



# Exploring the 2025 LA Wildfires

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~ 40,000 acres burned	> 10,000 structures destroyed	At least 200,000 evacuated and 29 killed
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The 2025 wildfire season in Los Angeles has left communities devastated, raising urgent questions about **what went wrong and how we can better prepare**. We’ve decided to break down the key factors that contributed to this disaster.

## 🔥 2025 LA Wildfires: What Happened?

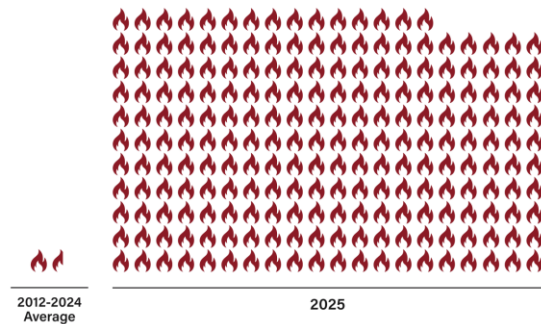
The 2025 LA wildfires were fueled by a dangerous combination of extreme weather patterns and long-term environmental shifts. A phenomenon known as **"hydroclimate whiplash"**—a cycle of heavy rainfall followed by intense heat—caused rapid vegetation growth that later dried into highly combustible fuel. This was worsened by persistent drought conditions and rising temperatures linked to climate change, making ignition easier and fire spread more aggressively.

Decades of fire suppression and limited prescribed burns led to excessive fuel accumulation, creating a landscape primed for extreme fire behavior. Combined with strong winds, this buildup made containment nearly impossible, highlighting the escalating wildfire risks in a changing climate.

Santa Ana winds revisited: *Have we learned from history?*

Santa Ana winds are strong, dry winds that originate from high-pressure systems over the Great Basin (desert areas of Nevada and Utah) and rush toward the coast through mountain passes, gaining speed and heat as they descend. These winds dry out vegetation, making it more

Fire alerts in Los Angeles County, California in first four weeks of the year



Note: Image shows high confidence VIIRS fire alerts in Los Angeles County in the first four weeks of the year for 2025 (as of Feb. 4) compared to the average for the first four weeks of the year from 2012-2024.  
Source: WRI.

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susceptible to ignition. Their intense speed can carry embers miles ahead, rapidly expanding the fire’s reach and making containment efforts incredibly difficult. While the Santa Ana winds themselves don't start fires, they significantly exacerbate fire behavior, intensifying and spreading any fire ignited, whether from human negligence, power line sparks, or other sources.

This year’s Santa Ana wind events followed a familiar pattern, with multiple bursts lasting two to three days, reaching wind speeds of over 80 mph. During these dry conditions, fires like the Eaton Fire burning in the San Gabriel Mountains grew rapidly, increasing twentyfold in size within hours.

Despite decades of understanding Santa Ana wind behavior, wildfire management strategies have struggled to keep pace. This year’s fires demonstrate that simply knowing the **risks isn’t enough**—we must improve mitigation efforts,

fire-resistant infrastructure, and controlled burns to prevent history from repeating itself.

### **Misinformation Wildfire: Separating Fact from Fiction**

During these devastating wildfires, misinformation spread quickly, complicating disaster response and recovery. From false claims about fire progression to rumors targeting public services, the chaos was amplified by unreliable sources.

*The Water Resources Rumors:* A significant topic of misinformation was the supposed shortage of water resources for firefighting. While hydrants did run dry in certain areas due to high demands, rumors about widespread water system failure and mismanagement have been debunked. The truth is that municipal systems are not designed to fight massive wildfires, and while additional resources, like water-carrying tankers, were deployed to manage the situation, even they could not supply enough water to combat the massive simultaneous burns. With limited air support due to extreme winds, containment was impossible.

*Insurance companies withdrawn coverage:* Rumors about insurance companies withdrawing coverage or limiting claims emerged in the midst of confusion. While many insurers did review policies due to wildfire risks, the misinformation surrounding their actions added undue stress for affected communities, creating uncertainty when homeowners needed reassurance.

*The role of social media:* Misinformation was further fueled by social media, with bad actors and unverified claims spreading at the speed of the fire itself. The rise of artificial intelligence tools also made it easier for false images and stories to circulate, leading to confusion and anxiety. Officials at FEMA and the Governor's office had to dedicate considerable resources to debunk these rumors to maintain trust in official channels and ensure proper response efforts.

These examples show the critical need for reliable, fact-checked information during a crisis. Combating misinformation is as vital as fighting the flames themselves.

### **Power Lines & Lawsuits: Who's Responsible?**

In Southern California, power lines are often a source of wildfire ignition, especially in areas

prone to high winds and dry conditions. The region's extensive electrical infrastructure, which includes high-voltage transmission lines suspended from metal towers, poses significant risks during extreme weather events. Sparks from malfunctioning equipment or downed lines can ignite nearby vegetation, leading to devastating fires. The 2025 Eaton fire in Altadena is a stark example, where evidence suggests that high-energy power lines may have sparked the deadly blaze, raising questions about utility responsibility and fire prevention measures.

*Utilities on Trial: How do power utilities (like SCE) play a role in wildfire ignition?*

Surveillance footage and eyewitness reports suggest that high-voltage power lines near Southern California Edison (SCE) transmission towers sparked the deadly Eaton fire, which killed 17 people and destroyed over 10,000 structures. Despite SCE's denial of electrical failure in the area, evidence from sources like Whisker Labs pointed to electrical faults, exacerbated by 100 mph winds. The decision not to cut power during high winds has raised questions about the utility's responsibility. Numerous lawsuits have been filed against SCE, accusing the company of negligence, while 2019 legislation limiting their liability has led to public criticism. This case highlights the growing accountability issues for utilities in wildfire-prone areas.

*Lawsuits galore: Is this the new normal?*

The rise in lawsuits is compounded by the 2019 legislation shielding Californian utilities from full liability for wildfire damages. While this law protects companies from catastrophic financial fallout, it has led to public outcry as taxpayers and ratepayers bear part of the financial burden. As more lawsuits emerge, questions about accountability, utility safety standards, and policy reforms need to dominate public discourse. With fire seasons growing more severe due to climate change, lawsuits may indeed become the new normal, setting a precedent for how utilities are held responsible for fire-related damages.

### **Unequal Impacts: Who Suffers Most?**

The series of wildfires that tore through Los Angeles in January have left both residents and businesses grappling with critical decisions: to rebuild or relocate? In the aftermath of the 2025 Los Angeles wildfires, marginalized

communities, particularly in neighborhoods like Altadena and South LA, have been disproportionately affected. Many of these areas are home to lower-income residents who often live in older, less fire-resistant housing. For example, in Altadena, several homes in the foothills were lost, but residents with limited financial means struggled to secure insurance claims or access fire-resistant materials, leaving them more vulnerable in future events. Additionally, many residents are renters who lack the financial security to rebuild or relocate, forcing them to face prolonged displacement. The lack of affordable housing and resources further exacerbates their recovery challenges, leaving these communities to rely heavily on governmental assistance, which can be slow and insufficient. News outlets have been reporting heartbreaking stories of vulnerable individuals who were physically unable to evacuate or escape the deadly flames—sometimes with family members who refused to leave them behind.

*Long-term impacts: Are we resilient enough?*

These fires are a clear signal that we are nowhere near as prepared for future climate disasters as we need to be. In the wake of this destruction, even as local leaders push for quick reconstruction of over 15,000 burned structures, experts warn that rebuilding in high-risk fire zones may lead to similar outcomes. With a history of increasing wildfire damage due to factors like drought and arid vegetation, some advocate for government buyouts of homes in the most fire-prone areas, though financial and political hurdles make this option challenging. Many residents, however, remain determined to rebuild and return to their communities. This month, the area faces a new challenge as rain joins the mix, bringing much-needed precipitation but also increasing the risk of mudslides and debris flows in recently burned areas. While rain is essential after a prolonged dry spell, experts are cautious, as heavier rainfall could worsen the situation. A stark challenge remains for all of us: how to prevent this level of destruction in the future.

### **? Questions to Ponder:**

*What preventive measures can our communities take to mitigate wildfire risks?*

*How do we effectively combat misinformation during crises?*

*Should utilities be held more accountable, and how?*

*What can we do to ensure equitable recovery and resilience for all communities?*

### **For further reading:**

<https://newsroom.ucla.edu/ucla-faculty-experts-wildfires>

<https://news.northeastern.edu/2025/01/15/santa-ana-winds-california-fires/#:~:text=How%20do%20the%20Santa%20Ana,caused%2C%20either%20intentional%20or%20accidental.>

<https://www.bu.edu/articles/2025/how-and-why-the-la-wildfires-grew-so-fast/>

<https://news.climate.columbia.edu/2025/01/09/a-disaster-expert-explains-why-the-la-fires-have-been-so-catastrophic/>

<https://www.nytimes.com/2025/01/26/us/los-angeles-eaton-fire-cause.html>

<https://dornsife.usc.edu/news/stories/a-national-nonpartisan-study-of-the-los-angeles-fires-could-improve-planning-for-future-disasters/>

<https://www.wri.org/insights/los-angeles-fires-january-2025-explained>

<https://dornsife.usc.edu/news/stories/camp-and-woolsey-fires-mudslides-and-debris-flows/>

<https://www.science.org/doi/full/10.1126/sciadv.abh2262>