

Fuels Management on Park Land:

An Overview of History, Planning Process, and Future of Vegetation Management in San Mateo County Parks

Dan Krug – County Arborist





Through stewardship, San Mateo County Parks preserves our County's natural and cultural treasures, and provides safe, accessible parks, recreation and learning opportunities to enhance the community's quality of life.

San Mateo County Parks: Mission Statement

San Mateo County Parks

- A diverse collection of 25 properties covering roughly 17,000 acres, several Ecosystems and vegetation types.
 - Oak Woodland
 - Mixed Evergreen
 - Redwood Forest
 - Coastal Prairie
 - Coastal Marsh
 - Coastal Scrub
 - Chaparral
 - Serpentine Grassland
 - Several others



A collection of historic uses

Memorial County Park

- Saved from logging in 1924

Huddart Park

- 1938 bequeathed to County after the death of Logger James M. Huddart.
- Opened to the public in 1948, with a primary use as a youth recreation camp.

Junipero Serra Park

- Donated to the County in 1956.
- Historically significant location for Native Californians.

Historic Uses Continued

Sam McDonald Park

- Comprised of 3 different properties acquired between 1970-1976 with mixed use.

Pescadero Creek Park

- Extensively logged - Clear cut between 1920's-1950's. Acquired by the County in 1968.

San Pedro Valley Park

- Acquired in the 1970's

Wunderlich Park

- Sold to the County in 1974 from developer Martin Wunderlich.

Historic Uses Continued

San Bruno Mountain

- 1,700 acre in 1978 to limit development. 300 acres owned by State Parks but Managed by SMC Parks. Peak of the Mountain is owned by a tv/radio tower company.

Edgewood Park and Preserve

- Originally Purchased from the State in 1980, and designated a Natural Preserve in 1992.

Quarry Park

- As it is structured now was dedicated in 2014.

A Story of Mixed Use

Prior Use

- Ranching
- Logging
- Farming
- OHV use
- Labor Camps

Trends

- Suspending hands on management of the land results in naturalization of native and exotic species.
- Initially this was seen as an overall good due to the conversation of working land to non-working lands.

What happened after purchase?

- Significant alteration of land use
 - In some instances the properties went from managed to unmanaged land.
- Misunderstanding of maintenance needs for natural landscapes
- Prioritization of recreation management not Natural Resources

Changes Over Time

- 1993 - San Mateo County Fire Safe Council Established
- 2006 - Parks Vegetation Management Guidelines
 - Forest Resources of San Mateo County (Sub Committee 1971)
 - Natural Resources Management Program for Pescadero Creek County Park (1983)
 - Natural Resources Management Program, Implementation Concept Plan, Pescadero Creek County Park (1995)

County of San Mateo
Environmental Services Agency
Parks and Recreation Department



Decision-Making Guidelines for Vegetation Management, San Mateo County Parks



June 30, 2006

Focus on
maintenance of
existing trail
system.

Severe lack of
attention toward
defensible space of
Park facilities.

Occasional
treatment for
public safety along
property lines

Early Fuels Reduction

Changes over time continued

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- 2013 - Parks Strategic Plan
- 2015 - Natural Resources Management program.

Development of Natural Resources

Natural Resources is a Special District within the Department which focus on a Scientific approach to land management.

- Technical advisory for Department Staff
- Assists in Training
- Builds and maintains relationships with other land managers and agencies



Recent Fuels Reduction Projects

King's Mountain Road

Pre-Project Condition



Post-Project Condition







Quarry Park

Pre-Project Condition



Post-Project Condition



Quarry Park Operation







Neighborhood Protection 2019

- Junipero Serra Park
 - Terrace Drive
- Edgewood Park and Preserve
 - Joint Fuels Reduction - SFPUC and PG&E
 - Sylvan Way

Terrace Drive - Junipero Serra County Park

Pre-Project



Post-Project





Sylvan Way - Edgewood County Park

Pacific Gas and Electric and Other Utilities

- Developing relationships with PG&E has helped to improve communications on some Park properties.
 - San Bruno Mountain
 - Edgewood Park
 - Huddart Park

 - Stanford Linear Accelerator Center (SLAC)
 - Wunderlich Park



PG&E Joint Fuels Reduction - 2019





PG&E Oak Woodland Restoration - Wunderlich

- Larger scale project converting 16 acre of Eucalyptus removal, to be re-planted with oak woodland. In the center of Wunderlich County Park
- Includes the construction of a 1500' fire access road from the Wunderlich parking lot which will improve fire suppression efforts to the Park in the event of wildfire.





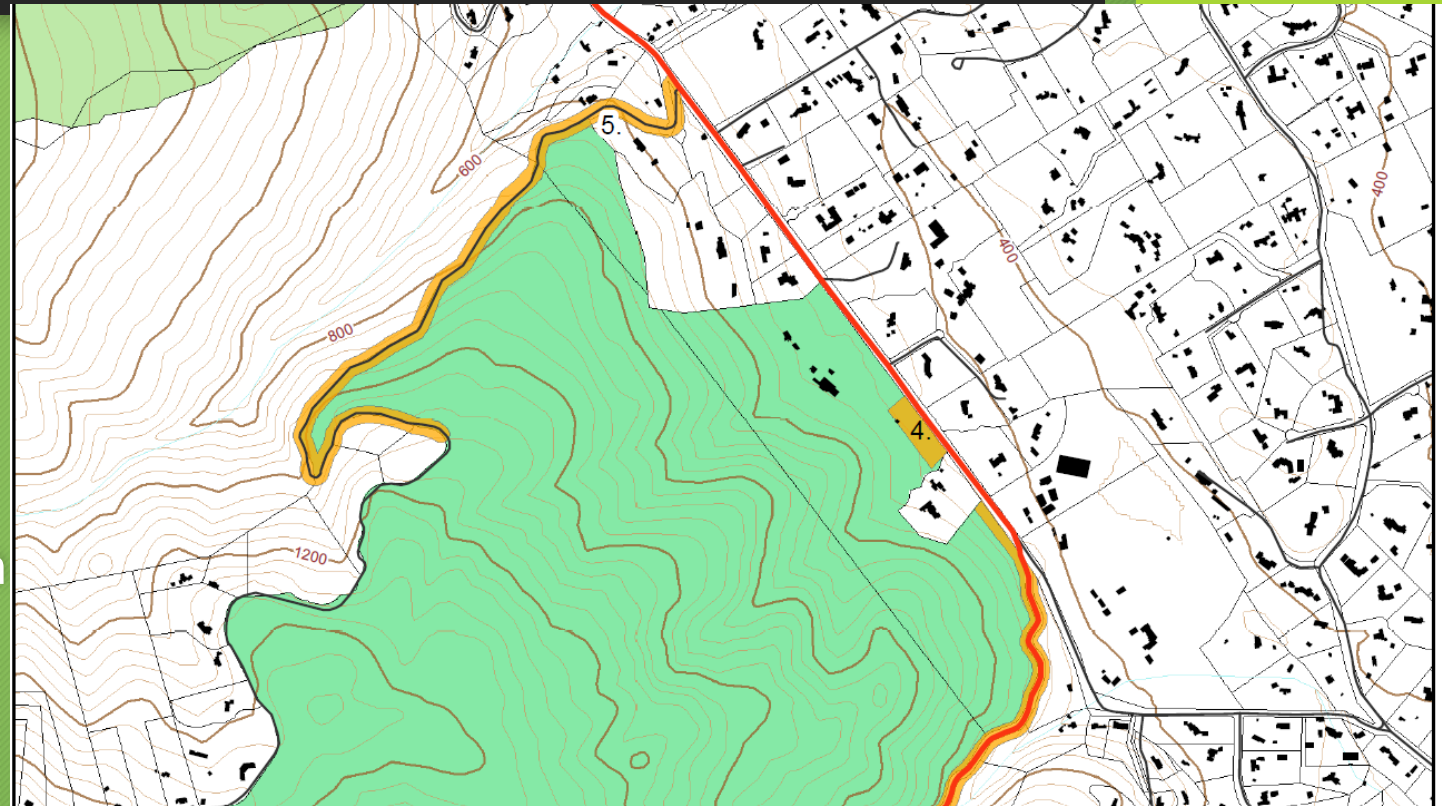






HWY 84 - Eucalyptus Removal

- 2 stands of Eucalyptus were removed along Hwy 84 within Wunderlich Park.
- 2 acre removed near Portola road in 2017, with the assistance of the Fire Safe Council - Clearing House Grant.
- Another acre of Eucalyptus removed in 2019 between the horse vendor and private property. Several trees removed with the assistance of Cal Trans.



New Project Planning Continued

- Accessibility
 - Slope and terrain are taken into account
 - Location of existing trails, service roads, or defunct skid-roads (to aid access to treatment areas)
- Determine process for vegetation management
 - Mechanical
 - Chemical
 - Handwork
 - Grazing
- Can existing fire breaks or shaded fuel breaks be “linked” to the proposed project?

Environmental Review and Public Process

- Fuels reduction in County Parks requires many considerations the most important of which is CEQA compliance.
 - Development of a Routine Maintenance Manual
- Significant Considerations
 - Wildlife and Rare Plant occurrences
 - Historical Records
 - Public outreach

Initial Treatment

- Can be costly depending on the density of the treatment area and terrain.
 - Planned treatments around sensitive species and critical habitats.
- Often requires multiple treatment methods for effective control.
- Work doesn't stop here!!!

Re-Treatment

- Plan for re-treatment ahead of time.
- Regular monitoring of treated areas to determine optimum re-treatment intervals.
 - What plant material being observed through the treatment area?
 - Good/Bad?
- Photo Points before and after help to better display the efficacy and benefits of the project.

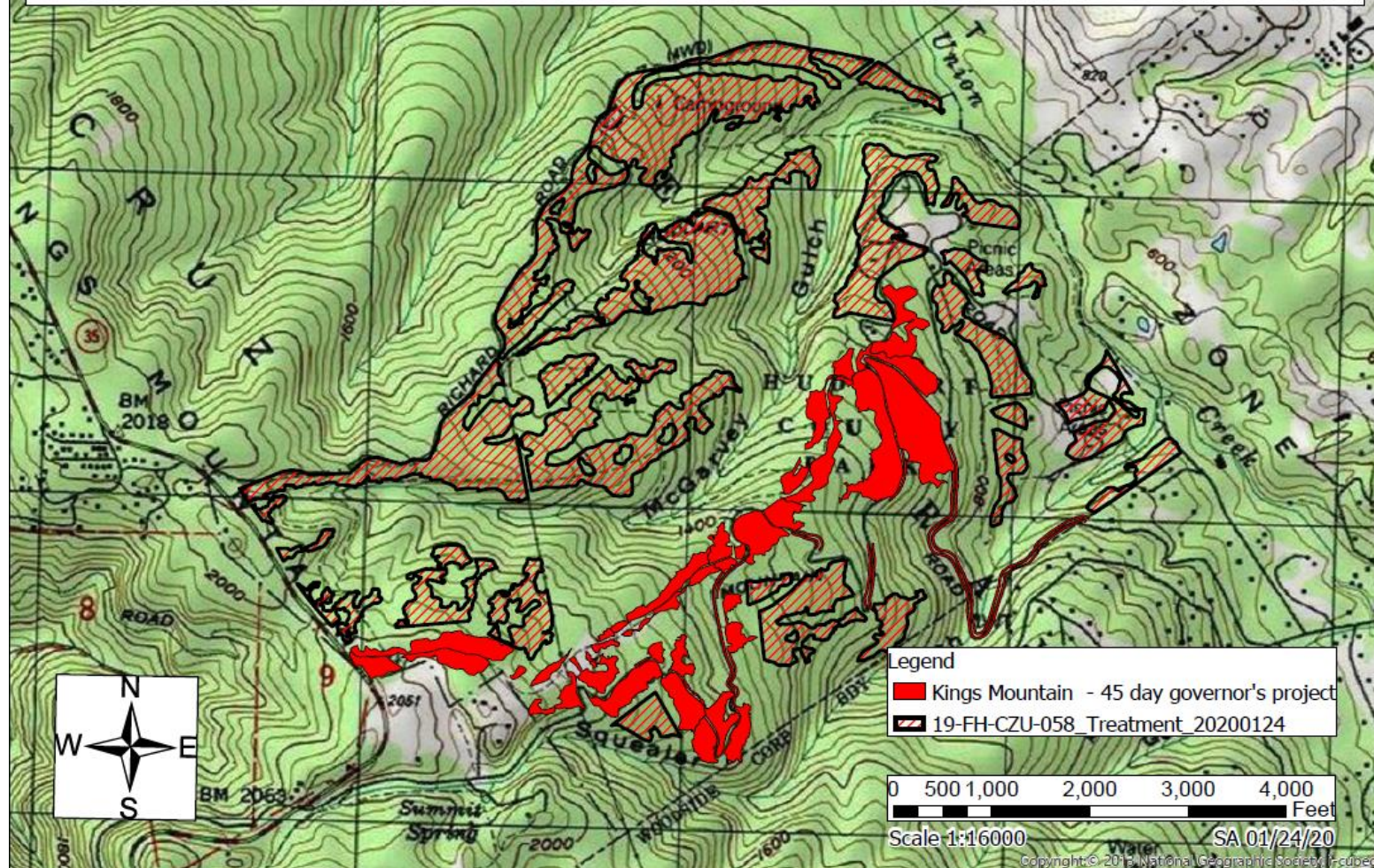
Future Projects

- Forest Health Grant
 - Recently awarded grant through the assistance of the Resource Conservation District.
 - 2.5 million for treatment of 460 acre within Huddart and Wunderlich Parks, and project planning for a future project an Butano State Park.



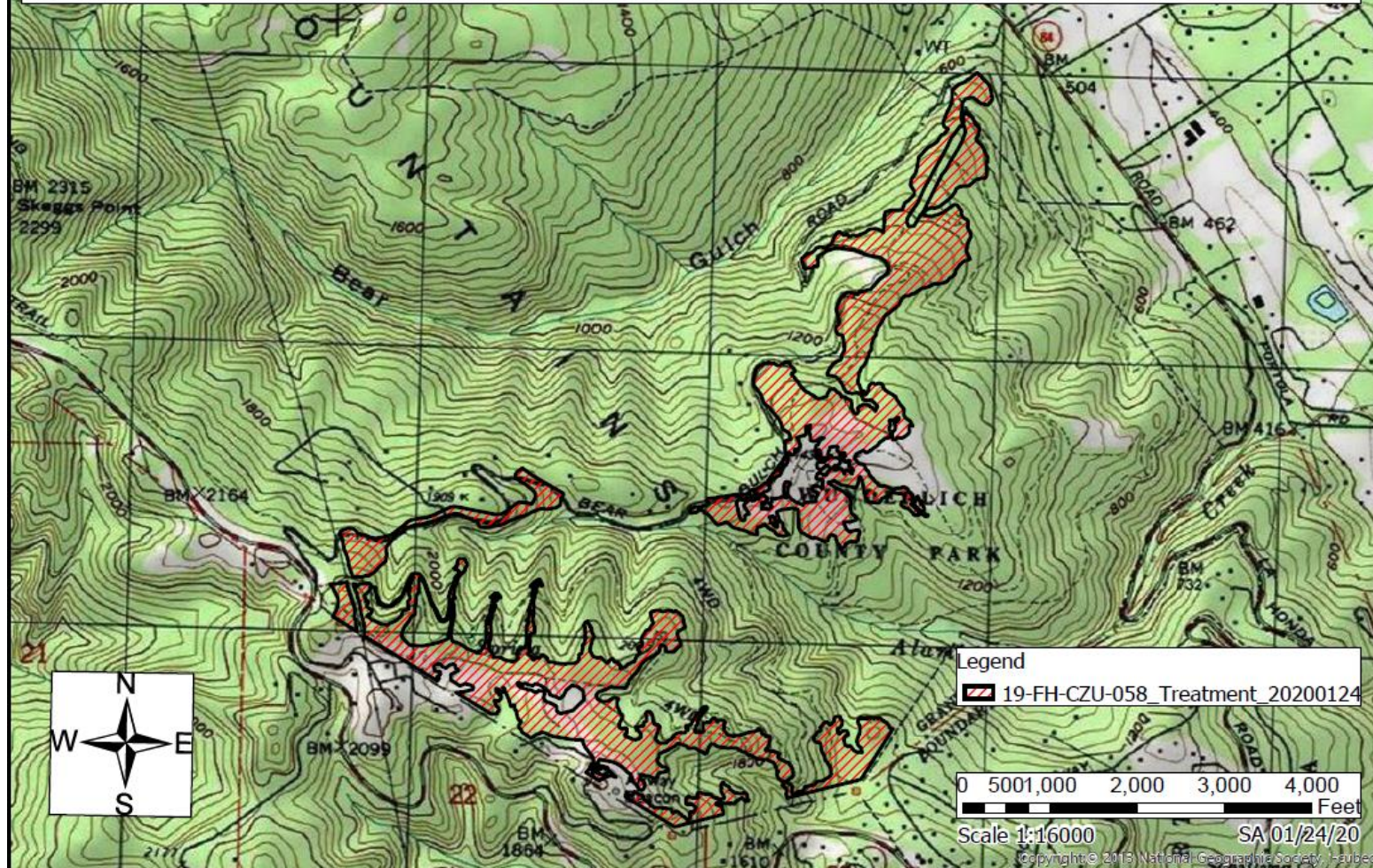
Resource Conservation District San Mateo County - 19-FH-CZU-058
Forest Health in San Mateo - A Collaborative Approach
Huddart County Park: Fuels Reduction Treatment Area - 230 Acres

San Mateo County, Woodside, CA, USGS 7.5" Quadrangle, Woodside, Portions of Canada Raymundo



Resource Conservation District San Mateo County - 19-FH-CZU-058
Forest Health in San Mateo - A Collaborative Approach
Wunderlich County Park: Fuels Reduction Treatment Area - 185 Acres

San Mateo County, Woodside, CA, USGS 7.5" Quadrangle, Woodside, Portions of Canada Raymundo



Legend
19-FH-CZU-058_Treatment_20200124

0 500 1,000 2,000 3,000 4,000 Feet

Scale 1:16000 SA 01/24/20

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Future Projects Continued

- San Bruno Mountain
- Grose removal
 - 7 acre burned in the area February 2020
 - Nearly 20 acre in the immediate area of the burn site is grose.
 - Department is considering several pilot projects for control
 - Crush and burn
 - Rip/ chip and burn
 - Cut/treat









Future Projects Continued

Pescadero Creek Complex

- Fuels treatment along 37 miles of vehicle accessible fire and service roads.
 - Roadside treatment of understory and over-dense fuels.
 - Long term maintenance project which will involve development of a regular treatment cycle.

Future of Fuels Reduction on County Property

- Continue to increase annual acreage in an environmental and fiscally responsible manner.
- Focus on high-value treatments to provide benefits to the surrounding communities and tie in habitat restoration wherever possible.
- Consider new and scientifically proven treatment options for invasive fire-prone species.
 - Reduce herbicide use or focus on less toxic formulations where possible.

Questions?

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