Pine Mountain Project: What You Need to Know

Bryant Baker Conservation Director Los Padres ForestWatch

Pine Mountain Project Quick Facts

755 acres total

0

- Live and dead trees would be cut using heavy equipment or by hand with chainsaws
- Over 300 acres of chaparral mastication or clearing
 - Commercial logging/timber sale likely



Vegetation Types in the Pine Mountain Project Area

Montane Hardwood-Conifer



CALIFORNIA 33

dobe

- Coastal Sage Scrub
- Sagebrush Scrub
- Hardwood



- Grassland
- Barren or Rock







Pine Mountain Ridge

Canyon Live Oak Woodland/Chaparral

Old-growth Mixed-conifer

Jeffrey Pine

Old-growth White Fir

Transition Zone

Chaparral

Google Earth

Chaparral





Great Basin Sagebrush

Canyon Live Oak Woodland



Mixed-conifer

Ancient White Fir



"No-questions-asked" Limit

< 24" in diameter

This tree is 23.5" in diameter.



Can Be Cut Under Some Circumstances

24 - 64" in diameter

1. Safety reasons

2. Impacted by dwarf mistletoe

This tree is 53" in diameter.

Dwarf mistletoe

What about environmental review?

Let's talk about the National Environmental Policy Act.

NEPA requires review of the effects of all federal, federally assisted, and federally licensed actions.

But should every single action require an environmental assessment?

What about painting a bathroom or fixing the ranger station gate?

Enter:

Categorical Exclusions

Categorical exclusions have become loopholes to avoid preparing an environmental study for big projects.

How the Public Gets Cut Out

 Only one comment period
Agency not required to respond to comments
No objection process

So why is the Forest Service proposing this?

EXECUTIVE ORDERS

Trump Executive Order (2018):

EO on Promoting Active Management of America's Forests, Rangelands, and other Federal Lands to Improve Conditions and Reduce Wildfire Risk

--- ENERGY & ENVIRONMENT Issued on: December 21, 2018

*Included a directive to sell 3.8 billion board feet of timber in the process.



Forest Service Internal Memo (May, 2019):

"Categorical exclusions to complete this work should be the first choice and used whenever possible. I encourage you to explore creative methods and set clear expectations to realize this priority effort."

Forest Service Internal Memo (June, 2019):

Reduced base price of "low value" timber on national forests to \$0.25 per 100 cubic feet. Low value timber includes "material that has a lengthy distance to market."



Will the project make the forest healthier by reducing density?

What the Forest Service Says:

Only 65 trees per acre historically (pre-fire suppression era) compared to 0 - 180 today*

*Citing personal communication with agency scientists

What the Science Says:

171 trees/acre in southern Sierra ponderosa pine forests

202 trees/acre in southern Sierra mixed-conifer forests

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SYNTHESIS & INTEGRATION

Improving the use of early timber inventories in reconstructing historical dry forests and fire in the western United States

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Citation: Baker, W. L., and C. T. Hanson. 2017. Improving the use of early timber inventories in reconstructing historical dry forests and fire in the western United States. Ecosphere 8(9):e01935. 10.1002/ecs2.1935

Let's take a trip to the past.





Mixed-conifer Mt. Pinos 1934

Near Alamo Mountain 1938

Naturally Open, Unmanaged Stand Pine Mountain 2019
1930 VTM Plot Locations Near Project Area

Chaparral

(33)

- Coastal Sage Scrub
- Sagebrush Scrub
- Hardwood
 - Montane Hardwood-Conifer

- Conifer Forest
- Grassland
- Barren or Rock
- $\stackrel{\scriptstyle <}{_{\sim}}$ 1930 Sample Plot



1930s Plot Size: 800 square meters

High variability within forests not captured by historical plots

Google Eart

Agency: Only 65 trees per acre historically compared to 100 today

Joogle Earth

Closest Forested 1930 Plot: 110 trees/acre

Will the project help reduce catastrophic fire?

Mixed-severity Fire

Moderate severity

tv

High severity

Low severity

Rim Fire Area 2014

Google Earth

Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-Conifer Forests of Global Ecology and Biogeography, (Global Ecol. Biogeogr.) (2012) 21, 1042–1052

Dennis C. Odion^{1,2}*, Chad T. Hanson³, André Arsenau Richard L. Hutto⁷, Walt Klenner⁸, Max A. Moritz⁹, Ros Mark A. Williams¹²

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Cite this article: Tingley MW, Ruiz-Gutiérrez V, Wilkerson RL, Howell CA, Siegel RB. 201^{-/-} Pyrodiversity promotes avian diversity over t decade following forest fire. *Proc. R. Soc. B* **283**: 20161703.

Research

Pyrodiversity promotes avian diversity over the decade following forest fire

Morgan W. Tingley^{1,2}, Vivi Christine A. Howell^{4,5} and

¹Ecology and Evolutionary Biology, Ur CT 06269, USA ²The Institute for Bird Populations, P(³Cornell Laboratory of Ornithology, 15 Land surveys show regional variability of the western United States

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RESEARCH

PAPER

Richard L. Hutto,^{1,†} Robert E. Keane,² Rosemary L. Sherriff,³ Christopher T. Rota,⁴ Lisa A. Eby,⁵ and Victoria A. Saab⁶



"Our findings suggest a need to recognize **mixed-severity fire regimes as the predominant fire regime** for most of the ponderosa pine and mixed-conifer forests of western North America."

Odion, D.C., et al (2014) Examining historical and current mixedseverity fire regimes in ponderosa pine and mixed-conifer forests of western North America. PLoS ONE, 9:e87852. Smucker, K.M., R.L. Hutto, and B.M. Steele (2005) Changes in bird abundance after wildfire: Importance of fire severity and time since fire. *Ecological Applications*, 15(5):1535-1549.



California Spotted Owl Nesting in Burned Snag

High Severity Fire Big Pine Mountain 1936 (Three Years Post-fire)



High Severity Fire San Bernardino Mountains 1926

High Severity Fire El Dorado County 1937 (12 years post-fire)



Fire in the Shrublands

• Natural fire regime in chaparral:

– Large, intense, infrequent fire once every 30 - 150 years

- Crown fire regime (everything burns)

- Generally late summer through fall under extreme winds

Whittier Fire from Goleta July 2017

Cave Fire 1 week post-fire

One Month

Three Months

Six Months

Santa Barbara County, 1935 4 months post-fire



Fire Severity Distribution: 2016 Pine Fire

- Unburned Low (16%)
- Low (45%)
- Moderate (25%)
- High (14%)



0.25





0.5 mi





Vegetation Types Burned in the 2016 Pine Fire

Chaparral

Hardwood

Montane Hardwood-Conifer

Conifer Forest

Grassland



Barren or Rock

0 0.25 0.5 mi







Pine Fire Burn Area Low-Moderate Severity 1.5 years post-fire

Buckwheat

White fir

Pine Fire Burn Area Small High-severity Patch 1.5 years post-fire

Pine Fire Burn Area High Severity -2 years post-fire

Sugar pine seedlings

What about dead or dying trees? What about bark beetles and disease?

Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks

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"...our results refute the assumption that increased bark beetle activity has increased area burned; therefore, policy discussions should focus on societal adaptation to the effects of the increasingly important driving factor: climate warming." 2018 Frontiers in Plant Science

Are Survivors Different? Genetic-Based Selection of Trees by Mountain Pine Beetle During a Climate Change-Driven Outbreak in a High-Elevation Pine Forest

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Pacific Northwest Research Station	INSIDE
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"Science affects the way we think together."

DEAD AND DYING TREES: ESSENTIAL FOR LIFE IN THE FOREST



A Hollow logs are used by martens, black bears, and smaller mammals for den sites and shelter.

IN SUMMARY

Twenty years after publication of a report on wildlife habitat in managed east-side forests, Pacific Northwest Research Station scientists Evelyn Bull, Catherine Parks, and Torolf Torgersen, are updating that report and discovering that the current direction for providing wildlife habitat on public forest lands does not reflect findings from



Condors Roosting in Snags (Ventura County)

Photo: US Fish and Wildlife Service



Previous Fires and Vegetation Removal Projects in the 2020 Creek Fire Area

- Creek Fire Perimeter
 - Previous Wildfires (< 30 Years Ago)
 - Prescribed Fires (< 20 Years Ago)
 - Post-fire Logging Projects (1994 - 2019)
 - Pre-fire Logging Projects (Mostly Commercial Thinning)
 - Other Vegetation Projects



4 mi

Creek Fire perimeter obtained from the National Interagency Fire Center (September 9, 2020). All vegetation removal project data collected from the U.S. Forest Service FACTS database. Previous fire perimeters obtained from FRAP database (Cal Fire). Contact Bryant Baker with any questions: bryant@lpfw.org.



So what will it look like if the project goes through?

Plumas National Forest "Cradle Valley Forest Health Project" Before (2014)

Google Earth

Plumas National Forest "Cradle Valley Forest Health Project" During/After (2019)

Chaparral Mastication Los Padres National Forest

Photo: Jeff Kuyper



Masticated

Masticated

Invasive, highly-flammable cheatgrass in dozer line





Pine Mountain Fuel Break

Priority Ranking: 118 out of 163
Comparing the role of fuel breaks across southern California national forests

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"...constructing fuel breaks in remote, backcountry locations will do little to save homes during a wildfire"

Homes destroyed; trees survived Paradise, CA 2018

These Oregon towns just burned down in the Alameda Fire. They were surrounded by agriculture.

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ProtectPineMountain.org

Questions?

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