



Photo credit: David Briggs

OVERVIEW OF THE CALIFORNIA 2020 FIRE SEASON AND UPDATES ON THE POINT REYES WOODWARD FIRE

One Tam Virtual Summit on
Climate: Change and Resilience
October 8, 2020

ONE TAM SUMMIT ON CLIMATE: CHANGE AND RESILIENCE OVERVIEW



PRESENTATION OUTLINE

- 2020 FIRE SEASON SUMMARY
- FIRE ECOLOGY 101
- WOODWARD FIRE IN DETAIL



Photo credit: Chrissy Sullivan

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2020 CALIFORNIA FIRE SEASON



2020 CA FIRE SEASON TO DATE

- >4 MILLION ACRES BURNED
- ESTIMATED 90 MILLION METRIC TONS CARBON EMITTED
- >1 BILLION IN SUPPRESSION COSTS
- IMMEASURABLE HUMAN IMPACTS

OCTOBER 1, 2020

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FIRE ECOLOGY 101



FIRE REGIME: THE PATTERN OF HOW FIRE BURNS IN A GIVEN ECOSYSTEM

BISHOP PINE FOREST



**HIGH SEVERITY
LOW FREQUENCY
FIRE REGIME**

MARITIME CHAPARRAL



SIERRAN MIXED CONIFER FOREST

**LOW SEVERITY
HIGH FREQUENCY
FIRE REGIME**



REDWOOD FOREST

**CAN TOLERATE A
RANGE OF
SEVERITY &
FREQUENCY**

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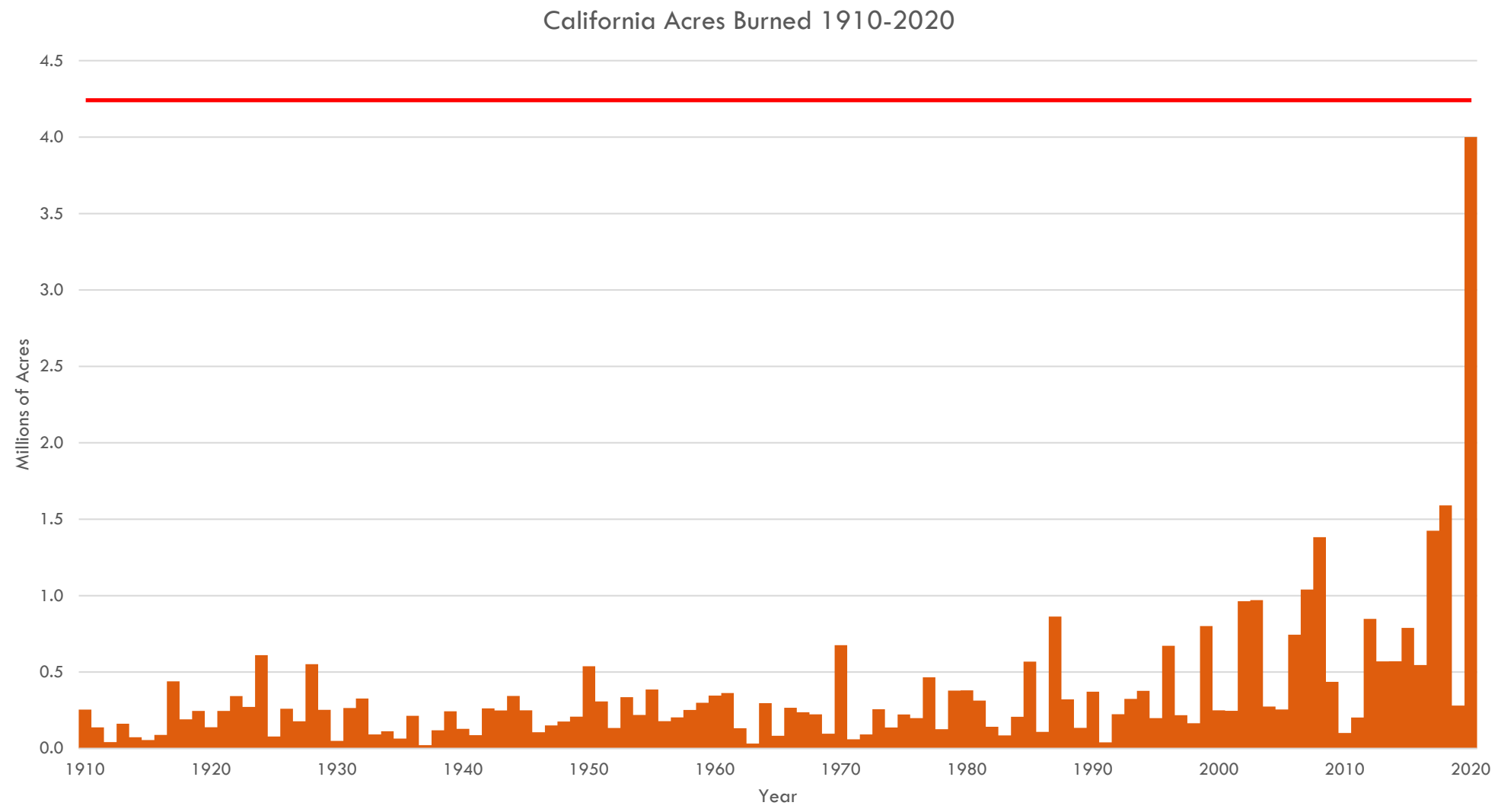
“The grass was burned every year. The fires were started and allowed to burn in every place. Burning was to make the weeds grow better and to keep down the brush.” - Pomo Indian oral history

“the grass and brush wood on this headland had been lately burned down so that I had little opportunity here to augment my botanical collection...” – Menzies 1793



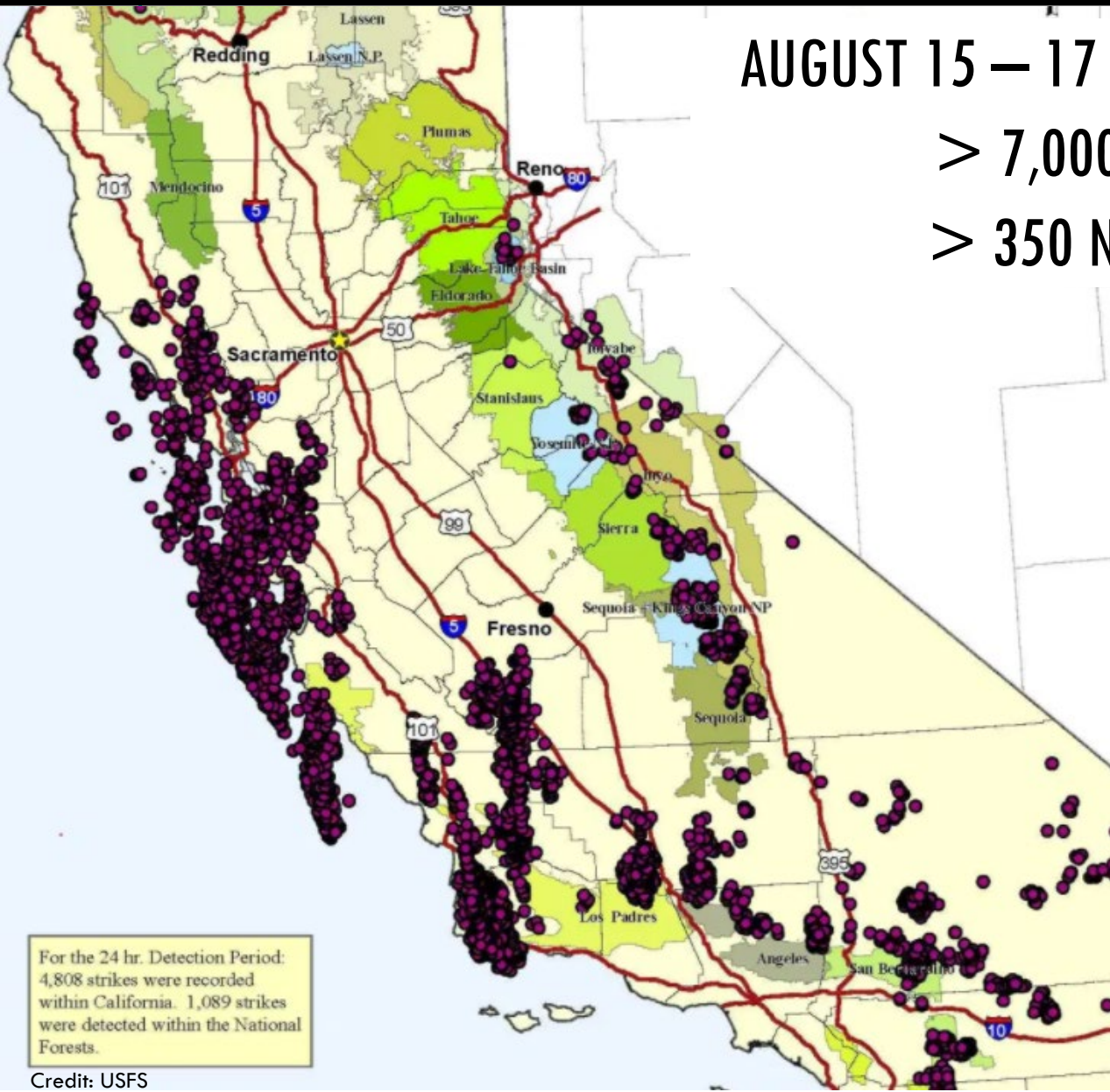
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POINT REYES WOODWARD FIRE



For the 24 hr. Detection Period:
4,808 strikes were recorded
within California. 1,089 strikes
were detected within the National
Forests.

Credit: USFS

AUGUST 15 – 17 LIGHTNING EVENT:
> 7,000 STRIKES
> 350 NEW FIRES



Credit: Jim Tang

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POINT REYES WOODWARD FIRE



AUGUST 19

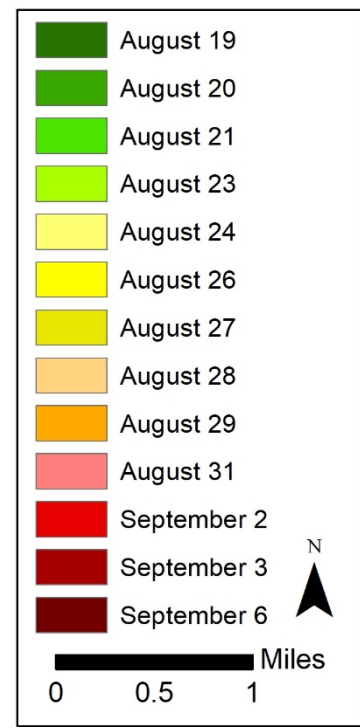
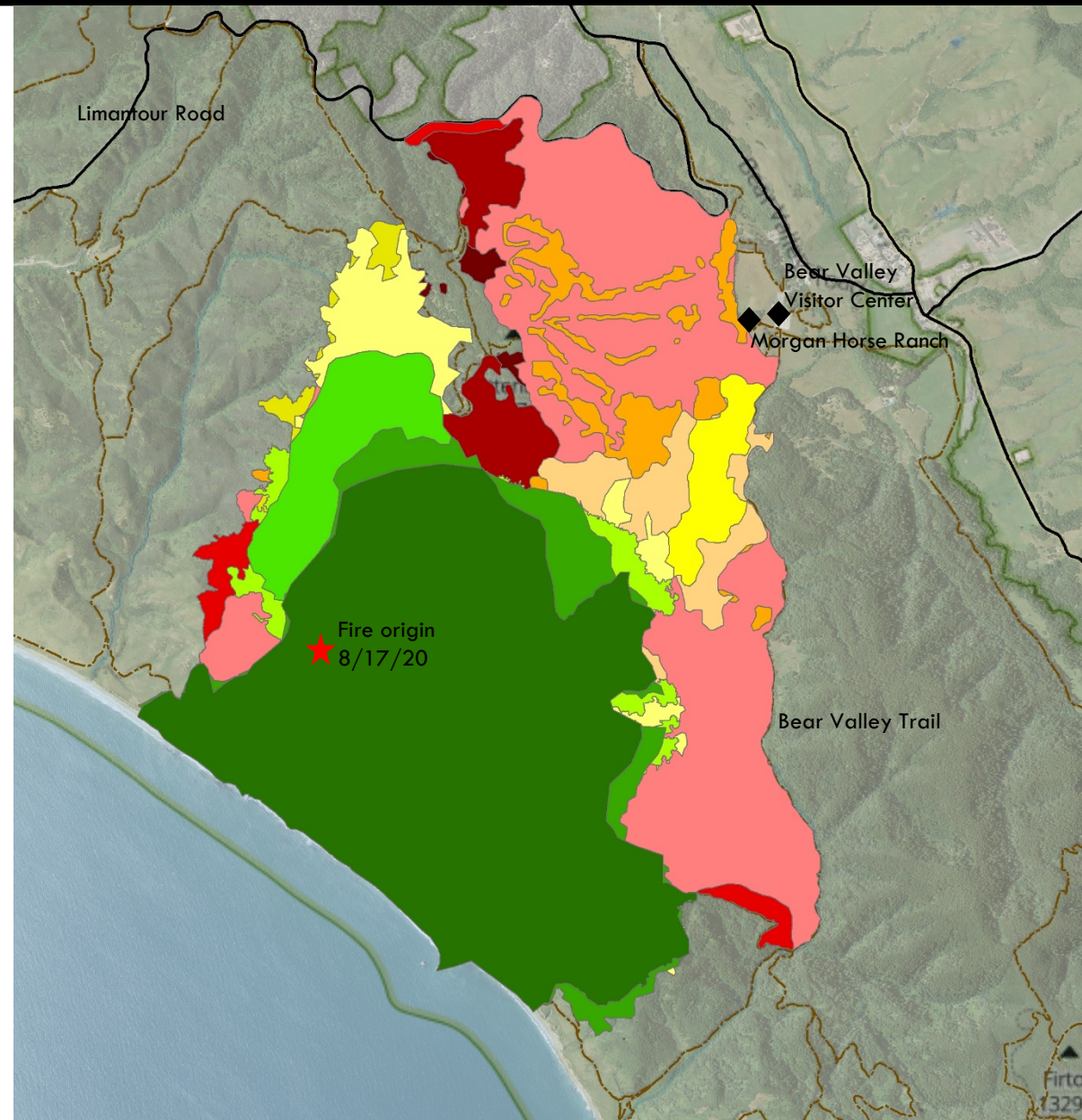


Photo credit: @WestMarinFeed

- **DISCOVERED ON MONDAY 8/17 — APPROXIMATELY 5 ACRES**
- **TUESDAY 8/18: 700 ACRES**
- **WEDNESDAY 8/19: 2000 ACRES**
- **SATURDAY 8/22: TYPE 1 INCIDENT MANAGEMENT TEAM ARRIVES; 2500 ACRES**
- **MUCH OF REMAINING GROWTH DUE TO BURN OUT; NOW 5,011 ACRES**

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POINT REYES WOODWARD FIRE



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ONE TAM SUMMIT ON CLIMATE: CHANGE AND RESILIENCE

POINT REYES WOODWARD FIRE



Photo credit: San Francisco Chronicle

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POINT REYES WOODWARD FIRE

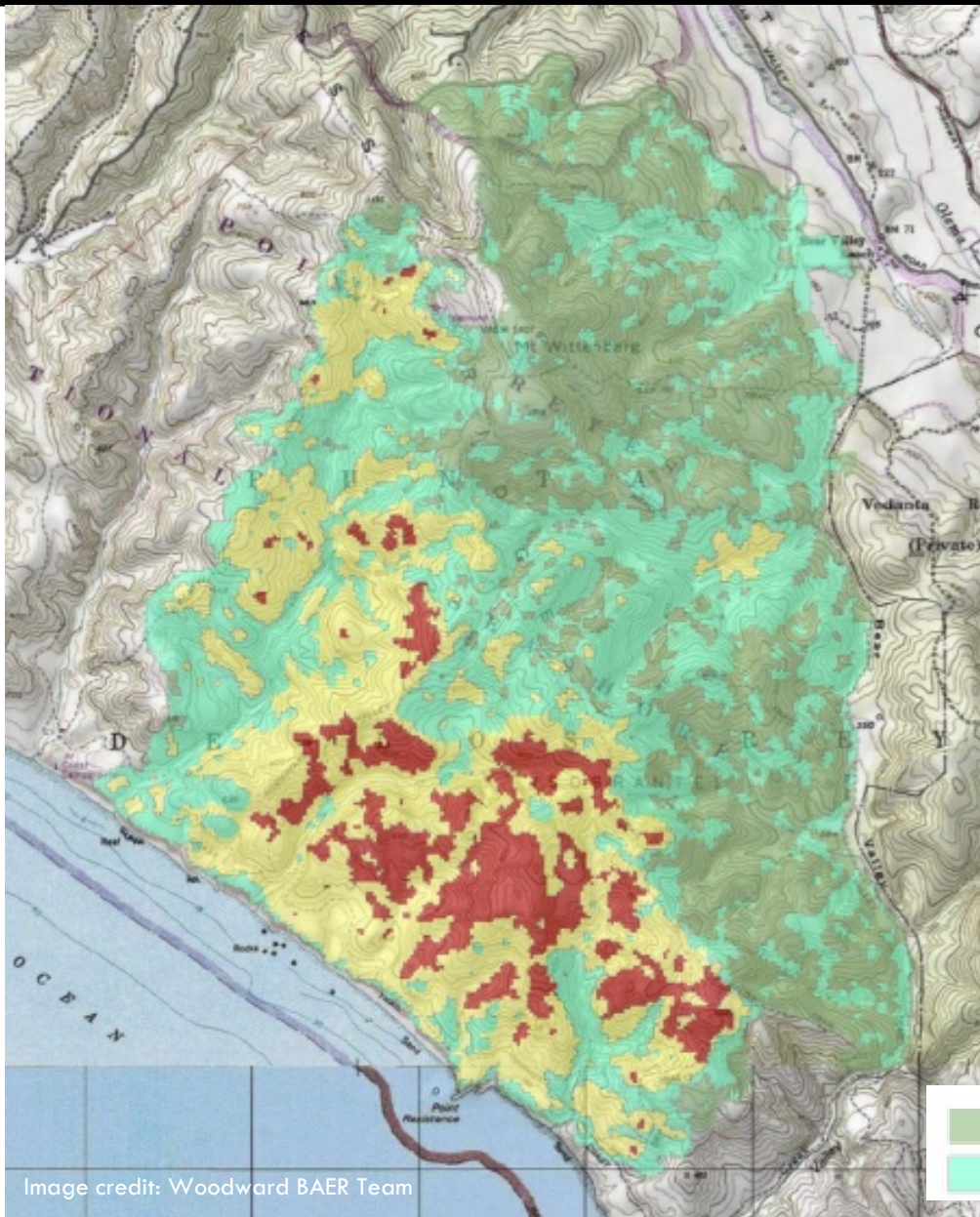
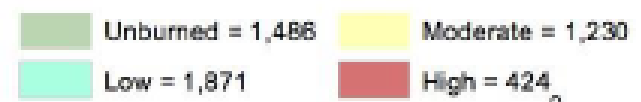


Image credit: Woodward BAER Team

SOIL BURN SEVERITY BASED ON 9/14 BURNED AREA REFLECTANCE CLASSIFICATION DATA

Soil Burn Severity	Acres	Percentage
Unburned	1,486	30%
Low	1,871	37%
Moderate	1,230	25%
High	424	8%
TOTAL	5,011	



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POINT REYES WOODWARD FIRE



Image credits: NPS

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Image credit: NPS

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POINT REYES WOODWARD FIRE



POST-VISION FIRE
DOUGLAS-FIR FOREST



CEANOTHUS SCRUB



MATURE
DOUGLAS-FIR FOREST



COASTAL SCRUB

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KEY ELEMENTS OF POST-FIRE RESPONSE

- REPAIR DOZER LINES, HAND LINES, DROP POINTS, ETC
- STABILIZE CULTURAL SITES
- HAZARD TREE SURVEILLANCE & MITIGATION
- TRAILS & FENCE REPAIR
- INVASIVE PLANT MANAGEMENT

Fire Suppression Repair Plan

Woodward

CA-RNP-12009

September 2020

Prepared by Cedar Drake, Lead READ



Interagency Burned Area Rehabilitation Guidebook

Interpretation of Department of the Interior 620 DM 3
For the Burned Area Rehabilitation of Federal and Tribal Trust
Lands
Version 1.3



ONE TAM SUMMIT ON CLIMATE: CHANGE AND RESILIENCE CONCLUSIONS



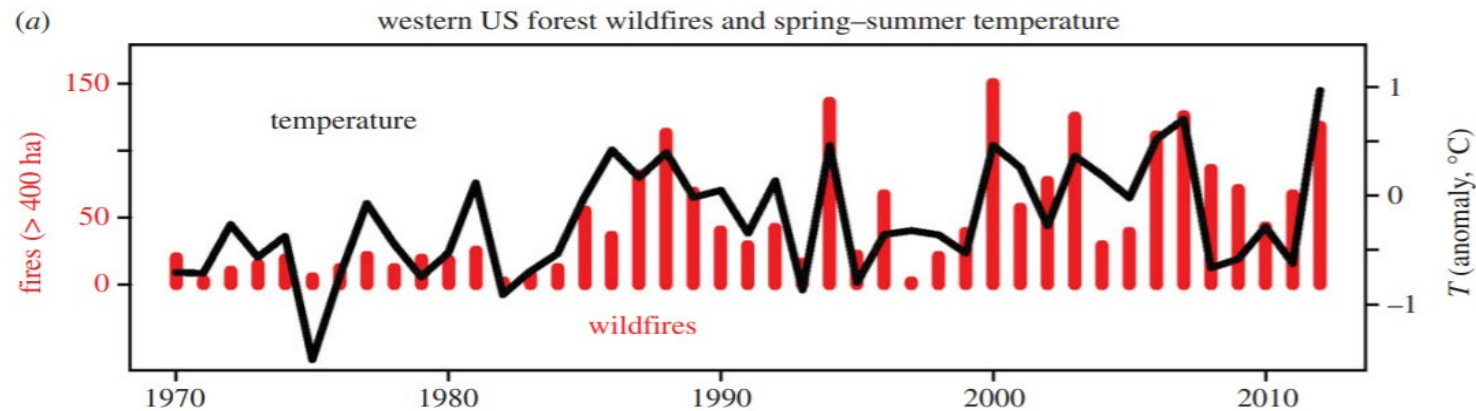
Photo credit: Chrissy Sullivan

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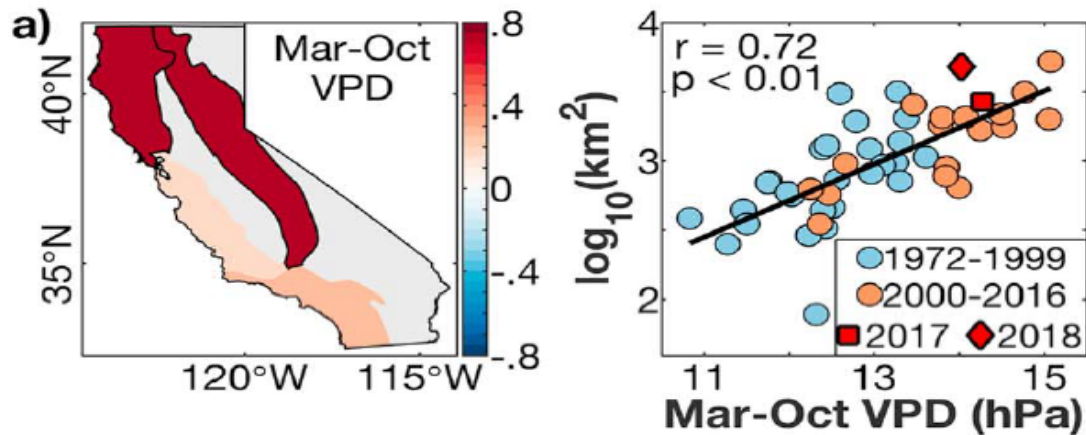
FIRE ECOLOGY 101



FIRE SEASONS ARE DIFFERENT THAN THEY WERE 20 YEARS AGO. WHY?



CREDIT: WESTERLING 2016



Williams et al 2019

- 100 YEARS OF FIRE SUPPRESSION & “FIRE DEFICIT” IN SOME REGIONS
- EXPANDING DEVELOPMENT AND INCREASED WILDLAND URBAN INTERFACE
- CLIMATE CHANGE, LONGER FIRE SEASONS AND DRIER FUELS

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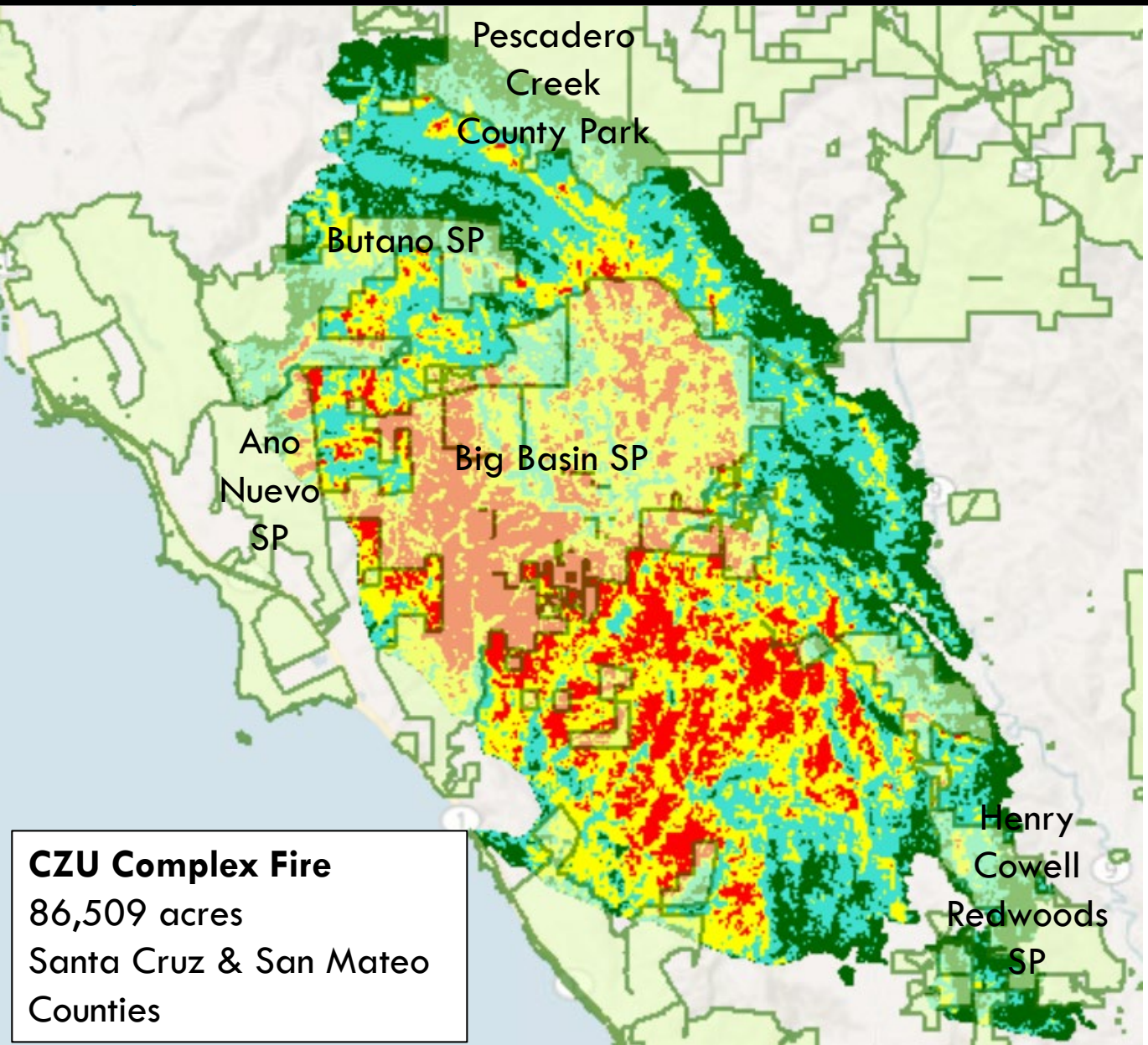
WIND DRIVEN FIRES



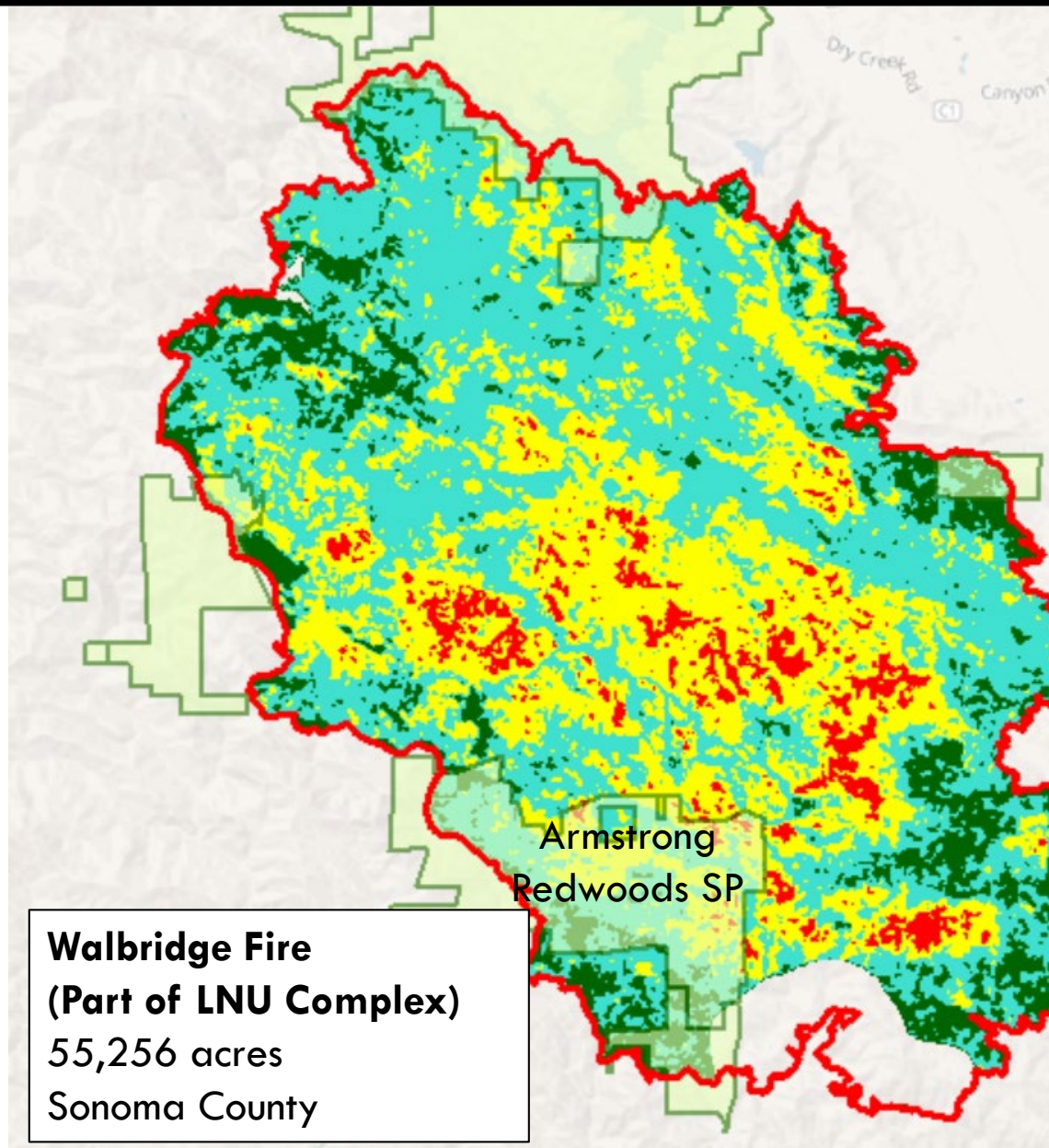
FUELS DRIVEN FIRES

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OTHER 2020 COASTAL FIRES



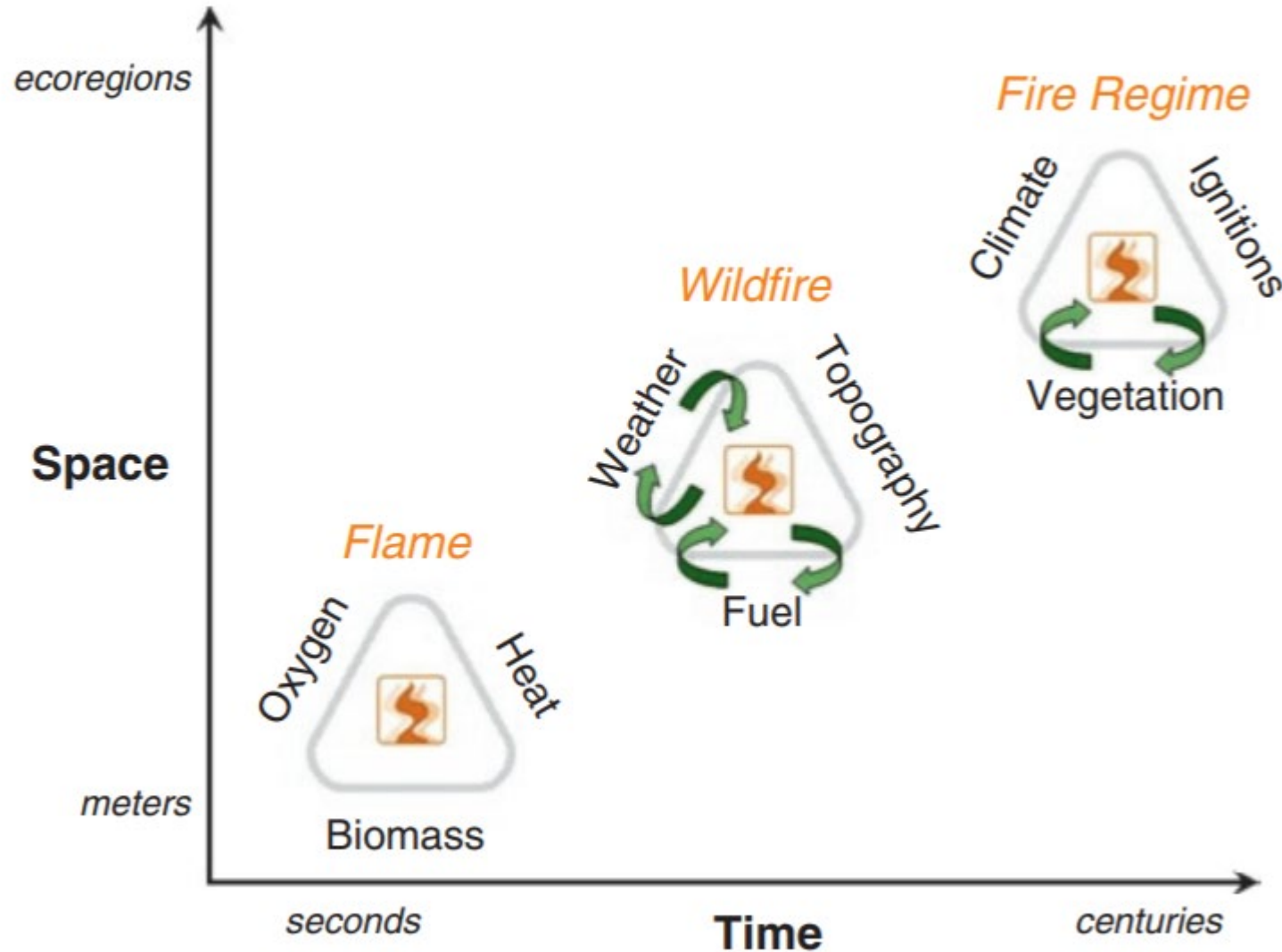
CZU Complex Fire
86,509 acres
Santa Cruz & San Mateo
Counties



**Walbridge Fire
(Part of LNU Complex)**
55,256 acres
Sonoma County

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FIRE ECOLOGY 101



FIRE REGIME: LONG TERM PATTERNS IN FIRE FREQUENCY, SIZE, SEVERITY & SEASONALITY IN A GIVEN LOCATION OR ECOSYSTEM

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FIRE ECOLOGY 101

