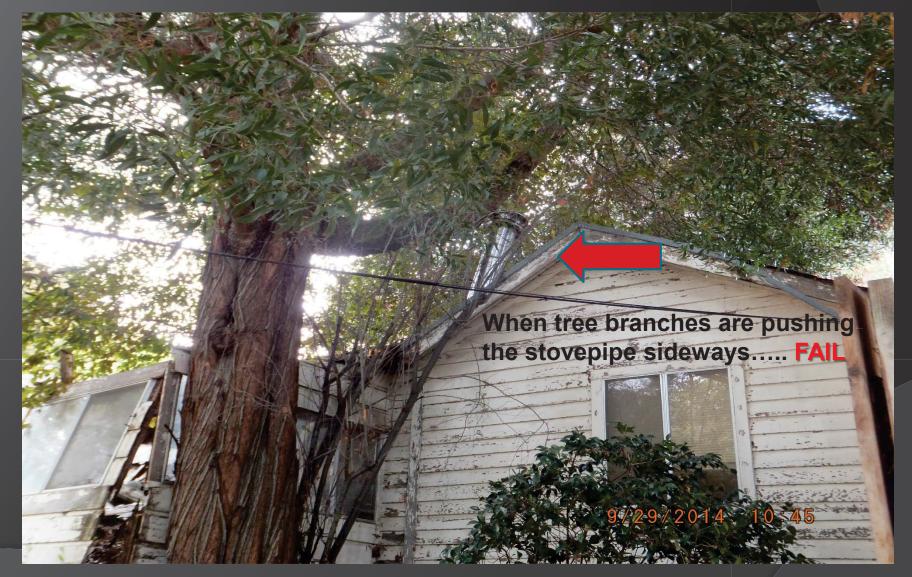


## **Roadside Clearance**





#### Chimneys and Stovepipe Outlets Remove all portions of trees which extend within 10 feet of the outlet of a chimney and or stovepipe outlets.





#### **Tree Crowns**

Maintain 10 foot of horizontal clearance for all trees from any structure



The goal is to have a minimum of 10 feet of open air space between the roof and the tree branches. No tree canopy should contact the roof.



## Tree Crowns: Example of No Clearance Maintain 10 foot of horizontal clearance for all trees from any structure



The goal is to have a minimum of 10 feet of open air space between the roof and the tree branches. No tree canopy should contact the roof.



### Tree Crowns: Example of Proper Clearance

Maintain 10 foot of horizontal clearance for all trees from any structure



The goal is to have a minimum of 10 feet of open air space between the roof and the tree branches. No tree canopy should contact the roof.



#### Roof tops free of Leaves, Needles, or other Dead or Dying Vegetation and Broken Branches



The roof should not have a "carpet" of pine needles or leaves which could ignite from an ember or spark

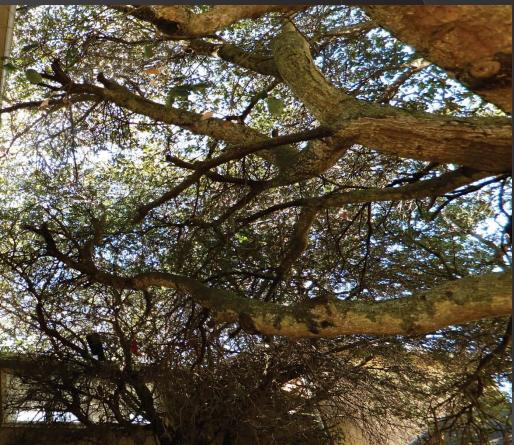


Maintain Trees adjacent to or overhanging any structure. Keep free of fallen and or broken branches or dead & dying branches or debris

TAN



## Underside of tree is full of dead branches



1/ 3/2014 12:55

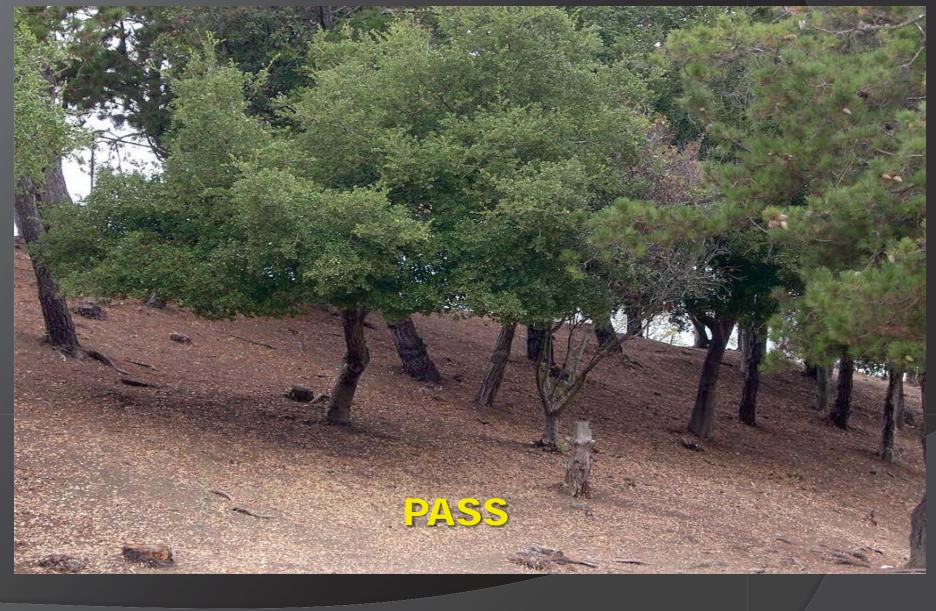


Remove all tree limbs within six feet of the ground or ¼ the height of the tree to provide a fuel break between ground fuels and tree crowns



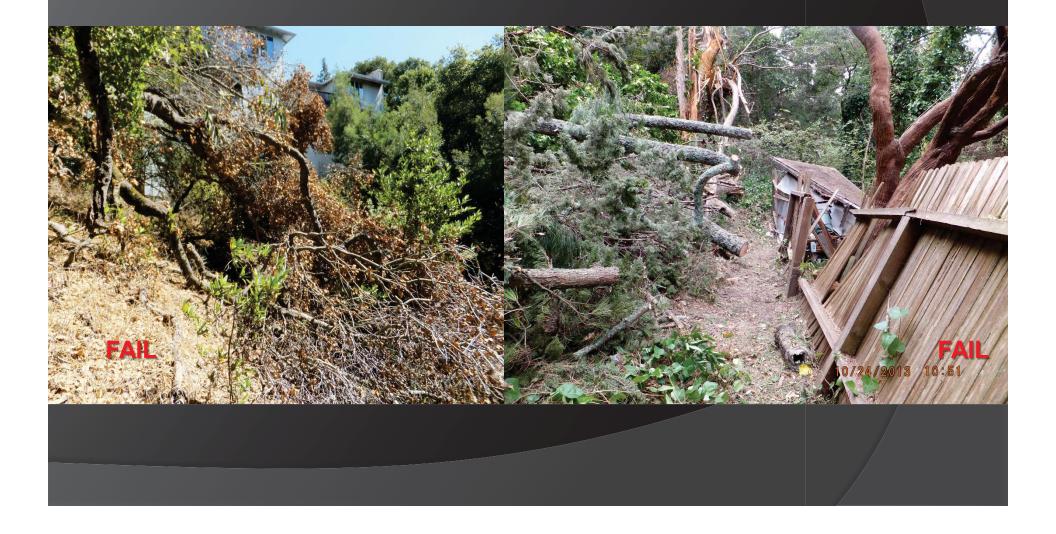


## Example of proper tree maintenance $-\frac{1}{4}$ height of tree or 6 feet ground clearance





## Remove all dead and dying vegetation from the property





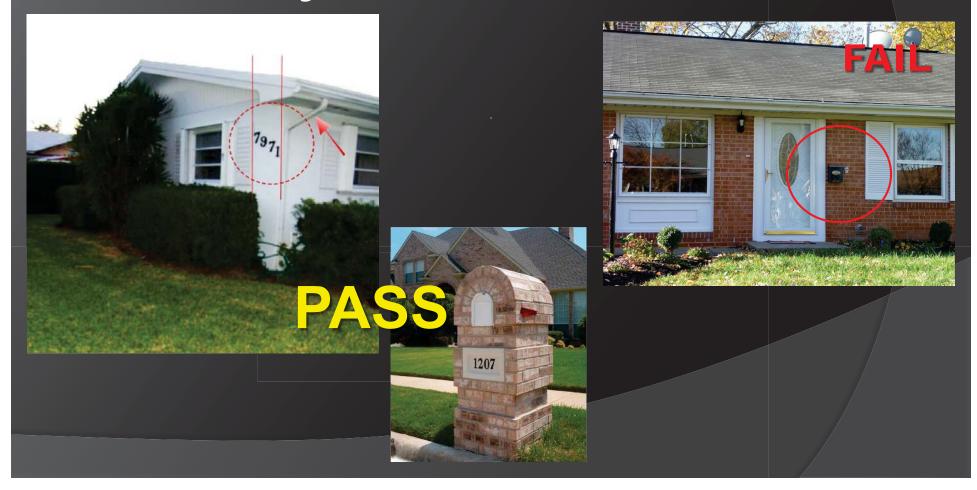
#### Remove all dead and dying vegetation from the property





## **Street Address**

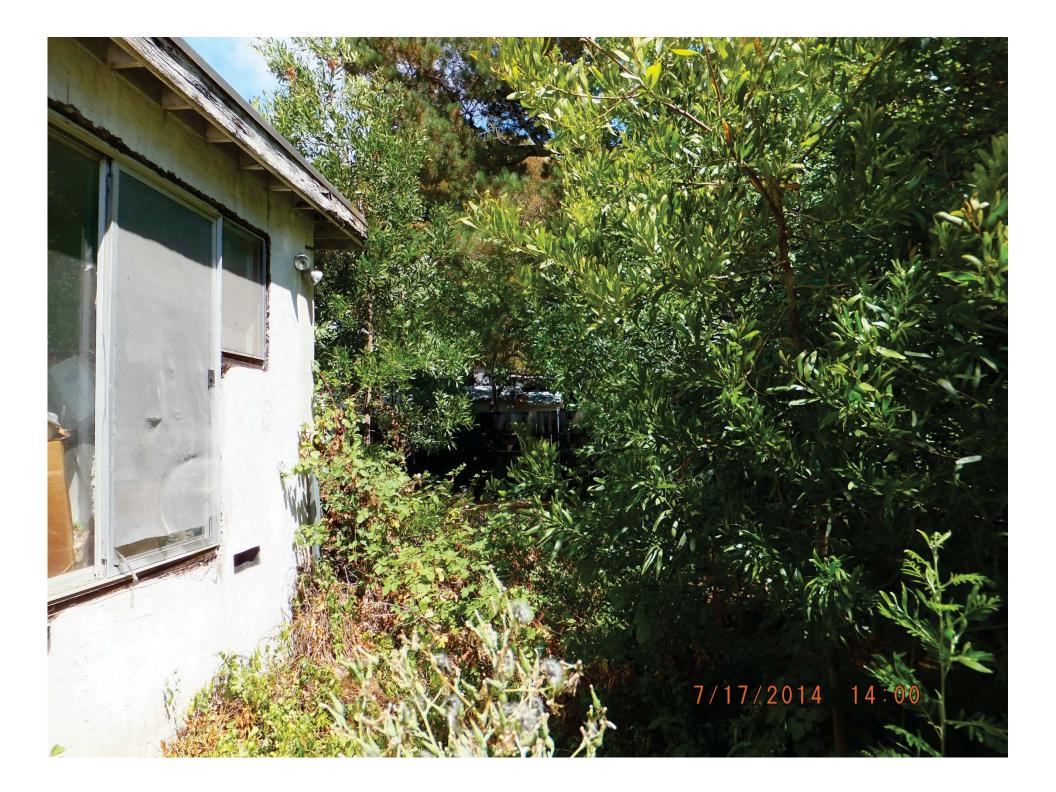
# Provide street address numbers that are clearly visible from the roadside.





# Practice

# What do you see?









## Report Hazards to the Fire Prevention Bureau Vegetation Management Unit for follow up and inspection

Report Abandoned Vehicles or those that obstruct access & hydrants to Oakland Parking Enforcement

(510)238-3099

12/20/2013 12:08-



## www.diablofiresafe.org