



## The Current Paradigm and Changing Environment



## War on Fire



### 110 years of total fire suppression

- The US Forest Service “10 a.m. rule”—all wildfires completely out by 10 o’clock the next morning.



Photo: 1955. J.R. Eyerman/The LIFE Picture Collection, via Getty Images

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## Forests Have Become More Dense



1934

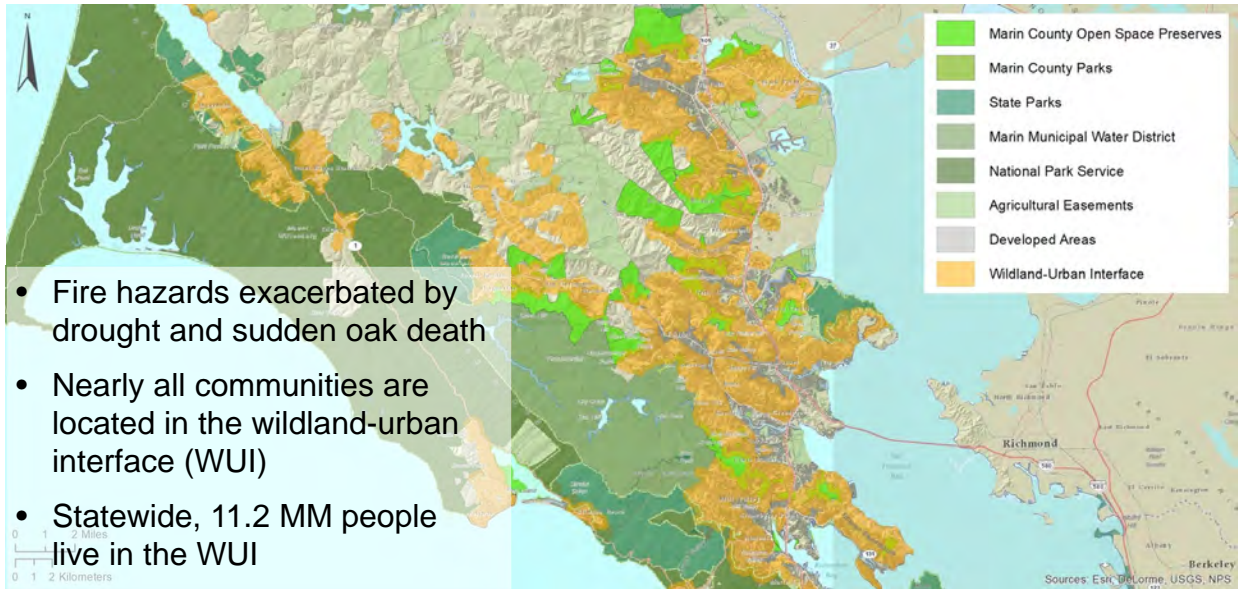


2010

SOURCE: TED Talk: Why Wildfires Have Gotten Worse and What We Can Do About It

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## People Have Moved Further into Wildlands

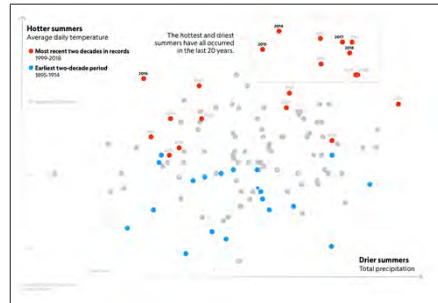
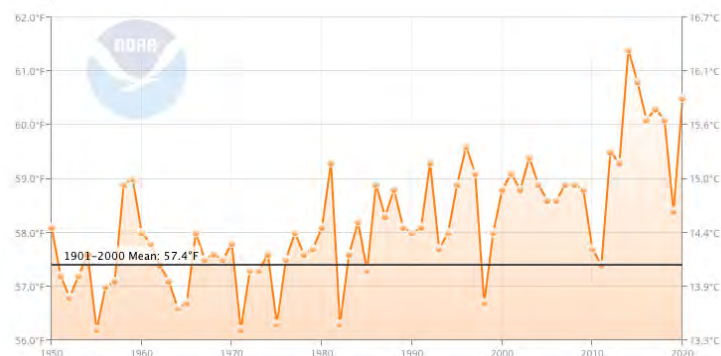


- Fire hazards exacerbated by drought and sudden oak death
- Nearly all communities are located in the wildland-urban interface (WUI)
- Statewide, 11.2 MM people live in the WUI

## Climate Change: Hotter, Drier, Longer



California Average Temperature  
January–December



- The fire season has lengthened by 2-3 months since the 1970's.

## Working Independently



- 19 Independent Fire Agencies responsible for Fire Prevention and Suppression
- Fire knows no jurisdictional boundaries
- Compelling need to address common threats, mutual interests

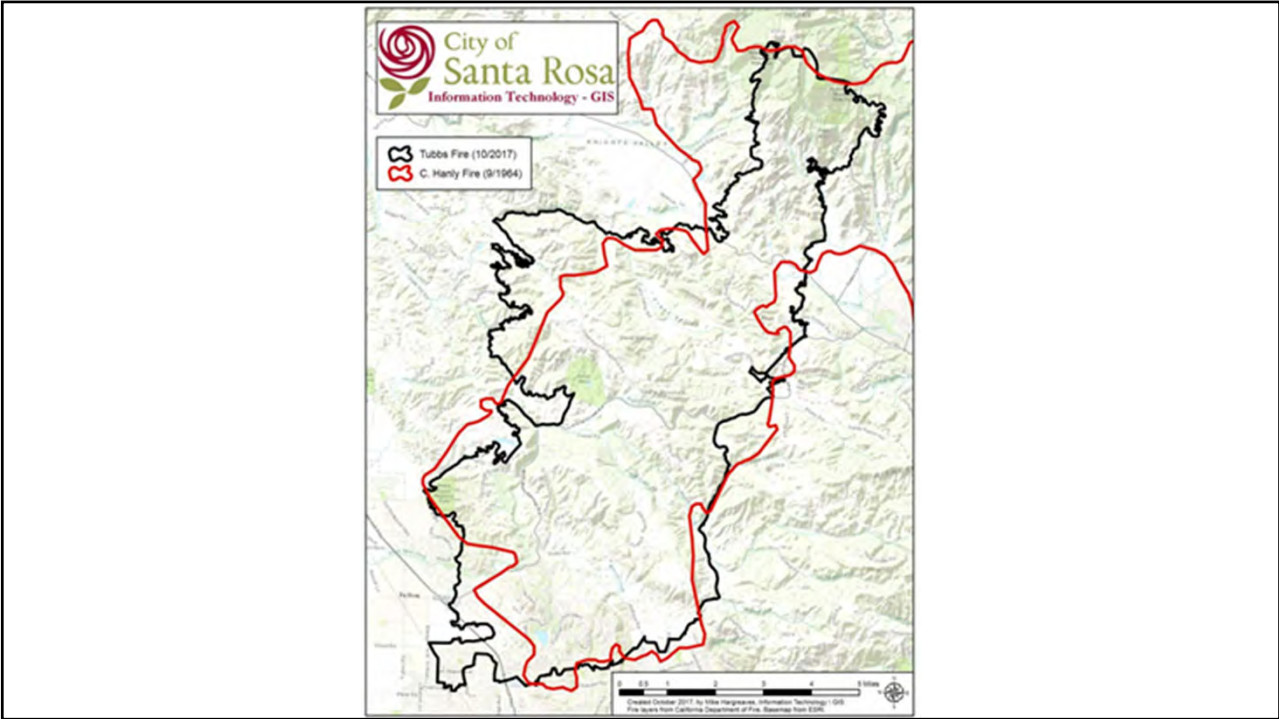


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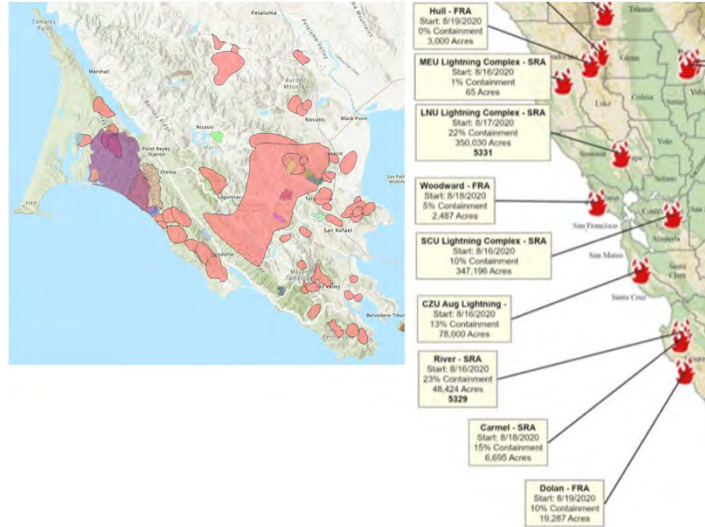
## Why Change the Paradigm? Lessons Learned.



2017 Tubbs Fire, Coffey Park, Santa Rosa, CA  
Photo: CC-BY The National Guard



## Fire History of Marin County



- Significant history of wildfires.
- Neighboring communities and counties severely damaged by catastrophic fires over last decade.
- Any of our communities could be next. We are all vulnerable.

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## Lessons Learned from 2017 North Bay Wildfires



**2018: Lessons Learned from the 2017 North Bay Fire Siege Report**  
*"When fires started October 8<sup>th</sup> the only thing separating Marin County from their neighbors to the north was simply an ignition source."*



**2019: Marin Civil Grand Jury Report on Wildfire Preparedness**  
*"...the creation of a joint powers authority to coordinate a comprehensive, consistent approach to pre-ignition planning."*

### Key Recommendations

- Form a Joint Powers Authority
  - No single agency exists to coordinate fire prevention efforts
  - Need to integrate county-wide prevention and risk reduction work
  - Need an ongoing source of funding

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# The New Paradigm: A Fire-Adapted Community



“a knowledgeable and engaged community in which the awareness and actions of residents regarding infrastructure, buildings, landscaping, and the surrounding ecosystem lessens the need for extensive protection actions and enables the community to safely accept fire as a part of the surrounding landscape.”



- U.S. Forest Service

Dominant Paradigm	New Paradigm
“War on fire”	“Work with the flow” of natural processes
Wildfire is destructive	Wildfire is a necessary natural process
Control wildfire on the landscape	Learn to live with fire on fire-adapted landscapes
Prevent and suppress fires	Create fire-resilient human and natural communities
The problem is that wildfires are escaping our control.	The problem is that always suppressing natural wildfire is creating an unsustainable buildup of fuels which results in dangerous “unnatural fire.”
The solution is to apply existing procedures and technologies more strongly to bring fires under control.	The solution is to develop a more holistic approach to fire management where local communities, adjacent property owners, and governments work together to co-manage fire risk.

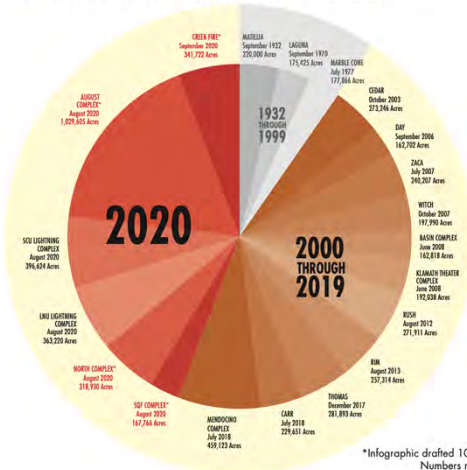
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Image: fireadaptednetwork.org 13

# We’ve Reached the Tipping Point



## TOP 20 LARGEST CALIFORNIA WILDFIRES



\*Infographic drafted 10/13/2020. Numbers not finalized.



SOURCE: <https://www.fire.ca.gov/media/ps4p2vck/californiawildfireandforestresiliencereactionplan.pdf>

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## Building Support for a Joint Powers Authority



## The Process: Plans and Policies in Place Pre-2017 (Tubbs Fire)



### 2016: Community Wildfire Protection Plan

*"This document provides a framework for future collaboration that can be used to identify, prioritize, implement, and monitor hazard reduction activities throughout the county."*

- Code Adoptions
- Fire Hazard Severity Maps
- Wildland-Urban Interface (WUI) ordinances

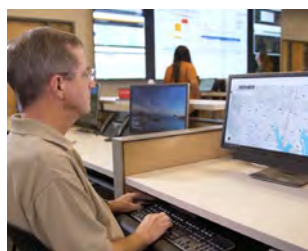




Adapting to Wildfire

- One of the nation's first Fire Safe Councils
- Public outreach and education, Firewise communities
- Trusted non-profit
- Existing relationships with relevant agencies

### Public Safety Community



What are you already doing  
in your communities?

What are your existing relationships  
in your communities?

## The Process: Crafting the Joint Powers Authority



- Which agencies will be members of the JPA?
- Which non-members need to be consulted?
- What about the agencies that opt out?

- City Managers and Fire Chiefs built the format of the JPA and language
- Elected official oversight
- Standing for subject-matter experts
- Visits (times 2) to each board and council



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## The Process: Campaign & Election



- Civic leaders and Fire Chiefs campaigned Cities/Town Councils/Fire Districts for formation of a JPA
- JPA to be funded by **\$0.10/square foot parcel tax**
- **17 of 19 agencies** agreed to join
- **Measure C** – Marin Wildfire Prevention Authority received 70.8% voters' support in March 2020



Marin County Measure C		
Result	Votes	Percentage
Yes	75,638	70.80%
No	31,200	29.20%

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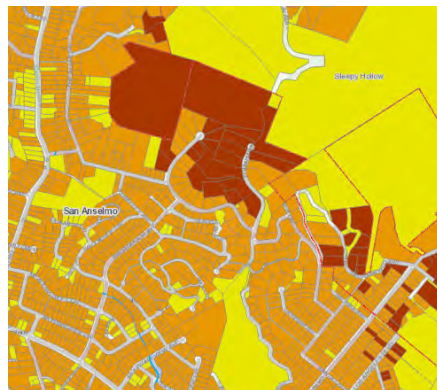
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## Setting Up the Marin Wildfire Prevention Authority



KQED: "This California Neighborhood Was Built to Survive a Wildfire, And It Worked"  
2007 Witch Fire, Crosby Neighborhood, Rancho Santa Fe  
Photo: Don Bartlett, Los Angeles Times via Getty Images

## Guided by Community Wildfire Protection Plan (CWPP)



**Marin County CWPP:** Provides county-wide framework for MWPA's annual work plans and investments—updated annually.

- **LIDAR data:** funded by a 2019 federal grant
- Conducted a **Fire Risk Assessment for every parcel and home** in Marin
- Identifies **critical hazards & investments needed to reduce risks**

## MWPA Mission



The Marin Wildfire Prevention Authority leads the development of fire adapted communities using sound scientific, financial, programmatic, ecological practices, vegetation management, community education, evacuation and warning systems with the support of its member and partner agencies.

**Land Managers**  
Manage landscapes for lowered fuel loads, lower fire intensity and ecological resiliency to fire.

**Marin Residents**  
Modify homes to be more fire resistant. Be prepared and subscribe to alerts.

**Civic Leaders**  
Develop laws and policies in support of fire prevention, preparedness and risk reduction.

**First Responders**  
Craft fire prevention, preparedness, and emergency response plans. Educate community.

**Developers & Business Owners**  
Don't build in high-risk areas. Build with fire-resistant materials.



**Leading the Development of a Fire-Adapted Marin**

## MWPA Vision



The Marin Wildfire Prevention Authority communities are informed, prepared, fire adapted, resilient and capable of withstanding a major fire limiting loss of life and major property damage while protecting our rich environmental diversity.

## MWPA Goals Areas



### Reduce Wildfire Fuels

Vegetation Management and Local Wildfire Prevention Mitigation



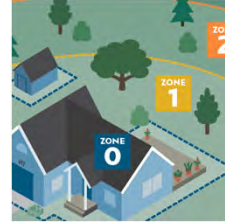
### Improve Evacuation Systems

Wildfire Detection, Alert, and Evacuation Program Improvements



### Reduce Risks to Homes

Defensible Space Evaluations (1/3 annually) and Home Hardening



### Educate the Public

Public outreach and education about fire prevention, preparedness, and risk reduction



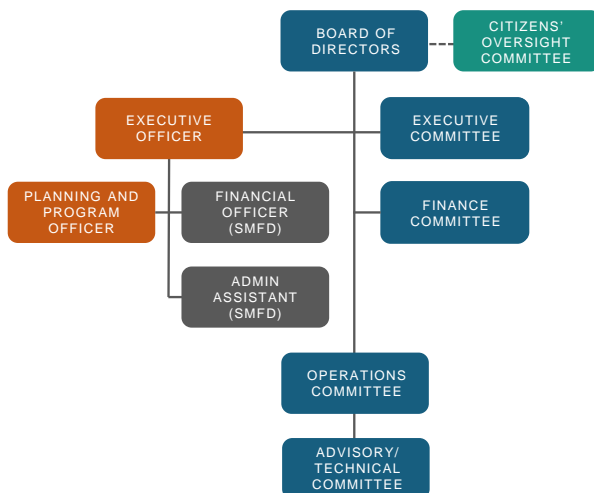
### Provide Grants to Residents

Grants to modify homes and partnerships to collaborate and augment funds

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## MWPA: Organizational Structure



- A **Joint Powers Agreement** clearly defines the JPA's authorities to operate, act and invest in wildfire prevention activities
- Operated "**From the Ground Up**"
- All sub committees' actions are defined by written **Bylaws**
- All actions and investments are **monitored by a Citizens' Oversight Committee**
- We are now one year old

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## MWPA: Geographic Zones



17 agencies with different level of work backlog, resources available, community support

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JPA Operational Boundaries:  
5 Geographic Zones

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## MWPA: Funding Allocations



Program Area	% of funds
<b>JPA Core: Cross-Jurisdictional Projects</b> Wildfire Detection & Evacuation Program Improvements, Veg Management/Fire Hazard Reduction, Grants Management, Public Education (Fire Safe Marin)	60%
<b>Defensible Space Evaluations and Home Hardening</b> (agencies can administer)	20%
<b>Community-Level Wildfire Prevention Mitigation</b> Local jurisdiction fire prevention issues with no funding. Enhanced fire patrols for problem areas, additional fire hazard reduction work, evac route parking issues	20%

2020-2030: **10-year term**  
~\$20 MM revenue per year

**Year 1:** Creating the framework for MWPA while implementing work on the ground

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## MWPA: Other Noteworthy Features



**Grant Acquisitions/  
Positioning**



**Environmental  
Compliance**

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## MWPA: Ongoing Stakeholder Outreach



**Land Managers**



**Homeowners**



**Citizens & Orgs  
Concerned about Cost  
and Transparency**



**Ecologically-Sound  
Practices Partnership**

Advise About:

- Wildland Vegetation
- Carbon Management
- Defensible Space

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## Implementing the New Paradigm: 2021-22 Workplan



## House Out Approach



Emphasizing importance of individual homes in preventing disaster



Parcel-level data



Harden Homes



Defensible Space



## Public Education



**WEBINAR**

**EVACUATIONS  
& WARNINGS:  
HOW TO SURVIVE  
A WILDFIRE**

Tuesday, August 25 @ 6pm

*It's Time to Prepare!*



**PREPARE FOR WILDFIRE  
COMMUNITY WORKSHOPS**

MARIN COUNTY

**FIRE Safe MARIN** **MARIN WILDFIRE  
PREVENTION AUTHORITY**



**TUNE IN TO FIRE SAFE MARIN'S NEW SHOW!**

**WILDFIRE WATCH**



EPISODES AVAILABLE ON  
YOUTUBE | CHANNEL 30 | FIRESAFEMARIN.ORG | FACEBOOK

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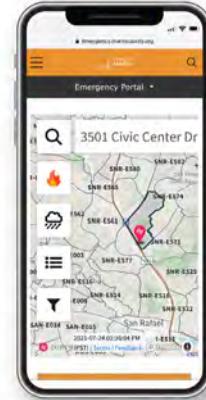
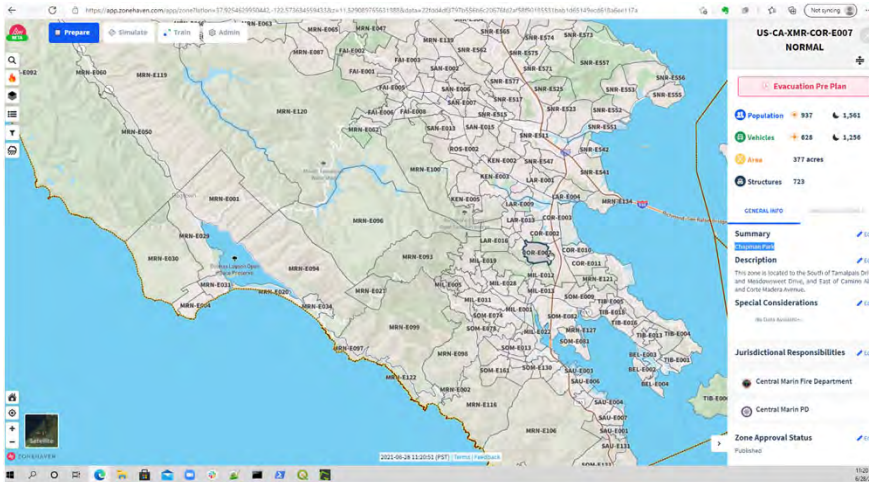
## Evacuation Route Clearing



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## Zonehaven



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## Evacuation Risk Assessment



Photo: Alan Dep, Marin Independent Journal  
Lassen Fire, September 2021, San Rafael, California

- Ingress/egress risk assessment
- App development: Fire risk analysis to help prioritize projects
- Roadway terrain and condition
- Traffic patterns
- Number of cars
- Pinch points
- Sync traffic preemption devices (i.e. green lights in a certain direction)
- Demographics of community (such as access and functional needs)

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## Local Fire Prevention/Mitigation Projects



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## Goat Grazing



## Shaded Fuel Breaks



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Mount Burdell Open Space Preserve  
2020 End of Year Report, Marin County Parks

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## Combining MWPA, local funds, regional grants



- Create Synergies
- Multiple revenue streams
- Collaboration with interdisciplinary partners

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**Sashi McEntee**  
City of Mill Valley Councilmember, MWPA Executive Committee

**Mark Brown**  
Executive Officer, Marin Wildfire Prevention Authority

**Bill Tyler**  
Novato Fire Chief, MWPA Operations Committee

**Dan Schwarz**  
Larkspur City Manager, MWPA Operations Committee