Midcoast Community Council

Building Defensible Space and Vegetation Management for Fire Risk Mitigation

Presented by Kate LeGros
Urban Forest Manager with A Plus Tree







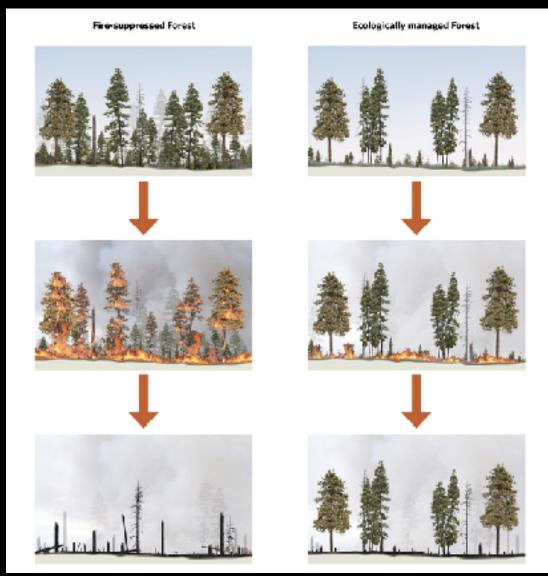
History of Fire in California



- Muwekma Ohlone people in San Mateo County
- Lightning at higher elevations
- Fire dependent and adapted ecosystems like chaparral, closed cone conifer forest, and oak grasslands

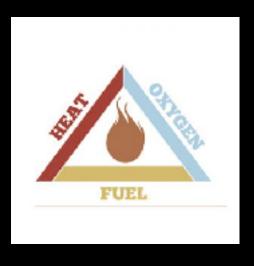


Catastrophic Fires in California



Traditional thought: dense vegetation + hot and dry conditions + oxygen (wind) = fire

Now: Topography, fuel loads, weather



Graphic from the Nature Conservancy



Eucalyptus in California: A Love-Hate Relationship

- Brought over as seed in the mid-1800s, following mass deforestation the California Tree Culture Act of 1868
- Early 20th century, planted aggressively for timber investment many of what remains is abandoned plantations
- Hard freeze of 1972, East Bay firestorm of 1991 and the aftermath.



Eucalyptus Grove in Pacifica, Sept 2020



Eucalyptus in HMB



Euc Hazardous Factors: Ladder Fuels and Weak Wood

- Eucs cut to stump, not treated and re-sprout through epicormic sprouting and weak branches
- Establish the problem: removing hazardous fuel build up for fire or trimming and removals for safety





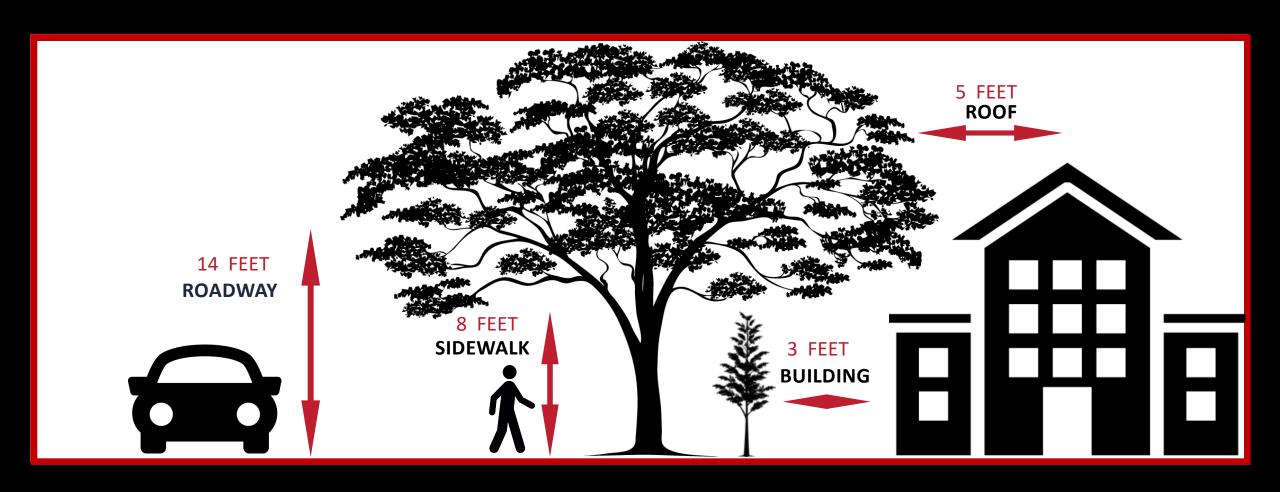


Eucalyptus Grove in SF - covered in English ivy needs to be managed for fire but then... failed limb in backyard



PRUNING BASICS CLEARANCE PRUNING

Goal: Create clearance from Buildings, Roads, and Sidewalks.





Building Defensible Space Varies per community based on vegetation and slope

DEFENSIBLE SPACE ZONES



Zone 1 - from home/structure out 30' (varies)

- Remove branches from home, gutter, and chimney
- Trim trees to keep branches spaced away from other trees
- Create separation between trees and vegetation from artificial structures (home, porch, utilities, etc.)

Zone 2 - from 30' out 100' (varies)

- Horizontal and vertical spacing between vegetation
- Remove dead and dried vegetation
- Thin dense tree stands
- Mow grasses and shrubs annually

Zone 3 - Vegetation management at a landscape level Like work that CalFire, SM County Parks, and SM Resource Conservation District complete

Image from CalFire website/I do not own



What can I do and when to hire a Pro?

Homeowner/private land owner	Professional vegetation management/urban forestry/ arborist/forester
Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.	Removing dead or hazardous trees, trimming trees young and old
Relocate wood piles to Zone 2.	Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
Cut or mow annual grass down to a maximum height of 4 inches.	Create horizontal space between shrubs and trees.
Remove all dead plants, grass and weeds (vegetation).	Create vertical space between grass, shrubs and trees

^{*} For any tree work, you must hire a licensed and insured Tree Care professional - no landscapers



Vegetation Management for Fire Risk Mitigation

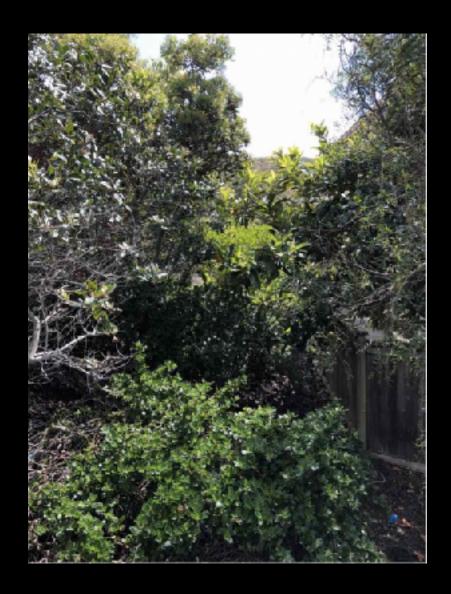
3. Aggressive vegetation mgmt efforts like mastication, targeting large areas of overgrown vegetation

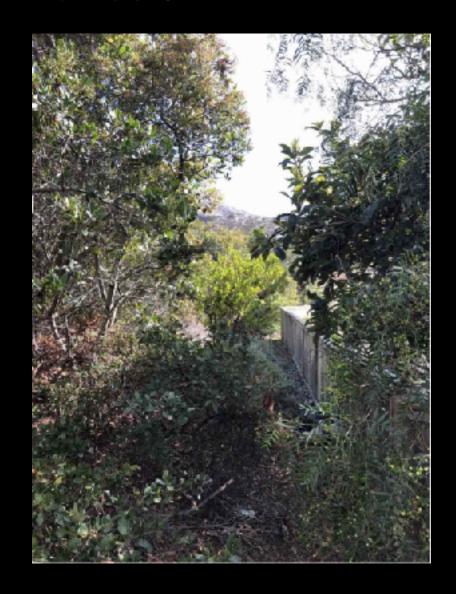
2. Zone 2 Vegetation Management - specialized equipment, targeting trees of a certain size

1. Accomplish Zone 1 Vegetation Management through the use of hand tools - removing invasive plants, shaping shrubs and vegetation, removing dead trees



Vegetation Management for Fire Risk Mitigation Hand Tools







Vegetation Management for Fire Risk Mitigation Hand Tools







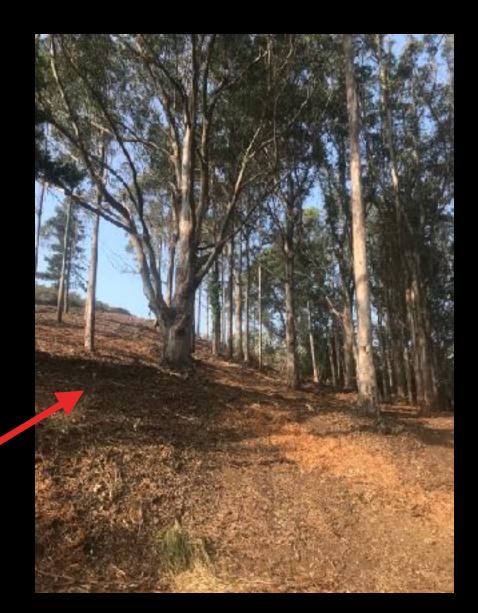
Vegetation Management for Fire Risk Mitigation Hand Tools - Targeting specific vegetation

UCSF Example pictures



Vegetation Management for Fire Risk Mitigation Mastication







What Now?

- 1. Establish evacuation routes, evacuation kit if fire is already here, be ready!
- 2. Defensible Space for your home and private property vegetation management
- 3. Work on a community level:
 Fire Adapted Communities (FAC) Self- Assessment Tool https://fireadaptednetwork.org/resources/fac-assessment-tool/





THANK YOU!



