

Lessons Learned from Wildfire and Building a More Resilient Water System

May 14, 2025

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General Manager



Top 20 Most Destructive California Wildfires

Top 20 Most Destructive California Wildfires

	FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1	CAMP (Powerlines)	November 2018	Butte	153,336	18,804	85
2	EATON (Under Investigation) *	January 2025	Los Angeles	14,021	9,413	18
3	PALISADES (Under Investigation) *	January 2025	Los Angeles	23,707	6,833	12
4	TUBBS (Electrical)	October 2017	Napa & Sonoma	36,807	5,636	22
5	TUNNEL - Oakland Hills (Rekindle)	October 1991	Alameda	1,600	2,900	25
6	CEDAR (Human Related)	October 2003	San Diego	273,246	2,820	15
7	NORTH COMPLEX (Lightning)	August, 2020	Butte, Plumas, & Yuba	318,935	2,352	15
8	VALLEY (Electrical)	September 2015	Lake, Napa & Sonoma	76,067	1,955	4
9	WITCH (Powerlines)	October 2007	San Diego	197,990	1,650	2
10	WOOLSEY (Electrical)	November 2018	Ventura	96,949	1,643	3
11	CARR (Human Related)	July 2018	Shasta County, Trinity	229,651	1,614	8
12	GLASS (Undetermined)	September 2020	Napa & Sonoma	67,484	1,520	0
13	LNU LIGHTNING COMPLEX (Lightning/Arson)	August 2020	Napa, Solano, Sonoma, Yolo, Lake, & Colusa	363,220	1,491	6
14	CZU LIGHTNING COMPLEX (Lightning)	August 2020	Santa Cruz, San Mateo	86,509	1,490	1
15	NUNS (Powerline)	October 2017	Sonoma	54,382	1,355	3
16	DIXIE (Powerline)	July 2021	Butte, Plumas, Lassen, & Tehama	963,309	1,311	1
17	THOMAS (Powerline)	December 2017	Ventura & Santa Barbara	281,893	1,063	2
18	CALDOR (Under Investigation)	September 2021	Alpine, Amador, & El Dorado	221,774	1,003	1
19	OLD (Human Related)	October 2003	San Bernardino	91,281	1,003	6
20	JONES (Undetermined)	October 1999	Shasta	26,200	954	1

"Structures" include homes, outbuildings (barns, garages, sheds, etc) and commercial properties destroyed.

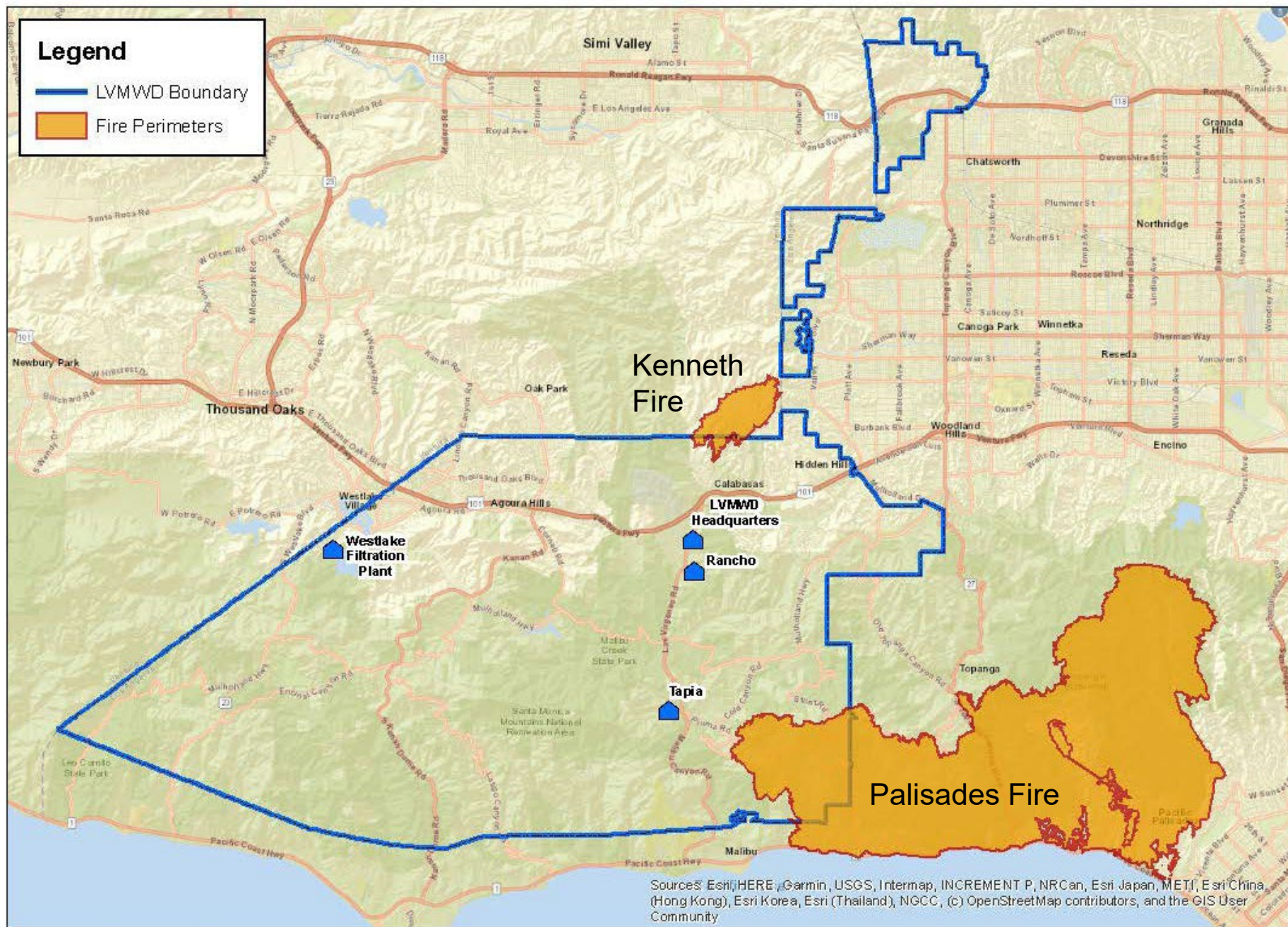
This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, local or tribal responsibility.

*Numbers not final *DINS Disclaimer: These numbers are preliminary based on aerial assessments dedicating heat sources which can include chicken coops, outbuildings, sheds, water containers, etc. *Validated inspections are currently being ground-verified by Damage Assessment Teams.



4/3/2025

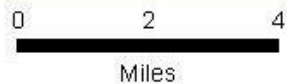


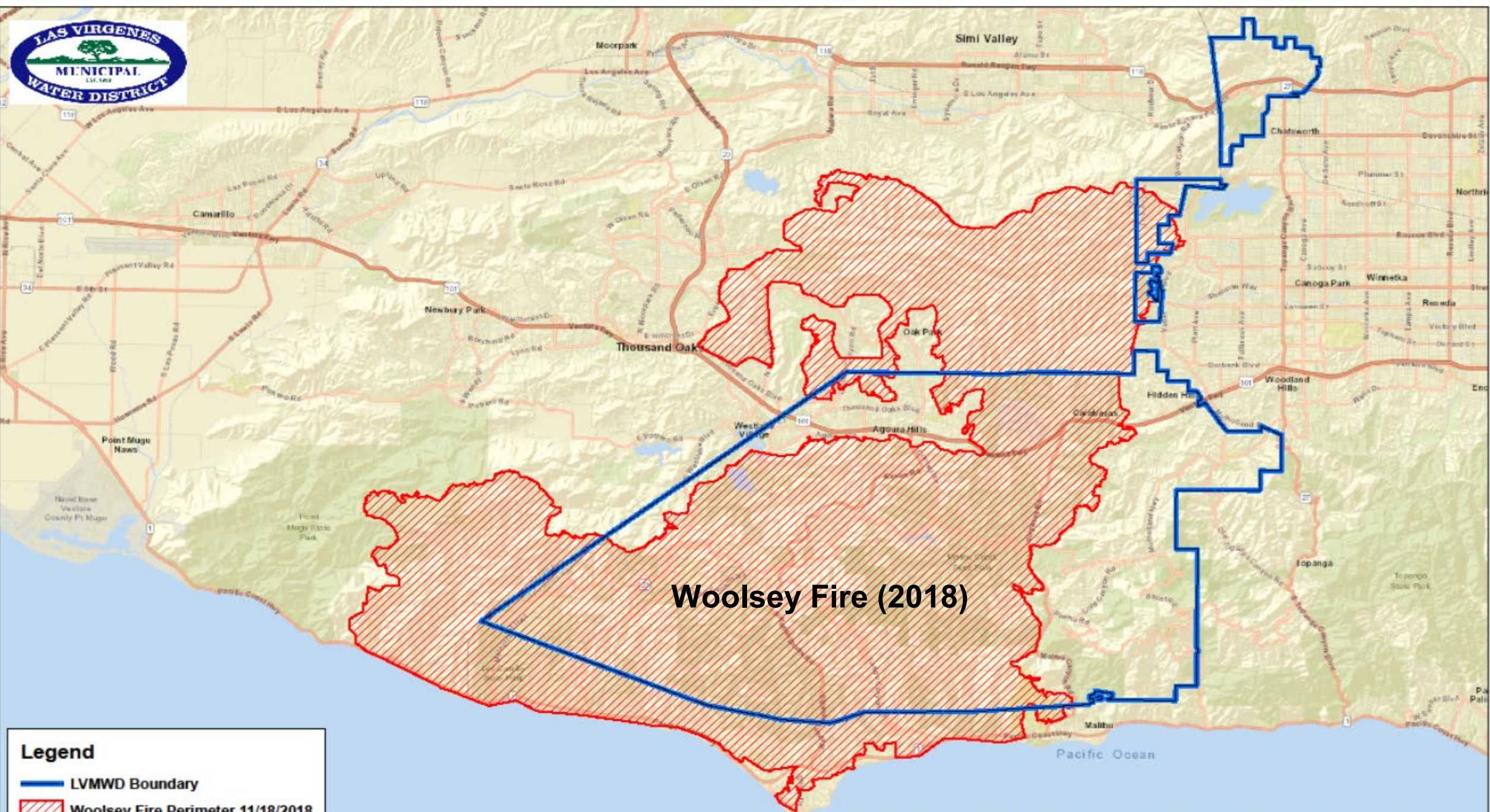


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Palisades & Kenneth Fires

January 2025



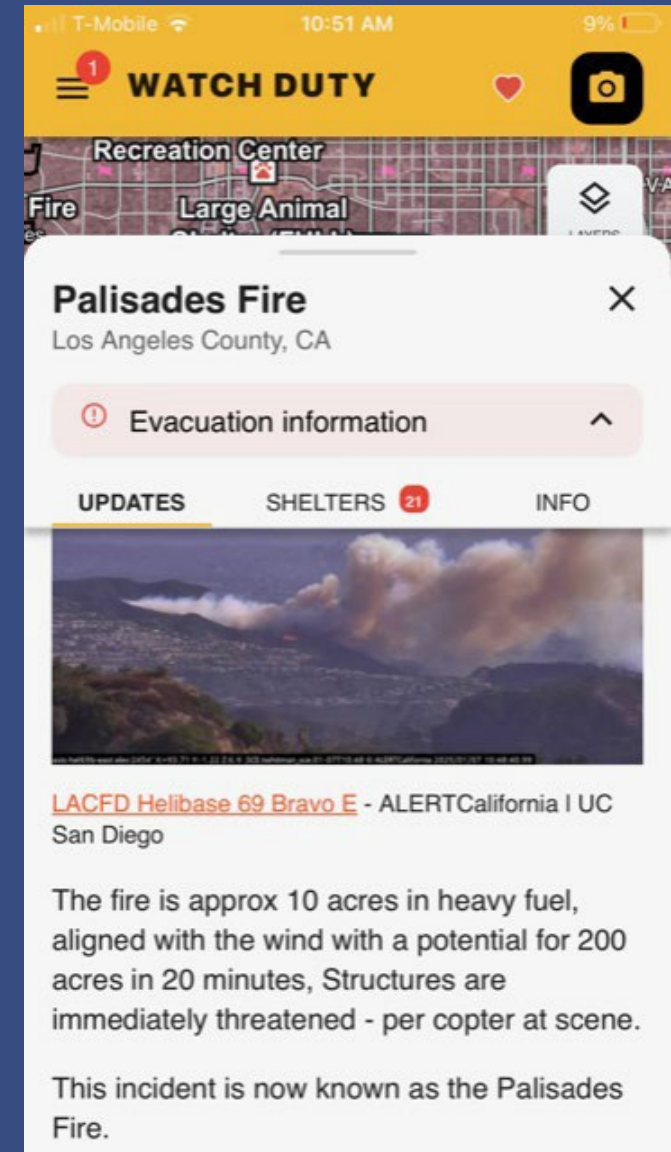
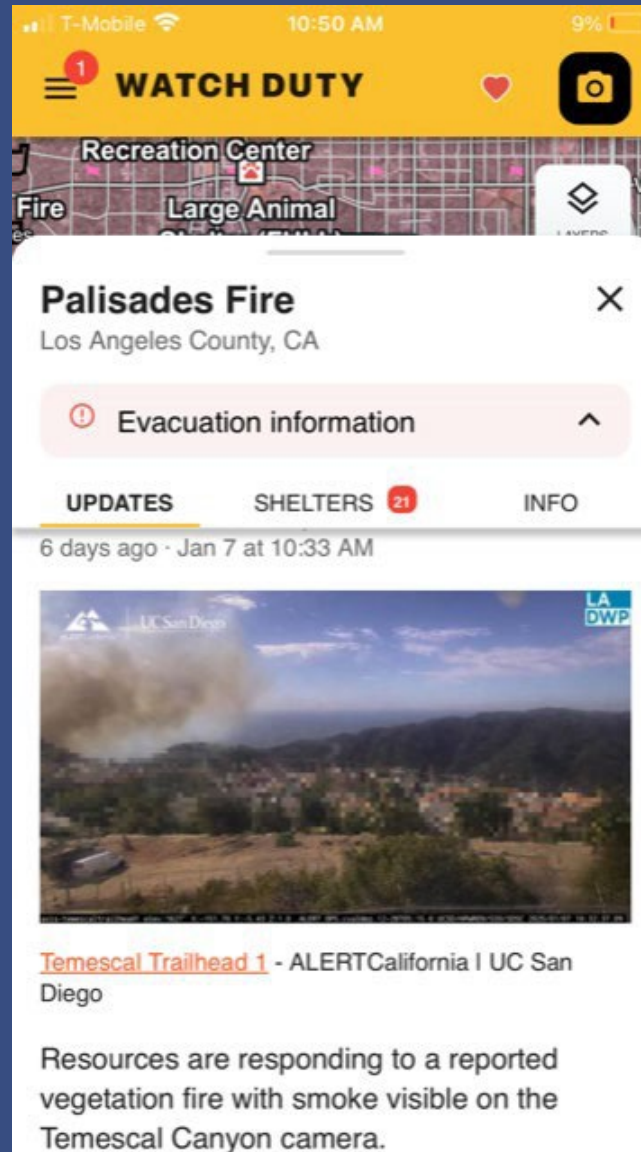


Legend

- LVMWD Boundary
- Woolsey Fire Perimeter 11/18/2018

Emergency Operations Center

- Palisades Fire first reported at 10:33 am on Tuesday, Jan. 7
- Mandatory evacuations within LVMWD Service area (ocean side of Saddle Peak) at 1:02 pm, Tuesday, Jan. 7
- Staff kept close watch of fire progress
- LVMWD Emergency Operations Center activated 6:24 am, Wednesday, Jan. 8





21602



Top of Saddle Peak



Water Service Shutoffs

- Water services to homes melt and water shoots out
- There can be hundreds of these at one time, making it difficult to maintain water storage
- Encountered about 108 of these at homes fed by Saddle Peak Tank.



LVMWD's Role

- Inform our community
- Push out accurate information
- Help neighboring colleagues
- Maximize our media availability
- Combat misinformation
- Fix leaks, shutoff services and maintain system pressure

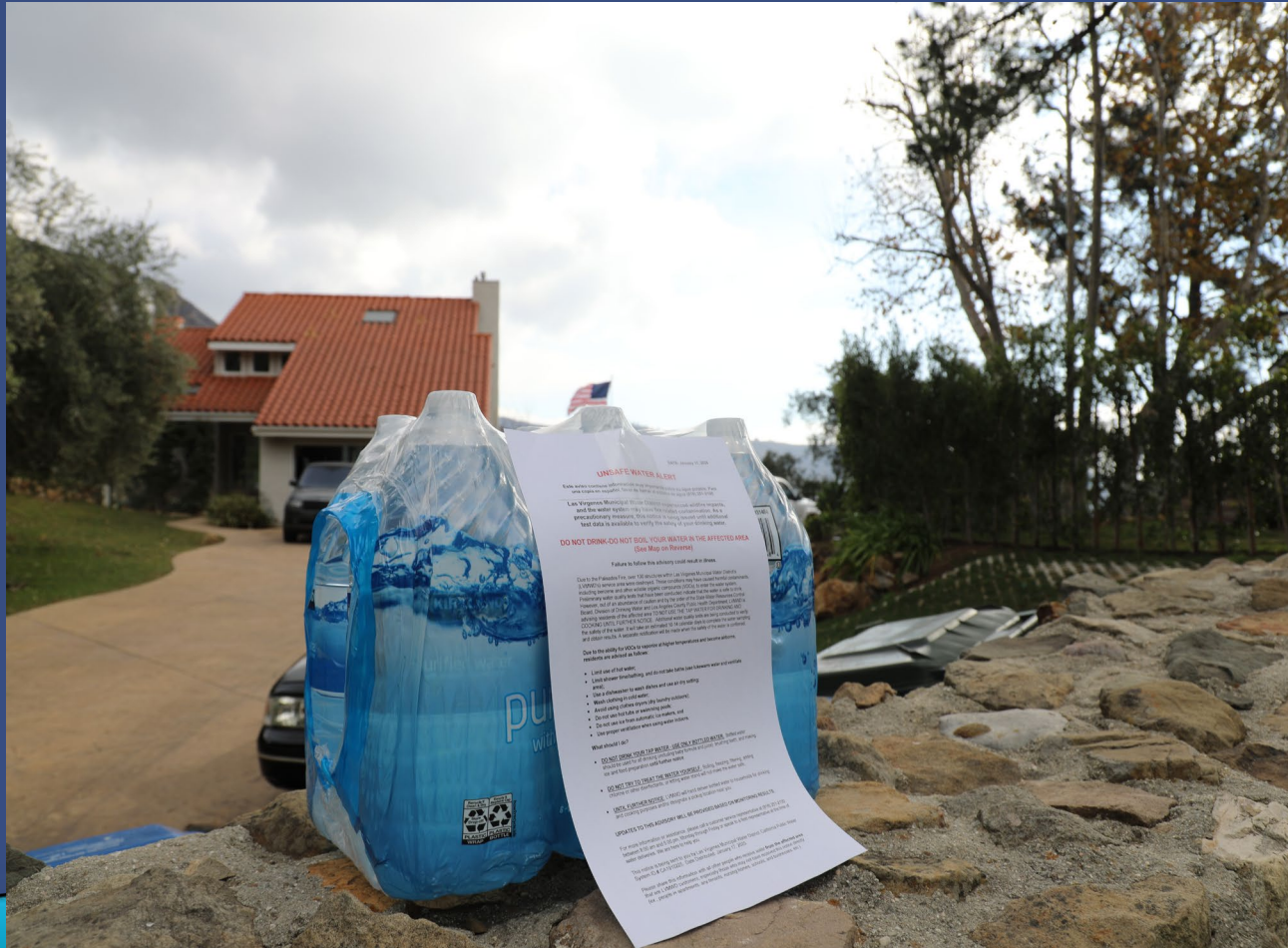


The Role of Social Media

- Social media is considered a primary source for information even during emergencies
- Used to confirm personal biases
- Headlines are often all that is read
 - Sometimes subtext is consumed
- Influencers can be considered sources of accurate information



Do Not Drink Order (AB 571 – Benzene)



WATER DISTRICT

For Customers

The District

Our Services

Community Resources

PALISADES FIRE INFO

CUSTOMER EXPERIENCE SURVEY

VIEW OR PAY MY BILL

BILL INSERTS

24 HOUR EMERGENCY SERVICE

MY ACCOUNT

START/STOP WATER SERVICE

WATER BUDGETS

BUSINESS AND COMMERCIAL CUSTOMERS

TECHNICAL SERVICES

SERVICE INTERRUPTIONS

RATES AND FEES

FIND MY WATER METER

COMMUNITY EVENTS

SIGN UP FOR NOTIFICATION

EMERGENCY PREPAREDNESS

CUSTOMER NEWSLETTER - THE CURRENT FLOW

CONTACT LVMWD

WOOLSEY FIRE HELP PAGE

For Customers

Palisades Fire Information

[Print](#) [Feedback](#) [Share & Bookmark](#) [Font Size](#) [Like](#) [Post](#)

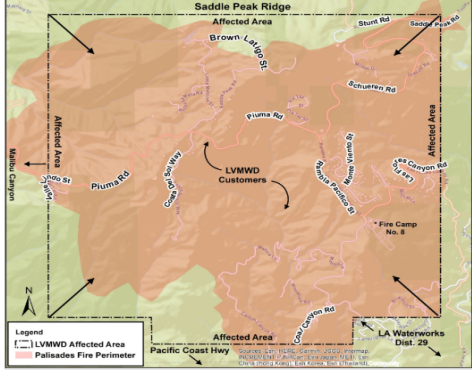
Palisades Fire Update: Friday 01/17/2025 11:30 am

DO NOT DRINK-DO NOT BOIL YOUR WATER IN THE AFFECTED AREA

Failure to follow this advisory could result in illness.

Affected Area

DO NOT DRINK YOUR TAP WATER IN THIS AREA



Due to the Palisades Fire, over 100 structures within Las Virgenes Municipal Water District's (LVMWD's) service area were destroyed. These conditions may have caused harmful contaminants, including benzene and other volatile organic compounds (VOCs), to enter the water system. Preliminary water quality tests that have been conducted indicate that the water is safe to drink. However, out of an abundance of caution and by the order of the State Water Resources Control Board, Division of Drinking Water and Los Angeles County Public Health Department, LVMWD is advising residents of the *affected area* to NOT USE THE TAP WATER FOR DRINKING AND COOKING UNTIL FURTHER NOTICE. Additional water quality tests are being conducted to verify the safety of the water. It will take an estimated 10-14 calendar days to complete the water sampling and obtain results. A separate notification will be made when the safety of the water is confirmed.

Due to the ability for VOCs to vaporize at higher temperatures and become airborne, residents are advised as follows:

- Limit use of hot water;
- Limit shower time/bathing, and do not take baths (use lukewarm water and ventilate area);
- Use a dishwasher to wash dishes and use air dry setting;
- Wash clothing in cold water;
- Avoid using clothes dryers (dry laundry outdoors);
- Do not use hot tubs or swimming pools;
- Do not use ice from automatic ice makers, and
- Use proper ventilation when using water indoors.

Lessons Learned

1. Invest in emergency backup power and improved redundancy.
2. Activate early and apologize later (if necessary).
3. Water agency personnel are first responders; be safe.
4. Set up 12-hr. shifts and send people home to rest.
5. Some chaos is normal but manage it.
6. Request mutual aid before you need it.
7. Document from the start for FEMA reimbursement.
8. Test emergency generators under load.
9. Send a representative to Fire Incident Command (IC).
10. Explain importance of facilities IC Liaison Officer.
11. Issue public notices and updates without delay.
12. Emergency response is a sprint; disaster recovery is a marathon.



Planning a More Resilient Water System

- Greater degree of redundancy
 - Backup power for all essential treatment and pumping systems with automatic transfer switches
 - Interconnections with neighboring water systems
 - Larger amounts of gravity storage
 - Looped distribution systems w/isolation valves
- Participation in Mutual Aid Agreements
- Emergency Response Planning/Hazard Mitigation Planning
- On-Site Fuel Storage and Delivery Capabilities
- Routine Maintenance and Testing of Equipment
- Emergency Contracts w/Key Vendors
- Improved Communication w/Power Utility Representatives
- Well-Trained Employees

