

# October Brown Bag Lunch Presentations

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Presentation 1: Fuel Management Program

Presentation 2: FM Project Management Reporting Tool

# FY18/19 Fuel Management Program

UC San Diego  
Facilities Management

October 30, 2018

# Agenda

- FM Notification
- Means & Methods
- Environmental Steps Taken
- Dates & Areas

# FACILITIES MANAGEMENT NOTIFICATION

**September 18, 2018**

**Subject: FM Notification of Annual Vegetation Management/Brush Abatement**

**Start:** Monday, September 17, 2018, at 7:00 am

**End:** Friday, December 14, 2018, at 3:30 pm (daily)

**Purpose of Notification:** To inform the campus community that an FM contractor will be conducting annual campus wide vegetation management/brush abatement.

**How the campus community will be affected:** There will be limited impact to campus operations, affected areas of campus during the vegetation management/brush abatement operations are typically areas 100ft from buildings and in the chaparral canyon areas. Traffic control will be provided as needed.

**Parts of Campus to be Affected/Scope of Work:** The following areas may experience elevated levels of noise for periods of time during the work. (maps attached)

**Special Instructions:** The affected area(s) will not be accessible, and will be cordoned off with tape or barricades. Area occupants may experience noise and odors from gas powered chainsaws, blowers, line trimmers, and chippers\*.

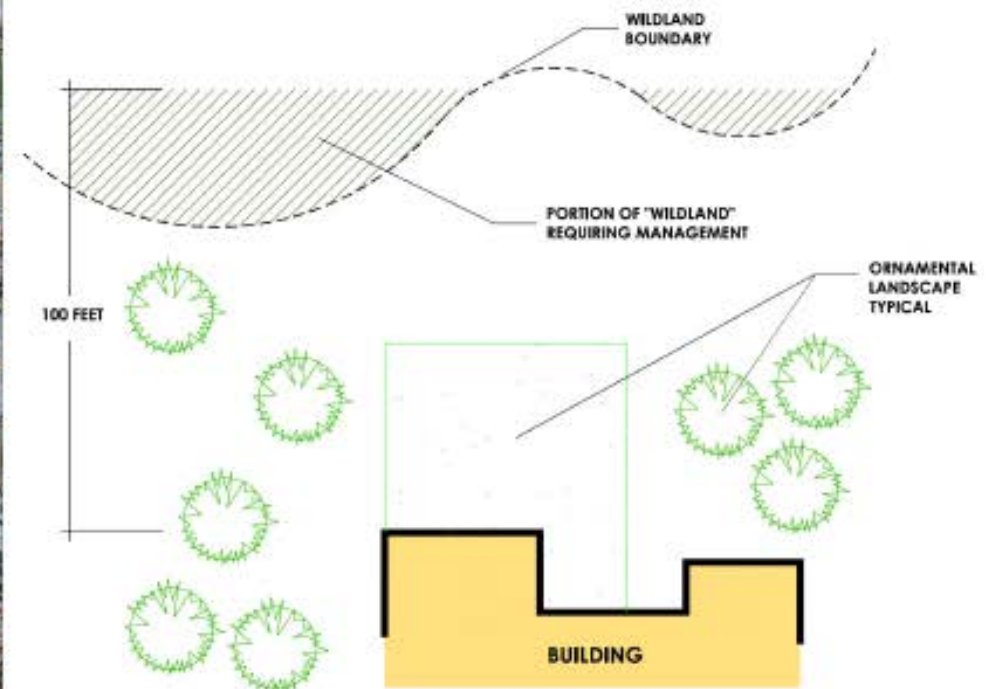


## LEGEND

- WILDLAND, INCLUDES NATIVE ECOLOGICAL RESERVE, RESTORATION LAND AND PARK EUCALYPTUS GROVE.
- UNIVERSITY BUILDINGS WITHIN 100 FEET OF WILDLAND URBAN INTERFACE (WUI)
- A TOTAL OF 143 BUILDINGS FALL WITHIN THE CAMPUS WUI

## NOTES:

- BRUSH MANAGEMENT SHOULD TAKE PLACE ON ALL UNIVERSITY BUILDINGS WITHIN 100 FEET OF CAMPUS WILDLANDS.
- BRUSH MANAGEMENT WITHIN SPECIFIC AREAS MAY REQUIRE ADDITIONAL PERMITTING AND REVIEW BY THE PLANNING OFFICE AND UC NATURAL RESERVE.

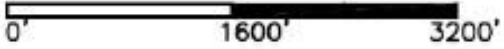
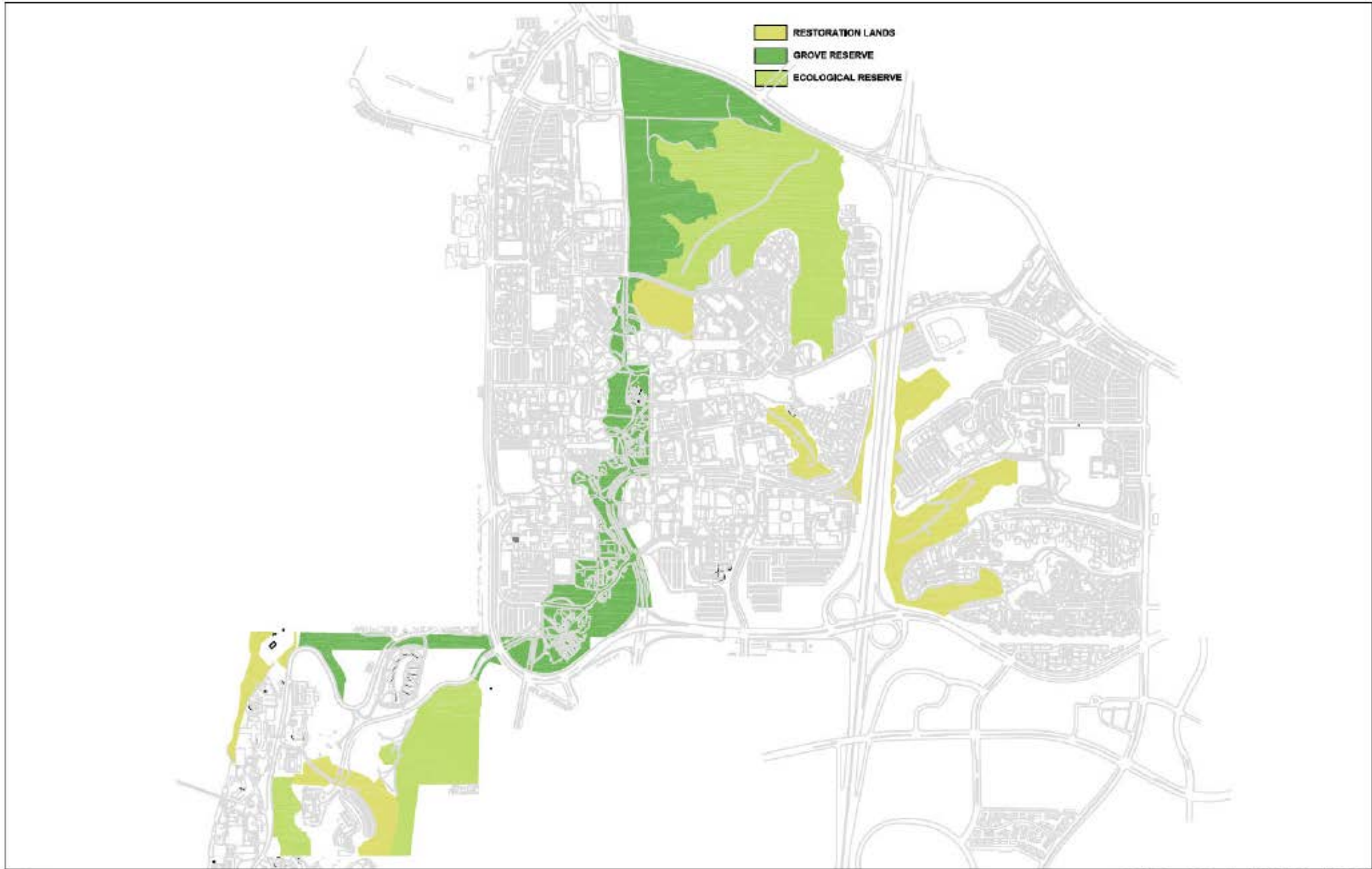


**A** TYPICAL DIAGRAM UNIVERSITY BUILDINGS ALONG WUI  
NO SCALE

# FIRE PREVENTION LAND MANAGEMENT WILDLAND URBAN INTERFACE (WUI)



CREATED ON 5-28-08  
UCSD PHYSICAL PLANNING OFFICE



**FIRE PREVENTION  
LAND MANAGEMENT  
UCSD PARK LAND**

CREATED ON 8-25-08  
UCSD PHYSICAL PLANNING DEPARTMENT

# Means & Methods

- Gas powered chainsaws, blowers, line trimmers, machetes and chippers\* will be used to trim, prune and clear areas to create defensible space between campus buildings and natural vegetation in canyons and other open space areas.
- Affected areas of campus during the wildland fuel management operations are typically areas 100ft from buildings and in the chaparral canyon areas.
- Affected areas will be cordoned off with tape or barricades. Signage will be placed when detours are warranted.

\*Chippers will be used in the later part of the day. Plant material is chipped and reapplied to the hillside as mulch.



THE CITY OF SAN DIEGO

## Brush Management Regulations

### BULLETIN #1: BRUSH MANAGEMENT GUIDE

The City of San Diego has over 500 linear miles of wildland-urban interface where the back yards of homes meet dense stands of native-naturalized vegetation in canyons and other open space areas. Years of drought have increased the flammability of vegetation and risk for dangerous wildfires to occur. Brush management is needed to reduce fire hazards around structures, and to help firefighters protect life and property when fires do occur.

In addition to protecting the public from fire hazards, the City also has a responsibility to protect sensitive biological resources in canyons and open space areas. Brush management activity must be done in a manner that both reduces fire hazards and minimizes impacts to undisturbed native or naturalized vegetation. It is the responsibility of each homeowner to conduct brush management on their property consistent with San Diego Municipal Code (SDMC) Section 142.0412 and with required protections for environmentally sensitive lands (SDMC Chapter 14, Article 3, Division 1).

This Bulletin generally describes brush management requirements and techniques. Check with the Fire-Rescue Department or Development Services Department (DSD) before you begin your work to better understand how the requirements apply to a specific piece of property. (See back of Bulletin for contact information.)

## BRUSH MANAGEMENT REQUIREMENTS (SDMC Section 142.0412)

Any property containing a habitable structure and native or naturalized vegetation is required to provide 100 feet of brush management in two distinct zones: Zone 1 and Zone 2. Special requirements may apply (i.e. pre-1989 development). Check with Fire-Rescue or DSD before you begin brush management work.

Brush Management **Zone 1** typically extends 35 feet out from the habitable structure towards flammable vegetation, and occurs on the level portion of a property.

- **Zone 1** must be maintained on a regular basis by thinning and pruning trees and plants, controlling weeds, and maintaining irrigation systems.
- No habitable structures are permitted. New construction (i.e. fences, walls, palapas, play structures, gazebos, and decks) must be non-combustible and/or have a minimum 1-hour fire resistance rating. Previously conforming structures (legally constructed prior to ordinance) may remain unless they constitute a distinct danger to life or property.
- Plants should be primarily low-growing (less than 4 feet in height), low-fuel, and fire-resistive.
- All portions of trees, other than the trunk, which extend within ten feet of a structure or the outlet of any chimney, must be cut back.
- Trees adjacent to or overhanging any building must be free of dead wood.
- Roof and rain gutters must be free of leaves, needles, or other dead vegetative growth.

Brush Management **Zone 2** is the remaining 65 feet that extends beyond Zone 1, typically comprised of undisturbed vegetation on a slope subject to sensitive biological resource protections.

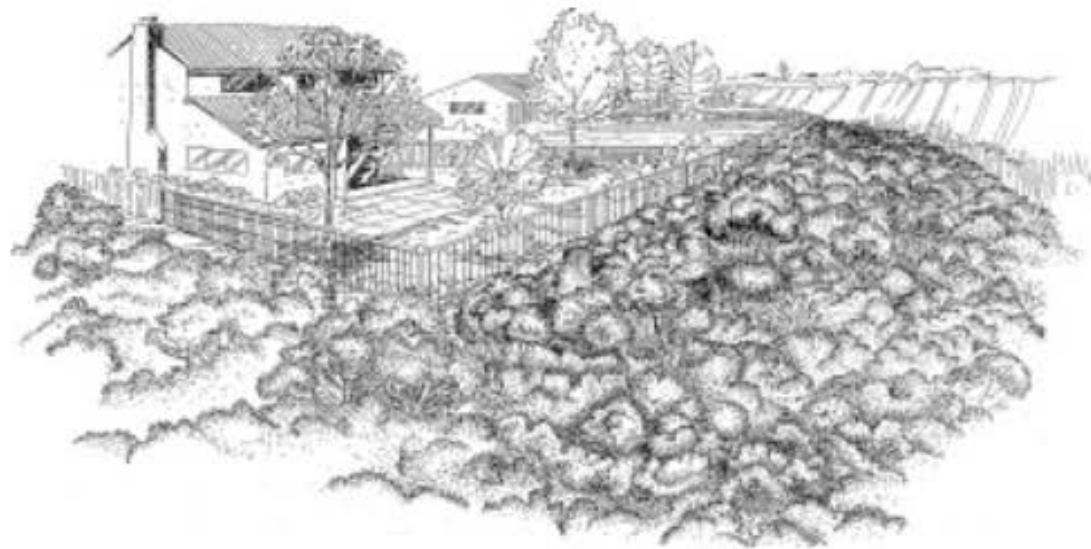
- **Zone 2** must be maintained on a regular basis by controlling weeds and removing invasive species. (See back of Bulletin under additional information.)
- Selective thinning and pruning of native and non-native plants is required to reduce the fuel-load. Do not grade or grub native plants, soils or habitats. Non-native plants must be pruned before native plants. See detailed instructions provided in this Bulletin. Violators will be responsible for restoration and mitigation costs as applicable.
- Brush management activity is not allowed March 1 through August 15 in coastal sage scrub, maritime succulent scrub, or coastal sage-chaparral habitats, unless an exception is specifically granted.
- NO structures or permanent irrigation are allowed in Zone 2.
- A permit is required to re-vegetate or reconfigure Brush Management Zone 2. Failure to obtain the required permits could result in costly corrective action.



## How to Selectively Thin and Prune Plants and Trees in Zone 2 and Avoid Clearing Sensitive Vegetation in Violation of the Code.

**Step 1: Remove....** as much dead wood as you can and invasive species within the Brush Management Zone areas.

**Step 2: Thin....** the entire Zone 2 area. Start by cutting down 50% of the plants over 2 feet in height to a height of 6 inches. Don't go any lower than 6 inches so the roots remain to control soil erosion. The goal is to create a "mosaic" or more natural look, as shown below, so do your cutting in a "staggered" pattern. Leave uncut plant groupings up to 400 square feet — that's a 20x20-foot area, or an area that can be encircled by an 80-foot rope — separated by groupings of plants cut down to 6 inches. Thinning should be prioritized as follows: 1) invasive non-native species; 2) non-native species; 3) flammable native species; 4) native species; and 5) regionally sensitive species.

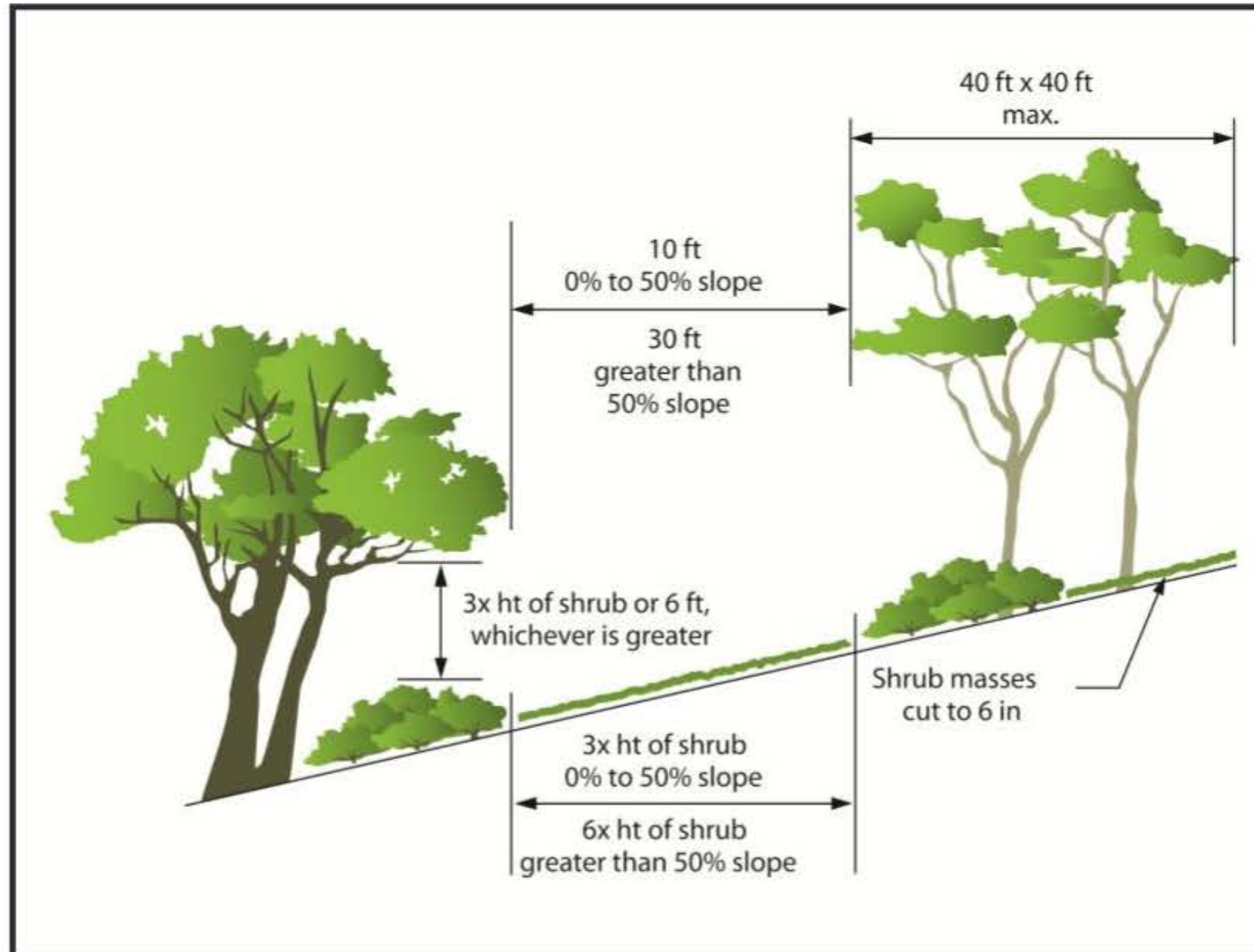


**Before Brush Management**



**After Thinning and Pruning**

**Step 3: Prune....** all plants or plant groupings that are left after the thinning process to achieve the horizontal and vertical clearances shown in the illustration below. (For trees in Eucalyptus Woodlands areas, see FPB Policy B-08-1.)



## Tree and Shrub Spacing

Remaining plants, 4 feet or more in height, should then be cut and shaped into “umbrellas.” This means pruning one half of the lower branches to create umbrella-shaped canopies. This allows you to see and deal with what is growing underneath. Upper branches may then be shortened to reduce fuel load as long as the canopy is left intact. This keeps the plant healthy and the shade from the plant canopy reduces weed and plant growth underneath. Vegetation that is less than 4 feet in height, like coastal sage scrub, should be cut back to within 12 inches of the root crown.



**Chaparral Plant Before Pruning**



**Chaparral Plant After Pruning**

**Step 4: Dispose....** of the cuttings and dead wood by either hauling it to a landfill; or, by chipping/mulching it on-site and spreading it out in the Zone 2 area to a depth of not more than 6 inches.

**Step 5:** Thin and prune annually.... because plants will grow back.

# Environmental Steps Taken

- Majority of work will be in areas that have been abated in the past based on Campus Planning and Fire Marshal review and input.
- Exceptions include:
  - Area north of Bordeaux Ave: Land owned by UC Regents and first time it has been abated.
  - Area along Voigt. Added, based on wildland fire study indicating this road as a potential escape route during a wildland fire situation. The reduction of brush will aid in securing this as an accessible route.
- Additionally, Campus Planning has been coordinating the installation of markers in environmentally sensitive areas to ensure vegetation management does not encroach those sensitive areas.

# Boundary Markers



# Dates of Annual Vegetation Management Project

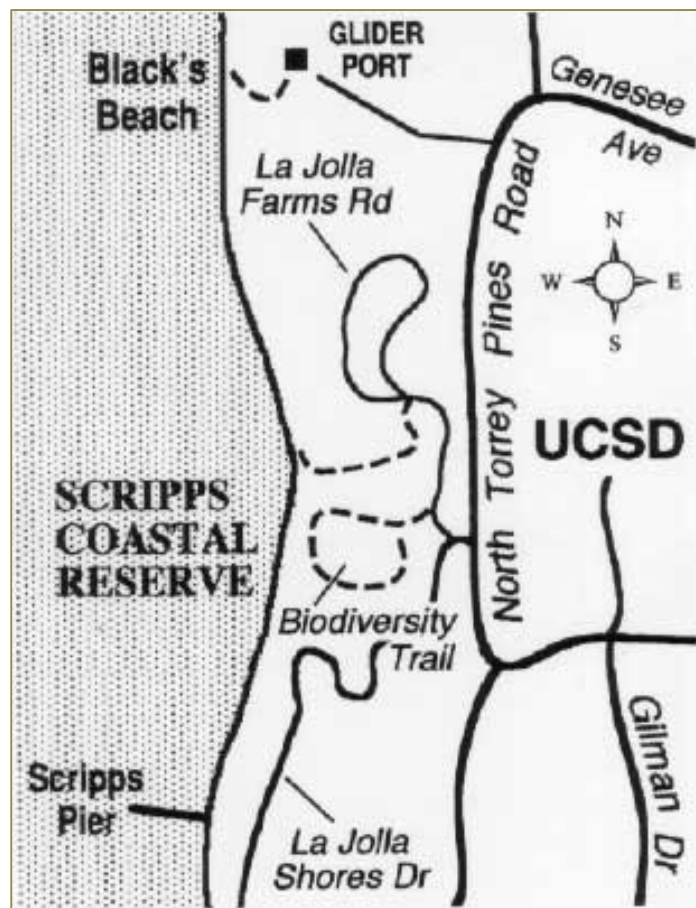


Protected species mating seasons require scheduling of trimming and vegetation removal in the late fall through early spring seasons.

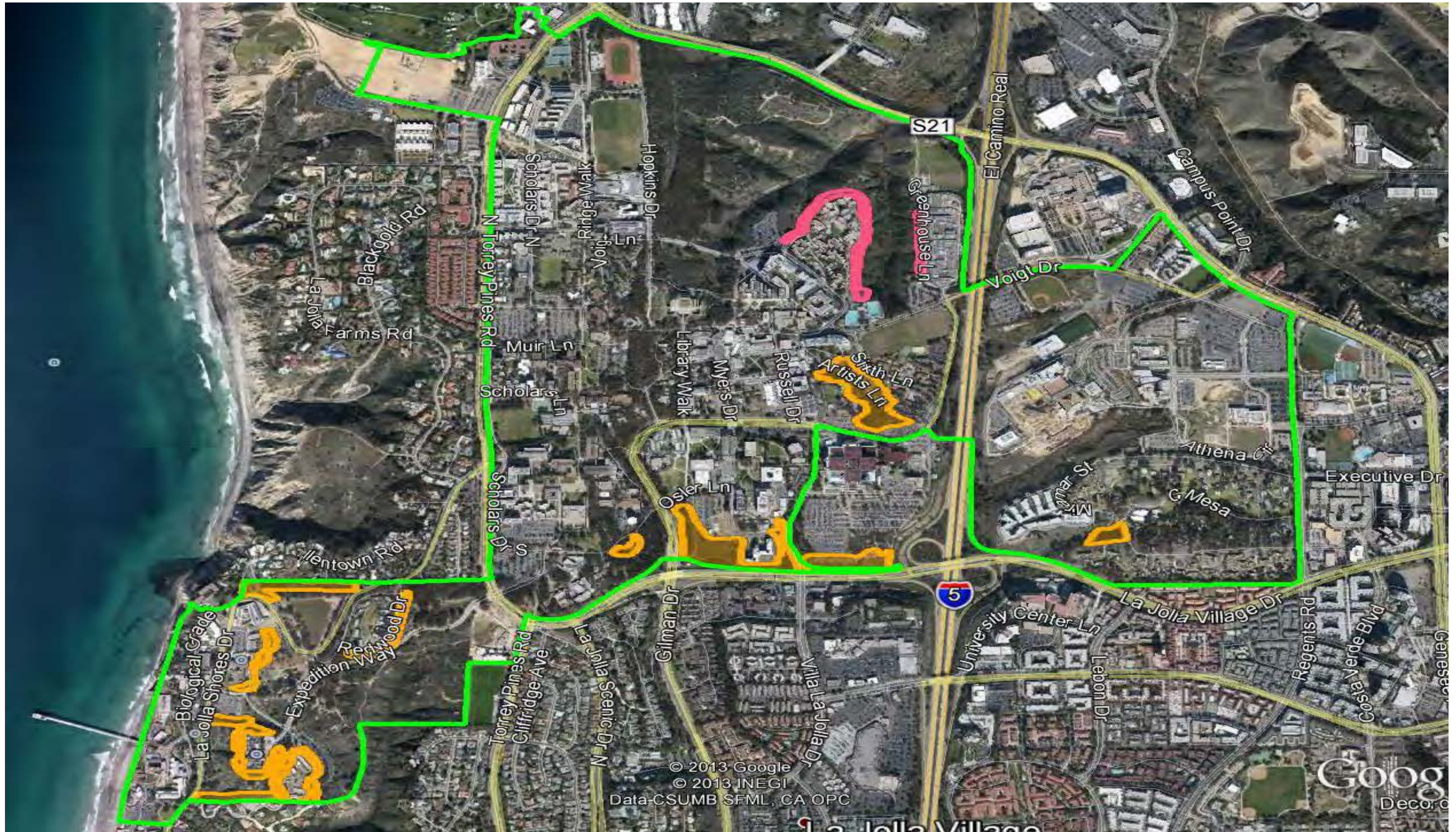


Some examples of species in the Scripps Coastal Habitat Region:

- Coastal California Gnatcatcher – breeding season Feb-Aug
- Least Bell's Vireo—breeding season Apr-Jul
- Quino checkerspot butterflies—Mating season Feb-May



# Abatement Areas



# La Jolla Shores Drive 17-18SEP18





# Horizon Way Grove

## 18-20SEP18



# Che Café

20-21SEP18



# Deep Sea Drilling

## 21-24SEP18



# Camp Elliot Laser Area

## 24-25SEP18



# Camp Elliot Radio Tower

## 25-27SEP18



# West of ECEC

## 27SEP-02OCT18



# Warren Undergraduate Apartments

## 02-04OCT18



# Warren Housing

## 04-05OCT18





# Campus Services Complex

## 05-08OCT18

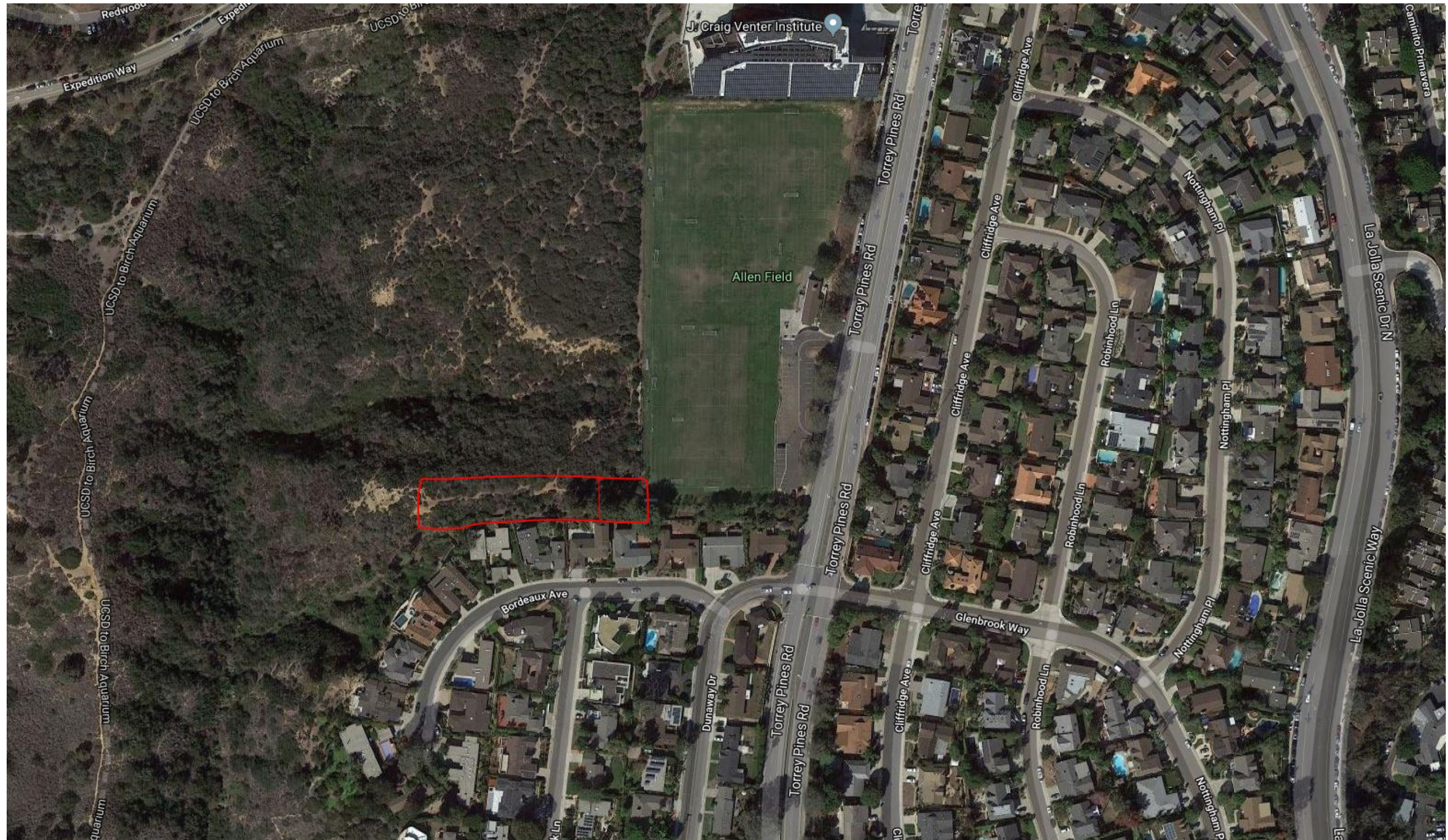


# Coast Apartments 08-100CT18



# Bordeaux Ave. Properties

## 10-30 OCT 18



# Birch Aquarium

## 01-05 NOV 18



# Nierenberg Hall & Keck Center

05-07NOV18



# Mt. Soledad

## 07-09NOV18



# Voigt Drive

09NOV-03DEC18



# Seaweed Canyon

## 01-05 NOV 18





# La Jolla Village Drive

## 03-12DEC18



# SIO Building D

## 12-14DEC18



**QUESTIONS ?**

UC San Diego



Project Management  
Facilities Management  
Supporting Educational and Research Environments



# Facilities Management Web-Based Project Reporting Tool

October 30, 2018

# Why?

- Provide accessible project information to all stakeholders
- Provide consistent project information on cadence
- Provide information in a similar format across all RMP units



- Users access the site using this URL: <https://rmp-web.ucsd.edu/pmd>
- Accounts are administered through Single Sign-On
  - Many accounts have already been created by our team, if you cannot access the site through Single Sign-On contact Doug Darois at [ddarois@ucsd.edu](mailto:ddarois@ucsd.edu)



- All current projects managed by FM Project Management
  - Some older projects have historical information that can be accessed
- Projects managed by CPM or other FM Units are not on this site
- We've categorized projects by two designations, Type 1 Projects and Type 2 Projects
  - Type 1 Projects exceed \$100K or have design consultants
  - Type 2 Projects are under \$100K and do not have a design consultant
    - Projects less than 45 days old will always be shown as Type 2 projects until the scope, budget and schedule information can be further developed



- **Project Status Summary Tab**
- **Projects Total** – Shows the total number of projects in the lower table and the dollar amount of the work.
- **Info buttons** – Provided throughout to explain the information and how to interpret
- **Filters at top....**
  - Type 1 Projects – Over \$100K or have design
  - Type 2 Projects – Under \$100K without design
  - Type 1 & 2 projects
  - Projects Pending Close – Construction is complete but final warranties, user guides, payments are not yet complete.
  - Completed Projects – Construction, paperwork and payments are complete
  - All Projects
- **Search box function**
- **Excel Export function**
- **Sort arrows**
  - Health
    - Green = on schedule, on budget
    - Yellow = potential schedule or budget impacts identified
    - Red = behind schedule or over budget
  - Current Phase – Quick look at which phase (Planning, Design, Construction.... PWC)
- **Drill down info on this screen – Bold text**
  - Current Project Phase – Provides a list of the last three months of written updates
  - Project Delay – Provides a brief summary of any schedule delay reasons
  - Budget Variance – Provides a brief summary of any positive or negative schedule impacts
  - Work Order Description – Opens a new tab with detailed project update information.... Granular snapshot of project objectives, status, contacts, schedule and risks



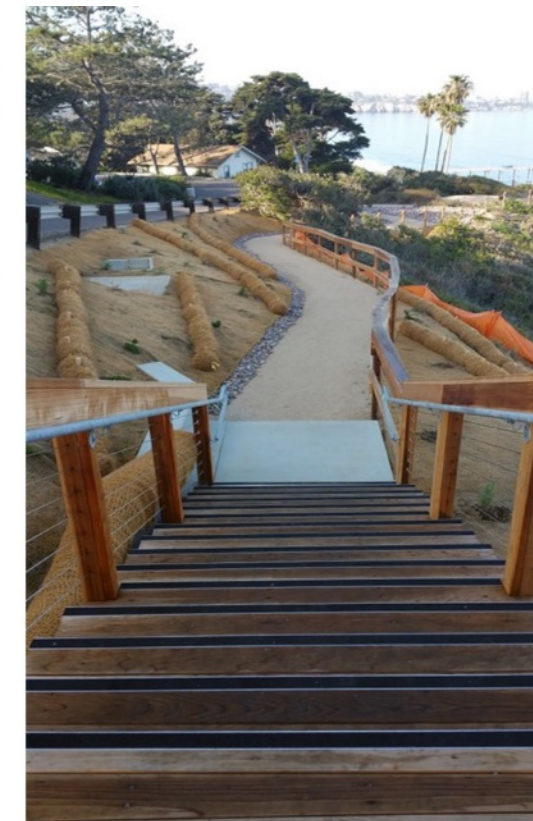


- **Detailed Project Information (similar layout and information to CPM’s “Dashboard”?)**
  - Project Heading
  - Key Objectives – Scope summary
  - Phase
  - Health
  - If the project health changes the PM will add a description of why in the box
  - Last Updated – shows the last time the information was updated by the PM (updates will be provided around the middle of the month or when the budget/schedule are at risk)
  - Executive summary – Overview of the status of the project at the current state along with what is about to happen
  - Includes current and past updates, to access complete historical updates click the plus sign
  - Project contacts
  - Project Milestones – dates listed are month and year when this phase will finish
    - P = Scope development thru schematic design (SD’s)
    - W = Schematic design thru the start of construction
    - NTP = When the construction contract is awarded.
    - C = Start of construction thru substantial completion
    - The PM will also list upcoming milestones in this area.... Things like interim design submissions, major shutdowns, key no-work days defined by the client, etc.
  - Move In / Occupy – Expected date the client can start moving equipment into the space or begin use
  - Budget – current budget
  - Budget approval – date the Minor Cap, CIB or augmentation was approved
  - Schedule summary
  - Baseline completion = initial estimated completion date
  - Forecasted Completion = current estimated completion date
  - Variance Days = difference between the two
  - Project Risks

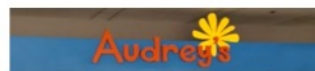


- Items that effect the health of the project, these have the potential to or are impacting the budget, schedule or both.
- Description – description of risk
- Delay type – categorized delay type (see info button)
- Mitigation strategy – What the options are to reduce or eliminate the impacts
- In current budget – is the impact represented in the budget line item (has it been approved)?
- In Schedule Summary – is the impact represented in the forecasted completion date?
- Project Files
- Cost Accounting – Current budget document with actual and forecasted costs
- Schedule – Detailed project schedule
- Photos – Relevant progress photos (up to 10)
- Close Out Documents – Warranties, maintenance information, finalized building permits, etc.
- **My Dashboard Tab**
  - Provides a dashboard of information pertaining to the user’s VC areas, PM’s, budget and schedules (still under development, graphs and new data are pending)
- **User Guide Tab** – Overview of how to use the tool and general information about FM Project Management projects
- **Future State**
  - Revised layout for Type 2 Projects (take out all the non-critical sections for smaller projects)
  - Gantt Chart Tab
  - Spend Forecasting
  - Better dashboard information with graphics





# UC San Diego Facilities Management



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Project Management  
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