

What Does a Wildfire
Response Look Like?

Wildfire Response

- Local Government Response
 - Chief, fire engines, and water tenders
 - North Sonoma Coast and surrounding agencies
- CAL FIRE Response
 - Chief, aircraft, wildland fire engines, bulldozers, and handcrews
 - Aircraft include Air Attack (“spotter plane”), helicopter, and at least 2 air tankers
- Cooperating Agencies



Wildfire Response

- Chiefs, engines, and water tenders respond from North Sonoma Coast, South Coast, Redwood Coast/Pt. Arena, Timber Cove, Fort Ross, Monte Rio, Cazadero, and Hilton
- Aircraft respond from Sonoma County Airport, Ukiah Airport, Willitts, and Cobb/Boggs Mountain
- Bulldozers respond from Healdsburg, Glen Ellen, and Boonville
- Handcrews respond from Mendocino County and Lake County

Fire Potential on the Sonoma Coast

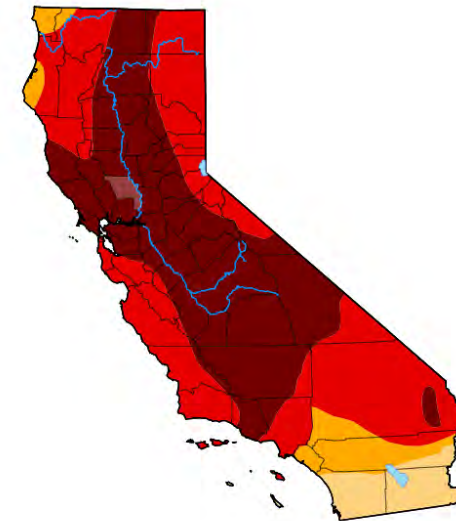
Fire Potential on the Sonoma Coast

- The potential exists for large/damaging wildfires; however the probability is less than other area of the County and State
- We *may* continue to have escalating fire seasons, in length and acres burned, or at least have occasional above average fire seasons
- We will have fires that will be difficult to stop until weather conditions change



California

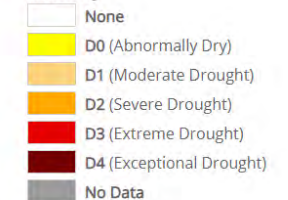
[Home](#) > California



Map released: Thurs. October 14, 2021

Data valid: October 12, 2021 at 8 a.m. EDT

Intensity



Authors

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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Fuels, Weather, and Topography

- The highest potential is when we have dry vegetation, warm and dry air, and windy conditions
 - North to south winds
 - East to west winds
 - Other winds with period of dry winds before moist air arrives
- These large/damaging wildfire conditions are not well predicted
 - Nocturnal drying event
 - Warm and dry air with wind during non summer months
- Fuels (vegetation) continues to accumulate unless managed
- Fire wants to burn uphill and can be funnelled by wind and topography (canyon such as the Gualala River canyon)

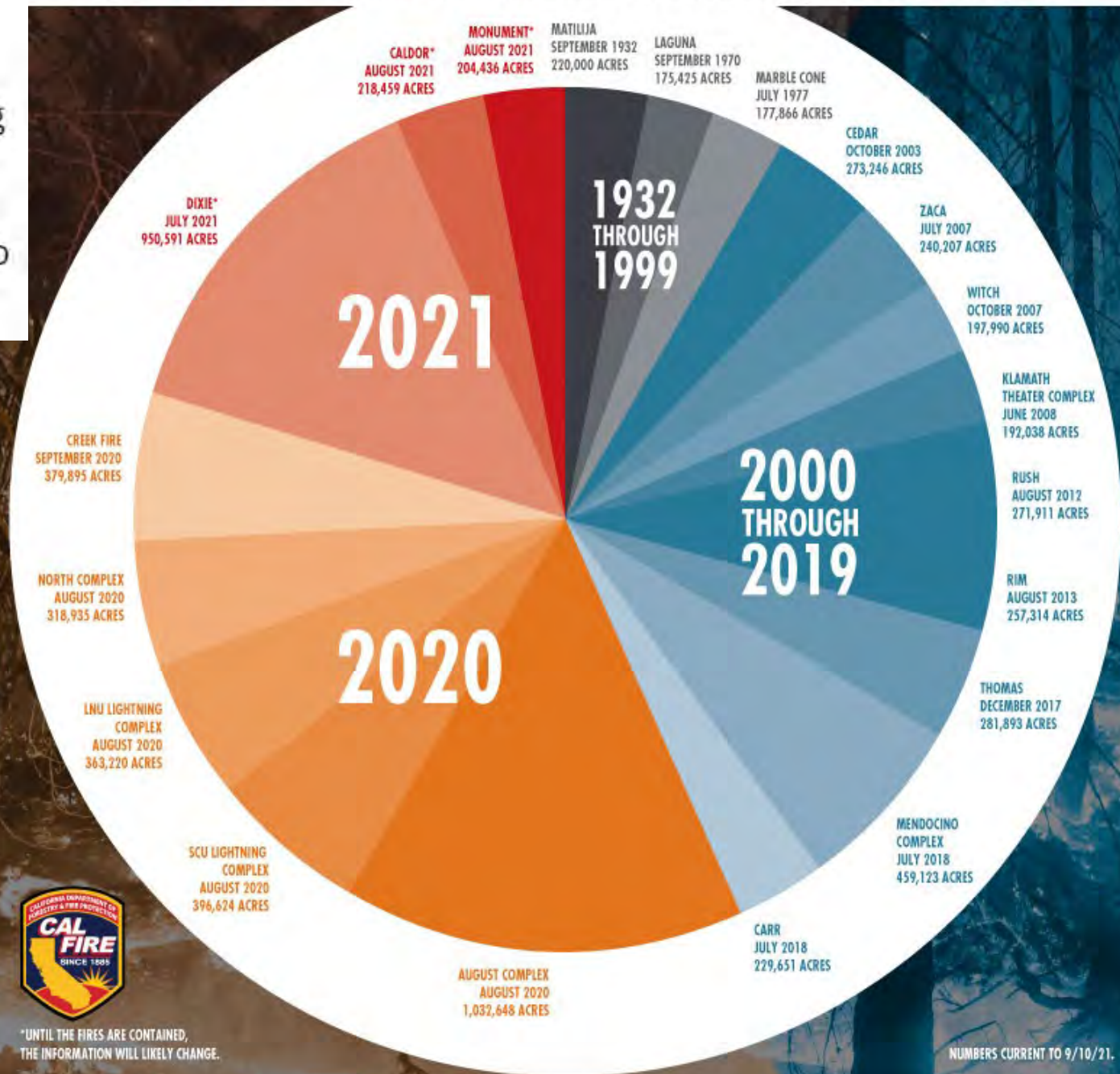
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CAL FIRE
@CAL_FIRE

TOP 20 LARGEST CALIFORNIA WILDFIRES

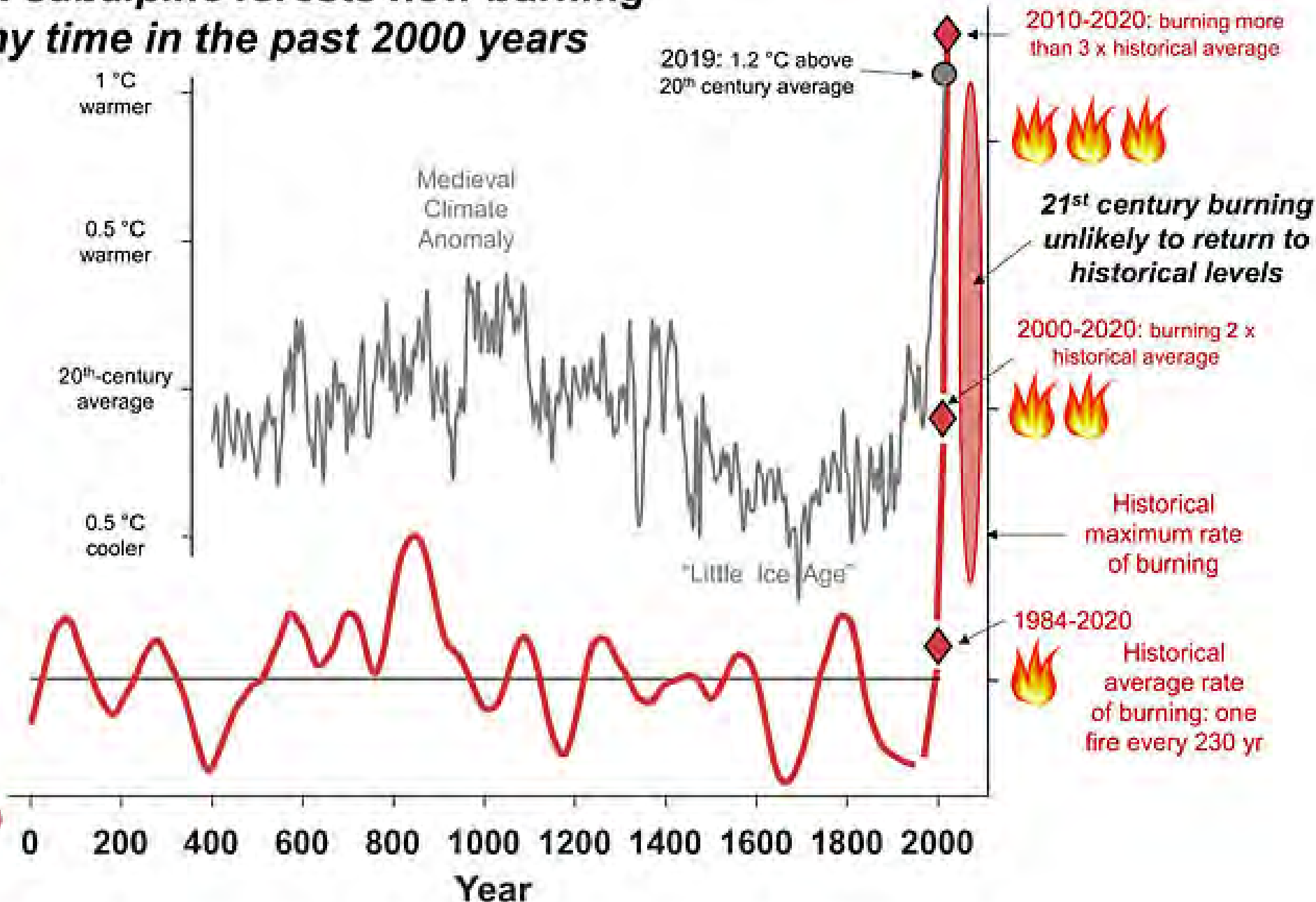
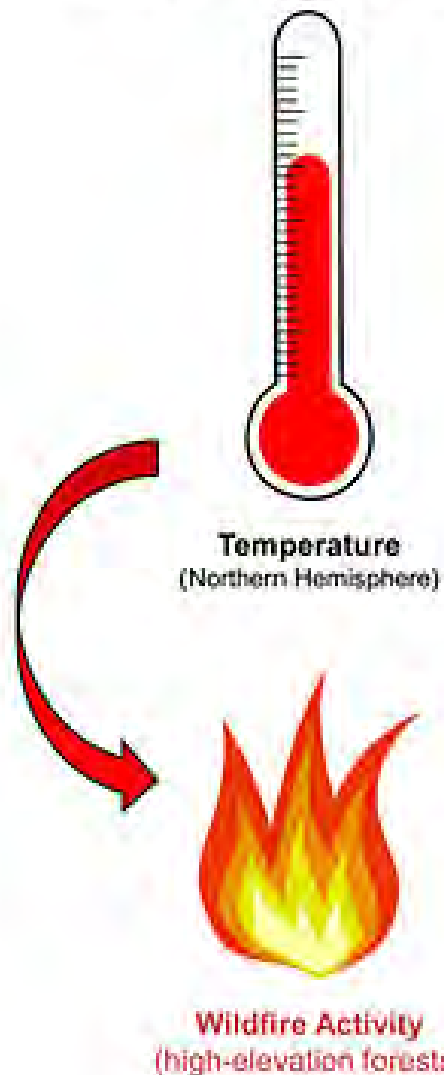
All but 3 of the Top 20 Largest #Wildfires have occurred since 2000, with 3 of these large & damaging wildfires occurring just this year. As we enter fall, which is known to have the largest & most destructive wildfires, we want to remind you that now is the time to be prepared.



*UNTIL THE FIRES ARE CONTAINED, THE INFORMATION WILL LIKELY CHANGE.

NUMBERS CURRENT TO 9/10/21.

Rocky Mountain subalpine forests now burning more than any time in the past 2000 years



Nocturnal Drying Event

- https://scholarworks.sjsu.edu/etd_theses/4833/

Fire Weather Snooper

Updated on Tue Oct 05 2021 05:40 (Pacific Daylight Time) Flirting Stations: 25 Red Flag Stations: 1



BACK

OAK RIDGE (OAAC1) Severity:28

TIME	RH	WIND	TEMP	FUEL
05:33AM	14%	SSE2G5mph	61	4
04:33AM	11%	SW1G5mph	64	4
03:33AM	5%	S4G5mph	67	4
02:33AM	3%	SSE3G6mph	68	4
01:33AM	3%	SW1G3mph	69	4
12:33AM	0%	VRB0G5mph	71	4
11:33PM	0%	N4G5mph	73	4
10:33PM	0%	VRB0G2mph	71	4
09:33PM	0%	VRB0G3mph	70	4
08:33PM	0%	W1G3mph	72	4
07:33PM	0%	VRB0G3mph	72	4
06:33PM	1%	S3G6mph	74	4
05:33PM	6%	S5G11mph	76	4
04:33PM	3%	S7G12mph	81	4
03:33PM	5%	SSW6G12mph	83	4
02:33PM	8%	SSW6G15mph	83	4
01:33PM	9%	SSW7G13mph	83	4
12:33PM	10%	S7G14mph	82	4
11:33AM	8%	S8G14mph	80	4
10:33AM	6%	SSE7G13mph	80	4
09:33AM	5%	S8G13mph	78	4
08:33AM	5%	SSE8G11mph	76	4
07:33AM	6%	SSE6G9mph	74	4
06:33AM	6%	SE5G6mph	76	4

Recent Large Sonoma Coast Fires

- 2020 Meyers Fire (August)
- 2017 Fort Fire (October)
- 1997 Yardarm Fire (July)
- 1993 Salt Point State Park (November)
- 1983 Prescribed Burns on The Sea Ranch



Preparation & Prevention Actions

WHAT ARE OUR OPTIONS?

- Become resilient, fire adapted, “live with fire”, etc?
- Become less attached to our personal belongings and property?

WHAT IS RESILIENT, FIRE ADAPTED, “LIVING WITH FIRE” ?

- Defensible Space
- Structural Hardening
- Prepared to Evacuation or Survive if Trapped
- Large Scale Vegetation Management

DEFENSIBLE SPACE

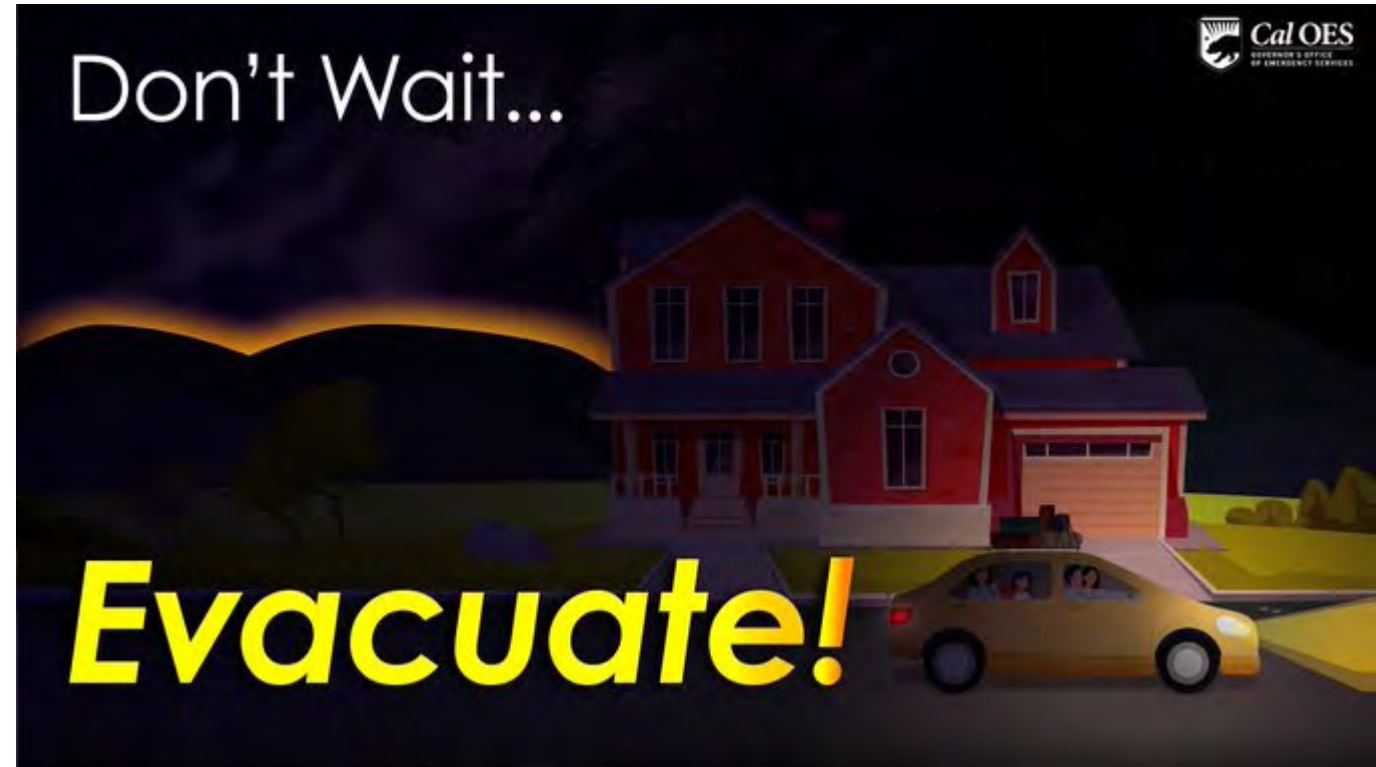
- Management of vegetation around a structure to reduce the intensity of an approaching wildfire
 - Reduce radiant heat
 - Reduce embers
 - Reduce direct flame impingement
- MAY NOT BE ENOUGH

STRUCTURAL HARDENING

- How a structure is built to not be ignited by:
 - Radiant heat
 - Embers
 - Direct flame impingement
- MAY NOT BE ENOUGH BUT LIKELY MORE IMPORTANT THAN DEFENSIBLE SPACE

EVACUATION

- Evacuation Warning
- Evacuation Order
- Evacuation Routes
 - Primary Route
 - Alternative Route
 - Contingency Route
 - Emergency Route



LARGE SCALE VEGETATION MANAGEMENT

- Surrogate for “natural fire”
- Grazing
- Reduce surface vegetation and ladder fuels
- Prescribed burning
- Mastication
- Logging

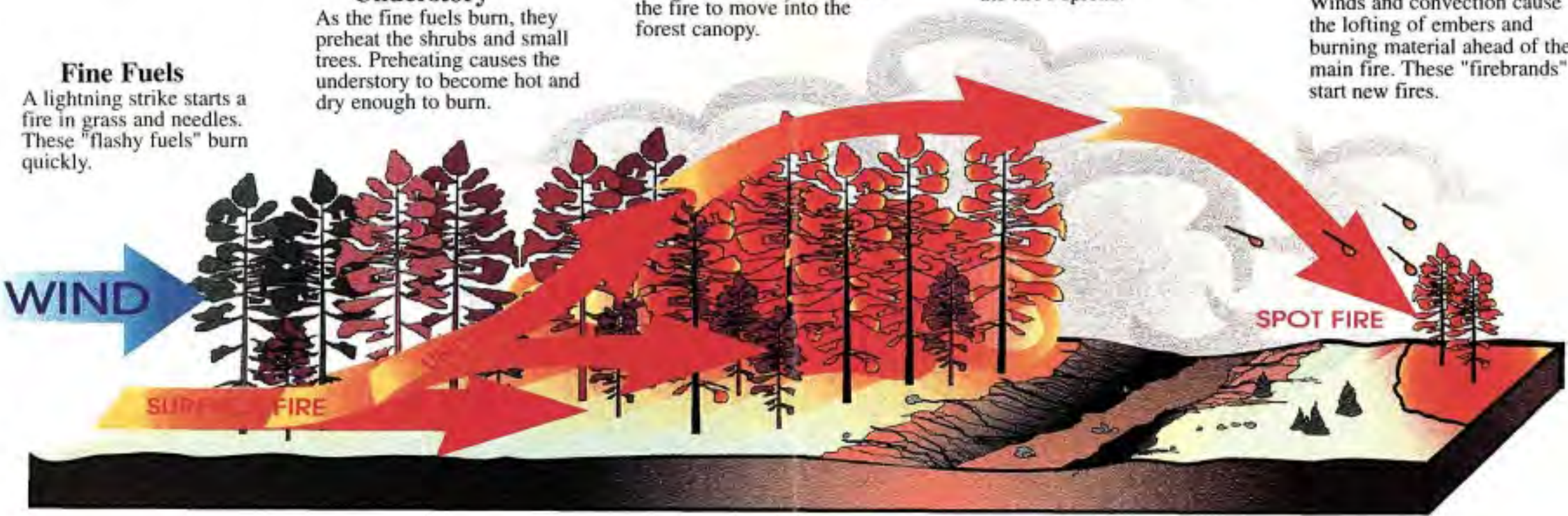
Fine Fuels
A lightning strike starts a fire in grass and needles. These "flashy fuels" burn quickly.

Understory
As the fine fuels burn, they preheat the shrubs and small trees. Preheating causes the understory to become hot and dry enough to burn.

Crown Fire
Preheating from the surface fire, combined with wind allows the fire to move into the forest canopy.

Fireline
Vegetation, branches, and needles are cleared to mineral soil to make a line wide enough to stop the fire's spread.

Spotting
Winds and convection cause the lofting of embers and burning material ahead of the main fire. These "firebrands" start new fires.



WHO IS GOING TO DO WHAT? Or HOW DO WE BECOME RESILIENT?

- Defensible Space
- Structural Hardening
- Prepared to Evacuation or Survive if Trapped
 - Vegetation Management Along Roads
 - Roadside Vegetation Management Can Be Used to Stop or Slow a Wildfire
- Large Scale Vegetation Management
 - Strategic Shaded Fuel Breaks
 - Prescribed Burning?

ITS'S MORE ABOUT PRIORITIES
AND
HOW WE CAN DO "EVERYTHING" BEFORE
THE NEXT WILDFIRE