

CALIFORNIA'S YEAR IN FIRE PROJECT

UC Center Sacramento Speaker Series

April 17, 2024
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Berkeley Law | Center for Law, Energy,
& the Environment

CLIMATE & WILDFIRE INSTITUTE

GORDON AND BETTY
MOORE
FOUNDATION



CALIFORNIA'S YEAR IN FIRE: BACKGROUND

Broadening and deepening our characterizations of wildfire impacts



Image Credit: Pacific Standard Magazine



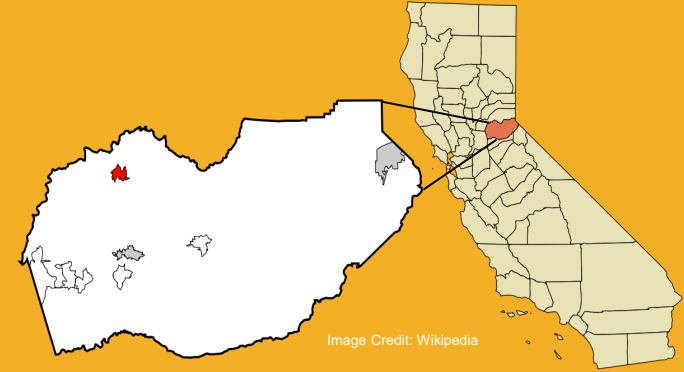
Image Credit: The Weather Channel



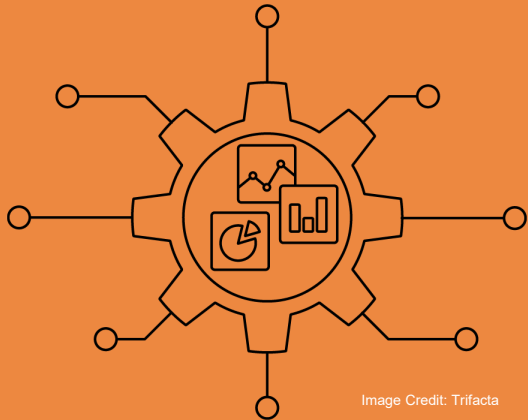
CALIFORNIA'S YEAR IN FIRE: APPROACH



Reflect social and ecological impacts



Report summaries and spatial data at multiple scales



Aggregate and synthesize data



Contextualize annual figures

CALIFORNIA'S YEAR



IN FIRE: OVERVIEW

QUESTION 1:

How is wildfire impacting
landscapes?



QUESTION 1: HOW IS WILDFIRE IMPACTING LANDSCAPES?



CALIFORNIA'S YEAR



IN FIRE: OVERVIEW

QUESTION 2:

How is wildfire impacting ecological resilience?

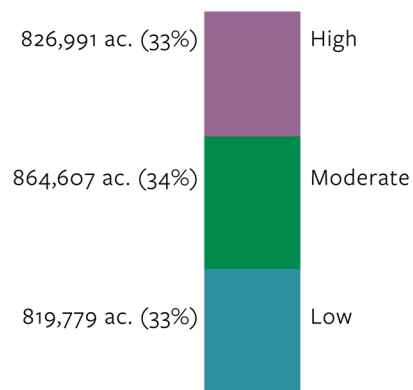
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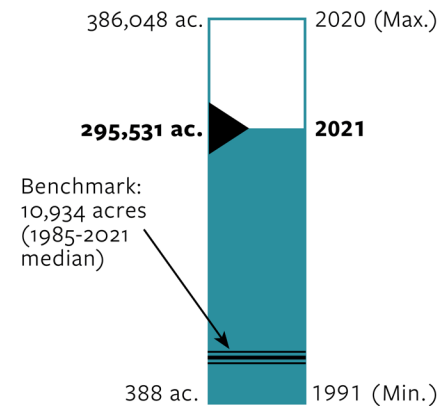


QUESTION 2: HOW IS WILDFIRE IMPACTING ECOLOGICAL RESILIENCE?

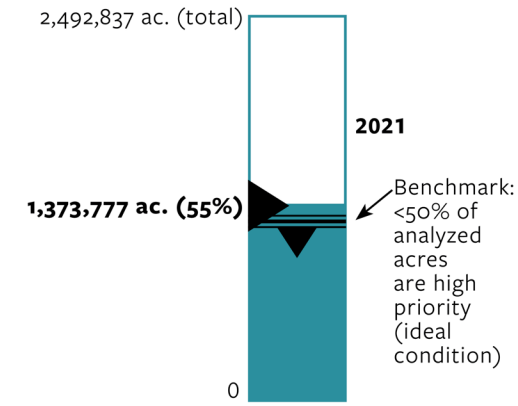
1
Fire Severity,
Area by Severity Class
(Basal Area Loss) 2021



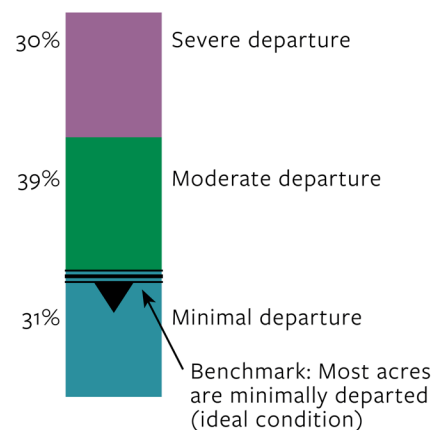
2
Area in Large High
Severity Patches



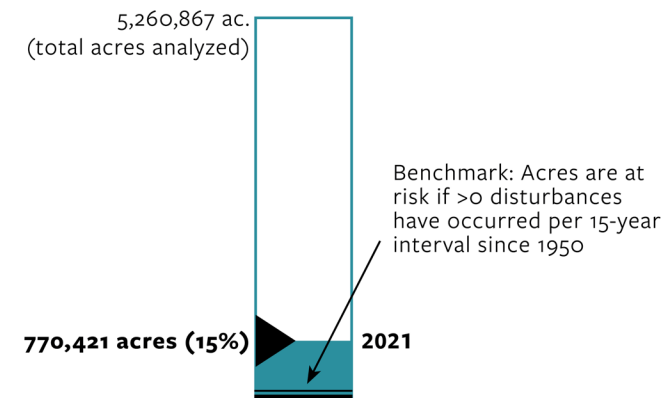
3
High Priority Acres
for Post-fire Reforestation 2021



4
Fire Return Interval
Departure 2021 (Mean Condition Class
Fire Return Interval Since 1970)



5
Low-Lying Shrubland
Resilience (Acres potentially at risk in
South Coast ecoregion) 2021



CALIFORNIA'S YEAR



IN FIRE: OVERVIEW

QUESTION 2:

How is wildfire impacting ecological resilience?

QUESTION 1:

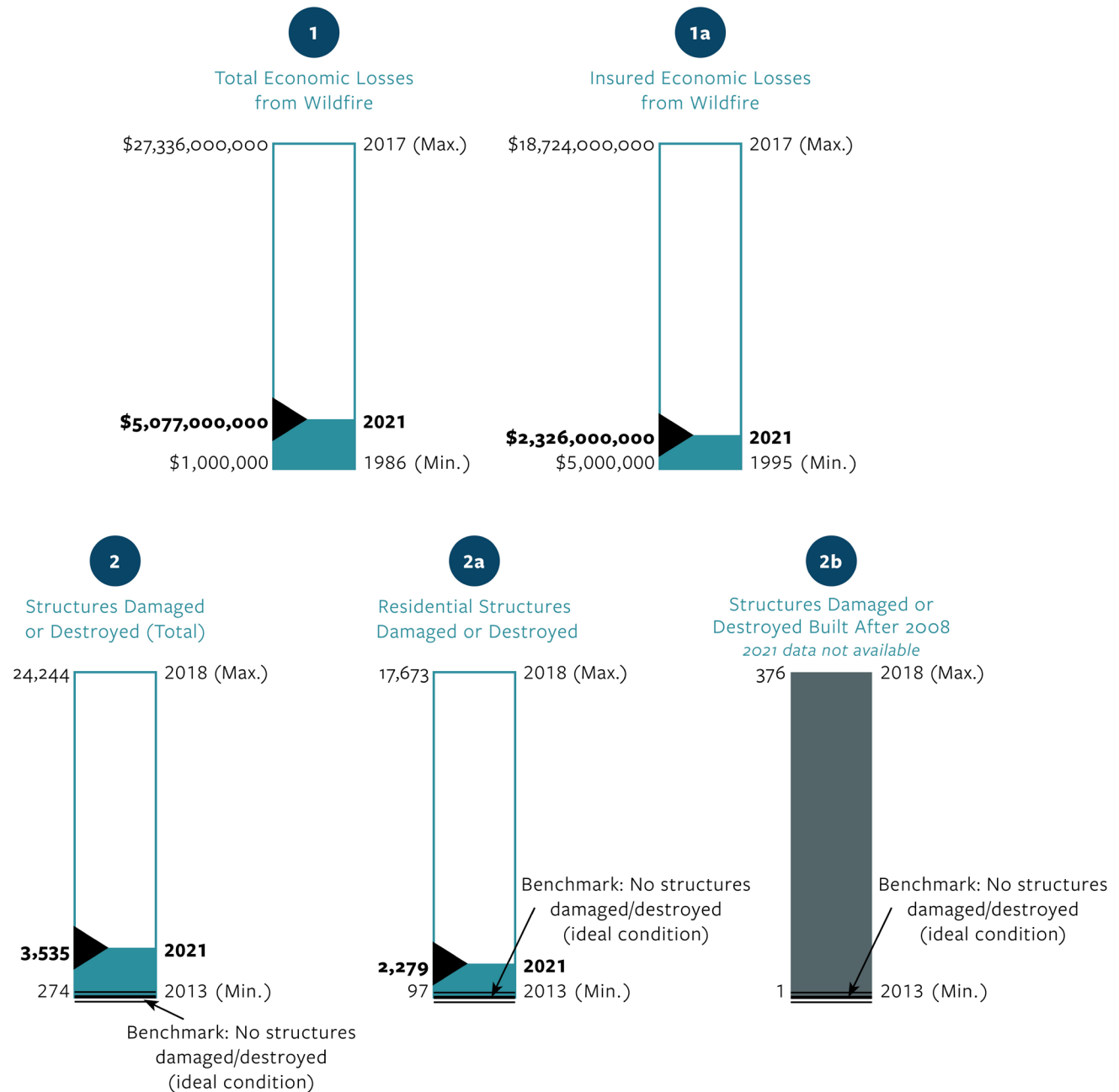
How is wildfire impacting landscapes?

QUESTION 3:

What are the social impacts of wildfire?



QUESTION 3: WHAT ARE THE SOCIAL IMPACTS OF WILDFIRE?

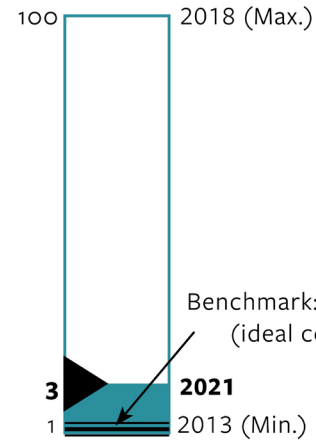




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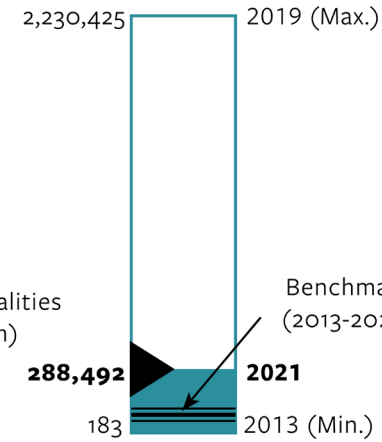
3

Fatalities



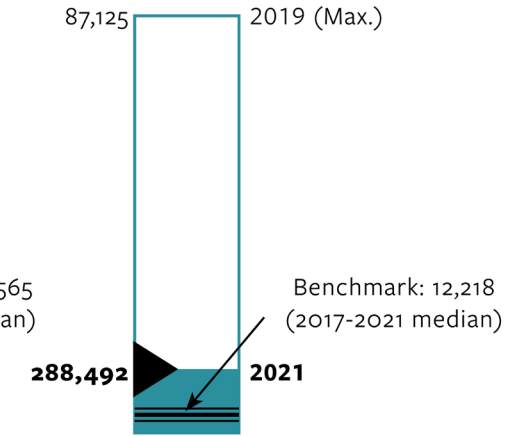
4

Number of Customers
Impacted by PSPS Events



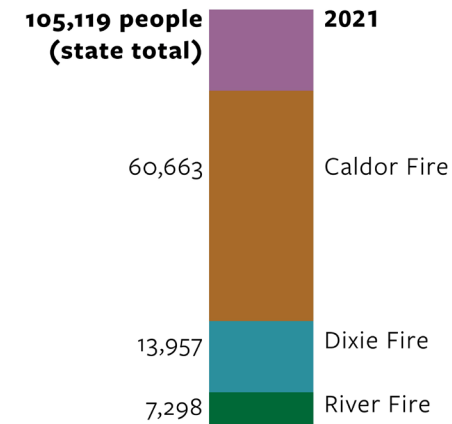
4a

Medical Baseline Customers
Impacted by PSPS Events



5

Evacuations (Total and Top 3
Incidents) 2021



CALIFORNIA'S YEAR



IN FIRE: OVERVIEW

QUESTION 2:

How is wildfire impacting ecological resilience?

QUESTION 4:

What is the cost of wildfire response and recovery?

QUESTION 1:

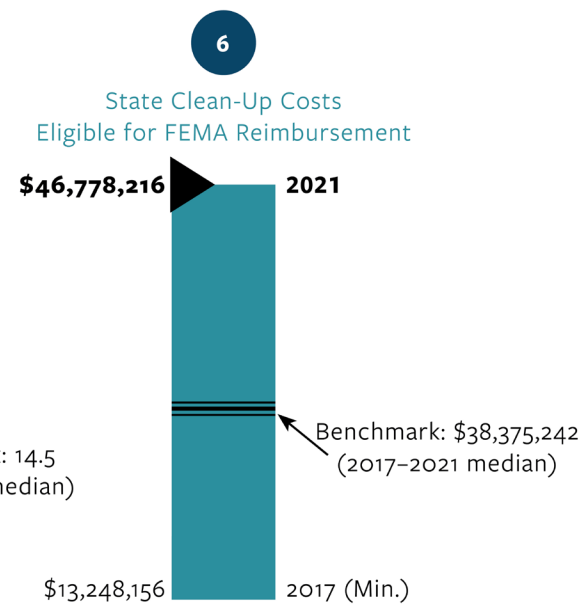
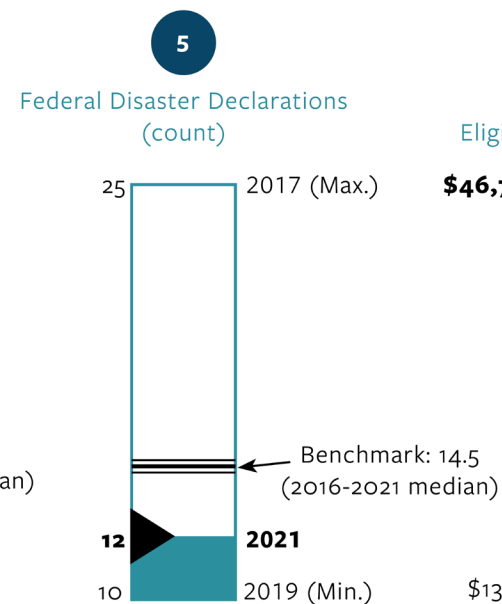
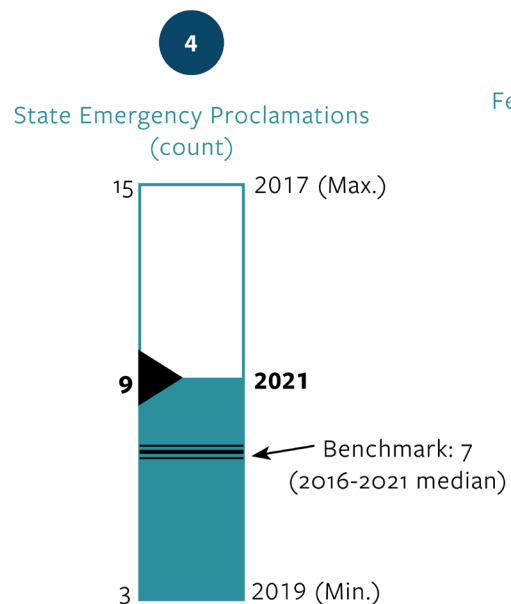
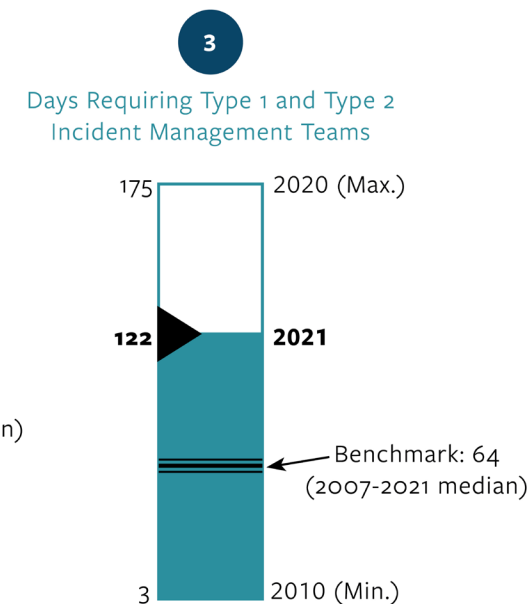
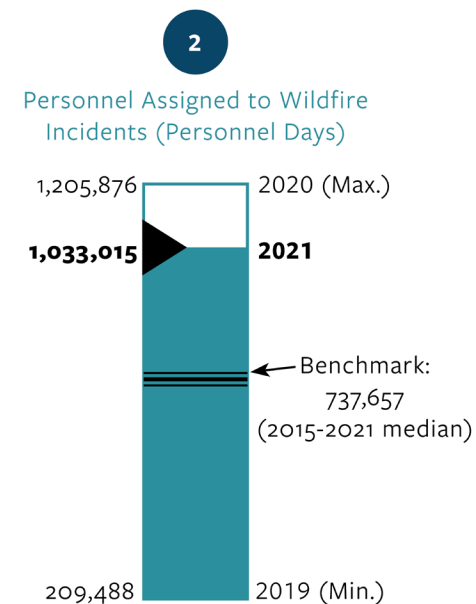
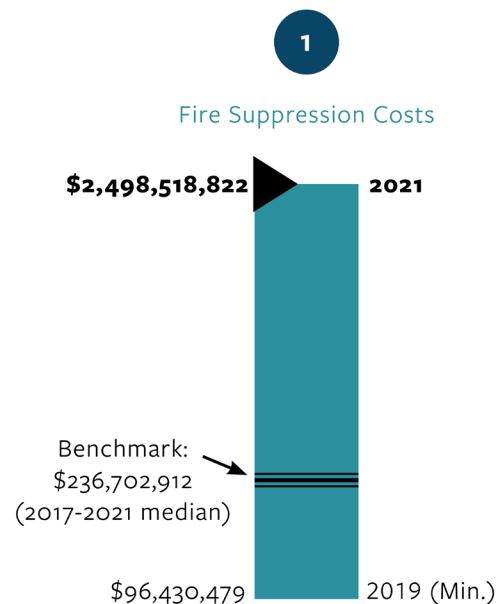
How is wildfire impacting landscapes?

QUESTION 3:

What are the social impacts of wildfire?



QUESTION 4: WHAT IS THE COST OF WILDFIRE RESPONSE & RECOVERY?



CALIFORNIA'S YEAR



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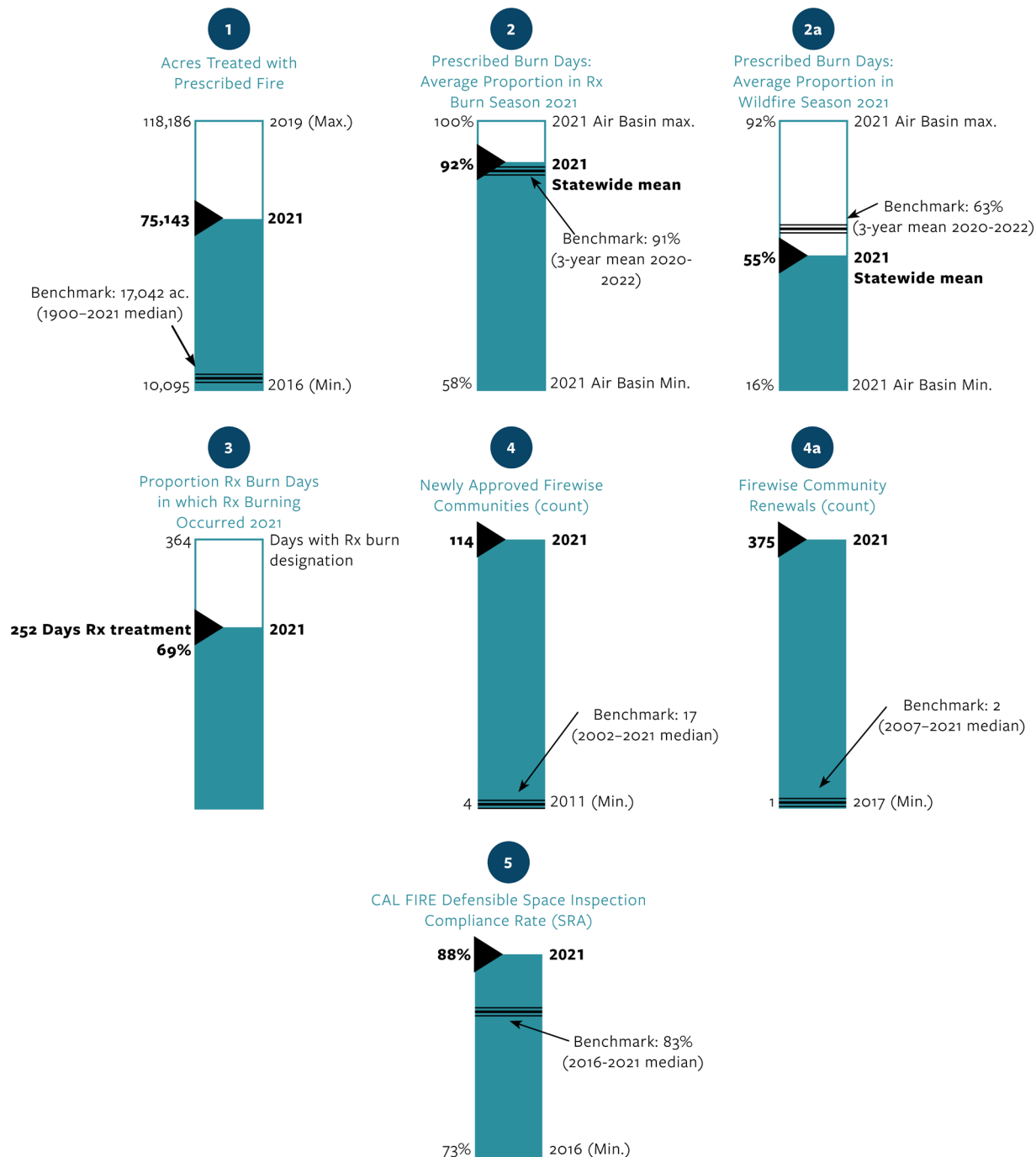
What are the social impacts of wildfire?

QUESTION 5:

How are we addressing wildfire risk?

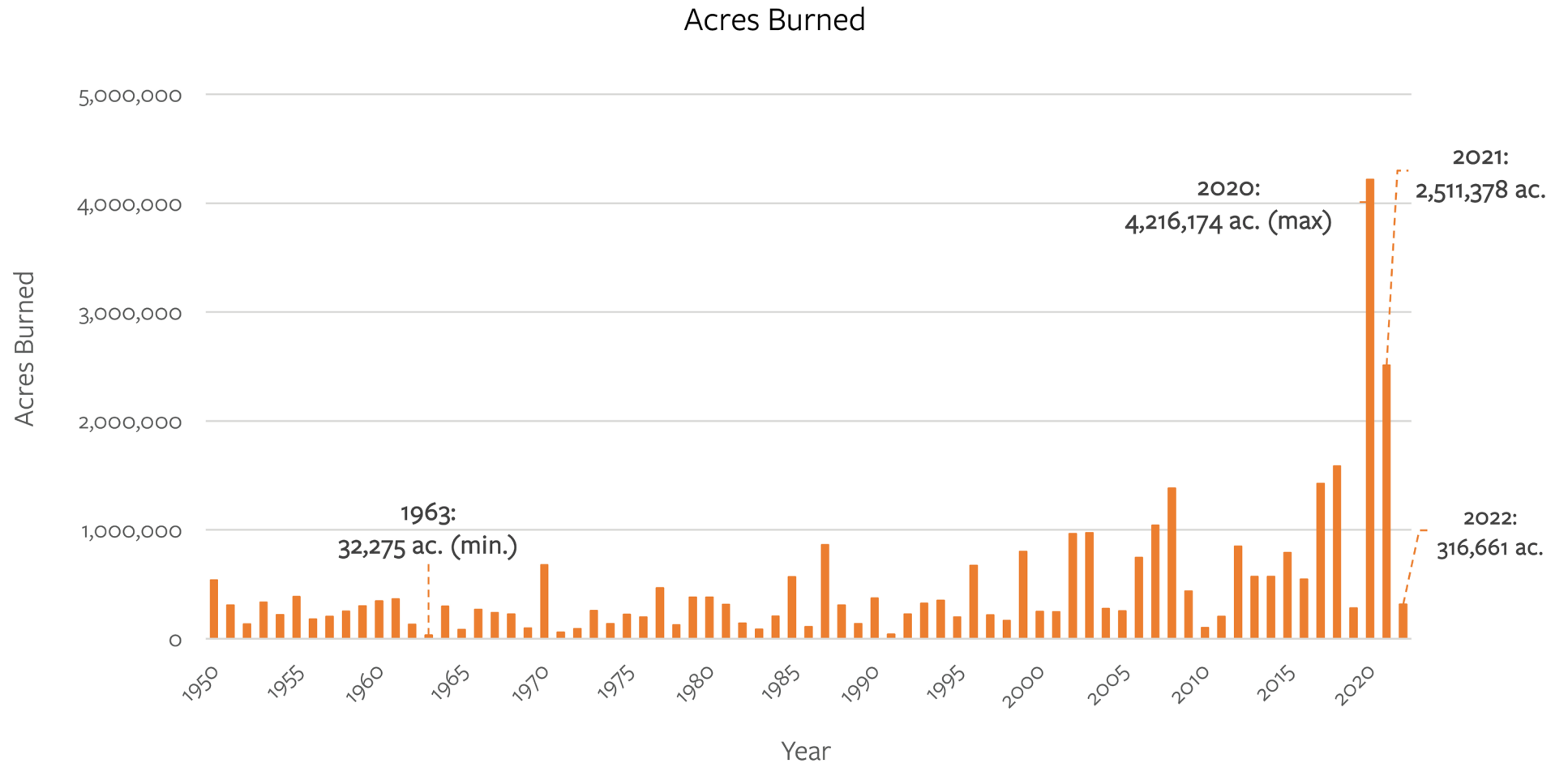
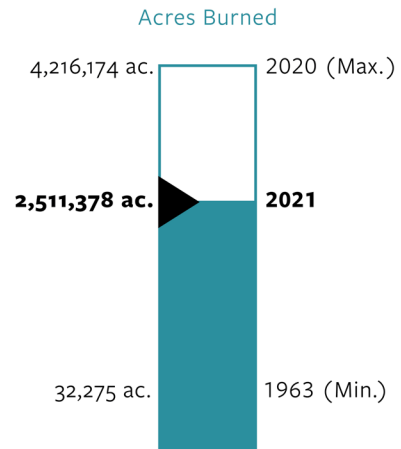


QUESTION 5: HOW ARE WE ADDRESSING WILDFIRE RISK?



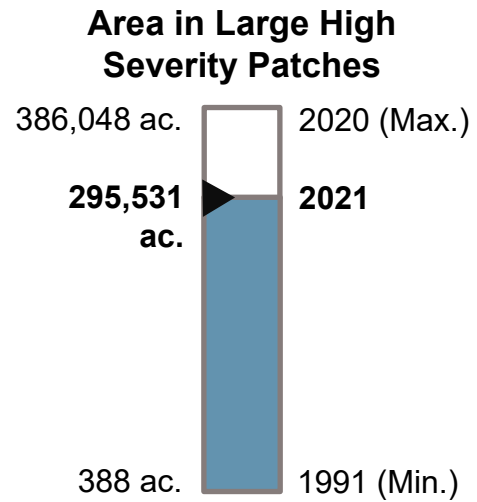


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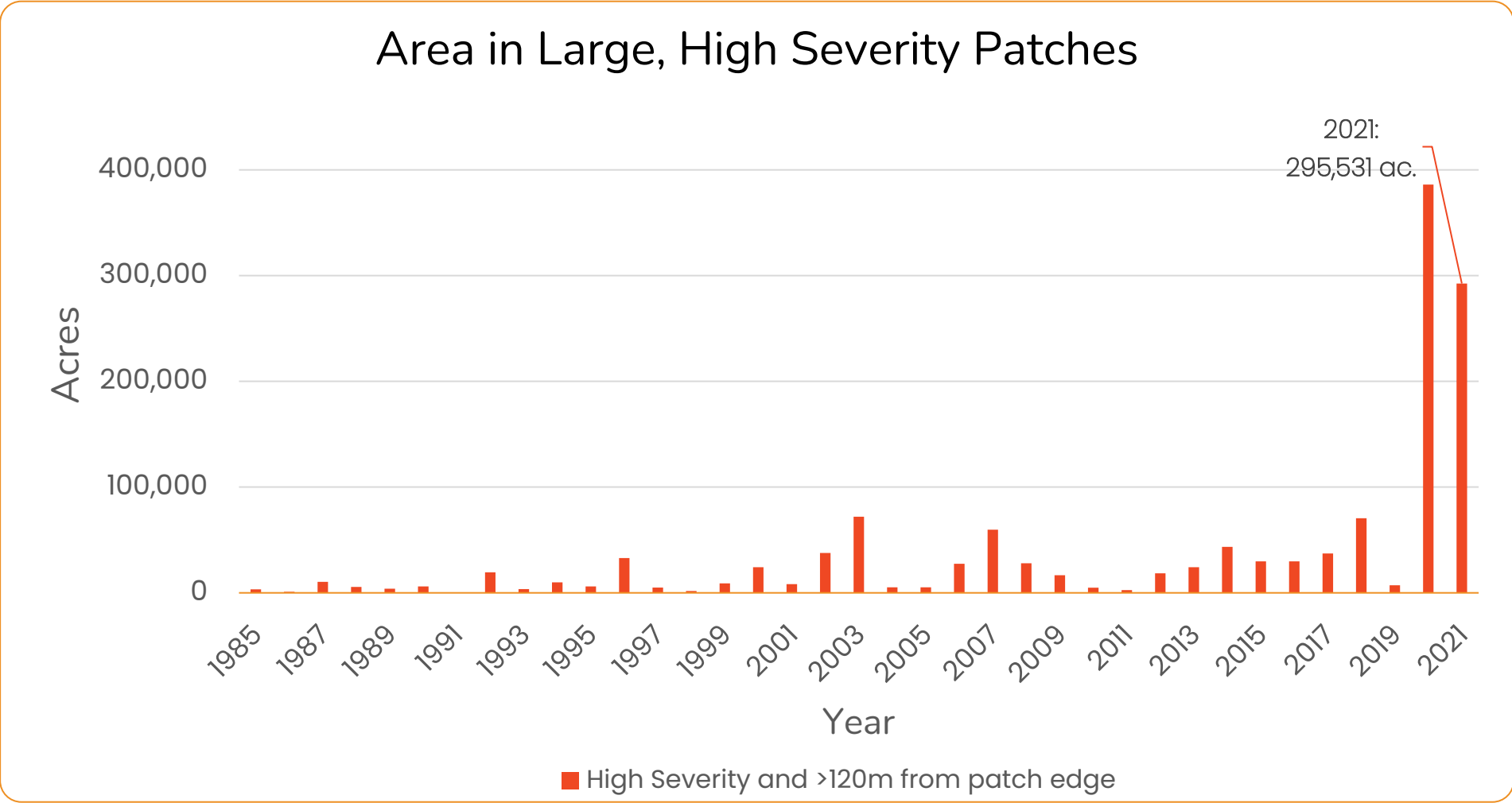
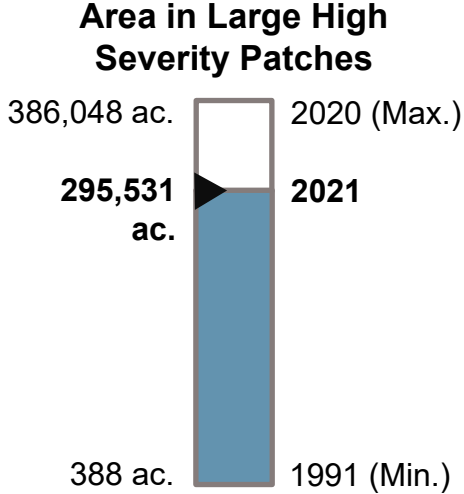


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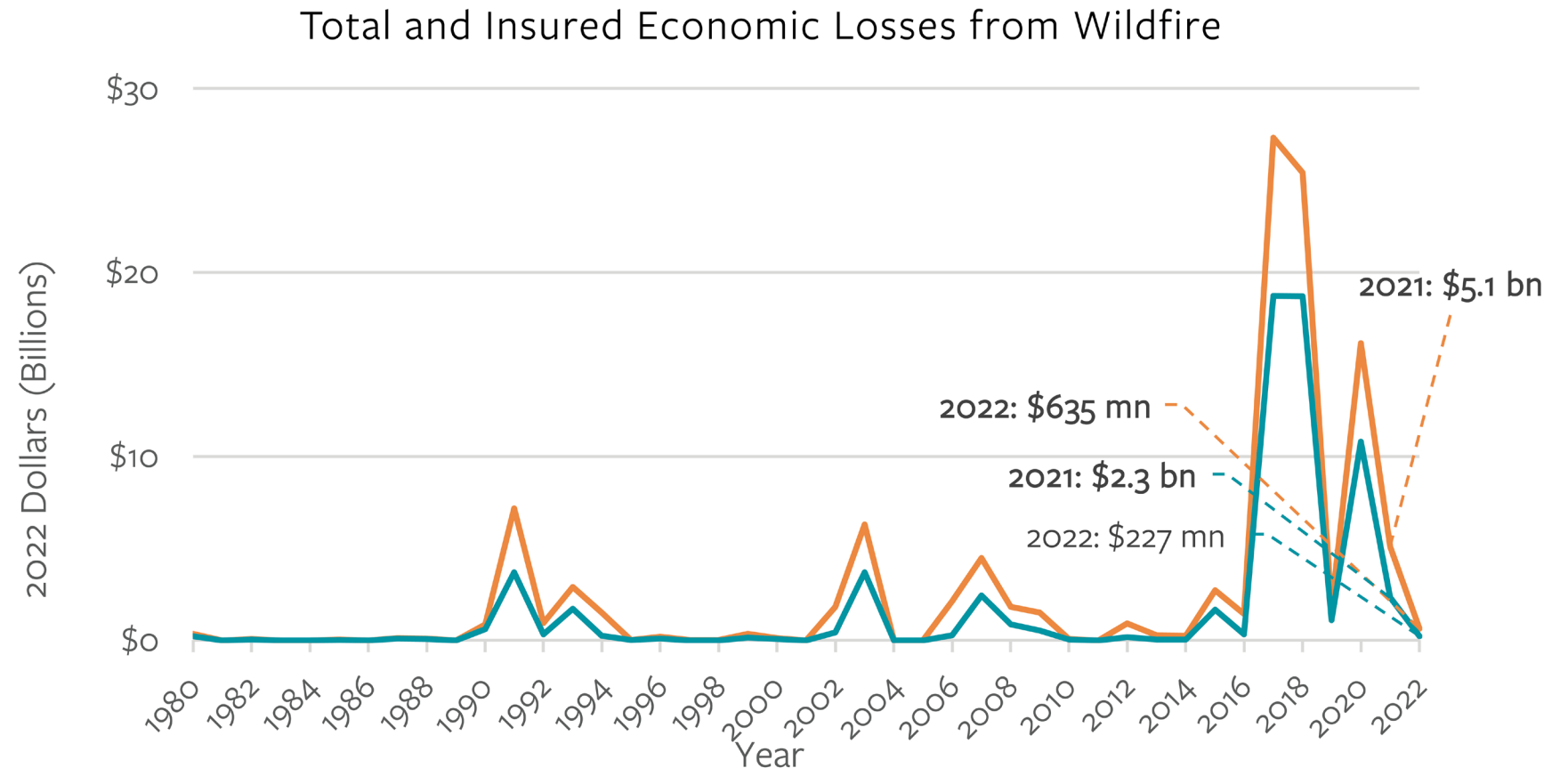
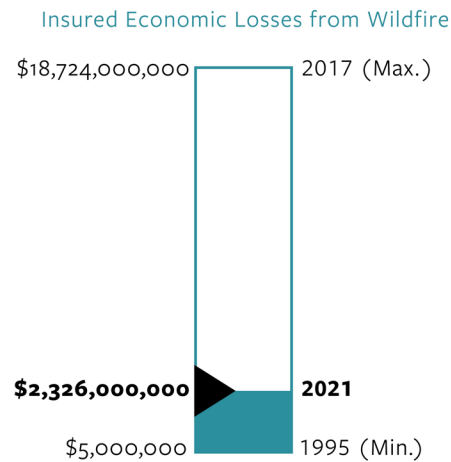
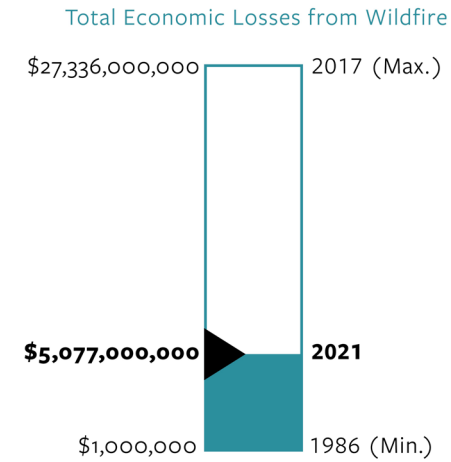
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Data Sources: Joseph Stewart, UC Davis
CAL FIRE Fire Perimeters Database

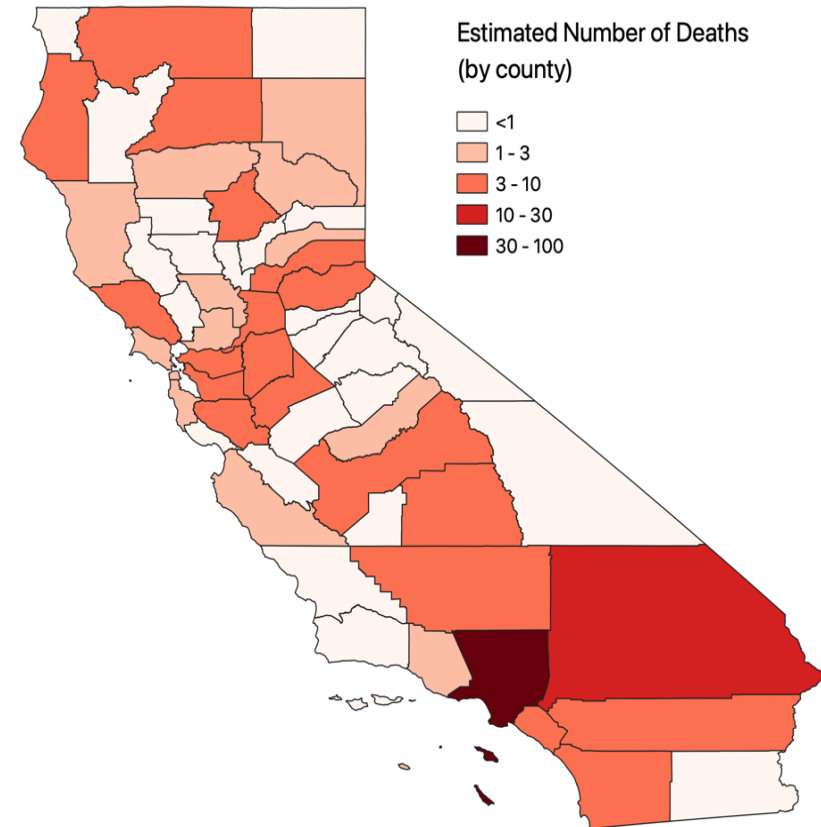
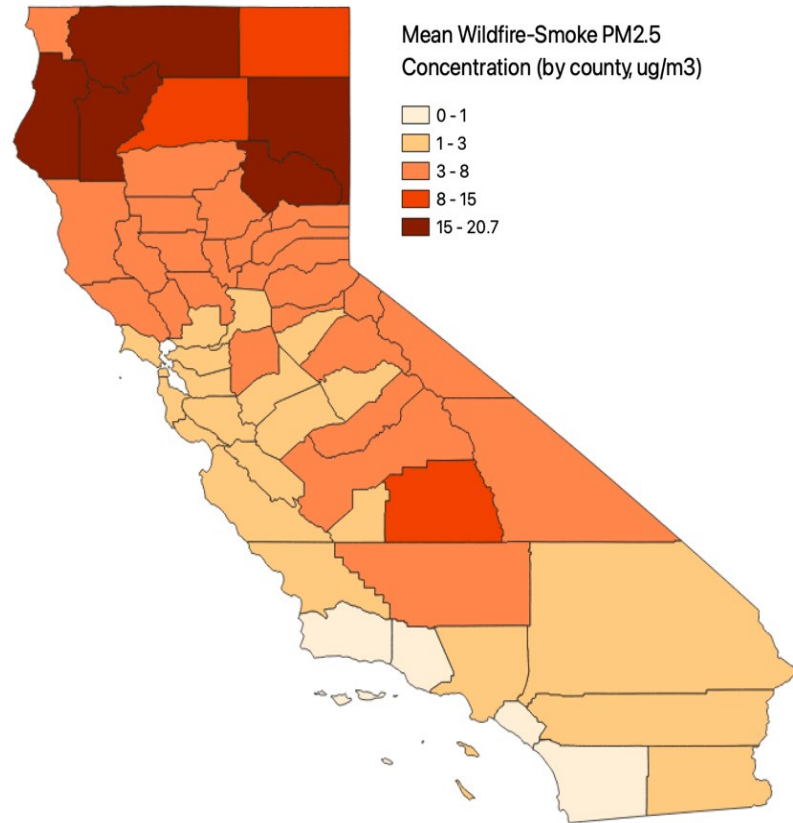


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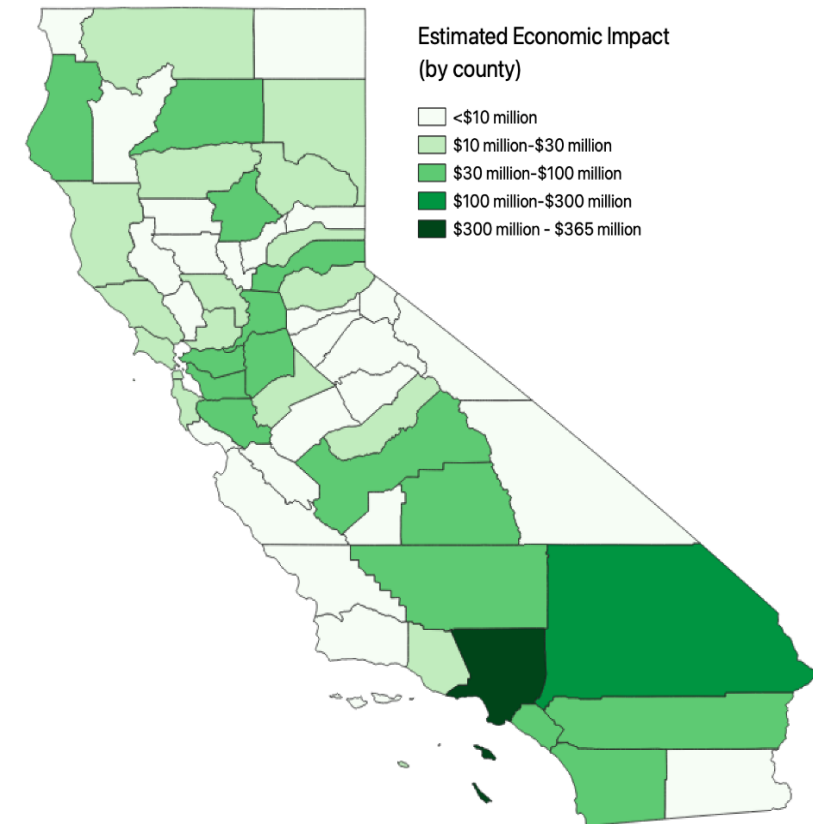
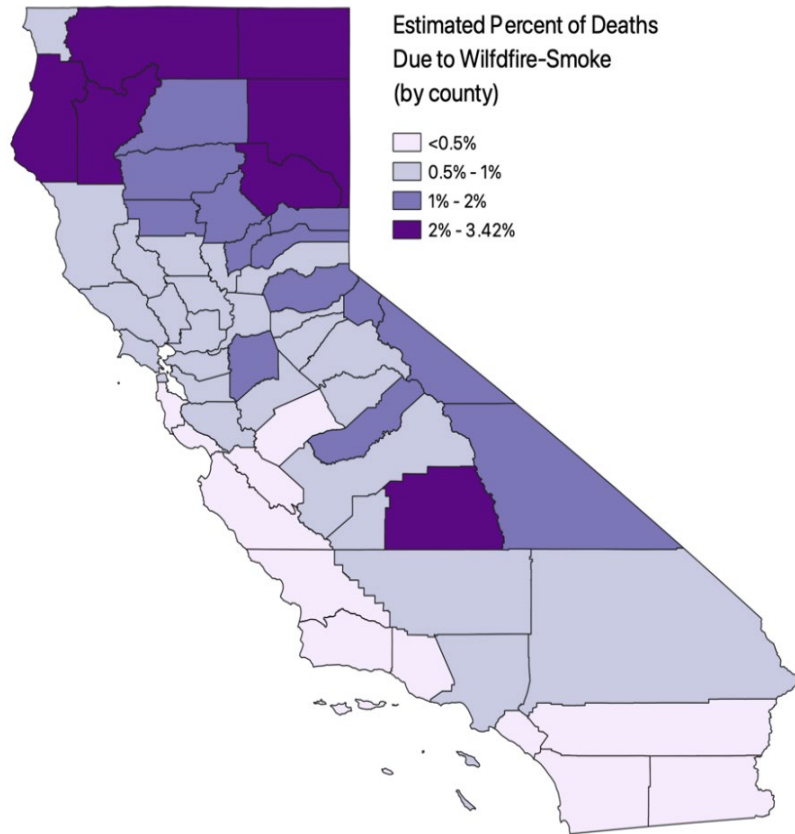


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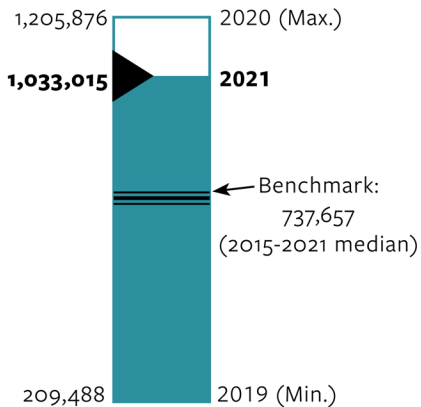
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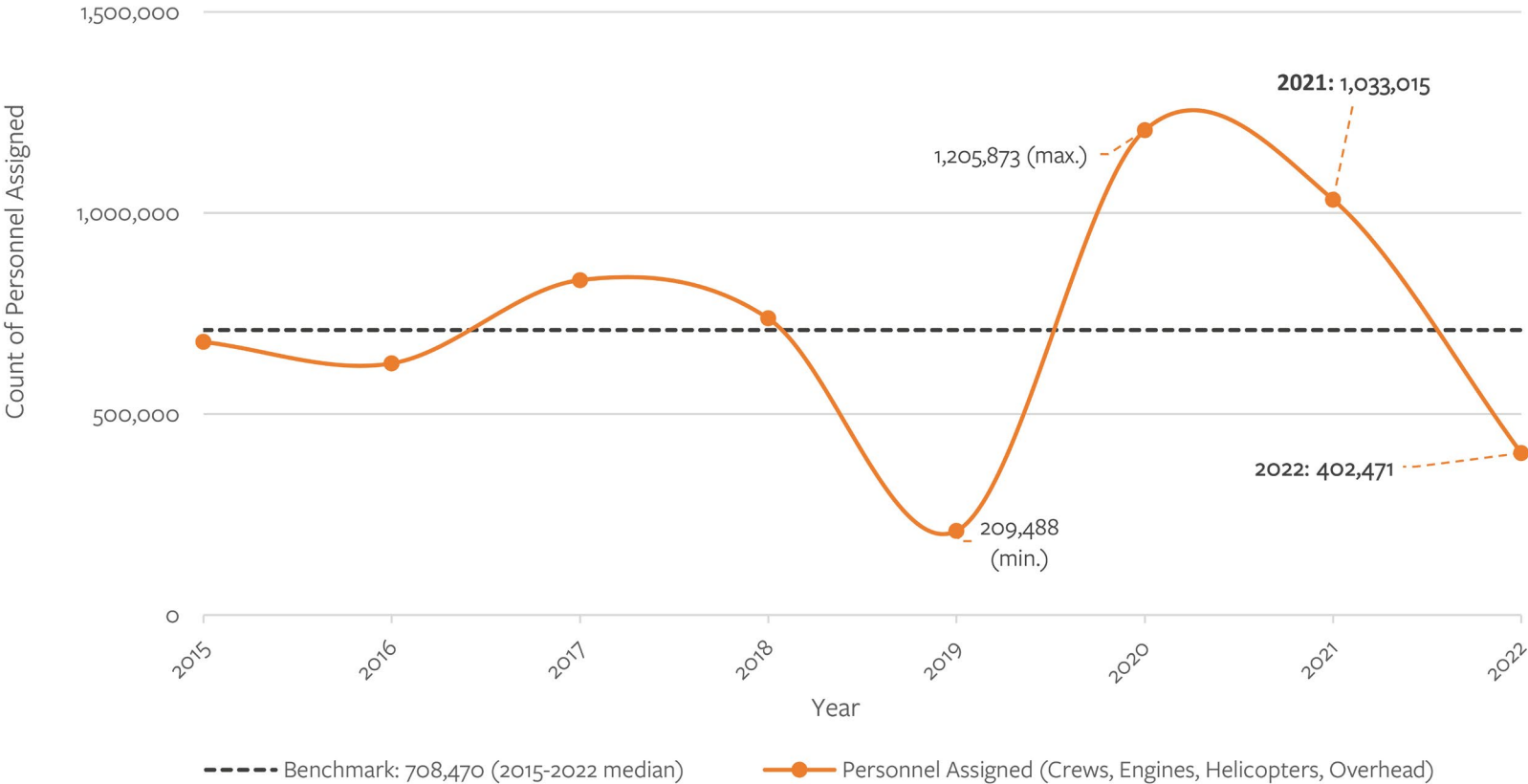


QUESTION 4: WHAT IS THE COST OF WILDFIRE RESPONSE & RECOVERY?

Personnel Assigned to Wildfire Incidents (Personnel Days)



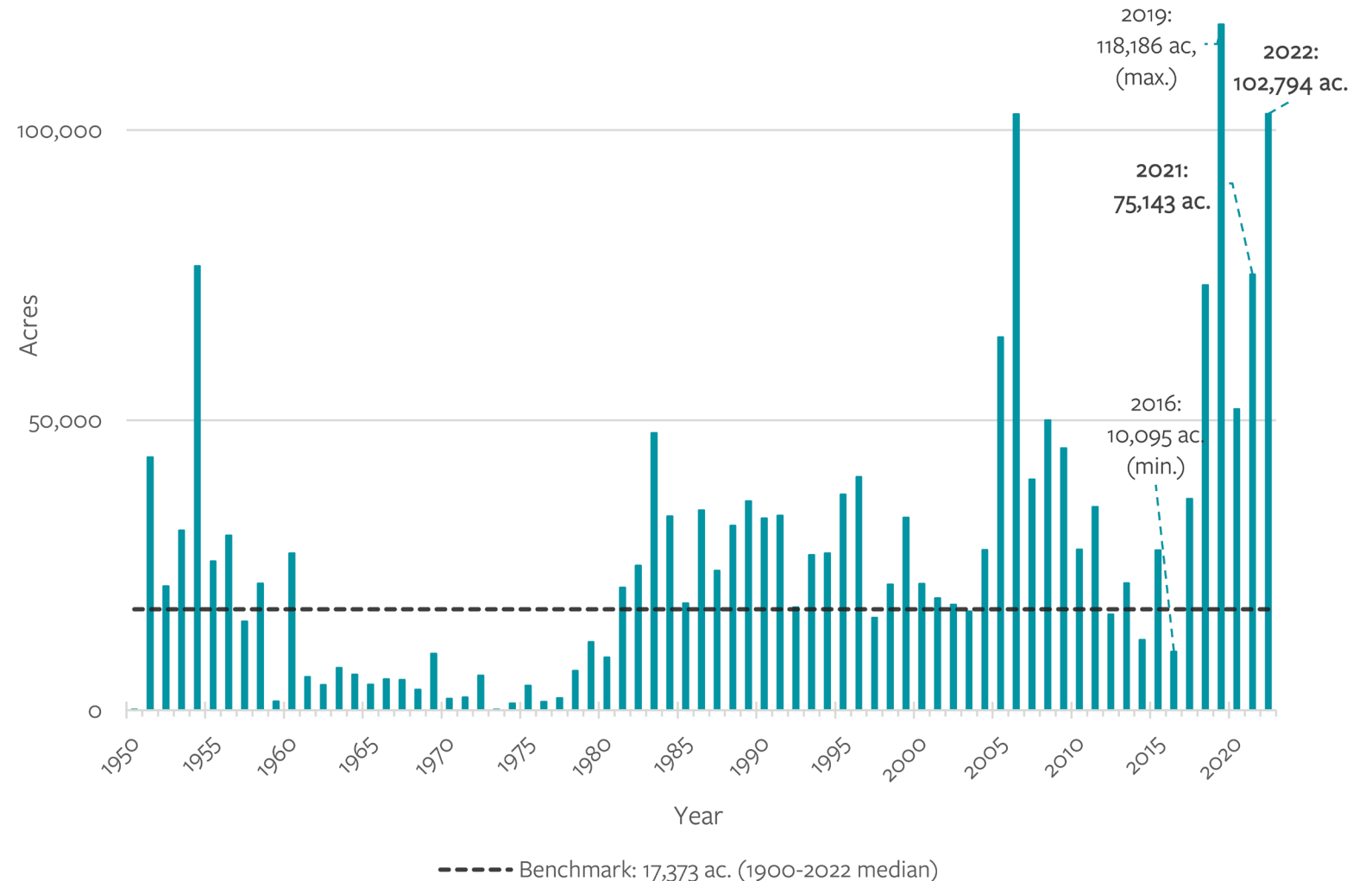
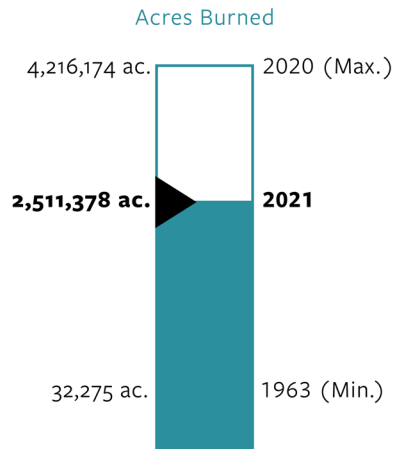
Personnel Assigned to Wildfire Incidents





QUESTION 5: HOW ARE WE ADDRESSING WILDFIRE RISK?

Acres Treated with Prescribed Fire





CHALLENGES AND POSSIBILITIES

- Increase regional and ecological specificity
- Incorporate qualitative information and elevate solutions
- Include newly available datasets
- Statistical analysis: metric correlation and benchmark refinement
- Regularly updated user interface



THANK YOU!

