

Fire-Rescue Department

Defensible Space / Home Hardening

Kensington-Talmadge Fire Safe Council

June 12, 2024

Wildland Management and Enforcement Programs

1. Proactive

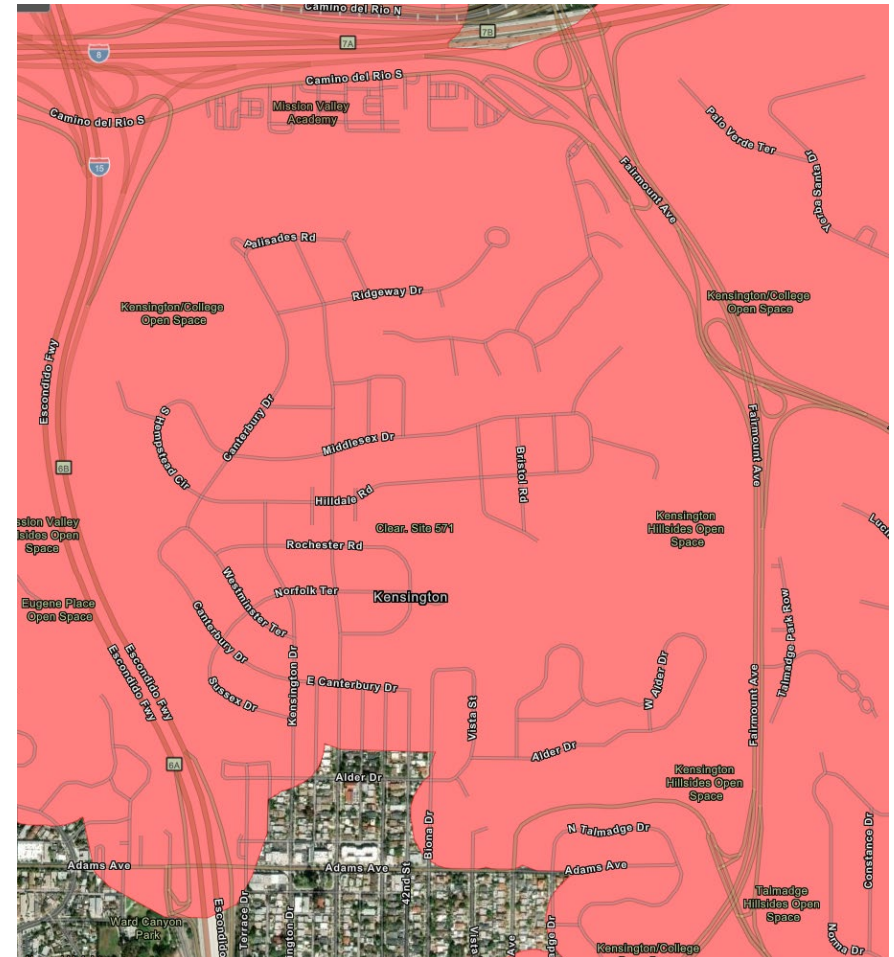
- Door to Door Defensible Space Inspections – Approx 46,000 canyon rim homes in VHFHSZ
- Vacant lot program – Fire Prevention Services
- Monitoring of the city’s property requiring brush management

2. Complaints

- approx. 1,500 annually

3. Requested Services

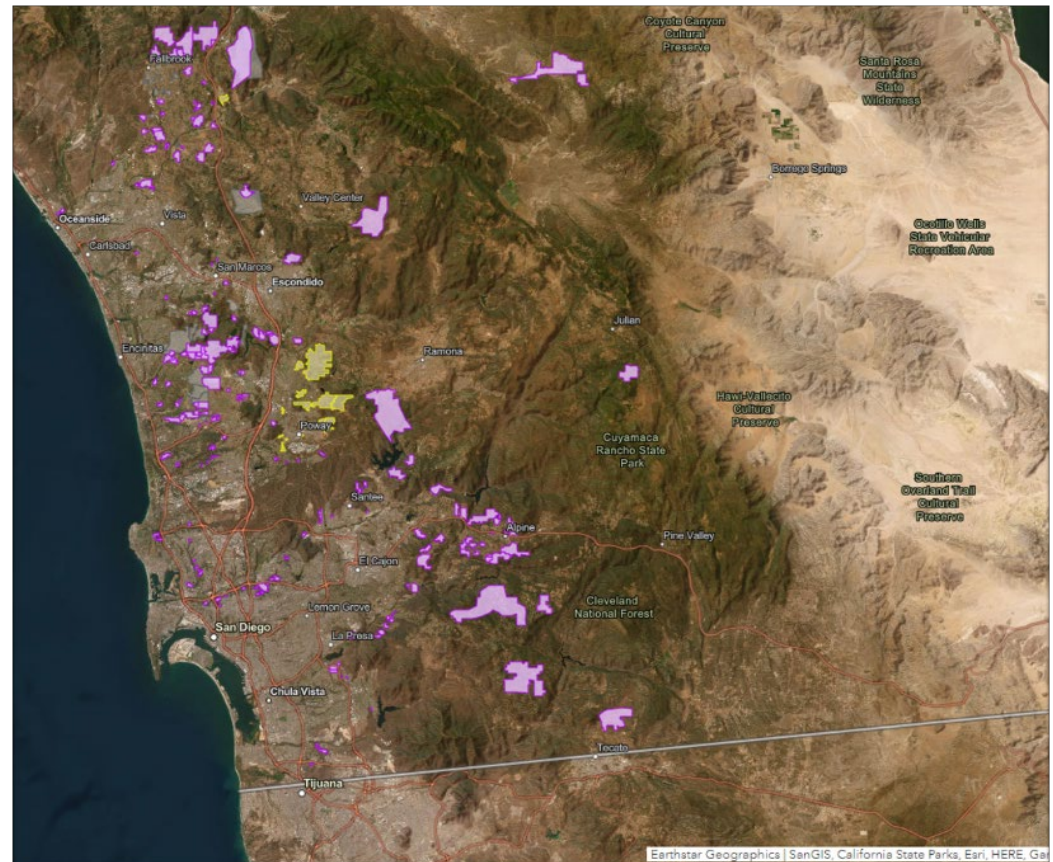
- Real Estate Defensible Space Inspections
- Home Ignition Zone / Defensible Space Inspection (Coming Soon)



Subdivision Review Program

AB 2911 - PRC 4290.5

- (a) On or before July 1, 2021, and every five years thereafter, the board, in consultation with the State Fire Marshal, shall survey local governments, including counties, cities, and fire districts, to identify **existing subdivisions located in a state responsibility area or a very high fire hazard severity zone, identified pursuant to Section 51178 of the Government Code, without a secondary egress route that are at significant fire risk.**



Subdivision Review Program

Identified Developments with:

- More than 30 dwelling units
- Located in a VHFHSZ
- One way in/out
- Board of Forestry Provided recommendations to improve safety of these communities.
- <https://bof.fire.ca.gov/projects-and-programs/subdivision-review-program/>





Subdivision Review Program

Caminito Borde

22-XSD-6853

Part III: Recommendations

Access and Evacuation Recommendations (check all that apply):

- Create a secondary access to the subdivision.
- Make improvements to the existing secondary access to the subdivision.
- Install reflective addressing signs for structures and roads in conformance with 14 CCR § 1274.01, 1274.02, 1274.03, and 1274.04 and the California Fire code, California Code of Regulations, title 24, part 9.
- Install reflective evacuation route street signs directing residents from their local roads to the nearest collector road(s) and/or arterial highway(s) (see California Highway Design manual for definitions), based on the standards for emergency management signing in the California Manual on Uniform Traffic Control Devices
- Where additional routes may exist, but with a gate that does not conform to the requirements in 14 CCR § 1273.09, recommend that gates (including private gates) remain unlocked during red flag warnings or high fire danger conditions.
- When side street parking narrows the road to a smaller width than the standards in 14 CCR § 1273.01, during red flag warnings or conditions of high fire danger, limit street parking so a wider pathway is available to support rapid evacuation.
- Conduct community-wide evacuations drills.
- Install reflective markers to indicate road edges or other areas of danger that might not be evident during periods of low visibility.

Comments:

Home Hardening

State Fire Marshal Low-Cost Retrofit List

1. When it is time to replace your roof, replace it with a **Class A fire-rated roof**. OSFM Wildland Urban Interface (WUI) Products
2. Block any spaces between your roof covering and sheathing with noncombustible materials (**bird stops**).
3. Install a **noncombustible gutter cover** on gutters to prevent the accumulation of leaves and debris in the gutter.
4. Cover your chimney and stovepipe outlets with a **noncombustible corrosion-resistant metal mesh screen** (spark arrestor), with 3/8-inch to 1/2-inch openings.
5. Install **ember and flame-resistant vents**. Consult your local building official and hire a licensed contractor for this project as these modifications may reduce airflow. OSFM Wildland Urban Interface (WUI) Products.
6. **Caulk and plug gaps greater than 1/8-inch** around exposed rafters and blocking to prevent ember intrusion into the attic or other enclosed spaces.



Home Hardening

State Fire Marshal Low-Cost Retrofit List

7. Inspect exterior siding for dry rot, gaps, cracks, and warping. **Caulk or plug gaps greater than 1/8-inch in siding** and replace any damaged boards, including those with dry rot.
8. Install **weather-stripping** to gaps greater than 1/8-inch between garage doors and door frames to prevent ember intrusion. The weather-stripping must be compliant with UL Standard 10C.
9. When it's time to replace your windows, replace them with **multi-paned windows that have at least one pane of tempered glass**. OSFM Wildland Urban Interface (WUI) Products.
10. When it's time to replace your **siding or deck**, use **compliant noncombustible, ignition-resistant**, or other OSFM Wildland Urban Interface (WUI) Products
11. **Cover openings to operable skylights** with a noncombustible metal mesh screen with openings in the screen not to exceed 1/8 inch.
12. Install a minimum **6-inch metal flashing**, applied vertically on the exterior of the wall at the deck-to-wall intersection to protect the combustible siding material.





Defensible Space Requirements

Where do these requirements come from?

Government Code 51182 - A person who owns, leases, controls, operates, or maintains an **occupied dwelling or occupied structure** in, upon, or adjoining a mountainous area, forest-covered land, shrub-covered land, grass-covered land, or land that is covered with flammable material, which area or **land is within a very high fire hazard severity zone** designated by the local agency pursuant to Section 51179, **shall at all times do all of the following:**

- Public Resources Code 4291
- CCR Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, Section 1299.03
- CCR Title 19, Division 1, Chapter 7, Subchapter 1, section 3.07
- California Fire Code Ch. 49
- SDMC 142.0412

New Legislation - AB 3074

- A new Zone was introduced in Assembly Bill 3074 in 2020. This new law requires a third zone (Zone 0) to be defined and made part of the defensible space requirements.
- It now requires the Board of Forestry and Fire Protection to develop the regulation by January 1, 2023. The board is to create a new ember-resistant zone (Zone 0) within 0 to 5 feet of a home.
- Estimated January 2025 for new construction and one year later will apply to existing homes (Jan 2026)

Why was Zone-0 Introduced?

- Based on extensive full scale fire testing conducted by the Insurance Institute for Business & Home Safety
- Maintaining 0-5 feet of non-combustible items around the home had a dramatic impact on the survivability during a simulated ember storm.



Zone 0 – Ember – Resistant Zone

Zone 0 extends 5 feet from buildings, structures, decks, etc.

While not legally required yet, Zone 0 is key for wildfire defense and preventing fires from spreading to your home. Here are the current guidelines:

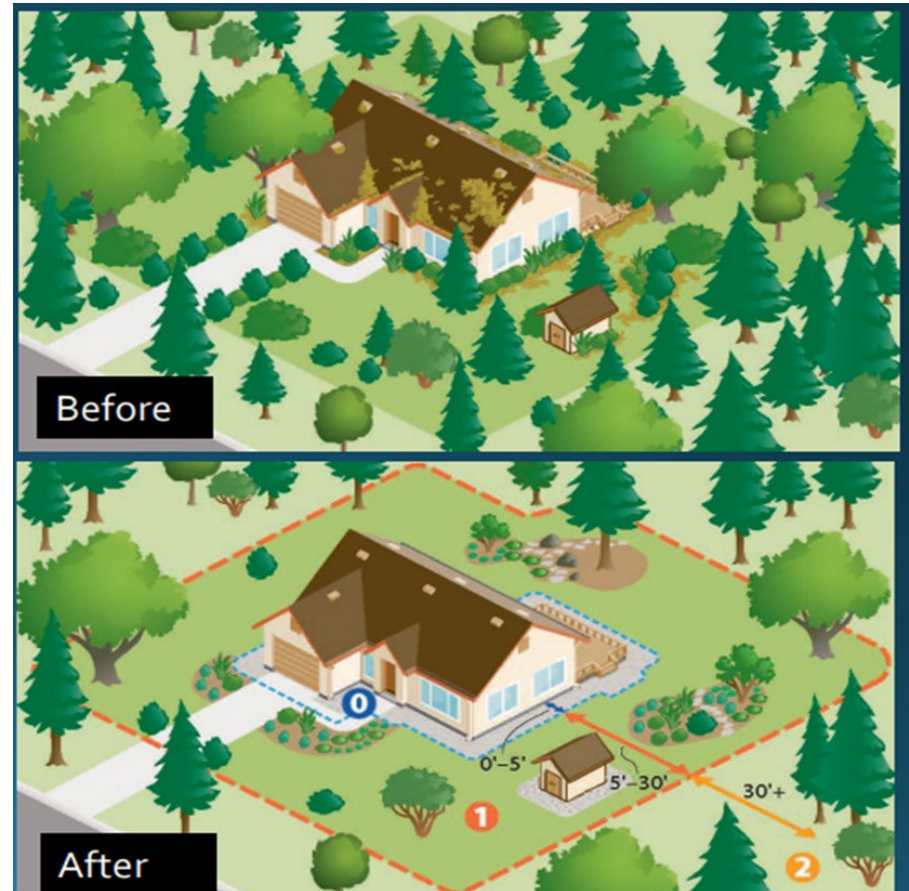
- Use gravel, pavers, or concrete instead of combustible mulch
- Clear dead weeds, grass, and debris; check roofs, gutters, and outdoor areas
- Keep branches trimmed 10 feet away from chimneys and stovepipes
- Minimize combustible items like furniture and planters on decks
- Move firewood and lumber to Zone 2 for safety
- Replace combustible fencing and gates with fire-resistant materials
- Shift garbage and recycling containers to a safer area outside this zone
- Relocate boats, RVs, and vehicles away from this zone to reduce fire risks



Zone 1 – Lean, Clean and Green Zone

Zone 1 extends 35 feet from buildings, structures, decks, etc. or to your property line, whichever is closer.

- Plants within Zone One shall be primarily low-growing and less than 4 feet in height with the exception of trees. Plants shall be low-fuel and fire-resistant.
- Clear all dead plants, grass, and weeds
- Remove dead leaves and pine needles from your yard, roof, and gutters
- Trim overhanging branches and keep them 10 feet from your chimney and roof line
- Move wood piles to Zone 2
- Prune flammable plants and shrubs near windows
- Clear flammable vegetation and items from under decks, balconies, and stairs
- Maintain space between trees, shrubs, and flammable items like patio furniture and wood piles



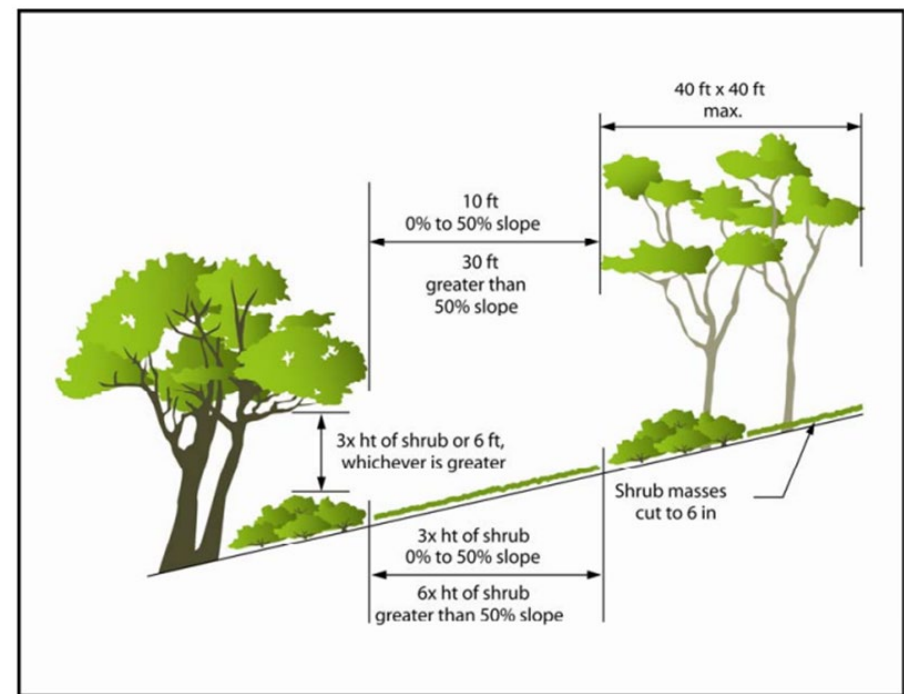
Zone 2 – Reduce Fuel Zone

Zone 2 extends from 35 feet to 100 feet out from buildings, structures, decks, etc. or to your property line, whichever is closer.

- Trim annual grass to a maximum height of 4 inches
- Space out shrubs and trees horizontally (See diagram)
- Ensure vertical spacing between grass, shrubs, and trees (See diagram)
- Remove fallen leaves, needles, and small branches, but can leave up to 3 inches
- Keep exposed wood piles at least 10 feet clear from surroundings, down to the soil
- Within Zone Two, 50 percent of the plants over 24 inches in height shall be cut and cleared to a height of 6 inches. All plants remaining after 50 percent are reduced in height, shall be pruned to reduce fuel loading

You are responsible for maintaining 100 feet of defensible space on your property.

Park and Recreation's Open Space Division performs brush management on city owned land where it is necessary to provide 100' of defensible space to an occupied structure.



TREE & SHRUB SPACING

Parks and Recreation Department

Brush Management

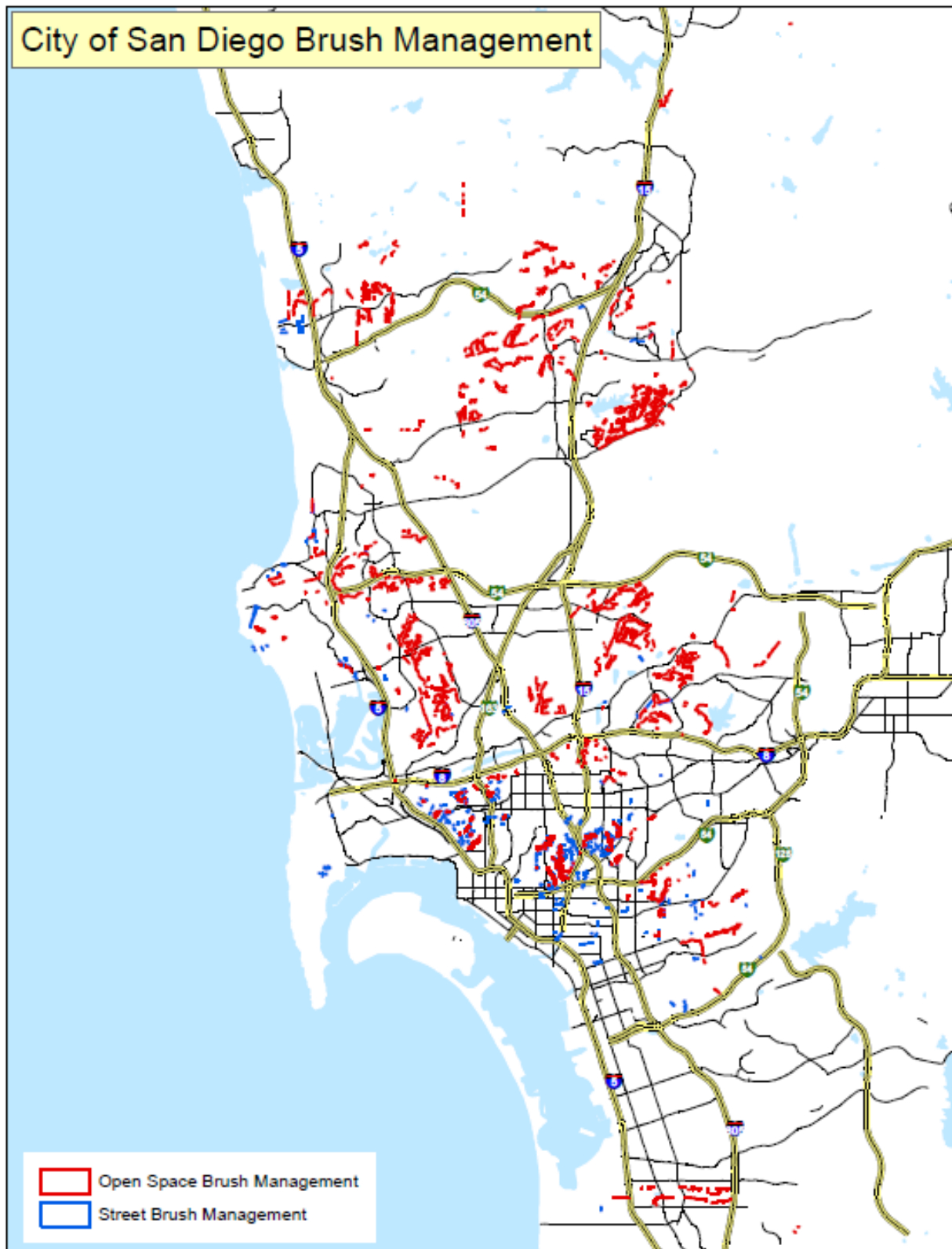
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Responsibility for performing Brush Management on City Owned Land?

Managing Departments for City Owned Land are responsible for conducting their own brush management in accordance with the City's Landscape Regulation.

City of San Diego Brush Management



Open Space Brush Management Program?

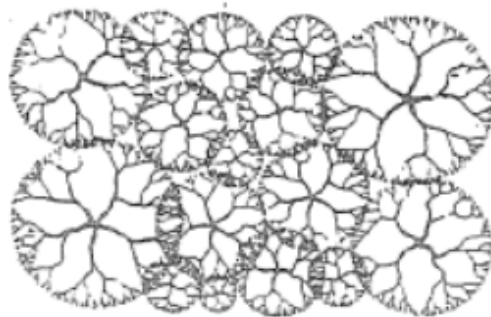
- Training
- Flagging
- Pre-biologist surveys (during and outside of nesting season)
- Crews complete brush thinning
- Post biologist surveys
- Any discrepancies are addressed
- Signoff on map

How is Brush Management Conducted?

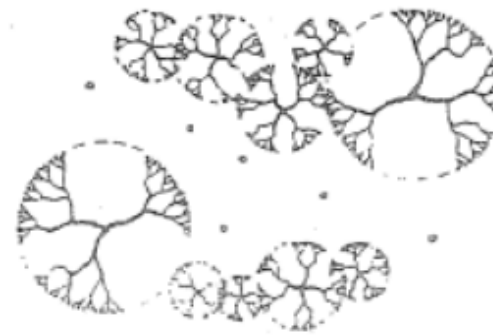
Thinning to 50% cover in Brush Management Zone 2

- Nesting bird surveys during nesting season
- Protocol CA Gnatcatcher surveys in CAGN habitat during nesting season
- The progression of work should proceed as follows:
 1. Remove dead plants
 2. Thin out brush management areas to the required coverage by removing non-native invasive species, non-natives, natives and then lastly sensitive species, in that order.
 3. Prune remaining plants
 4. Dispose of mulch debris and trimmings

PLAN VIEW



100% Canopy Coverage, Solid Foliage Mass with no Spaces between Plants



Reduced to 50% by Combination of Thinning and Removal of Canopy Coverage

How is Brush Management Conducted? (Cont'd)

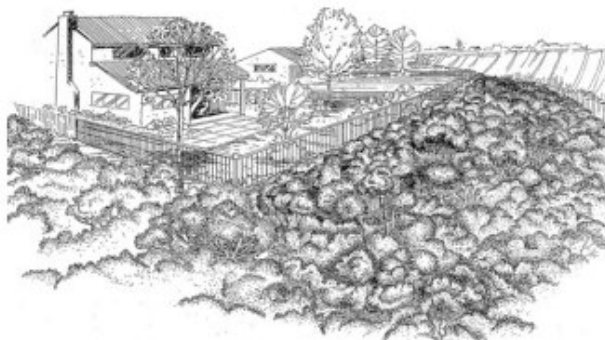
Pruning after thinning



Chaparral Plant Before Pruning



Chaparral Plant After Pruning



Before Brush Management

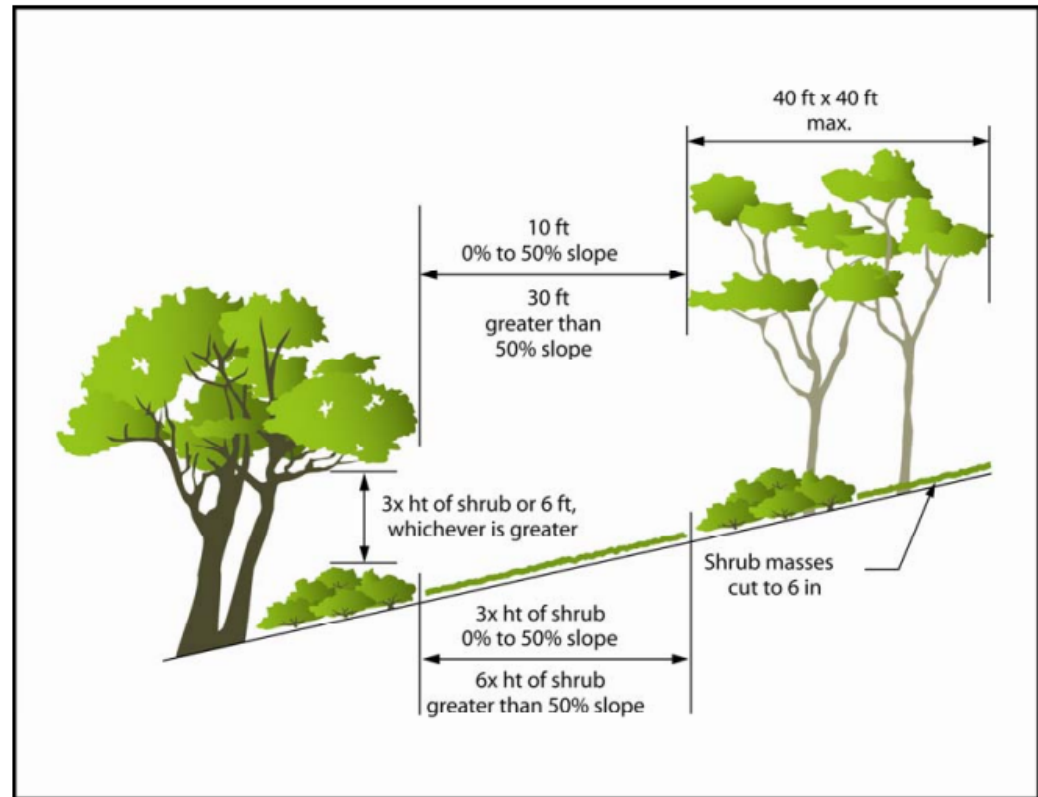


After Thinning and Pruning

How is Brush Management Conducted? (Cont'd)

Tree and Shrub Spacing

- Trees greater than 3 inches dbh located in Eucalyptus Woodland areas are exempt from the minimum horizontal tree spacing requirement.
- Indigenous, native trees in all areas are exempt from the minimum horizontal tree spacing requirement.



TREE & SHRUB SPACING

Examples of Brush Thinning



Pre
←

Post
→



Examples of Brush Thinning



Pre
←

Post
→



Conducting work on Parks and Recreation Open Space

- **Right of Entry permit** - You or your contractor may also thin brush on city property behind your property by obtaining a ROE
- Must follow all applicable regulations
- Application online – Allow 30 days for processing
- Contractor insurance requirements



City of San Diego Brush Management Resources

Municipal Code for brush management

<https://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art02Division04.pdf>

Clarification of brush management regulations and landscape Standards

<https://www.sandiego.gov/sites/default/files/legacy/fire/pdf/brushpolicy.pdf>

Parks and Recreation Open Space Brush Management program

<https://www.sandiego.gov/park-and-recreation/parks/osp/brush>

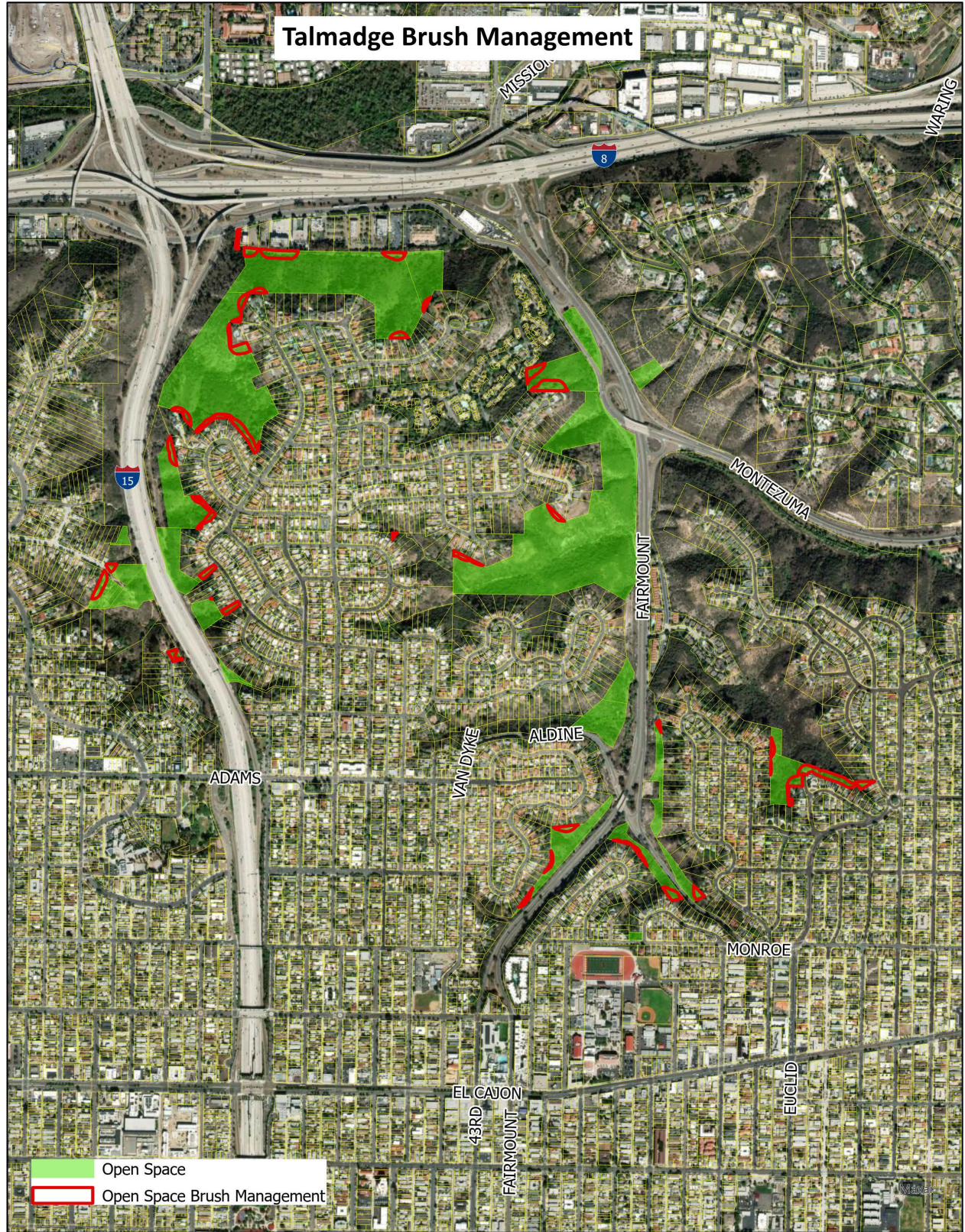
Parks and Recreation Open Space Brush Management schedule

<https://www.sandiego.gov/sites/default/files/brushprioritymaplist.pdf>

Parks and Recreation Brush Management Right of Entry application

[Parks and Recreation Open Space Brush Management program](#)

Talmadge Brush Management



Open Space
Open Space Brush Management



Questions