CAL FIRE San Mateo - Santa Cruz Unit

2025 STRATEGIC FIRE PLAN

UNIT STRATEGIC FIRE PLAN AMENDMENTS

Date	Section Updated	Page Numbers Updated	Description of Update	Updated By
3/27/2020	Appendix E	54-57	2019 data	FTR
4/1/2020	Appendix A,C,D & Sect IV	40-58, 21-22	Updates	FTR
4/14/2020	Edits: Sect. I, II, III	4-17	Minor corrections	FTR
4/21/2020	Sect.V, Annual Accomplishments	28-39, 70	Updates	FTR
4/6/2021	Entire document	All	Formatting update	FTR
4/9/2021	Sect.: I, II, IV:A, V	6-13, 16, 23-25, 38-48	Annual corrections	FTR
4/13/2021	Appendix E, Maps, Accomplishments	65-85	Updates 2020 data	FTR
4/27/2021	Appendix A & B	49-54, 55	Annual updates	FTR
5/5/2021	Whole document	6,9,11,13,38,41,69	Final edits	FTR
2/1/2022	Appendix E	64	2021 data & updates	FTR
2/9/2022	Cover page	Cover	Update	FTR
3/30/2022	Sect: V, App.B, Annual Accomp.	32-48, 54, 85	Battalion & Unit updates	FTR
4/30/2022	Entire document	various	Grammar and formatting	FTR
5/6/2022	Executive Summary	2	Minor additions	FTR
4/21/2023	Entire document	3, 14, 16, 17, 24, 25, 27, 31,33,42,49-53	Updates to 2022 data / grammar / project list	FTR
4/25/2023	Appendix B/E	54, 63-70	Update App.E & Removed Appendix B	FTR
4/28/2023	Entire	Index	Update page numbers	FTR
5/2/2022	Entire	all	Formatting edits/page numbers	FTR
3/6/2024	Appendix E, maps	61-85	2023 data	FTR
3/20/2024	Entire document	2,3,8,10,11,12,17,19	Check grammar, spelling, minor edits	FTR
3/21/2024	Battalion / Appendix E / Accomplishments	37-42, 66-70, 86	Minor annual edits	FTR
4/5/2024	Sect. III, IV, V	18, 21, 30, 33, 34, 35	Minor annual edits	FTR
4/9/2024	Sect. V, App,A	50, 51	Adding section on SDSF, Updated project list	FTR
4/19/2024	All	9, 13, 16, 24, 25, 32, 45, 46, 87, 88	Final grammar, spelling,& minor edits check. Annual accomplishments	FTR
4/24/2024	Entire document	All	Page numbering	FTR
5/2/2024	All	All	Accessibility check	FTR
3/12/2025	Appendix E	78-84	Edit for 2024 data	FTR
4/11/2025	Cover	Cover	Update to cover	FTR
4/23/2025	Sect.I, Unit Description	11	Apparatus renumbered for 2025	FTR
4/24/2025	Appendix A	64-67	Project list updated	FTR
4/24/2025	Maps	reshuffled	Moving maps to appropriate locations	FTR
4/25/2025	Table of Contents	iii	renumbering	FTR
4/25/2025	Entire document	6,7,8,19,26,29,34,39,43,44,48,50,51,54,56,63	Annual updates/statistics	FTR

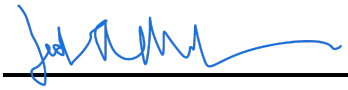
Table of Contents

SIGNATURE PAGE

Unit Strategic Fire Plan developed for the San Mateo-Santa Cruz Unit

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre-fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.



05/08/25

Unit Chief

Jed Wilson

Frank Rodgers

08/05/25

Pre-Fire Engineer

Frank Rodgers

EXECUTIVE SUMMARY

The history of wildfire in the San Mateo – Santa Cruz Unit can be dated back to Native Americans and later in the 1900's with slash and burn logging. Our knowledge of these fires is limited to verbal history and newspaper clippings. In the 1950's, the Division of Forestry began gathering data on large fires. Prior to the devastating wildfires of 2008 and 2009, large destructive wildfires were vague memories. Besides large fires in neighboring Units, Santa Cruz and San Mateo Counties had not seen much significant fire activity since the early 1960's. Until the Summit Fire of 2008, most residents had never experienced a destructive wildfire firsthand. The reasons for the lack of fire activity in the past 40 to 50 years can be argued; weather, changes in the way we manage our forests, extended fire regimes, aggressive firefighting, or a multitude of others. Regardless the reason, the fact remains, wildfires will occur. This concept was driven home in August of 2020 with the CZU Lightning Complex. By the time these fires were contained, they had consumed as many acres in one season as had been burned in the last 100 years combined and had burned from the southern border of San Mateo County to the town of Felton.

What makes the present different from early part of this century is the number of people living in the wildland. In the past 40 years, scores of people have chosen to live in the mountainous, rural part of the counties (aka: the Wildland Urban Interface (WUI)) rather than in the urban environment. People living in the wilderness is nothing new, however, their increasing numbers has caused the fire service to change the way the fire department does business. In the past, firefighters focused primarily on the fire; they are now faced with an ever-increasing infrastructure of roads, structures, traffic, and people. What has also changed is the fact there are not enough firefighters or fire apparatus to protect each and every home during a wildfire. Knowing this, it is the joint responsibility of the greater community and government to take preventative measures to make homes, neighborhoods, and the community more defensible from wildfire.

The 2010 strategic Fire Plan, developed collaboratively between the State Board of Forestry and Fire Protection (Board) and the California Department of Forestry and Fire Protection (CAL FIRE), asks how we can utilize prescribed fire and live with the risk of wildfire. The answer is through establishing a vision, goals, and objectives.

Locally, there is a history of collaborative efforts between fire agencies and groups such as Fire Safe San Mateo, and communities like Las Cumbres, La Honda, Olive Springs,

and Bonny Doon. Efforts such as these have culminated in numerous fuel reduction projects and community education. More recently, the Unit has seen an unprecedented amount of pre-fire “grass roots” organization, including the formation of the Soquel, South Skyline, and Bonny Doon Fire Safe Councils. In 2016, many of these groups began discussions regarding the formation of an overarching, county-wide Fire Safe Council for Santa Cruz County. A year later, the formation of the Santa Cruz Fire Safe was approved and a functioning board of directors and bylaws were voted in place. CAL FIRE is working closely with Fire Safe Santa Cruz County as it develops policies, practices, and projects.

With the assistance of the San Mateo County Resource Conservation District (RCD) through a grant from the United States Fish and Wildlife Service, a Community Wildfire Protection Plan (CWPP) was developed with input from stakeholders throughout San Mateo and Santa Cruz Counties. In 2010, the Board of Supervisors for both San Mateo and Santa Cruz County adopted the 2010 San Mateo County – Santa Cruz County CWPP. In 2014, 2018, and 2022 the CWPP had updates that were approved by all the Fire Chiefs with a stake in the document. The Unit is cooperating with the two counties’ Resource Conservation Districts, Fire Safe Councils, and Fire Chief’s Associations in order to maintain an up-to-date list of priority projects that will amend the CWPP as future updates occur.

The Unit Strategic Fire Plan is a living document, to be updated annually with additional goals and objectives. This document is also meant to work in collaboration with the already completed 2022 San Mateo County - Santa Cruz County Community Wildfire Protection Plan. Over time, we will be able to utilize measurement criteria to evaluate our accomplishments and their effectiveness.

SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

The San Mateo – Santa Cruz Unit includes the counties of Santa Cruz, San Mateo, and San Francisco. The Unit primarily operates in the State Responsibility Areas (SRA) of Santa Cruz County and San Mateo County; an area of approximately 894 square miles. CAL FIRE is the County Fire Department for both San Mateo County and Santa Cruz County. In addition to providing fire protection in the SRA, CAL FIRE contracts with the Coastside Fire Protection District in San Mateo County, Pajaro Valley Fire Protection District in Santa Cruz County, and Pajaro Dunes CSA#4 in Santa Cruz County.

San Mateo and Santa Cruz Counties border the Pacific Ocean to the west; San Francisco County to the north; San Francisco Bay and Santa Clara County to the east; and the Pajaro River along San Benito and Monterey Counties to the south. The counties straddle the eastern and western flanks of the Santa Cruz Mountains (part of the Coast Range) which runs in a general northwest to southeast direction. The ridgeline travels about 65 miles from just south of San Bruno Mountain in San Mateo County to Mount Madonna in Santa Cruz County. The highest point of the range is Loma Prieta at 3,806 feet (southwest of San Jose). Other notable peaks include: Mount Umunhum (3,442 feet); Castle Rock (3,214 feet); Ben Lomond Mountain (2,600 feet); Long Ridge (2,603 feet); Eagle Rock (2,488 feet); Kings Mountain (2,315 feet); Montara Mountain (1,900 feet); and Mount Madonna (1,897 feet).

Weather conditions in the Unit are considered to be Mediterranean in nature due to the warm dry summers and colder wet winters. In both Santa Cruz County and San Mateo County, the weather is generally mild throughout the year. Due to the proximity of the Monterey Bay in Santa Cruz County, the Pacific Ocean and San Francisco Bay in San Mateo County, fog and overcast conditions are common in the morning and evening.

Vegetation is dominated by dense conifer stands that typically have forest floor accumulations of litter and downed woody material and by coastal scrub communities consisting of low vegetation up to six feet in height, typically occurring on coastal bluffs, coastal hills, and wind-swept summits. Within many of the Unit's evergreen/conifer forests, there are some areas of Oak woodland understory. There are additional areas that are dominated by Oak woodland, but often have evergreens starting to intrude.

Unmodified vegetation is usually dense and difficult to penetrate. True chaparral communities can be found in isolated areas on southwest aspects and at higher elevations. Grasslands occupy coastal valleys along the western slopes of the Santa Cruz Mountains and in the southern end of Santa Cruz County (the majority of this community has been converted to agriculture or urban development). Grasslands can also be found on the western slopes of the Santa Cruz Mountains in rural San Mateo County, especially in upland areas historically used for grazing.

Approximately one million residents make up the combined population of San Mateo and Santa Cruz Counties. Additionally, numerous other non-residents frequently visit the counties for work, recreation, and tourism. Recreational use of public lands is a year-round activity in great demand by people from the local communities, the surrounding metropolitan Bay Area, and points beyond. There are approximately 29 miles of beaches in Santa Cruz County and almost double that in San Mateo Co. Between State Parks, County Parks, Mid-Peninsula Open Space District, and local land trusts, there are over forty thousand acres of parks available to the public.

Santa Cruz County has an estimated population over a quarter million, of which the highest population densities occur in the Cities of Santa Cruz and Watsonville. San Mateo County has much higher population densities than Santa Cruz, with many of the county's three quarter million residents dwelling in the more urban northeastern portion of the county. The Cities of Daly City, San Mateo, Redwood City, South San Francisco, and San Bruno make up the highest population centers. With the exception of the city of Half Moon Bay and communities to the north of that city, coastal San Mateo County is largely undeveloped. Major landowners in the area include local and state government, private timberland, water districts, open space trusts and private ranch ownerships.

The boundary between residential/commercial development and wildland in both counties is not clearly demarcated. Development of rural residential dwellings is progressing at a moderate to rapid pace. Where there were once scattered rural summer cabins on winding, narrow roads, there are now year-round residential subdivisions, and an increased density of structures. Much of this intermix zone is within the State Responsibility Area (SRA) in Santa Cruz County and contiguous to SRA in San Mateo County.

Due to local topography, fuels (forest, chaparral, grasslands) and certain weather conditions, San Mateo and Santa Cruz counties have the potential for large, destructive wildfire events. Each year, State, local, and volunteer departments throughout the region respond to numerous wildfires. The vast majority of these are held to less than one acre. The reasons for this include but are not limited to: early identification and reporting, large fire suppression response (both local and state agencies), generally good access to fire areas, favorable fuels, favorable fire weather, and air support. Effective fire suppression over the past 100 years has led to uncharacteristically high fuel loads. When ignitions occur during unfavorable weather and/or in areas with poor access, fires can rapidly increase to an unmanageable size prior to fire resources arrival. In 2008 Santa Cruz County experienced three large wildfires resulting in approximately 5,400 acres burned and numerous homes destroyed. In 2009, Santa Cruz County experienced two large wildfires resulting in approximately 8,500 acres damaging and destroying numerous homes and structures. After an eight-year hiatus, large fires returned to Santa Cruz County in 2017 with the 300+ acre Bear Fire, which destroyed 6 structures. In the year 2020, there was an alignment of weather and ignitions that resulted in a fire larger than the combined acreage burned in the past 100 years and more than 1400 structures destroyed.

Martin Fire as seen from Felton HQ (2008).

Since the 1970s, there has been increasing public pressure to preserve local natural features. This philosophy has influenced the management of parks, open space, and private land holding. There are also the pressures of subdivision and home development on rural lands prone to fire hazards. The result is an ever-increasing land base where little to no vegetation management occurs. In many instances, the resulting landscape is overgrown with a variety of species, often with a non-native, invasive species component in a variety of age classes. The increased number of homes and proximity to flammable landscapes can be a potentially dangerous situation in the event of a fire. With new ownership and management objectives, many existing access roads are abandoned resulting in poor access to fires during suppression activities. With demand for additional housing intensifying, lands previously used to either access historical fires or used to create fire breaks are now occupied, making suppression significantly more difficult. Fuel reduction has become a priority of the CAL FIRE leadership and the local Unit is committed to working diligently towards reaching the set goals for acres treated through both mechanical means and broadcast burning. Local Unit personnel have been working with both public and private landowners/managers, fire safe councils, and local utilities to plan and carry out fuel reduction projects that help protect residents and infrastructure in and around the SRA.

Priority Landscapes

State law requires periodic assessment of California's forest and rangeland resources. Beginning in 2008, this became a Federal Law as well. In June of 2010, the Fire and Resource Assessment Program (FRAP) released California's Forest and Rangelands: 2010 Assessment, then updated the document in 2017. As part of the assessment, states were required to identify key issues and define the status and trends throughout the forests. Additionally, they were asked to identify specific geographic areas, called "priority landscapes". The intent of identifying "priority landscapes" was to assist planners and encourage investment in projects associated with the identified areas. The assessment identifies forest and rangeland issues across the state, with strategies to address them. A complete copy of the assessment can be found on the CAL FIRE FRAP Website (https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program/Assessment). The Unit will consider the following priority landscapes, as discussed by the 2017 assessment, when planning for future projects:

Chapter 1 – Sustainable Working Forests and Rangelands – Priority landscapes were identified in the Unit in regard to “Risk Reduction on Rangelands”.

Chapter 6 – Population Growth and Development Impacts - Landscapes at risk include annual grasslands and coastal scrub, found in both San Mateo and Santa Cruz County. Strategies to address development include land acquisition, easements and zoning policies.

Chapter 7 – Climate Change: Threats and Opportunities - San Mateo and Santa Cruz County have been identified as priority landscapes for threats to forest carbon from wildfire, insects, and disease. Strategies to mitigate these issues include reforestation, forestland conservation, fuels reduction, urban forestry, and forest management to improve carbon sequestration.

Chapter 9 – Water Resources: Quality and Quantity Protection and Enhancement – Landscapes at risk include both San Mateo and Santa Cruz County for water supply from forests in source watersheds.

Chapter 11 – Reducing Community Wildfire Risks - San Mateo and Santa Cruz Counties have been identified as priority landscapes. A primary strategy for this priority landscape is to complete a CWPP (this has occurred for both counties).

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

The San Mateo – Santa Cruz Unit (CZU) Headquarters is located in Santa Cruz County, in the town of Felton. CAL FIRE is contracted to provide personnel and services for Santa Cruz County and San Mateo County Fire Departments, respectively. CAL FIRE has contracts to provide fire protection to Pajaro Valley Fire District & Pajaro Dunes CSA 4 in Santa Cruz County and to Half Moon Bay, El Granada and Montara (collectively known as Coastside Fire Protection District) in San Mateo County. The Unit is geographically divided into five battalions. Battalion's One, Two and Five are within San Mateo County (with a small sliver extending into Santa Cruz County) and Three and Four in Santa Cruz County. See page 73 for a map of the battalions. Within the Unit there are State and County paid stations, local government departments, fire protection districts, as well as numerous volunteer companies. Additionally, the Unit manages both schedule "A" and schedule "B" stations.

Paid Schedule "A" Stations

Belmont Station #17	320 Paul Scannell Dr., San Mateo, CA 94402
Cordilleras Station #18	300 Edmonds Rd., Redwood City, CA 94062
Skylonda Station #58	17290 Skyline Blvd. Woodside, CA 94062
Pescadero Station #59	1200 Pescadero Rd., Pescadero, CA 94060
Half Moon Bay Station #40	1191 Main Street, Half Moon Bay, CA 94019
El Granada Station #41	531 Obispo Road, El Granada, CA 94018
Point Montara Station #44	501 Stetson Street, Moss Beach, CA 94038
Pajaro Dunes Station #42	2661 Beach Rd., Watsonville, CA 95076
Pajaro Valley Station #45	562 Casserly Rd., Watsonville, CA 95076

Paid Schedule "B" Stations

Saratoga Summit Station #21	12900 Skyline Blvd., Los Gatos, CA 95033
Jamison Creek Station #23	16115 Jamison Creek Rd., Boulder Creek, CA 95006
Fall Creek Station #31	7272 Empire Grade Road, Bonny Doon, CA 95060
Big Creek Station #33	240 Swanton Rd., Davenport, CA 95017
Felton Station #39	6059 Highway 9, Felton, CA 95018
Soquel Station #43	4750 Soquel-San Jose Rd., Soquel, CA 95073

Burrell Station #47	25050 Highland Way, Los Gatos, CA 95033
Corralitos Station #49	120 Eureka Canyon Rd., Watsonville, CA 95076
Belmont Station #17	320 Paul Scannell Dr., San Mateo, CA 94402
Skylonda Station #58	17290 Skyline Blvd. Woodside, CA 94062
Pescadero Station #59	1200 Pescadero Rd., Pescadero, CA 94060

CDCR Conservation Camp

Ben Lomond Camp #80 13575 Empire Grade Rd., Santa Cruz, CA 95060

The next closest CDC Conservation Camp is Gabilan Conservation Camp in Soledad, approximately 40 miles south of Santa Cruz County, in the CAL FIRE San Benito-Monterey Unit.

Glenwood Fire Center

Glenwood Fire Center	400 Log Capin Ranch Rd, La Honda, CA 94020

Volunteer Stations /Equipment

South Skyline Volunteers, Company 29:

Saratoga Summit Station 21	12900 Skyline Blvd., Los Gatos, CA 95033
Las Cumbres Station 29	18271 Las Cumbres Road, Los Gatos, CA 95033

Bonny Doon Volunteers, Company 32:

Martin Road Station 32	975 Martin Road, Santa Cruz, CA 95060
McDermott Station 34	7276 Empire Grade Rd., Santa Cruz, CA 95060

Loma Prieta Volunteers, Company 36:

Loma Prieta Station 36	17445 Old Summit Road, Los Gatos, CA 95030
Burrell Station 47	25050 Highland Way, Los Gatos, CA 95033

Davenport Volunteers, Company 37:

Davenport Station 37	75 Marine View Ave., Davenport, CA 95017

Corralitos Volunteers, Company 41:

Corralitos Station 49	120 Eureka Canyon Rd., Corralitos, CA 95076

Kings Mountain, Company 56:

Kings Mountain Station 56	13889 Skyline Blvd., Woodside, CA 94062

La Honda, Company 57:

La Honda Station 57	8945 Highway 84, La Honda, CA 94020

Loma Mar Fire Brigade:

Loma Mar Fire Station 55	8879 Pescadero Creek Rd., Loma Mar CA 94021

Initial Attack Resources

The following CAL FIRE resources are available for initial attack (not accounting for local agency and adjacent Unit response):

(2) Dozers: D1741, D1743
(13) Engines: E1754, E1762, E1764, E1765, E1771, E1772, E1773, E1774, E1775, E1782, E1783, E1784, E1785
(5) Fire Crews: Ben Lomond Crew #1 through Crew #5. Crew levels vary and fully staffing all 5 crews is dependent on qualified inmate resources. Current staffing level is two crews.
(2) Glenwood Fire Crew: Firefighter 1 hand crew.
(1) CCC Crew: CAL FIRE CZU contracts with the California Conservation Corps (CCC) to provide a crew for fire response (IA and large incidents), paired with a CAL FIRE Captain. All crew go through an annual rating to be qualified as a type 1 crew.

The following CAL FIRE resources are held in reserve, to be used in times of need or while front line equipment is being repaired:

(2) Engines: E1791, E1793
(1) Camp Engine: E1799

The nearest air support is Alma Helitack in the Santa Clara Unit off of Highway 17, adjacent to Lexington Reservoir.

Aid agreements

There are agreements in place with cooperators and allied agencies to ensure adequate and appropriate responses are dispatched to provide for the mitigation of all types of emergencies occurring within the jurisdiction of CAL FIRE San Mateo – Santa Cruz Unit, including cooperative agreements and contracts.
Most local government jurisdictions which are enclosed within the boundaries of the CAL FIRE Unit have areas that are considered a Mutual Threat Zone (MTZ).

Dispatch Agreements

Currently, the Unit has no dispatch agreements.

Federal Areas

While not widely known, the San Mateo – Santa Cruz Unit does have Federal Responsibility Areas (FRA) within its borders. These include the BLM Cotoni-Coast Dairies National Monument, US Fish and Wildlife Refuges and Golden Gate National Recreation Area. Being the closest available resource, CAL FIRE provides fire protection under an Assistance by Hire (ABH) agreement in the BLM lands and in GGNRA properties within San Mateo and Santa Cruz counties. The total acreage of FRA within the Unit is approximately 19,175 acres, which is about 3% of the land area.

Local Government

While the majority of wildland fires occur in the SRA, there is potential for many different agencies in the county to be affected. Fires have occurred in Mutual Threat Zones (MTZ's), in areas near adjoining jurisdictions, or in the Local Responsibility Area (LRA). It is through mutual relationships with local government agencies that initial attack resources become larger and more effective. The following local government agencies are typically available and involved in suppressing wildland fires:

Santa Cruz County

- Central Fire District of Santa Cruz County
  https://www.centralfiresc.org/
- Scotts Valley Fire Protection District
  https://www.scottsvalleyfire.com
- Santa Cruz City Fire Department (City of Santa Cruz & UCSC)
  http://www.cityofsantacruz.com/government/city-departments/fire-department
- Watsonville Fire Department
  http://cityofwatsonville.org/430/fire-department
- Boulder Creek Fire Protection District
  https://bcfd.com
- Felton Fire Protection District
  https://feltonfire.com
- Ben Lomond Fire Protection District
  http://www.benlomondfd.com/
- Zayante Fire Protection District
  https://zayantefire.com

- Pajaro Valley Fire District
  https://www.pajarovalleyfire.com/
- Santa Cruz County Fire Department (Unincorporated County)
  https://santacruzcountyfire.com

San Mateo County

- South San Francisco Fire Department
  https://www.ssf.net/departments/fire
- North County Fire Authority (Brisbane, Daly City, & Pacifica)
  https://northcountyfire.org
- Central County Fire Department (Burlingame, Hillsborough, & Millbrae)
  https://ccfd.org
- Colma Fire Protection District
  https://www.colmafire.org
- San Bruno Fire Department
  https://www.sanbruno.ca.gov/294/Fire
- Redwood City Fire Department (Redwood City/San Carlos/North Fair Oaks)
  http://www.redwoodcity.org/departments/fire-department
- San Mateo Consolidated Fire Department (Belmont, Foster City, & San Mateo)
  https://www.smcfire.org
- San Mateo County Fire Department (Unincorporated County & Highlands)
  https://www.cfsfire.org
- Woodside Fire Protection District
  https://www.woodsidefire.org
- Coastside Fire Protection District
  https://www.coastsidefire.org/

SECTION II: COLLABORATION

COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

The Unit is continually engaging the community, local government, and other stakeholders to address the wildfire issues. CAL FIRE is typically involved in the recommendation and development of pre-fire projects in both counties independently and in advisory roles. CAL FIRE participates in Fire Safe programs as well as other ad hoc fire prevention groups seeking assistance. In 2008, CAL FIRE, with the assistance of the Resource Conservation Districts of both San Mateo and Santa Cruz Counties and from a grant from the US Fish and Wildlife Service (USFWS) began development of a CWPP. The CWPP was completed in 2010 and is a living document (**updated 2014, 2018, & 2022**). The information obtained during the Collaborative efforts undertaken in the development of the CWPP applies to this document as well.

As many residents of San Mateo and Santa Cruz Counties have experienced firsthand, wildfire can threaten lives, property, community assets, and natural resources. There are preventive measures that can be taken to help protect communities from the devastating losses that can result from wildfire. However, individual implementation of such measures can be prohibitive in terms of both cost and time, especially when neighboring properties do not participate. In this respect, the Strategic Fire Plan and Community Wildfire Protection Plan (CWPP) can be very empowering tools, providing communities with the opportunity to influence where and how fuel reduction projects are implemented.

CWPP community outreach, Zayante (2009).

Communities with CWPPs in place are given priority for funding of hazardous fuels reduction projects. Funding is made available primarily through the California Fire Safe Council's grant clearinghouse that combines federal and state funding sources into one place. Organizations such as Fire Safe councils and the RCD's regularly apply for grant funding on behalf of the community. This plan, in conjunction with the approved CWPP creates the opportunity to address the wildfire problem across the two counties.

Early stages of development of the CWPP for San Mateo and Santa Cruz Counties began in 2008. After securing limited funding, a core Planning Group convened in June of 2008 to discuss the feasibility for developing a CWPP for Santa Cruz and San Mateo Counties. This Group discussed the potential project scope and a rough timeline for the process of developing a CWPP. The Planning Group included the following participants:

- CAL FIRE
- Resource Conservation District of Santa Cruz County (RCDSCC)
- San Mateo Resource Conservation District (SMRCD)
- US Fish and Wildlife Service (USFWS)

Each time a CWPP is created in a given locale, a unique and new process ensues for that region and it always involves a steep learning curve for each community. Rather than recreating the wheel, from July to November of 2008, the Planning group gathered and reviewed available guidance documents and talked to people in other areas who had previously developed CWPPs in order to gain from lessons they learned.

Beginning in December of 2008, representatives of CAL FIRE and the RCDs conducted preliminary outreach to Fire Districts to compile existing wildfire prevention information. Through individual meetings with local Fire Districts, this effort harnessed local fire professionals' knowledge in both counties about high-risk areas, WUI boundaries, and priority projects. CAL FIRE compiled this information and represented it graphically on maps.

CAL FIRE and the RCDs solicited community input by holding several public meetings in order to create a draft CWPP. State Parks, the Bureau of Land Management (BLM) and the Central Coast Fire Learning Network were invited to advise on development of

a process for public input. In May 2009, two public meetings were convened, one in each county, to introduce community members to the CWPP process, solicit self-identified members for a Stakeholder Advisory Committee and conduct breakout sessions to gather a preliminary round of feedback.

Throughout the process of public feedback, from May 2009 until March 2010, community members interested in following the CWPP process online have been able to access updates and information about how to provide feedback through the CWPP blog (http://wildfireplan.blogspot.com).

In the middle part of 2010, the Santa Cruz County - San Mateo County Community Wildfire Protection Plan was adopted by the respective Board of Supervisors for each County. Much of the information contained in the approved CWPP is related to and should be used in conjunction with the development of the Strategic Fire Plan. A link to the approved CWPP can be found here: https://santacruzcountyfire.com/fire-resources/cwpp/

The update process for the CWPP that occurred in 2014, 2018, & 2022 involved the following stakeholders: CAL FIRE, Resource Conservation District of Santa Cruz County (RCDSCC), San Mateo Resource Conservation District (SMRCD), local Fire Safe Councils (Fire Safe San Mateo County, Bonny Doon Fire Safe Council, South Skyline Fire Safe Council, & Fire Safe Council of Santa Cruz County), other fire departments & districts within San Mateo & Santa Cruz counties. The process was designed to re-identify communities at risk, target hazards, and potential project locations. After all the stakeholders had given their input on updates, the document was sent to the Fire Chiefs Associations of the two respective counties for final approval, which occurred most recently in November 2022. Any future updates will follow the same process.

Over the past couple of years, several small community groups have successfully worked through the Firewise USA program created by NFPA to form Firewise Communities. These communities have completed an assessment of their fire preparedness, taken appropriate measures to become more fire resistant and agree to maintain this status, all as a grassroots effort. There are now (2024) seven Firewise Communities in San Mateo County and 57 in Santa Cruz County. More are being added monthly. While the local unit has not been able to take a leadership roll in this effort, we are pleased with the process and hope that it continues to grow in the unit.

SECTION III: VALUES

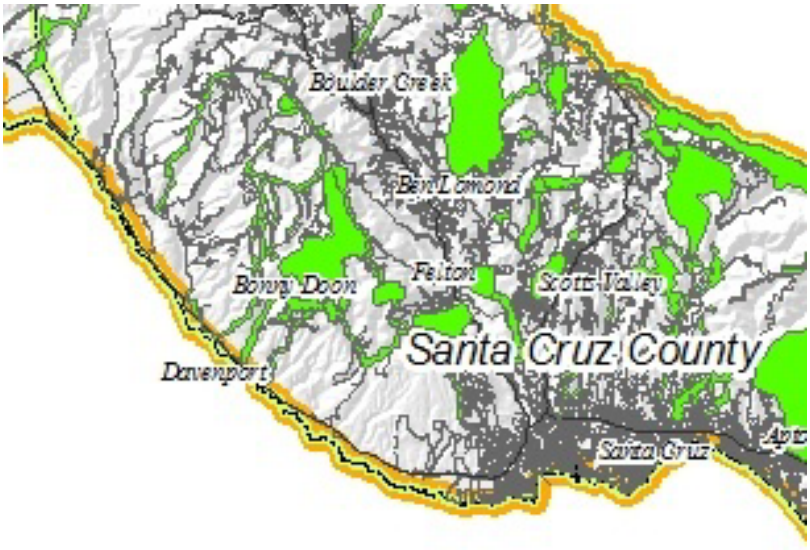
A: VALUES

During the preparation of the 2010 San Mateo County – Santa Cruz County CWPP, stakeholders were invited to identify assets at risk. Stakeholders provided specific assets at risk in each county. Due to the large size of the lists, they have not been included here. For complete lists of specific assets at risk for each county, please refer to the 2010 San Mateo County – Santa Cruz County CWPP (**updated 2014, 2018, & 2022** found at the website below).

https://santacruzcountyfire.com/wp-content/uploads/2023/03/CWPP-Santa-Cruz-San-Mateo-2022-update.pdf

In general terms, assets at risk have been divided into communities/neighborhoods, environmental, and other (non-environmental). It was determined most major assets would fall within one of these three categories. Communities and neighborhoods were given the highest priority because they are most often associated with life and property. Also considered high priority assets at risk are both environmental and non-environmental assets. This includes public facilities such as parks, wildlife, open space, watershed, and includes uninhabited public facilities in the wildland.

Following stakeholder meetings, assets at risk were identified throughout the plan area. Based on priority ranking, high priority areas were identified and mapped.



Excerpt of CWPP map showing high priority project areas (in green). See Figure M, pg 77

B: COMMUNITIES

Communities at risk identified on the California fire alliance website do not accurately represent the number at risk from wildfire. This list was created with the intent of identifying communities adjacent to federal lands. In Santa Cruz County and San Mateo County, there are few federal properties and no US Forest Service holdings. There are, however, numerous communities threatened by the possibility of wildfire. Included below are the communities identified by the California Fire Alliance as well as those identified during the development of the San Mateo County and Santa Cruz County CWPP and listed on the Office of the State Fire Marshal website: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/pre-fire-planning

Communities at risk in San Mateo County:

- Belmont
- Brisbane
- Burlingame
- Colma City
- Daly City
- El Granada
- Emerald Lake Hills
- Half Moon Bay
- Highlands
- Hillsborough
- La Honda
- Menlo Park
- Montara
- Moss Beach
- Pacifica
- Portola Valley
- Redwood City
- San Carlos
- San Mateo
- South San Francisco
- West Menlo Park
- Woodside

Communities at risk in Santa Cruz County:

- Aptos
- Aptos Hills - Larkin Valley
- Ben Lomond
- Bonny Doon
- Boulder Creek
- Capitola
- Corralitos
- Davenport
- Day Valley
- Felton
- Freedom
- Interlaken
- Opal cliffs
- Rio del Mar
- Santa Cruz
- Scotts Valley
- Soquel
- Twin Lakes
- Watsonville

In addition to those communities identified on the federal and state list, there are numerous other communities identified by stakeholders during the preparation of the CWPP. Many of these communities are unincorporated developments and sometimes neighborhoods within the WUI. Their names, although not cities, are known to fire agencies throughout the plan area (refer to table on next page).

San Mateo County - Communities at Risk	
Alpine Creek Tract - Alpine Rd/Apline Oaks Rd	Los Trancos Woods
Barranca Knolls	Palomar Park
Big Canyon Open Space Park - San Carlos	Portola Heights
Butano Park / Canyon Road	Princeton (by the Sea)
Cuesta Subdivision - La Honda	Redwood Terrace/Troutmere - west of La Honda
Dearborn Park - Pescadero	Rocky Creek - Heacocks - Crazy Pete's Roads Community
Devonshire Canyon	San Gregorio
Eaton Park - San Carlos	San Juan Canyon - Belmont
La Honda/Redwood Properties	Skylonda
Ladera	Vista Verde
Loma Mar	Water Dog Lake - Belmont
Middleton Tract	Whitehouse Creek
Miramar	
Santa Cruz County - Communities at Risk	
Bear Creek Canyon	Loma Prieta
Ben Lomond Camp	Lompico Canyon
Braemoor	Mount Hermon
Branciforte corridor	Mount Madonna
Brookdale	Oak Ridge
Calabassas Road	Old Pilkington Road corridor - Branciforte
Deer Creek	Olive Springs community
Empire Grade corridor	Paradise Park
Fairway Drive community - Soquel	Pine Ridge
Fern Flat	Porter Gulch community
Glen Canyon Road corridor - Branciforte	Redwood Drive / Monte Toyon - Aptos
Glen Haven corridor - Soquel	Rodeo Gulch community
Glenwood Acres - Northridge Dr, Scotts Valley	Smith Road corridor
Graham Hill Road corridor	Swanton
Harmon Gulch	Trabing
Indian Trails	Trout Gulch
La Selva Beach	Valencia Road - Aptos
Langley Hill / Rapley Ranch	Vienna Woods - Aptos
Las Cumbres	Weston Road corridor
Laurel Glen community	Whalebone Gulch
Lockhart Gulch / Mission Springs	White Road
Lockheed area	Zayante

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION

The Fire Prevention Program is made up of the Prevention Bureau overseeing Fire related public education and law enforcement, the Fire Marshal's Office who oversees building code compliance issues, and the Pre-Fire Engineering Program, who works with Resource Management and the Vegetation Management Program Manager. Each of these programs works towards a common goal of reducing ignitions. It is the goal of the prevention program that with the combined efforts of each program, through enforcement, education, and implementation of projects, ignitions will be reduced.

Reducing the number of ignitions is a goal; however, fires will always occur. The Unit's objective is to keep these ignitions and subsequent fires to a manageable size, minimizing negative impacts to people and their property. There are a variety of methods for this to be accomplished. The CZU prevention program aims to reduce ignitions through the use of education, defensible space inspections, fuel reduction, and enforcement activities. The Unit plans on educating numerous residents throughout each county through LE-100 inspections and public contacts. Through the development of the CWPP and with numerous collaborators, fuel reduction projects are almost always in progress throughout the Unit. Increased educational efforts, coupled with fuel reduction projects in high priority areas are intended to reduce the number of ignitions.

The Unit acknowledges the state-wide directive we have been given from the Director of CAL FIRE to increase the number of acres both mechanically treated and broadcast burned using our Vegetation Management Program. As such, the Unit is constantly looking for vegetation management projects that would meet the goal of protecting the communities at risk. This can be accomplished by partnering with State and Local government agencies, non-Government agencies, Fire Safe Councils, and private landowners to complete vegetation fuels reduction projects that help protect communities in the SRA. The priority of any potential projects is filtered through the CWPP to ensure work is being done in areas that stakeholders have identified as high priority.

ENGINEERING & STRUCTURE IGNITABILITY

Santa Cruz County

Santa Cruz County Fire Marshal's Office provides the fire prevention services for areas outside of established fire districts within Santa Cruz County and for the Pajaro Valley Fire Protection District. Santa Cruz County is known to have a pro-active fire prevention program in regard to new and existing building construction. Santa Cruz County has completed adoption of the 2019 California Fire and Building codes (Title 24 parts 2, 2.5 and 9) with local amendments. The local amendments detail the requirements for roads, driveways, water supply, and the local fire sprinkler requirement for all new construction (in place since 1989).

Road Construction

Fire Apparatus access roads shall have an unobstructed width of not less than 20 feet except for approved security gates in accordance with Section 503.6 of Title 24, and an unobstructed vertical clearance of not less than 13 feet 6 inches. There are exceptions, contrary to State Fire Code, outside of the Urban Services Line as established by the County of Santa Cruz. In these locations access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures, and 12 feet for an access road or driveway serving two or fewer habitable structures. Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot-wide all-weather surface access road with 12-foot wide by 35-foot-long turnouts located approximately every 500 feet may be provided with the approval of the fire code official.

Title 19 of the California Administrative Code requires that access roads from every state governed building to a public street shall be all-weather hard-surface (suitable for use by fire apparatus) roadway not less than 20 feet in width. Such roadway shall be unobstructed and maintained only as access to the public street. Vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved by the fire code official. It is important to note this is for new construction and that many roads, both public and private, in the county do not comply with the standard.

Water Supply

In Santa Cruz County, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings which are constructed or moved into or within the jurisdiction. The minimum water supply for all new dwellings within the SRA shall be capable of supplying a flow of 500 gallons per minute for 20 minutes (10,000 gallons) for each parcel. Privately owned water that is not supplied by a licensed water purveyor shall: (1) serve no more than two dwellings and no more than 10,000 square feet of habitable dwelling space, and (2) be provided pursuant to a recorded covenant that runs with the land if the water supply originates from another parcel. If a water purveyor supplies the water, the applicant must submit with the building plan written verification from the licensed purveyor that the water supply meets the flow requirement.

Fire Sprinklers

An automatic fire sprinkler system shall be provided in all new occupancies as defined in Chapter 3 of the California Building Code, regardless of type of construction and/or floor area, unless otherwise pre-empted by the California Health and Safety Code. Any occupancy not specifically mentioned shall be included in the group that it most nearly resembles based on the proposed life and fire hazard. Private garages, carports, sheds not more than 1,000 square feet of total floor area shall not require fire sprinklers where they are detached and separate from other structures and provided with exterior wall and opening protection as per the California Building Code. Sheds exceeding 1,000 square feet, but not exceeding 3,000 square feet shall not require fire sprinklers at the discretion of the fire chief when the applicant demonstrates that the applicant's proposal does not increase the fire hazard or fire load. For existing structures an automatic sprinkler system shall be provided when, after the effective date of the fire code, a building permit is issued to allow additions to be made to existing structures which either: already are six thousand (6,000) square feet or greater in total floor area; or when additions are made to a structure which contains an existing fire sprinkler system, the fire sprinkler system shall be extended, thus creating fire sprinkler protection throughout the entire structure.

Summary

These requirements are placed on new construction and some remodels that are reviewed by the Santa Cruz County Fire Marshal's Office during the plan review phase of building permitting. The Santa Cruz County Building department reviews plans for the fire resistive construction requirements found in the fire and building codes (previously Chapter 7a UWIC).

Protection planning is reviewed during the discretionary and building permitting process by both the Santa Cruz County Fire Marshal's office and the building department. Codes found in local amendments to the California fire and building codes and in the Santa Cruz County General Plan provide guidance and requirements for fire and life safety.

Code enforcement for new and existing construction is provided for in a joint effort by the Fire Marshal's office and the Santa Cruz County code enforcement department located within the building department.

All new construction and remodels over 500 square feet that are reviewed by the Santa Cruz County Fire Marshal's office have holds that are placed on the project that can only be removed by thorough inspections of the project during multiple phases of the construction. Most projects that go through the permitting process receive a pre-site inspection prior to construction. All projects are inspected during rough and final construction for fire sprinklers. Inspections are also made prior to the final sign-off the roads and driveways, address numbers, smoke detectors, water supply, and vegetation clearance around the structure (PRC §4291).

Pre-plans for fire operations are conducted, at the local level, by the fire station personnel that will respond to an incident. Pre-plans are done for commercial occupancies, schools, and larger residential facilities. Pre-plans are sometimes conducted in conjunction with business inspections or on a rotating basis throughout the year. Starting in 2021, the Santa Cruz County Fire Marshal's office will be conducting all the mandated Fire and Life Safety inspections, as required by the State Fire Marshal's Office and Health and Safety Code.

San Mateo County

The Fire Marshal's Office in the CZU San Mateo Division consists of two offices responsible for fire prevention services in all unincorporated San Mateo County and the

City of Half Moon Bay. Both offices are currently staffed with three personnel each and overseen by one Fire Marshal. San Mateo County and the Coastside Fire Protection District (CFPD) both have completed adoption of the 2022 California Fire and Building codes (Title 24 parts 2, 2.5 and 9) with local amendments. The local amendments detail the requirements for roads, driveways, water supply, and the local fire sprinkler requirement for all new construction.

WUI Deputy Fire Marshal

Starting in 2019, the San Mateo County Fire Marshal's Office added a specialized position dedicated to the Wildland Urban Interface (WUI). This position is primarily tasked with community risk reduction efforts throughout the County. The WUI Deputy Fire Marshal position involves investigating vegetation complaints, assisting communities with emergency evacuation plans, conducting public presentations related to wildland fire safety and home-hardening, and coordinating vegetation management projects with multiple agencies.

Coastside Vegetation Management Programs

The Coastside Fire Marshal's Office has implemented both Weed Abatement and Vegetation Abatement programs to aid in reducing fire hazards throughout the community. The goal of these programs is to identify and reduce fire hazards on unimproved parcels throughout the Coastside Fire Protection District. Parcels are identified as requiring abatement, and the parcel owners are sent a notice to abate weeds/vegetation. After the allotted time frame for compliance, CFPD hires a contractor to perform the abatement, and all costs are recuperated through a tax lien process. These programs are approved by the Board of Directors annually and have been in place for several years. The Fire Marshal's Office works as a consultant to various vegetation management projects on the coast, cooperating with agencies such as the Resource Conservation District on projects like residential vegetation abatement programs and strategic fuel breaks.

County Vegetation Management Forestry Assistant II

San Mateo County has funded a position for a Forestry Assistant II that assists in Fuel Reduction Projects around the unincorporated County area in the County Fire jurisdiction. This position has been key to maintaining an active Fuel Reduction program in the county including Chipper support, project layout, project crew supervision.

Fire Sprinklers

Fire sprinklers are required in all new construction built after the 2007 code adoption cycle. Additionally, sprinkler systems will be required if an existing residential structure undergoes a significant addition or remodel with the valuation of 50% or more of the existing structure. All new fire sprinkler systems undergo a minimum of three inspections to ensure the system is robust and built to code.

Water Supply

San Mateo County contains many homes and businesses which are rural and relatively far from urban areas. Water supply is key for fire personnel to perform effective suppression operations; therefore, water supply is a major consideration during the plan review process for new construction. Reliable water supply is generally required 400 feet from any new structure and must flow a minimum of 500 gallons per minute at 20 pounder per square inch for 30 minutes. If there are no domestic water lines, water storage for one- and two-family dwellings up to 3,600 ft^2 shall be 7,500 gallons reserved for Fire, in addition to any domestic use. If larger than 3,600 ft^2 single family dwelling, use NFPA 1142.

Fire Department Access

Access to all new and improved structures must meet standards for length, width, and grading in order for fire engines to operate safely and effectively. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of Section 503 of the California Fire Code and local standards and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around fire apparatus. Turn-around areas for fire apparatus must comply with CFC 2022 Appendix D.

INFORMATION AND EDUCATION

Wildfire Prevention Through Education and Inspections

Education is one of the most effective tools for reducing wildfire ignitions and large fires. CAL FIRE integrates education across all levels of its department, from firefighters to office personnel, aiming to inform the public and cooperating agencies through media, printed materials, and direct community engagement. Education efforts occur both informally—through casual interactions at stations and in the community—and formally at public events, community meetings, defensible space inspections, incident scenes, and law enforcement interactions.

Formal education initiatives allow CAL FIRE to collaborate with county and local agencies to deliver standardized fire safety messages and resources. The goal is to enhance public understanding of wildfire risks and provide actionable steps, such as removing flammable vegetation and creating evacuation plans.

Each year, CAL FIRE personnel and local government agencies participate in various community events, including parades, fairs, festivals, community picnics, and school programs, where they distribute fire prevention materials. CAL FIRE resources are expected to attend over 30 such events annually.

Defensible Space Inspections

Property owners in State Responsibility Areas (SRA) must comply with Public Resource Code (PRC) §4291, requiring them to maintain a 100-foot clearance of flammable vegetation around structures or up to the property line. In both Santa Cruz and San Mateo counties, some local and state fire departments offer home defensible space inspections, typically upon request, depending on department policies.

Before fire season, CAL FIRE battalions identify priority areas for inspections, aiming to cover all SRA residences in the Wildland Urban Interface (WUI) every three to five years. To expand inspection efforts, CZU hires Defensible Space Inspectors (DSIs) under the Unit Prevention Bureau. These inspectors work with both Santa Cruz and San Mateo local fire jurisdictions within the SRA to conduct inspections.

During physical inspections, findings are documented using both paper records and the electronic LE-100 form, which records compliance with PRC §4291. If a property fails the inspection, the owner is given time to address the issue. If a second inspection still results in non-compliance, the case is escalated to the Prevention Bureau, which warns

the owner of possible legal action. In nearly all cases, homeowners comply before law enforcement steps in.

With the assistance of the Office of the State Fire Marshal (OSFM), CZU successfully hosted its first Qualified Entities training in July 2024 in Santa Cruz County. This training provided valuable instruction to approximately fifty individuals who were members of FireSafe Councils and Firewise groups within the county.

Over the course of two days, participants learned how to conduct defensible space assessments and input data using the Field Maps App. The Prevention Office is actively collaborating with members of FireSafe Councils and Firewise groups to continue defensible space assessments training, further strengthening the community's wildfire preparedness efforts.

Each year, the Unit distributes educational materials through various methods, including direct mail, defensible space inspections, and public events. Some materials, like *Ready, Set, Go!*, are provided by CAL FIRE Headquarters in Sacramento, while others are developed locally through partnerships.

For example, the *Living with Fire* guides for Santa Cruz and San Mateo counties were created in collaboration with CAL FIRE, Fire Safe San Mateo, and the Resource Conservation District (RCD) of Santa Cruz County to provide region-specific fire safety information.

Another key resource is the *CAL FIRE San Mateo/Santa Cruz Unit – Are You Prepared?* pamphlet, which has been distributed to residents in the Wildland-Urban Interface (WUI) since 2008. This easily accessible handout provides essential wildfire preparedness information.

In 2011, a new trifold brochure, *Wildfire – Are You Prepared?*, was developed through a partnership between the RCD of Santa Cruz, CAL FIRE, and the Aptos-La Selva Fire Protection District. This material focuses on defensible space, offering guidance on clearing vegetation and selecting fire-resistant plants. It also includes a fire safety checklist and agency-specific contact information.

Additionally, the Unit, in collaboration with local agencies and the RCD, publishes a 20-page guide called *Living with Fire – in Santa Cruz County* and *Living with Fire – in San Mateo County: A Guide for Homeowners*. Updated every two years, this comprehensive

document covers key topics such as defensible space, fire-safe landscaping, and available resources for homeowners.

By combining education, inspections, and enforcement, CAL FIRE strives to improve fire preparedness and reduce wildfire risks across communities.

Some of the printed materials provided to the community.

B. VEGETATION MANAGEMENT

The Unit Vegetation Management Program (VMP) is heavily involved in all aspects of project planning, development, and implementation. The Vegetation Management Program collaborates with Fire Safe councils, community groups and cooperating agencies. In recent years, the VMP program has developed fuel reduction projects utilizing both mechanical and prescribed fire. The CAL FIRE Vegetation Management Program performs as both lead and in advisory roles in the development of fuels management throughout the Unit. There are a variety of methods of treatment prescribed whenever a project is developed. The type of treatment should be tailored to each individual project. Appendix D – General Recommendations describes the types of treatments typically prescribed.

Henry Cowell VMP Burn (2018)

<u>Resource Management</u>

Within CZU, Resource Management is headed by a Division Chief/Forester II and consists of a VMP Forester I in both San Mateo and Santa Cruz Counties, a forest practice inspector Forester I, a Forestry Assistant II in each of the counties, the Pre-Fire Engineering position, and an Environmental Scientist.

Forested areas occupy a large percentage of land area within the San Mateo - Santa Cruz Unit. The Unit Resource Management staff is tasked by state statute to enforce the California Forest Practice Act and Forest Practice Rules on private timberland in the State of California. Santa Cruz and San Mateo Counties are within a special rules district, where the only allowable management practice is single tree selection. CAL FIRE and other agencies involved in the review of harvesting permits continually look for ways to improve fire safety, hazard reduction, public safety, vehicular access, water sources, timing of operations, and benefits to wildlife. Managed timberland constitutes an active and critical area for fuels management. Lands utilized for timber management are typically traversed with roads and trails, and their use can be critical during fire suppression operations. During fires such as the Summit and Lockheed, roads primarily maintained for timber management were also used by CAL FIRE for fire-fighting operations. Throughout the year, the Unit reviews Timber Harvest Plans and Non-industrial Timber Management Plans, and does periodic inspection of the lands that have these plans. Additionally, the CZU Unit also handles the processing of any local Less than 3-acre Conversion Permits, as well as inspecting for 150-foot Fire Hazard Reduction Permits and Emergency Notice of Timber Operations. As part of the permits, operators are required to comply with hazard (slash) reduction rules next to public roads, permitted structures, and throughout the harvest area. Operators are required to maintain firefighting tools during operations within fire season. On average, the Unit reviews for approval an average of two thousand plus acres per year of timber harvesting plans.

Suppression Repair

The Unit has a responsibility to repair damage incurred on the landscape during suppression activities, while at the same time attempt to reduce any increased fire hazard those suppression activities may have created. There are (6) Registered Professional Foresters (RPF's) on staff in CZU, each trained and experienced in suppression repair. Unit foresters work with other state agencies, large landowners, and the community to complete suppression repair efficiently and to high standards. The large fires that have occurred in Santa Cruz County within the last 15 years have been in forested and chaparral landscapes, and so suppression repair activities are completed with future fire prevention in mind.

Due to high fuel loading and, in some locations, coupled with reduced fuel consumption, many areas are left with high amounts of unburned fuel. Unless all fuels are consumed, there is typically fuel loading found adjacent to roads, dozer trails, and structures where fire crews or equipment have modified the landscape for fire suppression.

Following control of the fire, the areas of increased fuel loading need to be addressed. This is done through a variety of methods including: Hand crew, lop and scatter, and pile burning (as weather permits) or mastication. The Group Supervisor, usually a local RPF, will complete a plan of action and oversee the completion of suppression repair activities.

Documentation of Vegetation Management

In order to help quantify work done and provide a platform for the agency to visualize where work has occurred, CAL FIRE uses the CALFIRE Management Activity Project Planning and Event Reporter (CalMAPPER) online program to track work done within the Unit. This program creates a data base, internal to CAL FIRE, that tracks both acres of land treated and hours spent on the project. It allows the Unit to track grant funding spent and links all projects to a GIS referenced map. The program is linked to CAL FIRE's eFC-33 program in order to automatically load the hours and type of work done on projects on a daily basis. By being GIS referenced, it allows fire planning managers a mapping resource to see where work has been done for potential fire breaks. All CAL FIRE Units are mandated to input vegetation management projects as well as California Forest Improvement Projects (CFIP) in the CalMAPPER program. Since 2021, the public can view portions of the information collected in the CalMAPPER program. The online web viewer can be accessed at the following URL: https://experience.arcgis.com/experience/dfb8672f201145a4a8bf04cd9d3e37c1/page/Overview/

SECTION V: PRE- FIRE MANAGEMENT TACTICS

DIVISION / BATTALION / PROGRAM PLANS

Figure A: Unit Map

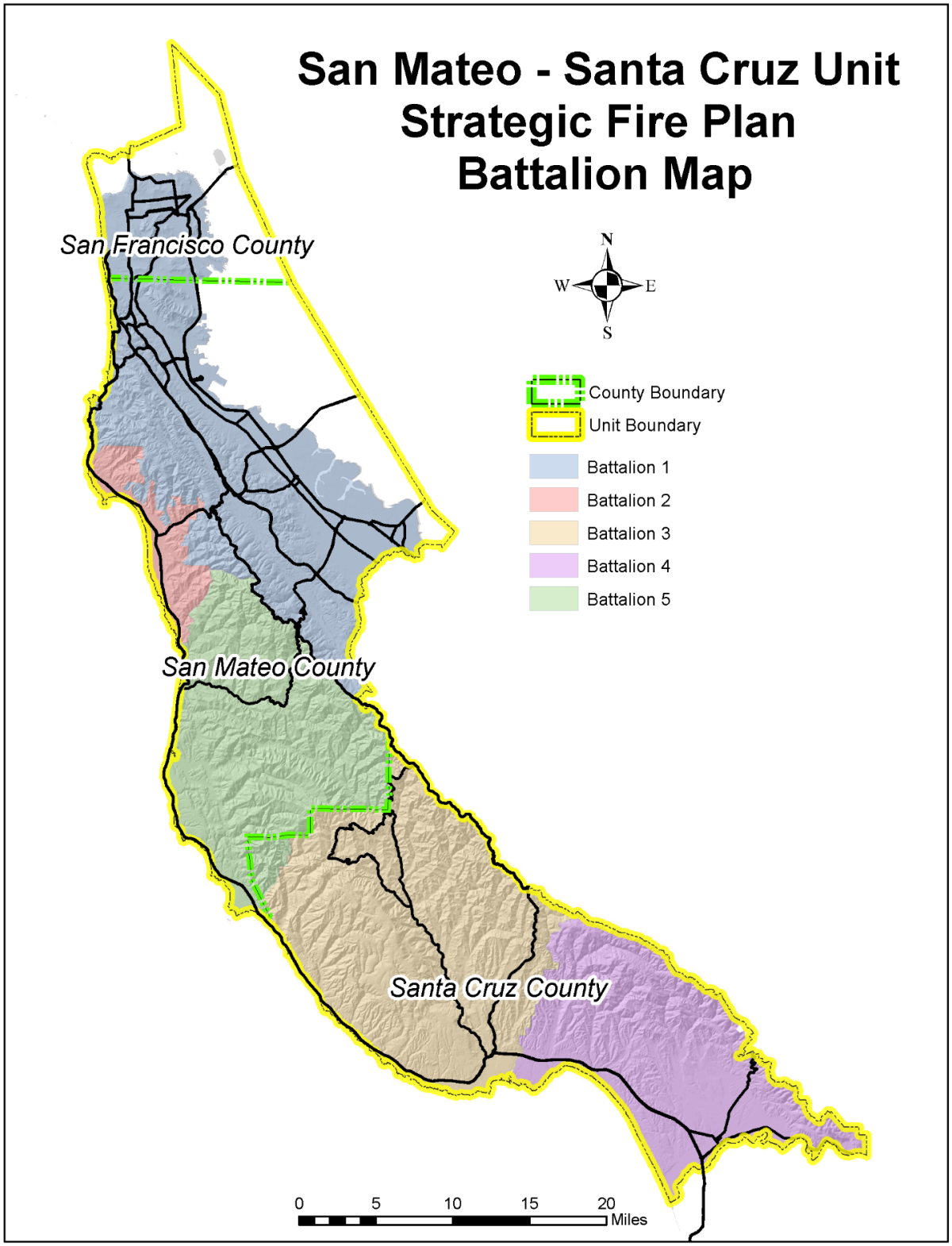


Figure B: Unit Map

Battalion I

Battalion 1 is in the San Mateo Division and consists of Station 17 & 18. While Station 18 is only schedule A, Station 17 is staffed by both schedule A and schedule B personnel.

This battalion stretches from the Santa Clara County line north along the Highway 280 and Highway 35 corridors to just south of the San Francisco City limits. It sits between two of the most densely populated cities in the nation, those being San Francisco and the City of San Jose. The infamous San Andreas earthquake fault bisects the western portion from the eastern portions of the Battalion. See page 37, Figure C for a map of Battalion 1.

The geography within the battalion is very diverse. Vegetation ranges from rolling grass and brush intermix in the valley and foothill locations to heavily forested coastal redwoods. The fire weather conditions are also very diverse throughout the battalion. The temperature and humidity values within the battalion typically fluctuate widely. The northern portions of the battalion are usually under a coastal influence with mild temperatures in the mid 60's, while just 10 miles south the temperature may be in the mid 80's to low 90's. The Battalion has many areas of Wildland Urban Interface (WUI) and most fires will threaten structures within the initial attack period. The Hwy 280 corridor and San Bruno Mountain area continue to be the locations with the most fire activity.

Cooperators: CAL FIRE / San Mateo County Fire Department, Fire Safe San Mateo, San Francisco Water Department, Mid-Peninsula Regional Open Space District, San Mateo County Parks, Woodside Fire Protection District, Redwood City Fire Department, South San Francisco Fire Department, North County Fire Authority, Central County Fire Department, Menlo Park Fire District, and Colma Fire Department.

Currently, CAL FIRE administers San Mateo County Fire Department, which is in a Class 1 rating in CSA#1 due to its ISO rating of 1. This is in part due to excellent response times, hydrant capabilities, pumping capabilities, available work force, and diverse responses from county/state equipment typing (engines, ladder trucks, breathing support, and rescues).

Service levels in CAL FIRE/San Mateo County Fire Department have been steadily increasing with the addition of truck company service in 2018, a 2000-gallon water tender at the Skylonda Fire Station, Emergency Response Vehicles (ERV) at the Skylonda, Pescadero, and Cordilleras fire stations. The ERV vehicles are diversely equipped and designed to transport patients from hard to access locations, such as beaches and remote trails, to conventional ambulance transport on the pavement. Older fire apparatus has been cycled out of daily operations at the Pescadero & Skylonda stations, which received new type 1 fire engines in 2022. The Belmont & Cordilleras stations have new engines being built to replace their older equipment, with delivery expected in 2025. A medium rescue apparatus is being built and will be housed at Belmont station when complete in 2024. Additionally, a new type-3 fire engine was put into service in 2020 and housed at Cordilleras station. A second, new type-3 fire engine has been ordered, which will be housed at Belmont station. A new radio repeater site, tone 15, on the north peak of Montara Mountain was installed in 2020. This improves communication in the north end of the Battalion.

A complete tear-down and rebuild of the Skylonda Fire Station was completed in 2022 and plans for similar construction at Pescadero Fire Station and Belmont Fire Station are in process.

Battalion personnel participate in community outreach programs including MDA's Fill the Boot campaign, Smokey Bear school presentations, station tours for Boy Scouts of America and local schools, sponsoring the San Mateo Explorer program, Touch-a-Truck pre-school event, Career Day at the County Receiving Facility, and Disaster Preparedness Day (a community out-reach day to educate and better prepare the public for natural disasters). In order to help local residents prepare for wildfire, an evacuation mailer was sent to all residents within the San Mateo County Fire jurisdiction in 2021.

The Battalion works closely with the community of Highlands. Among the activities that the Highlands community sponsors, personnel have participated in their Walk-a-Jog Fundraiser, Easter Event, July Fireworks and Parade, December Holiday Event, and the Highland Rec Staff BBQ. Battalion personnel help train the Highland CERT.

The Battalion works with local colleges as well. The San Francisco State University interior design students visited Belmont Station to learn about fire safety issues and

burn a variety of fabric types as part of learning about material flammability. The Belmont Station also plays host to the Community College of San Francisco students doing their Wildland Days training and assist with wildland fire instruction for local fire academies. Since the addition of a truck at Belmont Station 17, that station hosts two-week long truck academies once a year, which are attended by both CAL FIRE and local government participants.

The Battalion has identified four primary ways to assist in Pre-Fire Management. It continues to actively inspect properties for vegetation clearance around structures, as required by Public Resource Code §4291, in the areas identified by the Battalion Chiefs as a priority. The personnel assist in identifying areas for potential fuel breaks or fuel reduction projects and pass that information on to Unit Foresters. This has led to a VMP project that will treat up to 1,100 acres of vegetation on SFPUC property as well as an ongoing VMP project that helps maintain the health of dam faces on SFPUC property. The Battalion participates in the hands-on work of ongoing fuel reduction projects. The personnel of the Battalion will continue to engage the public at community outreach activities, many of which have been mentioned in the page above.

Battalion 1 was the location of one of the 2019 Governor's "45-day projects". The Kings Mountain Roadside Shaded Fuel Break treated 90 acres of vegetation, within Huddart County Park, that helps protect the access and egress for residents from fires on the eastern side of the Santa Cruz mountains.

Battalion 1 currently has 5 AlertCalifornia Wildfire Cameras operational within its boundaries. These cameras were installed to provided real time intelligence on wildfires or potential wildfires in the area. Numerous "smokes" are reported to our ECC and this camera system allows them to confirm location and potentially significance of the incident. This can allow the ECC to add additional resources to an initial attack if conditions on the cameras indicate a need. An additional 3 more sites are proposed for this battalion's area.

Figure C: Battalion 1 Map

San Mateo-Santa Cruz Unit Strategic Fire Plan
Battalion 1 Map

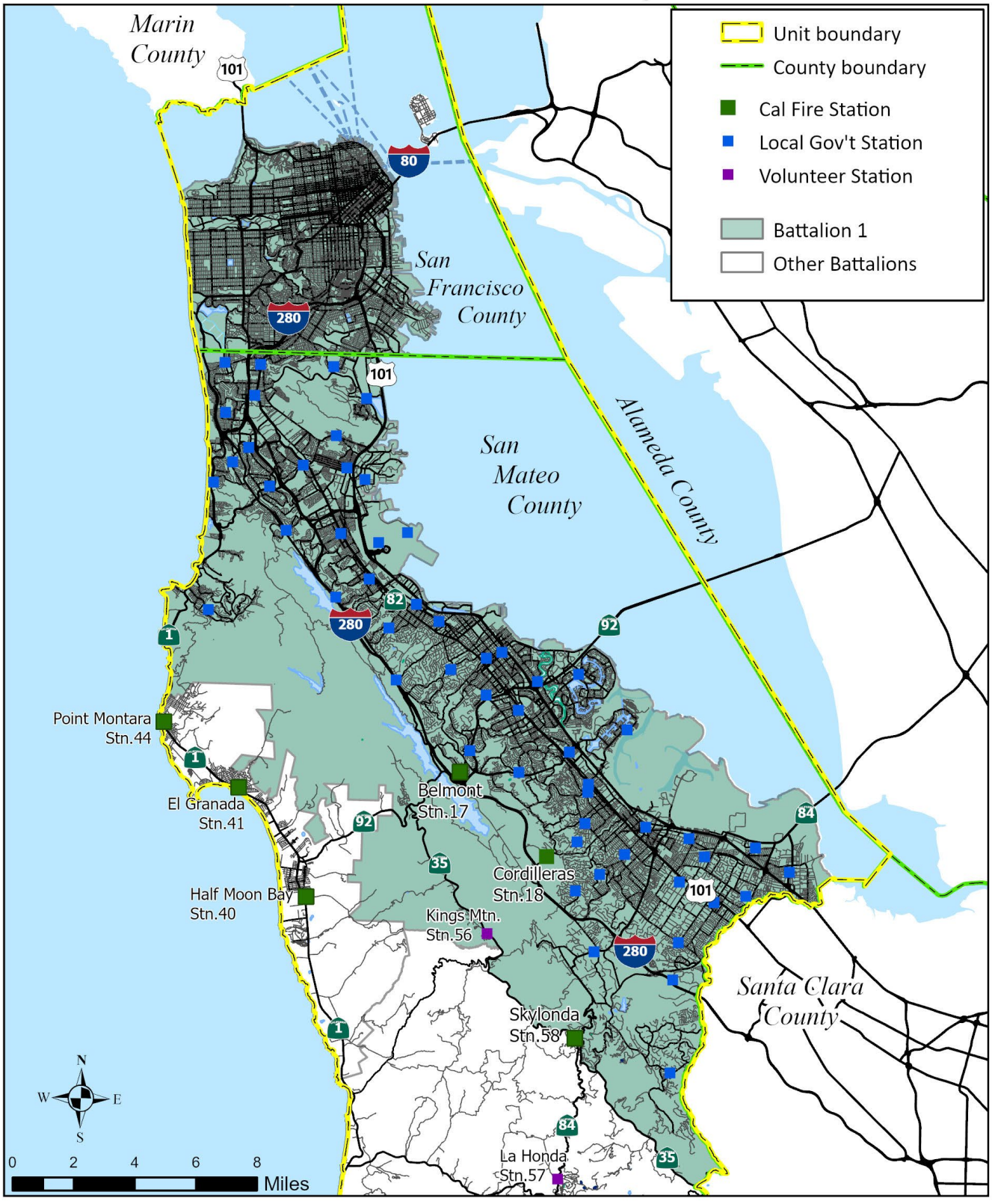
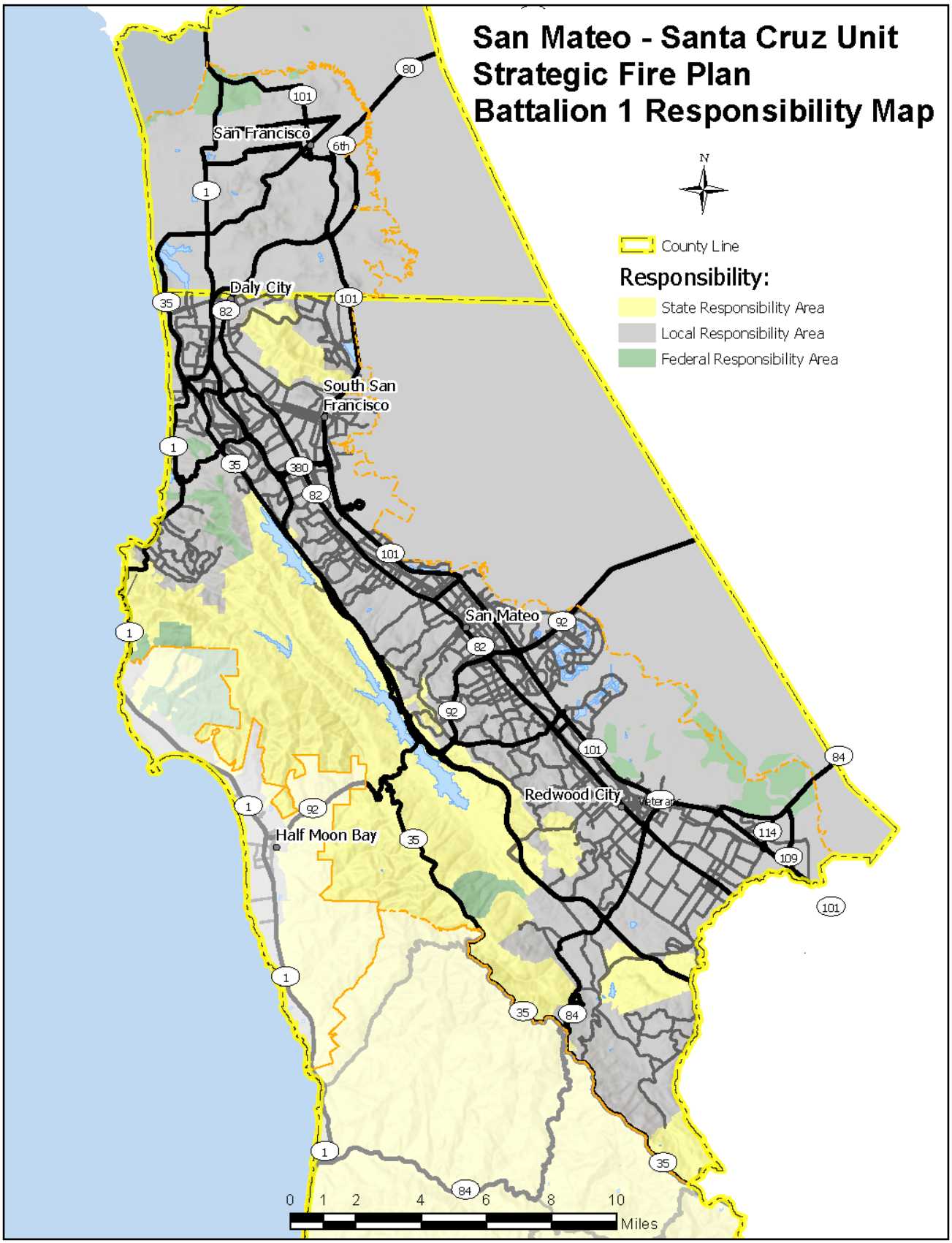


Figure D: Battalion 1 Responsibility Map



Battalion 2

Battalion 2 is the Coastside Fire Protection District, which consists of the City of Half Moon Bay, the communities of Miramar, El Granada, Princeton-by-the-Sea, Moss Beach and Montara, as well as some surrounding unincorporated sections of San Mateo County. Of these areas, Half Moon Bay, El Granada, and Moss Beach are the most densely populated and urbanized areas in the Battalion. CAL FIRE has a "schedule A" contract with Coastside Fire Protection District to provide fire personnel and management of fire resources within their district. This battalion includes Stations 40, 41, and 44, all of which are schedule A stations. See page 41, Figure E for a map of Battalion 2.

Vegetation ranges from rolling grass and brush intermix in the coastal foothills to eucalyptus groves and coastal redwoods/conifers in the uplands.

The fire weather conditions are diverse throughout the battalion and heavily influenced by the nearly ubiquitous marine layer. The temperature and humidity values typically fluctuate widely throughout the changes in elevation within the battalion. The coastal portions of the battalion are usually under a marine influence with mild temperatures in the mid 60's. As the battalion extends to the east the elevation increases and temperatures can increase rapidly.

Topography of this battalion consists of the coastal plains, which transition quickly into brush and forest covered hills. Like many other places in the Unit, there are a number of very steep sided canyons, many of which have residential neighborhoods perched on their slopes.

The Hwy 1 and Hwy 92 corridors continue to be the locations with the most fire activity. Battalion 2 is committed to working with our cooperators in reducing the fire and life safety hazards that exist within the battalion boundaries.

Cooperators: Coastside Fire Protection District, Fire Safe San Mateo

Battalion 2 is the location of one of the 2019 Governor's "45-day projects". The El Granada-Quarry Park Fuel Reduction project treated about 100 acres of eucalyptus within Quarry Park adjacent to the community of El Granada. The project removed a large amount of invasive eucalyptus fuel loading, which helps protect residents from fires.

The Unit has installed a new radio repeater in 2020 at the north end of the Battalion, along the Batt.1 / Batt.2 border, for improved communication in the north end of the division.

Battalion 2 currently has 4 AlertCalifornia Wildfire cameras operational within its boundaries. The most recent addition is one on Montara Mountain. An additional 2 cameras are proposed for this battalion.

In order to help local residents prepare for wildfire, an evacuation mailer was sent to all residents within the Battalion 2 jurisdiction in 2021.

Fuels management in Coastside Battalion near El Granada (2010), similar to the work completed on the 2019 El Granada – Quarry Park project.

Figure E: Battalion 2 Map

San Mateo-Santa Cruz Unit Strategic Fire Plan
Battalion 2 Map

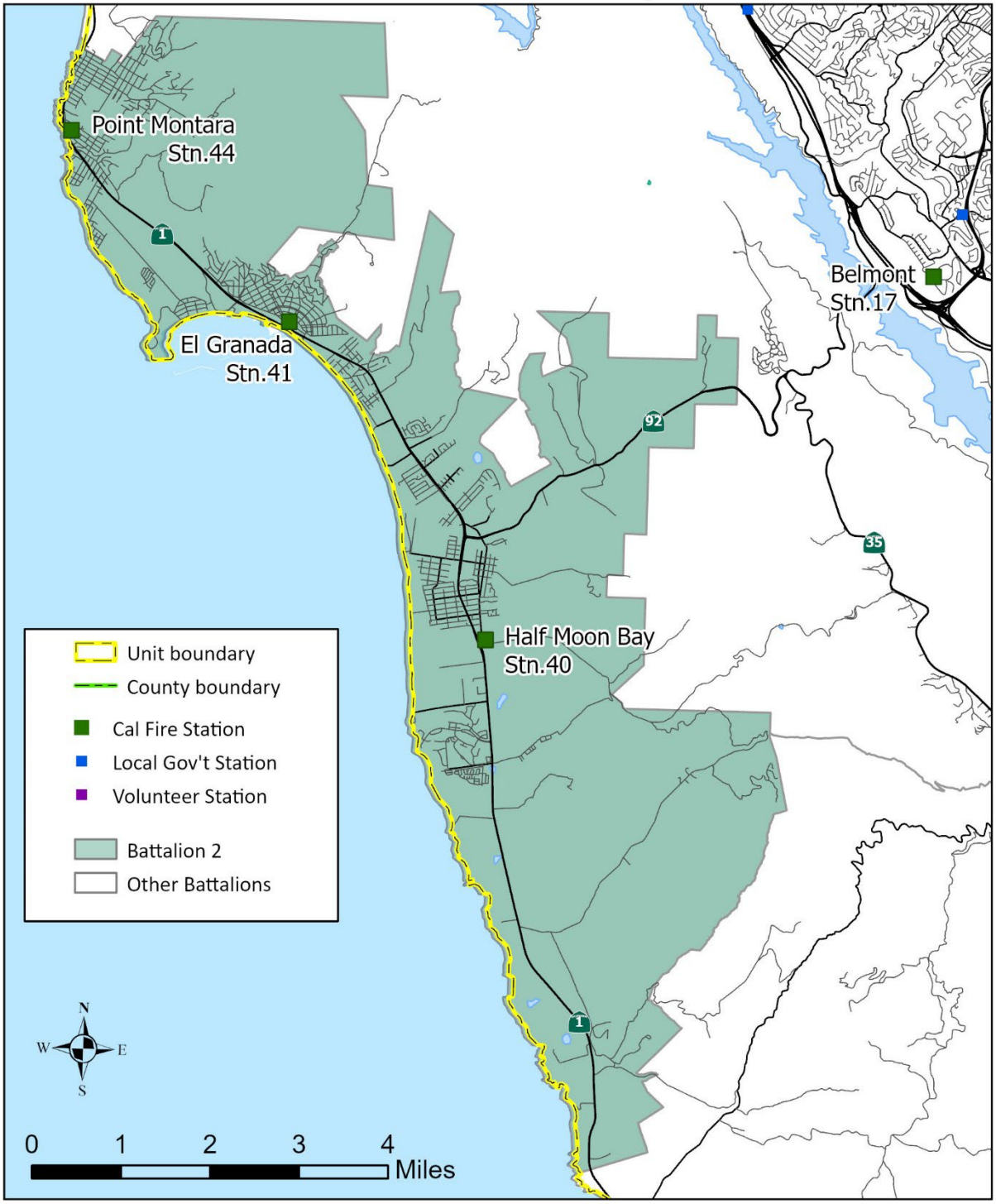
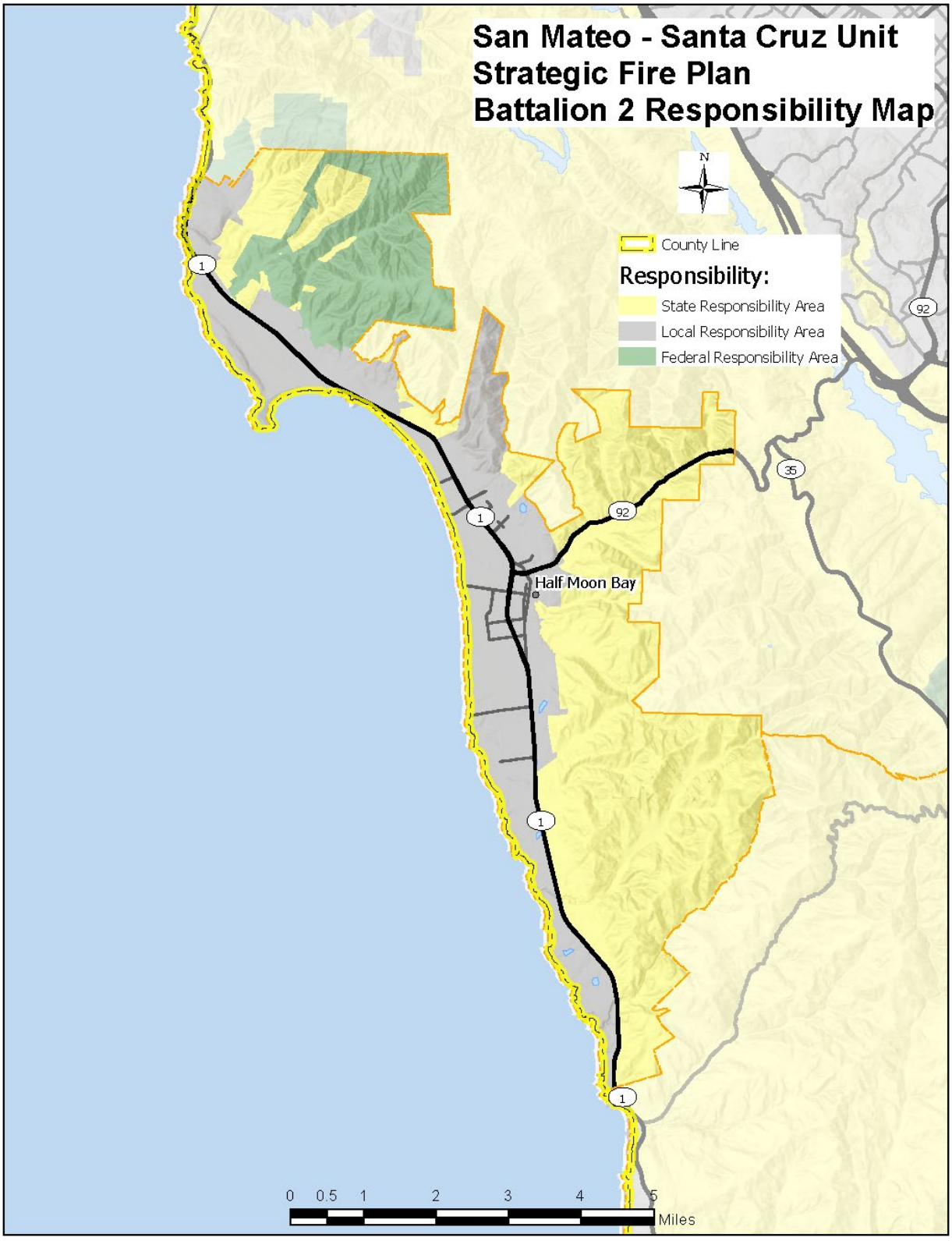


Figure F: Battalion 2 Responsibility Map



Battalion 3

Battalion 3 is part of the Santa Cruz Division. The staffed Cal Fire stations include Stations 21, 23, 31, 33, & 39. While all of these stations are schedule B during fire season, Stations 21, 31, and 33 are staffed as an Amador contract with Santa Cruz County Fire Department over the winter. The volunteer stations include Stations 29, 32, 34, 36, & 37. Other facilities include the Unit Headquarters, the Ben Lomond Camp, the Ben Lomond Shop, and the Ben Lomond Training Center.

This battalion is the northern Santa Cruz County Battalion. The boundaries of Battalion 3 are west of the Highway 17 corridor & Santa Clara County line, east of the Pacific Ocean, south of the San Mateo County line and north of the City of Santa Cruz. The Battalion includes the communities of Bonny Doon and Davenport, which have volunteer fire companies that are part of Santa Cruz County Fire. Inside the border of this battalion is the Big Basin Redwoods State Park, the largest state park in the unit. Within and adjacent to the Battalion are Boulder Creek, Ben Lomond, Felton, City of Scotts Valley, and the City of Santa Cruz, all of whom are local cooperators in fire protection. This battalion has the largest single area of FRA within the Unit; the BLM Cotoni-Coast Dairies 5,800-acre property. See page 46, Figure G for a map of Battalion 3.

The Battalion, like most of the rest of the Unit, has a variety of fuel types. Annual grasses cover many of the lower elevation coastal ridges and are found in occasional locations throughout the Battalion. Brush species are mixed with the timber types throughout the area, with a few endangered Chaparral species sprinkled about the hills. The heavier fuels include timber types of oak, madrone, knobcone pine, Douglas fir, and coastal redwood. A few large acre landowners and some small acre landowners have timber harvest plans on properties in the battalion, creating the potential for a timber slash fuel model. Due to state regulations, clear cutting is not allowed. The timber harvest plans within this battalion typically take redwood and Douglas fir species, much of which can be milled at a sawmill on the coast within the battalion or trucked out of county.

The weather is heavily influenced by the ocean, keeping coastal areas cool and the dispatch levels normally at low to medium. Inland and ridge top temperatures will cause dispatch levels to vary based on the presence or absence of marine layer influence.

Most critical fire weather conditions occur when the marine layer has been pushed back due to a north wind event.

The topography in Battalion 3 varies greatly depending on your location. Coastal areas have flats and gently rolling hills, which then quickly transition into moderate and steep, canopy covered canyons. Many of the valley bottoms within the battalion are semi-urban with a significant intermix of structures within heavily vegetated forests. There is a limited amount of agriculture within its boundaries, most of which is limited to small scale vineyards on steep slopes.

The Battalion has seen four major fires (Martin Fire 2008, Lockheed Fire 2009, Bear Fire 2017, and the CZU Lightning Complex 2020) in the last 18 years. The Battalion has areas rated both high and very high fire hazard severity. Many of these areas are overgrown and have overcrowded forests, which lead to hazardous burning conditions when weather comes into alignment. The Unit has attended community meetings with residents of the Las Cumbres, Bonny Doon, Davenport, and Boulder Creek communities to provide fire prevention information. The Unit has created and implemented a comprehensive evacuation plan in Battalions 3 and 4 for large scale events. Since 2018, Santa Cruz County Fire has added two Type 3 engine, a Type 1 engine, and a water tender in Battalion 3 to the fleet, to assist with fire suppression.

Cooperators: Santa Cruz County Fire Department, Santa Cruz Fire Safe Council, South Skyline Fire Safe Council, South Skyline C.E.R.T., Bonny Doon Fire Safe Council, Bonny Doon C.E.R.T., Santa Cruz Resource Conservation District, Lockheed Martin Space Systems Cooperation, Cal Poly Swanton Pacific Ranch, and Big Creek Lumber.

The Battalion has been heavily invested in the Vegetation Management Program (VMP). In recent years, the San Vicente VMP along Empire Grade, the Wilder Ranch VMP, the Lower Empire VMP on UCSC property, and the Henry Cowell Observation Platform VMP have all used broadcast burning as a tool for fuel reduction and/or habitat improvement. In 2023, there were approximately 280 acres of broadcast burn treatment with the Battalion 3 boundaries and about 37 acres in 2024. The China Grade VMP in Big Basin State Park is an ongoing project for all concerned as preparation work is done prior to broadcast burning. The San Vicente VMP project has also been a

demonstration of the use of both curtain burners and carbonators as successful methods of reducing available wildfire fuel sources.

Many of the roads used to access the more remote sections of the county, designated by CAL FIRE as Truck Trails, are located within this battalion. The personnel have maintained and improved these truck trails during the off-peak fire season for over 50 years. It is a goal of the battalion leadership to focus on the Kings Creek Truck Trail as a priority project in 2025. In an effort to assist the fuel reduction projects in the Unit and help protect its communities, Santa Cruz County Fire Department has invested in a remotely controlled forestry masticator (2021).

The leadership in Battalion 3 would like to continue our relationship with UCSC and State Parks and expand the broadcast burning program in the area of Chinquapin Road/Wilder Ranch State Park in order to provide a fuel break and promote native vegetation growth. The San Vicente shaded fuel break has continued opportunity for improvement and expansion beyond work already completed. Similarly, the Ice Cream Grade VMP has potential for expanding a shaded fuel break that would help protect the community of Bonny Doon.

Battalion 3 currently has 7 AlertCalifornia Wildfire Cameras (https://ops.alertcalifornia.org) operational within its boundaries. Additional camera sites are proposed along the North Coast section of the battalion, currently a blank spot for coverage.

The San Vicente VMP. Using a broadcast burn to create a shaded fuel break in Battalion 3.

Figure G: Battalion 3 Map

San Mateo-Santa Cruz Unit Strategic Fire Plan
Battalion 3 Map

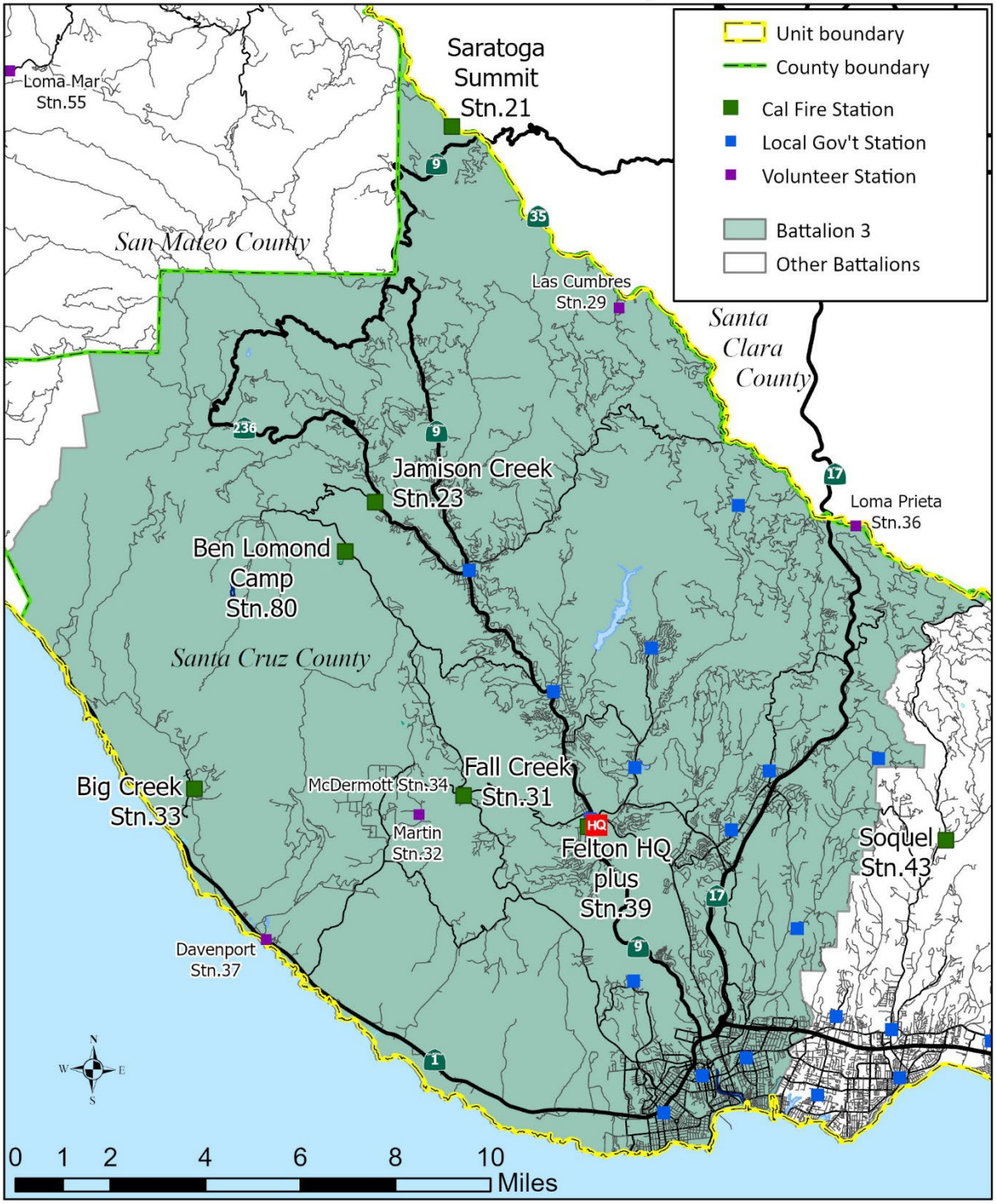


Figure H: Battalion 3 Responsibility Map

Battalion 4

Battalion 4 is part of the Santa Cruz Division. The staffed fire stations include Stations 42, 43, 45, 47, & 49. Both Station 42 and 45 are schedule A stations year-round, whereas Stations 47 and 49 are schedule B during fire season and an Amador contract with Santa Cruz County Fire Department during the winter months. Station 43 is a seasonal schedule B facility. There are volunteer fire companies that are co-located out of Stations 47 and 49. Other facilities include the offices for the Soquel Demonstration State Forest, which are adjacent to Station 43.

The Battalion stretches from Highway 17 in the northwest to the Monterey and San Benito County lines to the south and the Santa Clara County line to the north and east. The western boundary runs adjacent to several Fire Protection Districts and to the Pacific Ocean in the southern part of the County. Special features include the Soquel Demonstration State Forest and the Forest of Nisene Marks State Park, numerous State and County Beaches, five high schools, the county fairgrounds, and portions of Highways 1, 129 and 152. See page 52, Figure I for a map of Battalion 4.

Most of the SRA within the Battalion consists of heavy timber on steep slopes. This is a mixture of redwood, fir, pine, and oak. Mixed in the timber are batches of brush and grass, particularly along the ridge tops. South of Highway 152, the slopes of the hills have a greater occurrence of grasslands, with much of the acreage being used as grazing for ranch animals. Where the hills transition to valley floor, most of the vegetation has been converted to either agriculture or housing, though there are many areas of undisturbed brush, particularly along creek beds. This transition closely matches the switch from SRA to LRA. This battalion also has ongoing active timber harvest plans, with most of the harvest being redwood and some Douglas fir. Because of this, the potential for a timber slash fuel model exists on working forest plots.

The weather of the Battalion is Mediterranean in nature, with warm, dry summers and wet winters. The proximity of the ocean and the highest point in the Battalion being less than 3000 feet elevation make snow rare, even in winter when temperatures can drop to freezing. Average rainfall is about 26 inches at the RAWS station in Corralitos and higher in the hills above. Most of the rain occurs from November to April, with the months of May through October typically getting less than an inch of rain. The marine layer keeps the relative humidity high through most of the year in the lower elevations.

The highest points of the Battalion are often above the layer, a fact that is visible when looking down at the top of the fog bank that covers much of the Battalion, typically during the summer mornings and evenings. Most critical fire weather occurs during a north wind event when conditions have pushed the marine layer back off coast for days at a time.

The general population varies from dense residential and commercial to the less dense rural settings found throughout much of the SRA. As with most SRA areas, there is the increasing challenge of protecting homes in the Wildland Urban Interface (WUI).

Battalion 4 is committed to working with our cooperators to reduce the fire and life safety hazards that exist within the Battalion boundaries. Cooperators include: Pajaro Valley Fire Protection District, Santa Cruz County Fire Department, Watsonville Fire Department, Central Fire District of Santa Cruz County, Scotts Valley Fire Protection District, Branciforte Fire District, Santa Cruz Resource Conservation District, Santa Cruz Fire Safe Council, CAL FIRE Santa Clara and CAL FIRE San Benito Monterey Unit.

Large fire history within or directly adjacent to Battalion 4 includes the Rocha VMP Escape (1984), the Lexington Fire (1985), the Croy Fire (2002), the Hummingbird Fire (2008), the Summit Fire (2008), the Trabing Fire (2008), the Loma Fire (2009), and the Loma Fire (2016). Since 2018, Santa Cruz County Fire has added a Type 3 engine and a 2000-gallon water tender in Battalion 4 to the fleet, to help combat wildfires.

The Battalion participates in many community outreach programs including:

- Fire prevention programs with the local schools, including the Watsonville Charter School of the Arts, Alianza, Amesti, Bradley and Loma Prieta Schools
- Staffing of the Fire Prevention booth at the annual Santa Cruz County Fair.
- Installation and upkeep of Fire Prevention signs, including Smokey's Fire Danger Rating sign and a new prevention sign at Pajaro Valley Station.

There are Community Emergency Response Teams (CERT) located in the Corralitos and Aptos areas that are supported with training by Battalion personnel. The stations have all been very active in helping residents stay aware of the wildfire threat in the area by preforming LE-100 inspections and instructing homeowners in proper defensible space requirements.

The Battalion has been working closely with Santa Cruz County Roads and our ECC to maintain an accurate and up to date listing of road closures. This has led to modifying response plans in the CAD, so that there is minimized disruption of closed roads. They have also worked with the Pajaro Dunes Association to implement an Automated Emergency Call Out (similar to reverse 911) during storms and flooding.

The Battalion has multiple objectives for the coming year, including completing residential defensible space (LE-100) inspections, inspections of burn piles/areas, and public education during burn permit issuance. In 2025 the focus of the residential inspections will be the areas known as Zone 1 (over 2,000 structures) for Corralitos, Burrell, Soquel, and Pajaro Valley Stations. They are committed to completing all reports and informing the Fire Prevention Office of cost recovery incidents. The Battalion is committed to assist the County of Santa Cruz by reporting abandoned vehicles to the vehicle abatement program. The Battalion is looking to implement fire prevention mailers to residents within its boundaries.

Battalion 4 has worked with California State Parks maintaining access to fire road truck trails by doing brushing and roadbed maintenance, building shaded fuel breaks, expansion of helicopter landing zones and re-establishing a water tank within Nisene Marks for fire protection. Other fire prevention activities include a vacant lot weed abatement program within the boundaries of the Pajaro Valley Fire. In the last two years, a chipping program has been initiated in the Battalion, in which a fire department owned chipper was used to chip vegetation debris for residents of the Pajaro Valley Fire District.

Meetings with local ranchers have resulted in agreements to do fuel reduction projects on private property. The Estrada VTP was implemented in 2021, completing over 49 acres of broadcast burning to date, and the Kelly Thompson VMP (potential for up to 660 acres) is moving forward, with some prep work done and broadcast burning planned for about 200 acres. In accordance with the desire of the Director of CAL FIRE, the Battalion has plans to do fuel reduction broadcast burns over as many acres as possible. In addition to broadcast burning, the Unit is interested in establishing a fuel break along the ridge from the end of Bella Vista, south through several large ranches toward the San Benito County line.

Battalion 4 was the location of one of the 2019 Governor's "45-day projects". The Aptos-Buzzard-Hinckley Ridgetop and Roadside Fuels Treatment project cleared 260 acres of vegetation and an additional 14 acres of broadcast burning. This created a fuel break following Buzzard Lagoon Road to the ridgeline through Nisene Marks State Park, which is designed to protect the public from fires similar to the large fires of 2008 & 2009. At the completion of the project, the treatment area transitioned into the Santa Roaslia VTP project for ongoing broadcast burning and maintenance, which has completed 67 acres of treatment so far.

The Soquel Demonstration State Forest is located within the boundaries of Battalion 4. More information about the SDSF can be found in this fire plan, in the section below, or by going to the Cal Fire website: https://www.fire.ca.gov/what-we-do/natural-resource-management/demonstration-state-forests/soquel-demonstration-state-forest

Battalion 4 currently has 3 AlertCalifornia Wildfire Cameras operational within its boundaries.

Representative photo of Battalion 4 showing the forest covered mountain slopes, the ridges of mixed brush and grass, and the valley bottom areas that are largely converted to agricultural use. This photo shows where the 2008 Summit fire, 2009 Loma fire and 2016 Loma fire occurred. The fire scar from 2016 can still be seen on the peak in the upper left side of the photo.

Figure I: Battalion 4 Map

San Mateo-Santa Cruz Unit Strategic Fire Plan

Battalion 4 Map

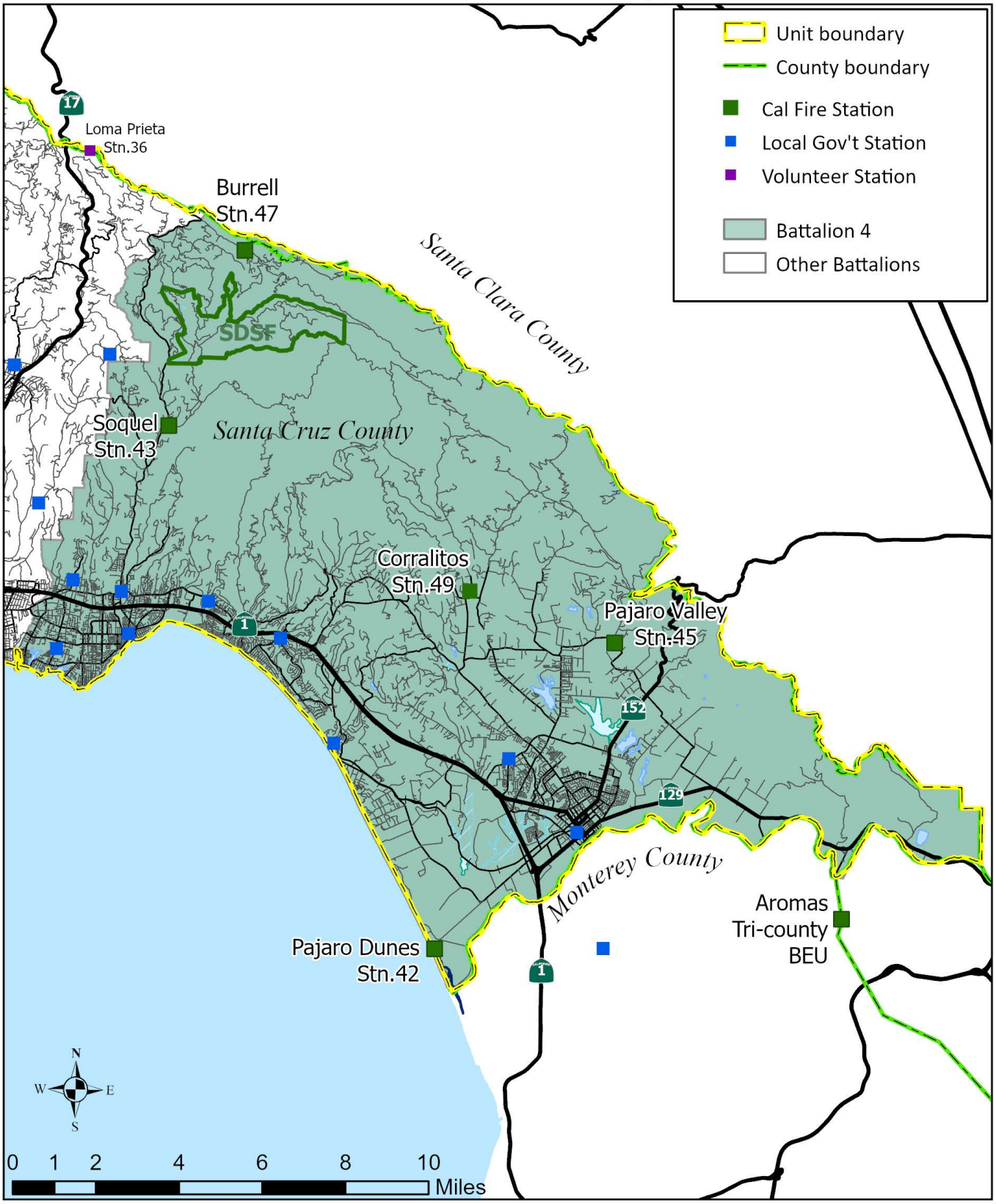
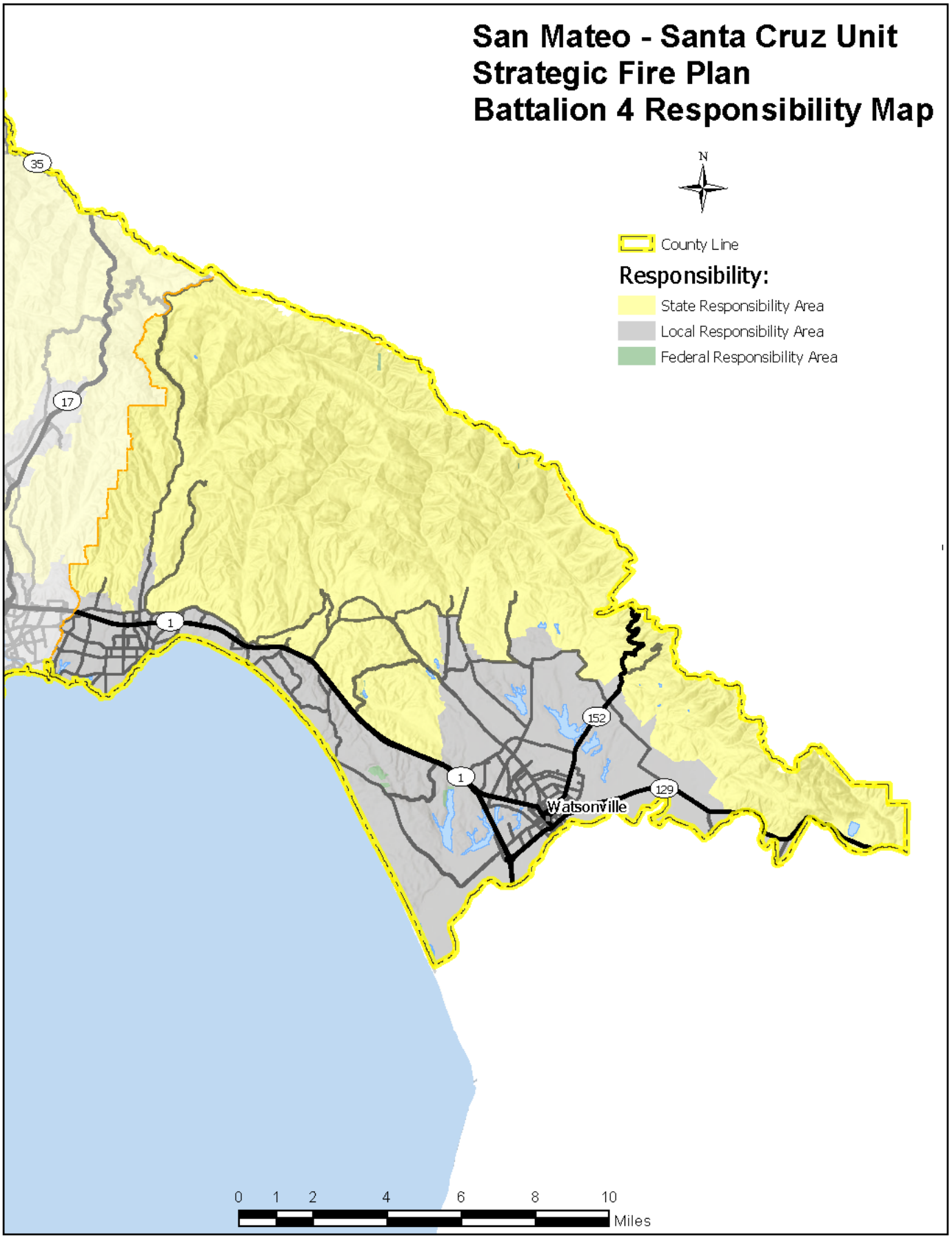


Figure J: Battalion 4 Responsibility Map



Battalion 5

Battalion 5 is in the San Mateo Division and consists of Stations 58 & 59. Both of these stations are a schedule A contract with San Mateo County Fire Department but also house schedule B equipment during fire season. The volunteer stations include Stations 55, 56, & 57.

Battalion 5 stretches north from the Santa Cruz County line through the southern half of San Mateo County to approximately the Lobitos Creek & Purisima Creek drainages. The Battalion extends from the coast to Skyline Boulevard. The eastern boundary runs adjacent to Santa Cruz County, Santa Clara County, and Woodside Fire Protection District. This battalion covers a largely unpopulated area of San Mateo County as well as the communities of Pescadero, La Honda, Skylonda, Loma Mar and Middleton Tract. See page 57, Figure K for a map of Battalion 5.

The flora within the battalion is very diverse. The Battalion contains heavy timber in the form of coastal redwood and mixed conifer on steep slopes, which turns to mixed chaparral type brush and grass on some ridges, with grass lands in the foothills, valleys, and some ridgetops. Eucalyptus groves have spread in many areas of the battalion, typically in the lower elevations. There are many acres of State and County parks and Open Space Trust areas within the battalion. That means, combined with the large timber company landowners, there are very large tracts of land that are unbroken swaths of vegetation. The Pescadero Creek and Butano Creek watersheds in particular have vast stands of timber, much of which was scorched in the 2020 CZU Lightning Complex. This battalion also has ongoing active timber harvest plans, with most of the harvest being redwood and some Douglas fir. Because of this, the potential for a timber slash fuel model exists on working forest plots.

The fire weather conditions are also very diverse throughout the battalion. The temperature and humidity values typically fluctuate widely. The coastal portions of the battalion are usually under a marine influence with mild temperatures in the mid 60’s. There is a typical summer inversion layer that will often drop the relative humidity values on the ridgetops below 20% during times of high temperatures.

Battalion 5 overlooking Peters Creek and Pescadero Creek drainage basins. Photo shows the heavily forested areas along with the mixed brush and grass that are found throughout the battalion.

The terrain in Battalion 5 is similar to other areas of the Unit. It ranges from the fairly flat strip of coastal plains, up the various river basins to steep sided canyons topping out at 2,500’ to 3,000’ elevation.

The general population varies from small pockets of dense residential and commercial to large geographic areas of sparsely populated rural settings found throughout much of the SRA. As with most SRA areas we have the increasing challenge of protecting homes in the WUI. Battalion 5 has many Open Space Preserves and State Parks within its boundaries, and the recreational population that comes with having large areas of parkland.

Battalion 5 is committed to working with our cooperators to reduce the fire and life safety hazards that exist within the Battalion boundaries. Cooperators include: San Mateo County Fire Safe, South Skyline Fire Safe Council, San Francisco Water Department, Mid-Peninsula Open Space District, Woodside Fire Protection District, Redwood City Fire Department, CAL FIRE / San Mateo County Fire Department, Coastside Fire District and San Mateo County Parks.

This past year, Battalion personnel have been active in community outreach with the residents of Pescadero, participating in the Pescadero Elementary School Garden Work Party, Christmas community events, Pescadero Booster Club clean up days, and attending High School sporting events as both first responders and community participants. Fire personnel attend the monthly Pescadero Municipal Area Council

(PMAC) in order to share information with the community regarding current emergency planning. In addition to completing residential LE-100 inspections, the Battalion has been preforming business inspections in the town of Pescadero. In order to help local residents prepare for wildfire, an evacuation mailer was sent to all residents within the San Mateo County Fire jurisdiction in 2021.

To maintain access to all of the areas in Battalion 5, the following truck trails (TT) have been identified as important to assist the landowners in maintenance with roadside brushing and occasional road grading: South Butano TT, North Butano TT, Whitehouse Canyon TT, Gazo's Creek TT, Ward Road TT, Chalks TT, Olmo TT, and Pomponio TT. Broadcast burning has occurred on the TomKat Ranch and on the Pomponio Ranch that achieves goals for both the ranch owners and fire prevention purposes.

The Battalion has added new apparatus and equipment in the past couple of years to increase the effectiveness of its emergency response. An Emergency Response Vehicle (ERV) with trailer was added at the Pescadero Station and an ERV with stake side truck was added at the Skylonda Station, for both medical and fire responses. Additionally, as of 2020, the Skylonda Station 58 completed its move into a new facility on the same site as the old building.

Battalion 5 currently has 6 AlertCalifornia Wildfire Cameras operational within its boundaries. There are currently plans for additional cameras in the County line area of the battalion to cover blank spots in coverage.

Figure K: Battalion 5 Map

San Mateo-Santa Cruz Unit Strategic Fire Plan
Battalion 5 Map

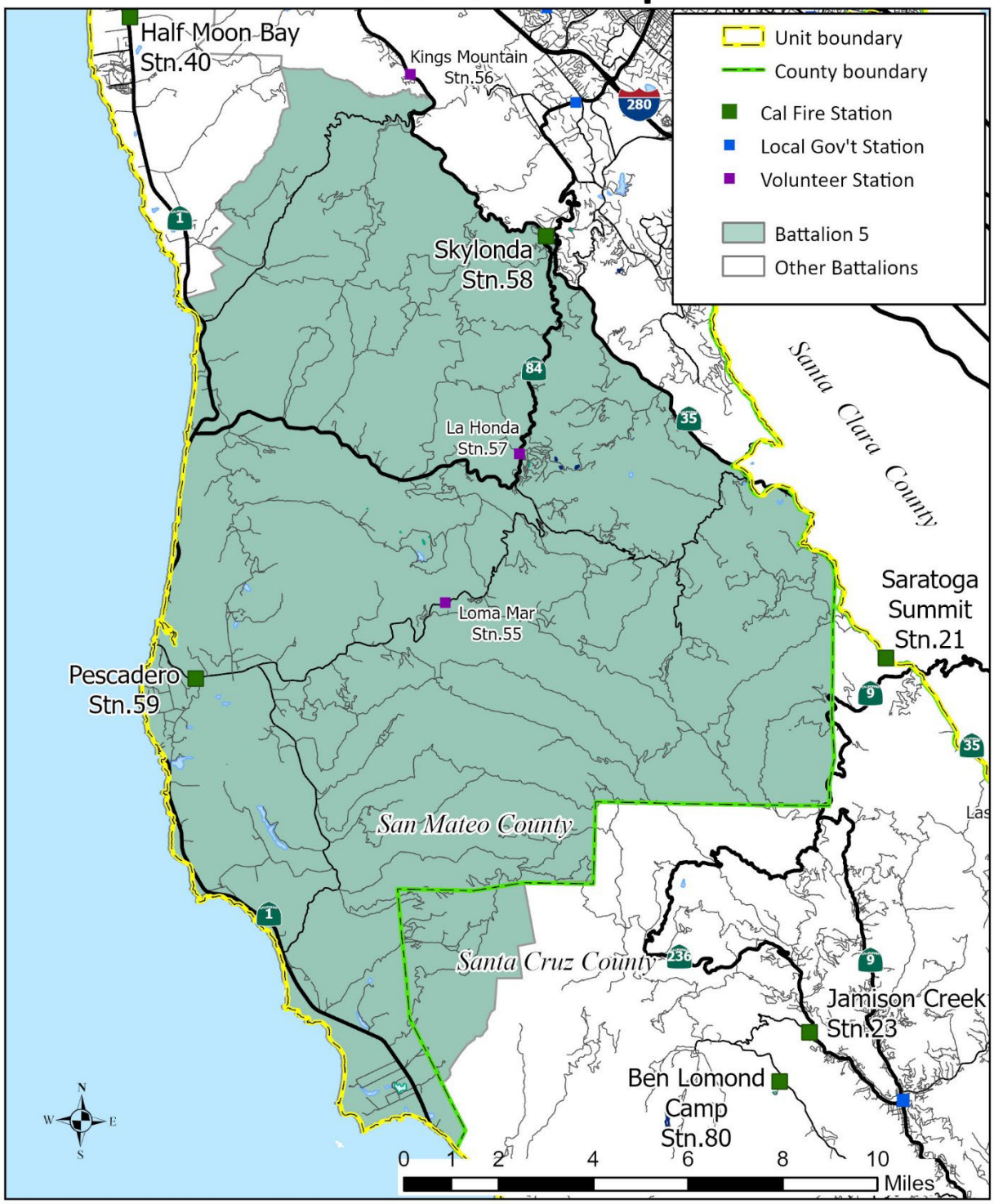
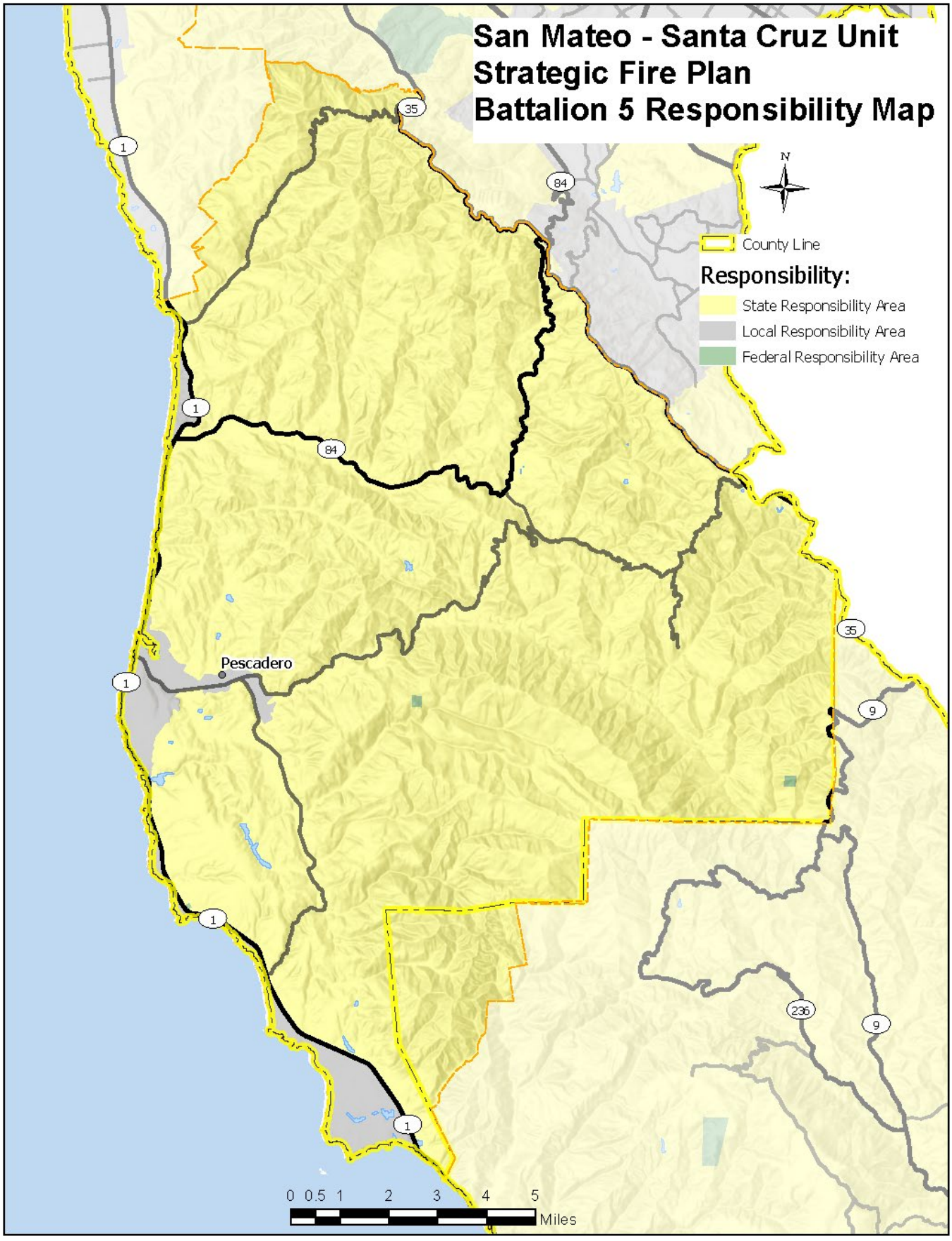


Figure L: Battalion 5 Responsibility Map



Training

The CALFIRE CZU Training Battalion is responsible for delivery and documentation of training for all career and volunteer personnel. The Training Battalion will ensure that all federal, state, and local training mandates, laws, and regulations are followed as they pertain to training.

The CALFIRE CZU Training Battalion in coordination with local cooperators conducts pre-wildland fire training. Training is conducted at the company level and covers all mandated safety requirements including perishable wildland firefighting skills. Many other State Fire Marshall and NWCG course of are offered through the Training Officer Associations to build local knowledge of wildland firefighting.

State and local Government firefighters participate in wildland fire training (2011).

In addition to the day-to-day operations of the Training Battalion, CALFIRE CZU has laid out goals for the Battalion to accomplish. These goals include: ensuring all suppression personnel are trained in the Rope Rescue Operations Course, hosting a Company Officer training course, facilitating a Physical Fitness program in which all employees are expected to participate and doing Unit wide training with vehicles in order to reduce the number of accidents per year.

Ben Lomond Conservation Camp

The Ben Lomond Conservation is one of 35 Conservation Camps statewide, operated in conjunction with the California Department of Corrections and Rehabilitation (CDCR). The statewide program houses approximately 1,800 inmates and wards. Ben Lomond Camp is located in northern Santa Cruz County, near the communities of Boulder Creek and Ben Lomond. Through the cooperative effort with CDCR, CAL FIRE is authorized to operate 5 fire crews year-round. Currently, CAL FIRE staffs up to five inmate firefighting crews with a minimum staffing of 12 persons in each crew. These crews are available to respond to all types of emergencies including wildfires, floods, search and rescue, and earthquakes. When not responding to emergencies, the crews are busy with conservation and community service work projects for state, federal, and local government agencies. Ben Lomond Crews are routinely involved in the hands-on removal of hazardous vegetation fuel levels locally. They participate in all manual labor aspects of pre-fire work from vegetation removal requiring chainsaws and hand tools to chipping and pile burning.

California Conservation Crew

Starting in 2021, CAL FIRE CZU began contracting with the CCC to provide one crew, staffed at 15 persons, which is available for initial attack and large incident fires. This crew is supervised by one CAL FIRE Captain and one CAL FIRE Engineer, and work on similar types of fuel reduction projects as the Ben Lomond Crews when not on an active incident. CAL FIRE puts the CCC crew members through a minimum two-week initial training regime to ensure the personnel are proficient in firefighting skills. The addition of a CCC crew comes from a state-wide budget change.

Glenwood Fire Center

The Glenwood fire center is funded for two CAL FIRE hand crews during peak fire season. Each crew can support up to seventeen members. The primary mission of the hand crews is to respond to wildland fire incidents as well as fuel reduction. They can also assist with mission tasking events such as floods, debris flow and other natural disasters. Currently the crews are working out of a satellite location while the permanent facility undergoes improvements to house the crews. Last season, 2024, the crews completed over 28,548 annual emergency hours during peak fire season. They also contributed to countless hours in the Vegetation Management Program (VMP) completing fuel reduction as well as participating in controlled burn in the San Mateo-Santa Cruz Unit.

Glenwood Crew on "Creek Fire" SCU July 2024

"3-6 Rim Fire" LMU November 2024

Henry Cowell State Park VMP burn 2024

Assisting with flood protection, November 2024

Soquel Demonstration State Forest

The Soquel Demonstration State Forest (SDSF) is owned and managed by CAL FIRE and was established to protect the Soquel Creek Watershed and old-growth redwood trees, conduct sustained-yield timber harvesting, provide an open environment for study and research, conduct demonstrations and education in forest management, and provide public recreational opportunities consistent with resource protection, forestry education and timber harvesting as compatible rural land uses.

SDSF roads and infrastructure suffered significant damage from the winter storms of 2022/2023. During most of 2023 SDSF was closed to public use while assessments, contracts and repairs were completed. The forest reopened to the public in October 2023.

SDSF staff collaborated closely with Cal Poly Swanton Pacific Ranch to continue work on a multi-year Forest Health Grant from CAL FIRE. The current Sulphur Springs Timber Harvesting Plan is operating in 2024 on the same ground as a Forest Health Grant covering 320 acres. Big Creek Lumber Company and Community Tree Service are the contractors cooperating to complete operations including reducing fuel to improve forest resiliency. Revenue from the timber sale (THP #1-22-00090-SCR) is estimated at $1,861,482.00 for 2,370,000 board feet. The Forest Health Grant also includes pile burning, and 84 acres were piled and burned by a separate contractor IMB Forestry.

Tractor Road pile burning unit (left) Timber Falling Demonstration at Sulphur THP (right)

Education includes webinars about the Forest Health Grant work at Soquel, facilitated by the Swanton Pacific Ranch Fuels and Vegetation Education (FAVE) program coordinators with presentations by CAL FIRE Foresters and fire control

personnel. These webinars are live online, recorded and posted for future training and education at: https://spranch.calpoly.edu/fuels Public field trips in summer 2024 will demonstrate timber operations and forest management techniques and examine forest health treatments with ongoing research in the treatment areas.

Lower helipad prescribed burn plot (left) and Corralitos Station Crew with training program participants (right)

SDSF plans to collaborate on additional Forest Health Grants and Prevention Grants to build upon work over recent years and implement additional techniques and treatments to create a more resilient forest. Priority areas include the Sulphur Springs corridor between the upper and lower helipads, the ridge between SDSF and the Forest of Nisene Marks State Park, the Hihn's Mill Road corridor, Amaya Ridge and Comstock Road areas and the Meridian THP area. SDSF will continue to apply for any grant opportunities available to fund this work.

It should be noted that all the on-the-ground activities that take place at SDSF have been thoroughly planned and evaluated and are following the California Forest Practice Rules, California Environmental Quality Act, California Department of Fish and Wildlife Rules, Air Pollution Control District Rules and Regional Water Quality Control Board Rules and Regulations. If there are any questions or comments regarding the management of SDSF, you can contact the Forest Manager at (831) 475-8643. More information can be found at the SDSF website: https://www.fire.ca.gov/what-we-do/natural-resource-management/demonstration-state-forests/soquel-demonstration-state-forest

APPENDIX A: PRE-FIRE PROJECTS: CWPP/Fireplan Project List

(ongoing / 5-year history 2020 to 2024)

Batt Planning area	Project Number	Project Name	Status	Estimated Completion Year	Project Type	Net Acres
		Community Outreach Projects				
1		Belmont Parade	C	Ongoing	CO	
1		July 4 Parade – Highlands	C	Ongoing	CO	
1 - 2		Community Preparedness Day	C	Ongoing	CO	
1 - 2		San Mateo County Fair	C	Ongoing	CO	
2		Half Moon Bay Pumpkin Festival	C	Ongoing	CO	
1 - 2		San Mateo City Parade	C	Ongoing	CO	
2		July 4 Parade – Half Moon Bay	C	Ongoing	CO	
1 - 2		Belmont Touch a Truck Event	C	Ongoing	CO	
5		Pescadero Fun Festival	C	Ongoing	CO	
1 - 5		Huddart Park Skylonda	C	Ongoing	CO	
5		Pescadero High School	C	Ongoing	CO	
5		Pescadero Elementary School	C	Ongoing	CO	
5		Pescadero Christmas community event	C	2023	CO	
5		Pescadero Booster Club Clean Up Day	C	2023	CO	
5		Kings Mountain Elementary School	C	Ongoing	CO	
4		Pajaro Valley Open House Prevention Week	C	2020	CO	
4		CT English/Loma Prieta School	C	2020	CO	
4		Bradley School	C	2020	CO	
4		Mount Madonna School	C	2020	CO	
4		Watsonville High School – Career Day	C	2020	CO	
4		July 4 Parade – Watsonville	C	2020	CO	
4		Building Blocks prevention program	C	2020	CO	
4		Corralitos CERT program	C	2020	CO	
4		PVFPD & Pajaro Dunes Defensible Space mailer	C	2020	CO	
		Potential Planned Projects				
3,4	1700-2014-FPL-002	Santa Cruz County Chipping Project	P		FR	County Wide
4		Browns to Eureka Fuel Break	P		FR	
4		Skyward Drive Fuel Reduction Project	P		FR	
4		Eureka-Haines Shaded Fuel Break	P		SFB	
1		Montara Fuel Break	P		SFB	
1	MROSD	Upper Alpine Emergency Access	P		FR	
1	MROSD	La Honda Creek OSP various projects	P			

Batt.	Project Number	Project Name	Status	Completion Year	Project Type	Net Acres
1	MROSD	Fire Management Planning	P			
4	MROSD	Rattlesnake Gulch/Loma Prieta Ranch	P		FR	
4		Old Evans Road Fuel Reduction	P			
3		Olympia Watershed SFB	P		SFB	
3		Lockewood Fuel Break Scotts Valley	P		FB	
4		Bella Vista to 129	P		FR / SFB	
3	1700-2016-VMP-002	Ice Cream Grade VMP	C	2019	FB	14
		VMP/VTP – Broadcast Burn Projects				
3	1700-2016-VMP-004	Ben Lomond SandHill VMP	A	2026	Burn	9
3	1700-2015-VMP-001	Big Basin /China Grade VMP Rx-North-CZU-037	A	2024	Burn	65
3	1700-2020-VTP-001 ~~1700-2021-VMP-004~~	Bonny Doon (Rd) VTP 2020	A	2031	FR	40
3	1700-2020-VMP-003	Deadman Gulch VMP	C	2021	FR, Burn	7
4	1700-2020-VMP-002	Estrada Ranch VTP	A	2030	Burn	49
3	1700-2015-VMP-003	Hennry Cowell Observation Platform VMP: Rx-North-CZU-038	C	2020	Burn	117
3	1700-2018-VMP-001	Locatelli VMP	A	2028	Burn	135
3	1700-2017-VMP-001	Lower Empire VMP	A	2031	FR, Burn	136
1	1700-2017-VMP-003	San Francisco PUC (Dam Faces)	A	2027	Burn	18
4	1700-2020-VMP-001	Kelly Thompson Ranch VMP	A	2030	FR, Burn	2
5	1700-2022-VMP-002	Pomponio Ranch VMP	A	2031	FR, Burn	428
5	1700-2021-VMP-001	TomKat VMP 2021	A	2031	Burn	115
3	1700-2016-VMP-001	San Vicente Redwoods VMP	A	2028	FR, Burn	56
4	1700-2021-VMP-002	Santa Rosalia VTP	A	2031	FR, Burn	67
1	1700-2022-VMP-001	SFPUC Prescribed Burn VMP	A	2030	FR, Burn	165
3	1700-2017-VMP-005	Wilder Ranch SP VMP	A	2022	Burn	400
		Truck Trail Projects				
5	1700-2014-FPL-008	S. Butano Shaded Fuel Break	M	2016	SFB	29
3/5	1700-2017-FPL-006	Johansen TT	M	2023	FR	12
3	1700-2011-FPL-010	Kings Creek TT	M	2017	SFB	60
3	1700-2015-FPL-002	Fall Creek TT Shaded Fuel Break	M	2017	SFB	100
3	1700-2017-FPL-003	Eagle Rock Road	M	2023	FR	3
5	1700-2017-FPL-004	Chalks Truck Trail	M	2017	FR	9
5	1700-2024-FPL-008	Dark Gulch	C	2024	FB	5
3/5	1700-2017-FPL-007	Gazo Creek Road	M	2017	FR	10

Batt.	Project Number	Project Name	Status	Completion Year	Project Type	Net Acres
5	1700-2016-FPL-002	Olmo TT Roadside Fuel Reduction	M	2017	FR	12
3	1700-2017-FPL-005	Middle Ridge TT	M	2017	FR	2
5	1700-2017-FPL-008	North Butano TT	M	2017	FR	11
3	1700-2017-FPL-009	Ward Rd Roadside Fuel Reduction	M	2017	FR	40
3	1700-2015-FPL-004	Warrenella Fuel Break	M	2016	SFB	163
5	1700-2016-FPL-014	Upper Whitehouse Canyon	M	2017	FR	8
5		Pomponio Truck Trail	P	2020	FR	
		Other Projects				
1	1700-2020-FPL-002	Adobe Gulch	P	2020	FR	
5	1700-2017-FPL-013	Ano Nuevo SP Fuel Reduction	A	2020	FR	8
4	1700-2019-FPL-005	Aptos-Buzzard-Hinkley Project	C	2020	SFB,Burn	259
3	1700-2019-FPL-004	Bielawski Hazard Tree Removal	M	2025	FR	5
1	1700-2020-FPL-005	Big Canyon	P	2021	FR	11
3	GT-151-CZU-009	Bonny Doon Ecological Reserve SFB	M	Ongoing	SFB	35
3	1700-2022-FPL-003	Bonny Doon Community Chipping	C	2022	FR	3
1	1700-2020-FPL-014	Cahill	C	2021	FR	17
3	1700-2017-FPL-001	Camp Cheseborough	A	2026	FR	43
3	1700-2025-FPL-001	Camp Krem	A	2026	FR	2
4	1700-2020-FPL-006	Cliffwood Estates	C	2021	FR	3
1	1700-2020-FPL-004	Cordilleras	C	2020	SFB	7
3	1700-2022-FPL-005	Daybreak	C	2022	FR	3
2	1700-2019-FPL-007	El Granada – Quarry Park	C	2020	FR	88
1	1700-2023-FPL-009	Filoli Field	A	2031	Burn	29
5	1700-2025-FPL-002	Glenwood Fire Center	A	2026	FR	1
4	1700-2016-FPL-012	Happy Valley School	M	2022	FR	5
1	1700-2015-FPL-006	Highlands Recreation District	M	Ongoing	FR	21
5/3/4	1700-2022-FPL-007	Highway 35 Evacuation Route SFB – Tri-county collaboration	C	2025	FR / SFB	418
1	1700-2025-FPL-003	Hillsborough	A	2025	SFB	1
1	1700-2020-FPL-001	Junipero Serra Park	C	2020	FR	5
1	1700-2024-FPL-012	Kings Mountain Road SFB	A	2025	SFB	14
5	1700-2016-FPL-016	La Honda Community Chipping	P	Ongoing	FR	
5	1700-2023-FPL-004	La Honda Fuel Break Project	A	2026	FR/FB/SFB	137
3	1700-2016-FPL-013	Las Cumbres Fuel Reduction	A	2025	SFB	34
3	1700-2023-FPL-002	Lockhart Shaded Fuel Break Direct Grant	P	2026	FB	
3	1700-2012-FPL-009	Lockheed Fuel Reduction	A	2029	SFB	159

Batt.	Project Number	Project Name	Status	Year	Type	Acres
4	1700-2020-FPL-013	Loma Prieta School	C	2020	SFB	6
1/5	1700-2016-FPL-006	LosTrancos/VistaVerde Haz.Fuel Reduct.	C	2021	SFB	42
5	1700-2020-FPL-027	Middleton Road Fuel Break (SSFSC)	C	2020	FR	51
1	1700-2013-FPL-019	Mills Canyon Park	M	2030	FR	36
1	1700-2024-FPL-013	Oakridge	C	2025	FR	1
4	1700-2023-FPL-007	Pajaro Valley Community Chipping	A	Ongoing	FR	2
2	1700-2022-FPL-014	Pillar Point	C	2025	FR	4
1	1700-2020-FP-003	Polhemus	C	2020	FR	30
2	1700-2018-FPL-016	Quarry Park	C	2021	FR	7
3	1700-2020-FPL-031	Riva Ridge	C	2021	SFB	17
1	1700-2020-FPL-023	Runny Meade	A	2030	FR	8
1	1700-2007-FPL-007	S.F. Water / Phleger Estate Southern Fuel Break	O	ONGOING	SFB	
1	1700-2016-FPL-001	San Bruno Mountain	M	2031	FR	22
2		San Mateo County Chipper Program	O	ONGOING	FR	
2	1700-2013-FPL-022	San Mateo Co. Parks - Huddart	C	2020	SFB	52
3/4/5	1700-2022-FPL-006	Santa Cruz County Hazardous Fuel Reduction & Summit Rd SFB	A	2025	FR	39
3	1700-2016-FPL-018	Santa Cruz Water District Fuel Reduction	A	2022	FR	59
4	1700-2013-FPL-021	SDSF Shaded Fuel Break	M	Ongoing	SFB	81
5	1700-2022-FPL-001	Skywood Trading Post LZ	C	2022	FR	1
5	1700-2022-FPL-002	Station Fuel Reduction	C	2022	FR	1
1	1700-2019-FPL-003	Teague Hill – Partition Road	C	2021	FR	16
1	1700-2018-FPL-005	Viewridge Drive – Sugarloaf Mtn.	C	2022	FR	8
5	1700-2016-FPL-006	Vista Verde/Los Trancos Fuel Reduction	C	2021	FR	52
1	1700-2016-FPL-017	Water Dog Lake	M	2023	FR	61
3	1700-2017-VMP-005	Wilder Ranch	A	2022	Burn	420
1	1700-2020-FPL-012	Windermere	C	2020	FR	3
1		Woodside Chipper Program	O	ONGOING	FR	

Status Guide: A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

In addition to the above listed specific projects, there are additional set of potential projects listed in the CWPP referred to as "Landscape Level Need". ~~Strikeout~~ under project name means that particular grant was completed but work is still in progress outside of grant. These are ongoing and potential projects the Unit would like to engage is as time and resources allow (refer to **Appendix E – Landscape Level Needs**).

Project Type: FR = Fuel Reduction, SFB = Shaded Fuel Break, FB = Fuel Break, Burn = Broadcast Burn, CO = Community Outreach, PRP = Pre-fire Resource Planning.

APPENDIX C: GENERAL RECOMMENDATIONS (taken from CWPP)

The following general recommendations were taken from the 2010 San Mateo County - Santa Cruz County CWPP (The CWPP was updated in December of 2014, 2018, & 2022). The plan identifies “high priority” areas, where fuel reduction projects should take precedence. When individual projects are implemented, site specific guidelines shall be developed by the persons/agency responsible for project development. Any proposed project shall conform to all applicable local, county, and state regulations concerning fuel modification projects. The following general recommendations are not intended to be site specific, but rather a tool to aid in the development of appropriate prescriptions.

Reduction of fuels adjacent to roads

Statewide, over 95% of wildland fires are started by human activity, and of those 90% start within 10’ of a road or trail. Overgrown vegetation on or adjacent to roads makes access difficult for fire-fighters and equipment. Additionally, roadside vegetation, including tree limbs, brush, and grass is the fuel first ignited for numerous fires each year. This is a problem adjacent to all types of roads in both counties. There are many, overgrown, narrow, one-lane road that often make it difficult for emergency vehicles to access a fire area while residents are simultaneously leaving. This document declares that fuel reduction along roadsides is a high priority. Maintaining reduced fuel along roads allows the road to be a safer evacuation route in the event of a fire. Roadside vegetation should be reduced to a level that allows ease of access for emergency response personnel and equipment, reduces the number of roadside fire starts and ensures the safety of fire-suppression personnel using roads as fire control lines.

County Public Works and Caltrans routinely conduct roadside clearing for access, visibility, and fire safety. Historically, this work was accomplished through a combination of chemical and mechanical means. In recent years, however, there has been increasing public pressure to eliminate the use of chemicals as a roadside treatment. Therefore, most of the recent work has been completed with mechanical mowers and masticators.

Strategically placed fuel breaks (including shaded fuel breaks)

The primary goal of a fuel break or shaded fuel break project is to change the behavior of a fire entering the fuel-altered zone in order to reduce large flame lengths and high energy outputs. Changing fire behavior may be the key to allowing fire crews to protect people and property from wildland fire. Effective fuel breaks may:

- Act as an anchor point for indirect attack on wildland fires.
- Allow for fire fighters to use fire as operational tool (firing out).
- Support safer ingress/egress for emergency responders and the general public.

With reduced fuel adjacent to a roadways and structures, flame lengths, fire activity, and heat production will be reduced, making it safer for firefighters to access the area and protect structures in the community.

A fuel break typically refers to either the removal of all or the majority of vegetation in a strategic area. A shaded fuel break refers to “thinning” of vegetation in a specific area with the remaining vegetation shading the ground. Non-shaded fuel breaks are typically used in non-residential, less visible areas. For the purposes of large-scale wildland firefighting, fuel breaks are preferable to shaded fuel breaks because they make little to no fuel available for combustion. However, shaded fuel breaks are often implemented because they are cheaper and easier to maintain, less detrimental to sensitive habitat, and often have more support from adjacent property owners.

The type and size of fuel reduction projects should be determined on a project-by-project basis. The widths of roadside shaded fuel breaks generally range from 10 feet up to 50 feet, with 75 to 100 feet a more effective, but less popular target prescription. Strategic fuel breaks can be as wide as 400 feet. The responsible fire agency as well as the community should collaboratively develop projects that meet the needs of the stakeholders.

Shaded fuel breaks can be placed around individual structures, communities or neighborhoods identified to be at risk. For example, after a community has developed defensible space out to 100 feet from structures, they may wish to augment that with an extended fuel break, depending on the topographical location. There is no specific prescription for this type of project. It should be developed in collaboration with the

community and responsible fire agency and should be adapted to local environmental constraints.

Roadside Fuel Breaks

There are many communities and neighborhoods identified as priority areas in this document where a roadside fuel break would be beneficial. Stakeholders in both counties consistently agreed that reducing fuel loading adjacent to roads is of highest priority. There is no standard distance recommended from a road's edge, other than more is often better. Extended fuel reduction projects may be reduced in some areas with continued maintenance and treatment of roadside grass and continued trimming of vegetation. Roadside fuel breaks are typically between 10 and 40 feet wide. The exact distance should be based on fuel type, slope, aspect, and be environmentally feasible.

There are a variety of methods used to create a fuel break or shaded fuel break, however, the primary method is manual labor using chainsaws. Locally, many fuel reduction projects are completed by CAL FIRE inmate fire crews, residents, and private contractors. Although chainsaws are the primary vegetation removal tool, other methods may include livestock, mowing, or other mechanical means (such as masticators), or prescribed fire. Treatment of the removed vegetation can be accomplished by a variety of methods, listed below.

- Chipping – Various chippers are available for use in both counties. The Santa Cruz County Fire Chiefs Association offers a chipping program, utilized through local agencies. Chipping programs have also been developed through Fire Safe San Mateo County and the Fire Safe Council of Santa Cruz County. Independent contractors with chippers are available for hire in both counties. When a fuel reduction project requires use of a chipper, vegetation to be treated should be placed in a location easily accessible to a chipping crew arranged in a manner to allow for efficient chipping. Such specifications are determined in project planning according to the size of the chipper. Depending on the location and project goals, the chips will be either left on site or be taken away for proper disposal.

- Pile burning – Vegetation can be placed in manageable piles to be burned by qualified personnel at a later date. Though this is a very effective means of fuel treatment, vegetation piles can become an increased fire hazard if left unburned. Other factors to consider are the risk of escape, smoke management, and air quality

restrictions. The agency having jurisdictional authority should be contacted prior to burning for information on all applicable fire and air quality rules and regulations. In general, guidelines for pile burning include:

- Burn only during daylight hours.
- Have adequate fire tools and water onsite.
- Always have an adult in attendance.
- Piles shall be no larger than 4-feet x 4-feet and no taller than 4-feet. If a project wishes to have piles of a larger size, an inspection by a CAL FIRE official is required and an LE-7 & LE-8 permit must be obtained.
- 10-foot clearance around each pile

Additionally, burning can only occur on "burn days" set by:

- Santa Cruz County – Monterey Bay Area Unified Air Pollution Control Board 1-800-225-2876, 831-647-9411, or 916-445-0747 or visit https://www.mbard.org
- San Mateo and Santa Clara Counties – Bay Area Air Quality Management District 1-800-435-7247 or https://www.baaqmd.gov

■ Lop and Scatter – This method of fuel treatment involves the cutting and spreading of cut material, so that it does not extend above a predetermined height above the ground. This can be between 12 and 24 inches. Material is spread out to prevent continuous fuels and to allow for quicker decomposition. Care should be taken to not spread cut material in sensitive locations, as identified during the planning process. This method may be used in an area removed from roadways and homes, and in projects with low amounts of cut vegetation.

■ Removal to off-site location – If there are no feasible on-site treatments, vegetation can be removed to an appropriate off-site location.

■ Masticators – Another option for reducing fuel involves the use of a masticator. Masticators are a mechanical means of vegetation removal, in which spinning blades "masticate" or "chew" vegetation. The masticator head can be attached to the end of an excavator arm or to the front of a tracked or wheeled vehicle such as a dozer or loader. They are primarily used in fuel break situations, rather than shaded fuel breaks, due in part, to the large swath of vegetation they remove. Masticators cut, as well as treat the

vegetation they remove, pulverizing the vegetation into a loose “chip like” material, obviating the need for a chipper. Masticators are very effective in roadside and ridge top fuel breaks. Smaller masticators are now being used in some shaded fuel breaks.

■ Prescribed Herbivory – This is also known as targeted grazing. It is using domestic livestock, typically goats, sheep, or cows, to browse or graze vegetated landscape with the intent of reducing the overall density and abundance of vegetation. Prescribed herbivory operations often involve the use of mobile fencing material to confine livestock to specific locations, as well as the guidance of skilled livestock managers and dogs. There is added ecological benefits using this method with the reincorporation of nutrients via feces and aeration of the soil from hooved animals.

■ Controlled / Broadcast / Prescribed Burns involves the burning of surface fuels in a predetermined area, under the supervision of trained fire personnel. Prescribed burns are planned in detail, occurring only when predetermined weather and fuel conditions exist. Other factors affecting prescribed burning include resource availability and atmospheric conditions favorable for adequate smoke dispersion. Prescribed burns have been implemented on State Parks, Peninsula Open Space Trust, Midpeninsula Regional Open Space District lands, the San Vicente Redwoods, San Francisco Water lands and several private ranches for the purpose of fuel reduction and habitat improvement. While prescribed fire is an effective means of reducing fuels in the wildland, it has not widely used as treatment locally for a variety of reasons including: narrow weather widows for burning, limited resources available for burning, and the potential threat of escape. CAL FIRE will cooperate with interested landowners to determine opportunities for the appropriate use of controlled burning.

Stakeholders interested in working with CAL FIRE to implement controlled burning can contact the local Unit Resource Management office at (831)335-6740 and speak with a state Forester. The CAL FIRE Forester will be able to explain the details of the California Vegetation Treatment Program (Cal VTP) and the CAL FIRE Vegetation Management Program (Cal VMP) and how these program may be able to collaboratively help land owners reduce their wildland fire fuel hazards

Road data

Whether private, dirt, rock or paved, there is agreement between stakeholders that proper mapping and identification of road systems throughout the counties is a high priority. Complete and accurate road mapping is vital during a wildland fire incident. Proper mapping allows emergency responders to locate and manage an incident. In many instances, emergency responders from out of the county do not know the local road systems in the vicinity of the wildfire. The Counties of San Mateo and Santa Cruz both have Geographic Information Systems (GIS) personnel who maintain county data. Although the county roads data is accurate, there are areas where data is lacking. These omissions primarily occur in the more rural areas of the counties and on large private and public landholdings such as parks or preserves, and managed timberland. Over the past several years, CAL FIRE has been compiling roads data, utilizing a variety of sources. This data was helpful during the large wildfires of 2008, 2009, 2017, and 2020.

- This process should continue into the future. Collaboration between stakeholders to prepare a comprehensive map and inter-operable system is a priority.
- Since 2018, CAL FIRE has been in collaboration with the Santa Cruz Mountain Stewardship Network and the Golden Gate National Parks Conservancy on a Lidar mapping project that identifies road surfaces and vegetation types in both counties. This data is available to the public at the website https://pacificvegmag.org

Roads, Bridges and Water in the WUI

In terms of new construction within the WUI, there are many common standards in terms of access, road width, water supply, and bridge specifications. These standards take into consideration the risk of wildland fire and the needs of responding fire agencies. There was, however, considerable construction in the WUI prior to modern fire code. There are, throughout both counties, numerous residences accessed by narrow, unmaintained roads, sometimes by inadequate bridges. This coupled with a

limited water supply can result in disaster during a wildfire. The following issues should be strategically addressed:

- Identifying inadequate bridges and plan for fixes.
- Identify existing water supplies in the wildland.
- Identify locations for additional wildland water supplies.
- Identify, prioritize, and mitigate high risk roads in the WUI

Truck Trails/Fire Roads

There are numerous “truck trails” or “fire roads” located throughout both counties, most of which are historic logging roads, referred to as truck trails for the purpose of this plan. The current conditions of truck trails are varied. Some are maintained at regular intervals, while some may see less frequent maintenance due to limited available resources. Some have been abandoned due to poor initial location, improper construction, and failures due to landslides or washouts. Truck trails often bisect public and private property. The importance of these roads in the event of a wildfire cannot be overstated. For example, the Warrenella truck trail and shaded fuel break provided critical ingress and egress access to the Lockheed Fire in 2009. The truck trail was used as a final perimeter line, stopping the eastward growth of the fire. Without the access the Warrenella allowed, it is likely the Lockheed Fire would have burned an additional two thousand acres and would have required fire personnel to make a stand within the residential portion of the community of Bonny Doon. In northern Santa Cruz and most of San Mateo County, numerous truck trails provide access to the primarily roadless areas between the coast and Hwy 35. When wildland fires affect these parts of San Mateo and Santa Cruz Counties, the truck trails are of vital importance. Accurate mapping, appropriate maintenance, and consideration of abandoning failed sections is needed on all truck trails throughout both counties.

Structure Protection Planning

One of the common difficulties during the wildfire season in California is when fire crews respond to regions of which they are unfamiliar. This problem is compounded when responders have limited information on roads, number of structures, evacuation routes, water supply, and other hazards. The Santa Cruz County Fire Chiefs have been working on a project identifying pre-determined protection planning zones. The zones

have been identified by local fire officials and include pre-packaged information, which will be provided to first responders in the event of an emergency. This is an ongoing project.

Vegetation Removal: Types and Locations

This plan (CWPP) discusses areas where fuel reduction projects, such as fuel breaks, shaded fuel breaks, and roadside fuel breaks, should take place. There is a need to further investigate environmentally and socially acceptable landscape level fuel breaks. Part of the benefit of bringing multiple parties to the table, is that priority areas and assets at risk have become identified. This allows planners to consider not only community or neighborhood specific projects but also landscape level projects.

Eucalyptus

Eucalyptus was introduced into California in the mid 1800's both as a windbreak and for fiber production. It has thrived in California's climate and has since spread throughout the state. Eucalyptus is responsible for the displacement of numerous native species; and the aromatic oils in eucalyptus will eventually kill off all native understory vegetation and macro-decomposers, leading to dangerous accumulations of extremely flammable litter to a depth of several feet.

Because of its invasive nature and proclivity to burn rapidly and violently, eucalyptus has been identified as one of the highest priority tree species recommended for fuel modification or removal. Eucalyptus as a wildland fuel was observed in Santa Cruz County during the 2008 Trabing Fire and prior to that, the Oakland Hills Fire in 1991. Both fires resulted in losses of property, residential structures and, in the case of Oakland, loss of life. Historically, there have been eucalyptus fires adjacent to the community of El Granada (Wicklow Property) which has involved the loss of life and property. Reports of embers observed falling two to five miles downwind illustrates the danger of fires in large eucalyptus stands.

Eucalyptus was imported into the local area in the early 1900's for several uses, including fuel for powering locomotives. Numerous hedgerows were planted in the area and the species was quickly found to exhibit strong adaptation and rapid growth. What was planted over 100 years ago as single or double wide rows of trees, have expanded to large extended stands. Recent estimates of eucalyptus grove expansion are 3 lineal feet per year. Eucalyptus is so successful in colonizing new ground, to the exclusion of

native species, that a common comment during scoping sessions for this CWPP was to request that the species be declared a noxious weed or an invasive pest and be eradicated.

Eucalyptus stands frequently grow in excess of 80 feet tall and have a propensity to generate copious amounts of ground litter. Vertical ground litter accumulations of three feet or more of dry leaves, branches, bark are not uncommon. Because of peeling bark, small branches and sprouts, many eucalyptus stands exhibit fuels from the ground to canopy. Fire behavior in these stands can become extreme.

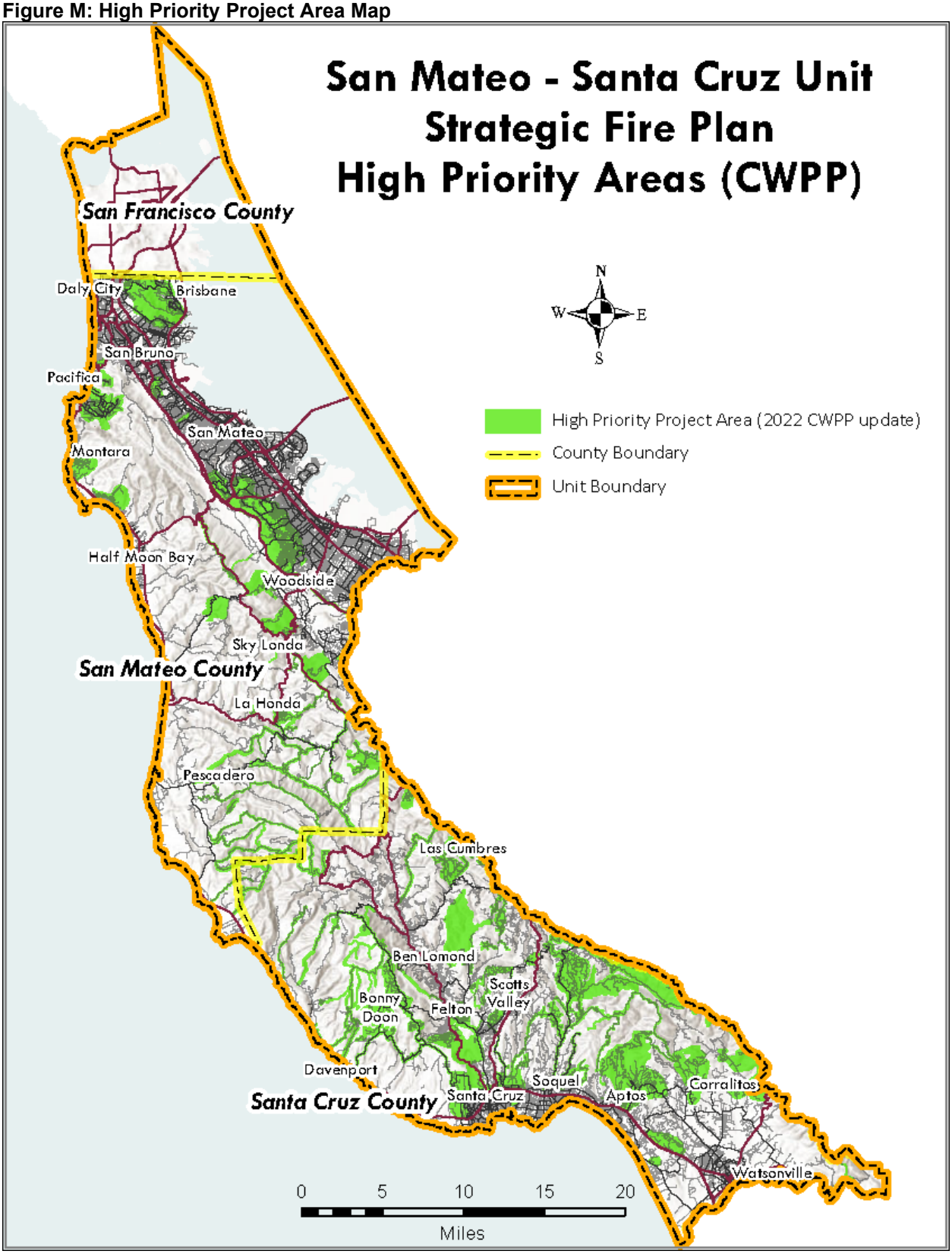
Flame length one and a half times the height of the stand is frequent in large stand replacement fires. Other examples of these conditions can be found in southern Australia in the frequent large catastrophic fires. This becomes a huge factor in fire control when residential and other structures are built within and adjacent to these stands.

There are several locations throughout San Mateo and Santa Cruz Counties where residents live in close proximity to large eucalyptus stands. Addressing the potential risk to lives and property where this situation exists should be considered. Several projects have been completed as pilot projects to thin or remove stands in San Mateo County, including thinning in the Quarry Park area of El Granada and clearing along Highway 84 in the Woodside area. Other projects include the Wicklow Project by Peninsula Open Space Trust and the Coral Reef project by the RCD, CALFIRE and Cabrillo Unified School District.

Potential projects needed across the landscape include:

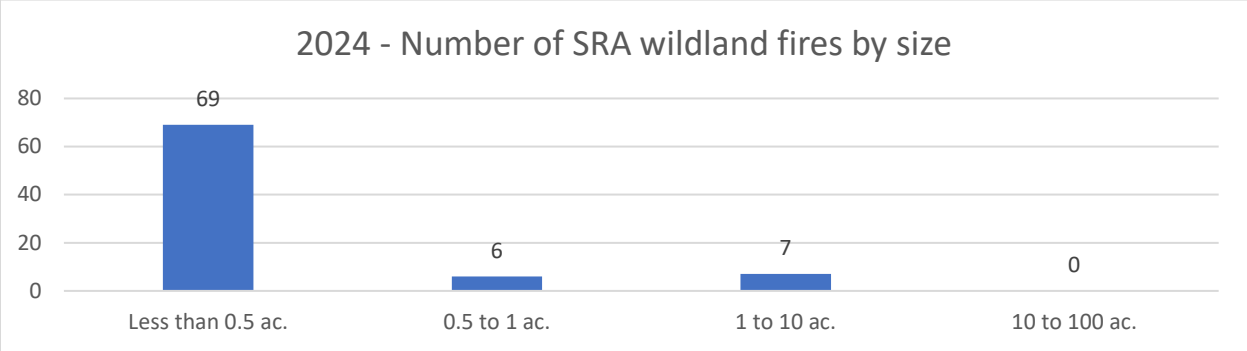
- Identify and map eucalyptus stands in both counties.
- Identify risks to lives and property.
- Mitigate risk to lives and property through appropriate vegetation management projects (thinning, removal and Potential projects needed across the landscape include:

Figure M: High Priority Project Area Map



APPENDIX E: IGNITION ANALYSIS

The primary goal of the fire prevention program is to reduce the number of ignitions within the Unit. By identifying the locations and causes of fire, the Prevention Bureau can allocate additional resources to combat and prevent fires. There were 347 ignitions of all types of fires reported in 2024. Of these, 82 were wildland fires within the SRA in 2024 totaling 24.8 acres burned. The Unit kept 100% (82 of 82) of all fires to less than 10 acres in size. The largest fire was 4.1 acres and the average size of all wildland fires in 2024 was 0.3 acres.



2024 Wildland Fire Statistics:
Total # of fires: 82; Mean size: 0.3 ac; Median size: 0.01 ac; Mode: 0.01 ac (44 occurances)

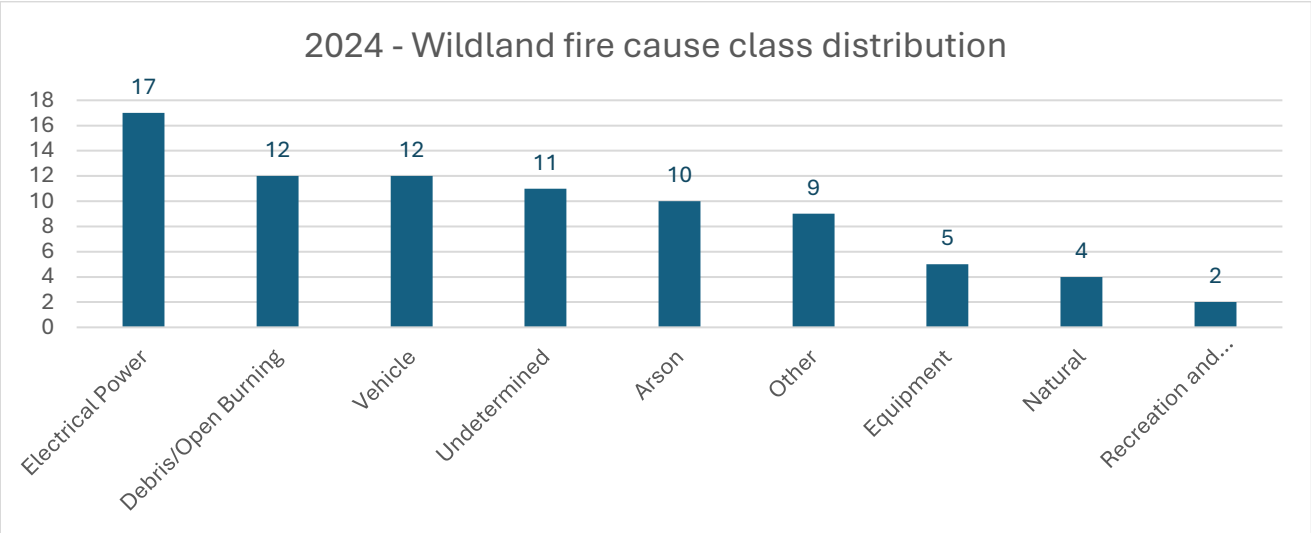
A map displaying the location distribution of the wildland fires shown below:

The table below compares the number and acreage of fires in the Unit over the past several years.

Ignition an acreage totals/year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total # of fires	94	73	91	84	80	140	104	112	87	82
Total # of acres	42	36	508	55	100	86,721	440	93	19	25
% of total fires less than 10 ac	99%	98%	98%	99%	96%	98%	94%	97%	100%	100%
Largest fire size (acres)	11	13	391	17	61	86,509	170	29	2	4
Average fire size (acres)	0.44	0.49	4.89	0.66	1.25	619.44	4.23	0.83	0.21	0.30

This past year (2024), there were 5 fewer wildland fires than the previous year (2023) and 23 fewer than the previous five-year (2019-2023) average of 105. The total acreage burned (25 acres) in 2024 is less than the previous five-year average of 17,475 acres. However, this average is disproportionately high due to the single large "100-year fire" in 2020 that burned more acres in the Unit than had been burned in the last 100 years combined. Without that 86,509-acre fire in the average, the five-year average annual total acreage burned is 173 ac. With that in mind, while both the number of fires occurring and the amount of land burned in the 2024 fire season were below average, they were within one standard deviation of average. Additionally, for the second time since 2014, the Unit was able to keep all SRA wildland fires below 10 acres in size.

The following chart shows the frequency of wildland fires by cause for the most recent data (2024).

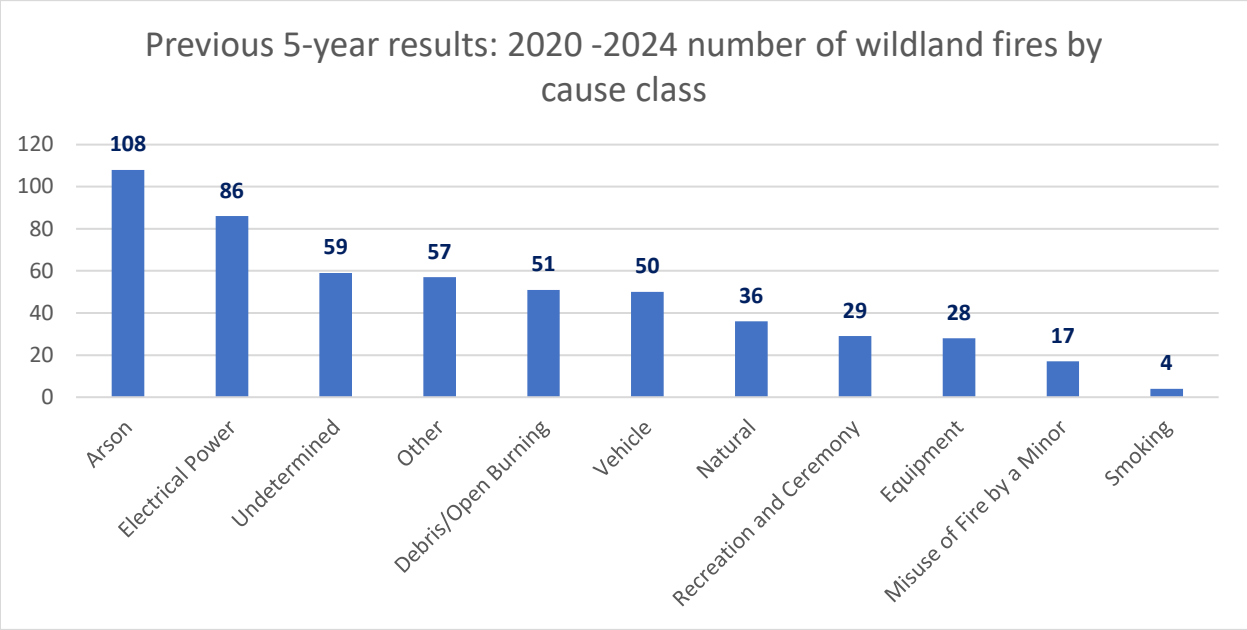


On the chart, the top three cause classes are Electrical Power, Debris / Open Burning, and Vehicles. These three classes represent 50% of ignitions in the Unit for 2024.

The number of arson fires in 2024 decreased from the number of arson fires in 2023 both in absolute numbers and percentage of all fires. The number of arson fires are below one standard deviation for the previous 5-year average, which shows a true reduction in arson started fires. Notably, there are four other causes of fires in 2024 that were more prevalent than arson, which has not happened since 2019.

The number of fires started due to electrical power was the most common ignition source found for fires in 2024. When looking at averages, the number of electrical power ignitions has been the second most common ignition cause over the past five-years, behind Arson ignitions.

During 2024 no fires were determined to be caused by railroad activities, smoking, or misuse of fire by a minor (playing with fire).



The distribution of cause class can be compared to the total previous five years (2020 to 2024) of fire causes in the chart above. The biggest differences from average for 2024 were the categories: Arson and Vehicles. As mentioned above, the number of Arson caused fires decreased notably this past year, approximately twelve percent less than the 5-year average.

The number of wildfires started by Vehicles doubled in 2024 as compared to the previous year, from 6 to 12. While this is still within one standard deviation of the 5-year average, it more than seven and a half percent higher than that average. This was the biggest upward change in the numbers of ignitions across all cause classes in 2024.

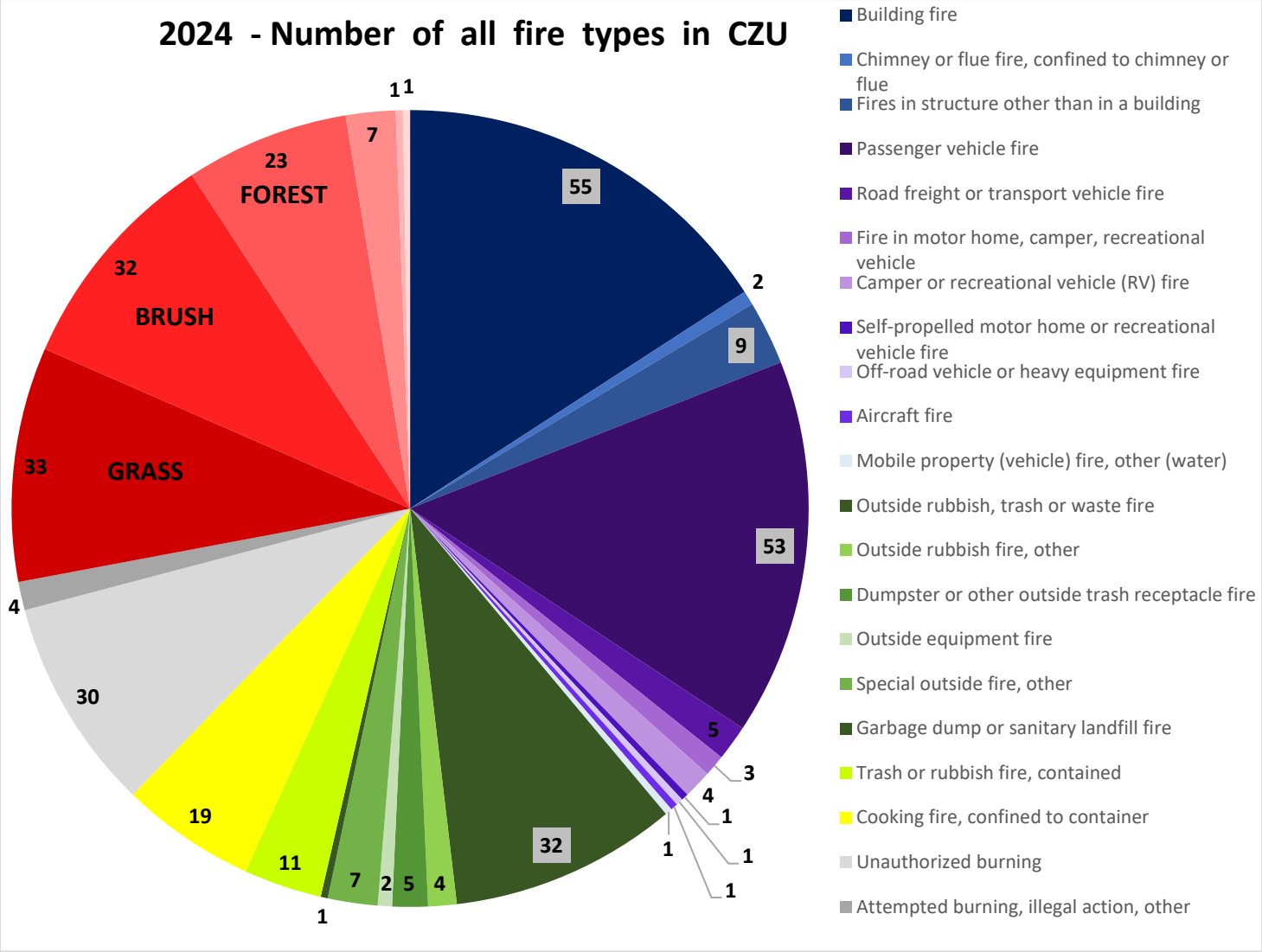
Additionally, it is worth noting that 39% (32 out of 82) of wildland fires in the year 2024 occurred within 50 feet of a road surface (same as the previous year) and 13% (11 out of 82) of the ignitions started within 50 feet of a state highway (similar to 2024).

The table below compares the number and causation of fires in the Unit over the past eleven years.

Number of wildland fires by cause and year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	5-year Average
Arson	28	7	3	4	5	3	30	19	25	23	10	*21.4*
Campfire	19	7	7	7	6	8	9	9	6	3	2	*5.8*
Debris Burning	19	4	4	7	3	5	4	7	14	14	12	*10.2*
Electrical Power	14	13	16	18	14	16	13	21	19	16	17	*17.2*
Equipment Use	4	6	4	5	11	10	9	2	7	5	5	*5.6*
Lightning	-	1	-	7	-	1	28	2	2	-	4	*7.2*
Miscellaneous	7	11	11	10	9	11	13	14	10	11	9	*11.4*
Playing with Fire	3	2	1	-	1	3	2	8	4	3	-	*3.4*
Railroad	-	-	-	-	-	-	-	-	-	-	-	*0.0*
Smoking	3	3	2	-	3	-	-	-	3	1	-	*0.8*
Undetermined	28	34	21	28	26	12	14	14	16	5	11	*12.0*
Vehicle	5	6	4	5	6	11	18	8	6	6	12	*10.0*
Annual Totals:	130	94	73	91	84	80	140	104	112	87	82	

Note: The descriptive cause classes that CAL FIRE had used for many years changed slightly in 2023. Some of the descriptors have had their wording altered to better align with the National Fire Incident Reporting System (NFIRS) standards. For the purpose of multi-year comparison, “Campfires” includes the new descriptor “Recreation & Ceremony”, “Electrical Power” includes the new descriptor “Power Generation / Transmission / Distribution”, “Miscellaneous” includes the new descriptor “Other”, “Playing with Fire” includes the new descriptor “Misuse of Fire by a Minor” and “Lightning” includes the new descriptor “Natural”.

While a large part of the State mission is to control wildland fires, the Unit is also responsible for controlling other types of fires as well. The pie chart below shows the distribution of the various types of all 347 fire ignitions that occurred in 2024. Wildland fires, of all types, account for 28% of the fires. The other types of fires, not extending into the wildland include the following: illegal burns (10%), rubbish/trash (18%), vehicle fires (20%), structure (19%), and other miscellaneous fire types (5%).



Discussion:

General Mitigation Measures

The Prevention Bureau has determined the most effective way to mitigate the number and type of ignitions includes both education and enforcement. The following describes the Unit's plan for dealing with specific fire problems.

Playing with fire / Misuse of Fire by a Minor:

Reducing the number of ignitions caused by children and juveniles playing with fire is best accomplished through education. Fire safety is a common topic at many community outreach events. Prevention officers will also speak to children at the request of educators. In the event a child is identified by prevention, there is the option of a juvenile fire setter program and of course the criminal justice system in some circumstances.

Equipment Fires (not vehicles):

Reducing the number of ignitions caused by equipment is best accomplished through education, followed with increased enforcement. In many cases, equipment fires are caused by individuals engaged in hazard reduction projects such as mowing or chainsaw operations. Permits are issued with specific parameters to reduce the likelihood of fire ignitions. Within the permit, we specify the necessary equipment/suppression tools required of the public to contain a fire when issuing a Timber Harvest permit. Spot inspections of tree service and logging operator equipment can further reduce the potential of ignitions.

Debris Fires / Debris & Open Burning:

Due to the number of debris fires and legal controlled burns in the Unit, the potential for escaped fires is always high. Correspondingly, the Department responds to many reported debris burns each year whether they have escaped control or not. Engine companies will respond to debris burns and assess whether or not they are safe, controlled, and are being burned within guidelines. Unsafe fires and fires burning material illegally are extinguished, while safe and permitted fires are allowed. The Air Pollution Control Board and Cal Fire share responsibility for determining, day-to-day, whether a burning process is allowed. The process for the public to acquire a burn permit is now 100% online (https://burnpermit.fire.ca.gov), which allows better tracking of legal burns, resulting in fewer false alarm incidents as well as increased availability for the public to obtain a permit and become educated on the safe and proper method of burning. Law Enforcement action is utilized when illegal or unpermitted burning is discovered.

Undetermined / Miscellaneous / Other fires:

The Unit has a prevention department and is actively training engine companies and overhead personnel in Wildland Fire Investigation. It is the goal of the Unit to reduce the number of “undetermined” fire causes through increased use of Unit investigators and continued training of Unit personnel. The engineering control of how the initial fire report is written has assisted the field personnel in coming to a conclusion regarding fire ignition cause. The Prevention staff have been going above and beyond the requirements to ensure that ignition causes are investigated thoroughly.

Arson:

The Prevention Bureau and the public are aware of the problem with arson in the Unit. Some of the increase in ignitions being classified as arson have to do with better investigation on the part of our staff. However, in spite of the single year decrease in 2024, the Prevention Bureau has seen an increase in arson fires across the last five years above and beyond the trend of concluding the ignition was caused due to arson rather than leaving the cause as undetermined. In other words, where previously fires had been classified as undetermined, they now have documented evidence of arson and the total number of arson cause ignitions are higher that what would be attributed to simply the change in cause class from “undetermined” to “arson”. Prevention efforts include increased patrols, working with the public and allied agencies to investigate and pursue all leads.

Campfire / Recreation & Ceremony:

While the number of campfire ignitions in the Unit has been fairly steady over the last five years and dropping by a significant amount in the last two years, there is always the potential for a large number of fire starts, due to the large numbers of individuals illegally using public and private forest lands for camping and living. Prevention efforts include increased patrols, educating the public, and enforcement action. The Unit has worked with local government cooperators, including law enforcement and fire, to discuss and implement mitigation efforts aimed at reducing campfire ignitions through education, enforcement, and seasonal burn restrictions.

Annual Report of Unit Accomplishments

Investigations and Enforcement: The Unit investigates all fires for origin and cause. An ignition analysis can be found in Appendix E. The CZU Prevention staff have been successfully working with the San Mateo Consolidated Fire Department's and Scotts Valley Fire Department's Junior Fire Setter programs when juvenile arson subjects are identified. The Prevention staff have been heavily involved in the Santa Cruz County Fire Investigations Task Force. They have been coordinating work with the Santa Cruz County's District Attorney's office and the Santa Cruz County Sheriff's office, bolstering the interoperability between fire and law enforcement personnel.

Wildland Fire Prevention Engineering: The San Mateo Santa Cruz Unit is heavily committed to Pre-fire Engineering efforts across the Unit. The Unit updated the San Mateo County and Santa Cruz County Community Wildfire Protection Plan in 2014, 2018, & 2022. Additionally, the Unit employs a team of Defensible Space Inspectors who inspect structures in the SRA for compliance with the previsions of PRC §4291. These inspectors focused their attention on areas in the SRA that are within Fire Protection District boundaries, whereas the CAL FIRE engine crews concentrated on inspecting the structures in the SRA that were within their own response areas. Between the Defensible Space Inspectors and the personnel assigned to fire engines, the Unit completed 4,369 inspections of vegetation clearance around homes within the SRA. The Unit Prevention office recently completed a set of maps that break up San Mateo & Santa Cruz counties into 3 zones, with the goal of focusing our inspections on one zone per year.

Education and Information: While our personnel did educate the public about fire safety and defensible space when the opportunities arose, the number of in person contacts is still below pre-COVID averages. Methods of electronic public outreach have been utilized much more in the past couple of years, which often are more difficult to quantify how many people are receiving the message. The Unit has a dedicated Public Information Officer and maintains a twitter (X) account, sends out email notifications, and news broadcasts. CZU has an account with Genasys EVAC (previously Zonehaven) for evacuation notifications. Unit personnel have attended County Fairs and staffed fire prevention booths. Both Prevention and field personnel have attended

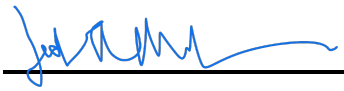
community meetings, Firewise meetings, and Fire Safe Council meetings to ensure the message of fire safety is included in the discussion. CZU is improving the fire prevention signage throughout the counties at both new and old sites. The websites for county fire, Pajaro Valley Fire Protection District, and Coastside Fire Protection District have been revamped for better outreach and access to the burn permit process.

Vegetation Management: The Unit Vegetation Management Program is an integral part of all aspects of fuels treatment, including prescribed fire. In 2024, the VMP broadcast burned 344 acres in the Unit. CAL FIRE also assisted California State Parks, outside of the VMP program, with 169 acres of broadcast burning. Other than broadcast burn fires, within the Unit, CAL FIRE has worked on its own projects and in collaboration with local Fire Safe Councils using either hand treating methods or mechanical means to treat 86 acres of vegetation. About 10 of those acres had the material burned after being cut and stacked in piles.

Volunteerism: Both Santa Cruz and San Mateo County Fire Departments and Coastside Fire Protection District have volunteers that staff apparatus, in addition to the paid Cal Fire employees. During fuel reduction projects, community volunteers routinely support fuel treatment projects by providing additional sponsor supervision when CDCR crews are utilized.

Fire Hazard Severity Mapping and Mitigation: The Unit has worked with the Santa Cruz Mountain Stewardship Network and the Golden Gate National Parks Conservancy to use the Lidar derived data in the creation of a Wildfire Risk Index map, which is similar to the Fire Hazard Severity map created at the state level by FRAP. Santa Cruz County was mapped in 2021 and San Mateo County mapped in 2022. The mapping data has been shared to FRAP for the update to the Fire Hazard Severity Zones in 2022/2023. New Lidar data was collected in 2024 for the area of the 2020 CZU Lightning Complex fire and analyzed in early 2025.

Other Fire Prevention Projects in SRA: The Unit continues to plan, organize, and implement fire prevention projects. The Unit works with numerous cooperating agencies and Fire Safe Councils to develop projects throughout the Unit.



5.8.2025

Unit Chief **Date**