

## *Tainted Grapes, Tainted Lungs:*

Lessons on Inclusive Wildfire  
Disaster and Climate Adaptation  
Planning for Undocumented Migrants

**Dr. Michael Méndez**



# California Wildfire Smoke Reaches Europe

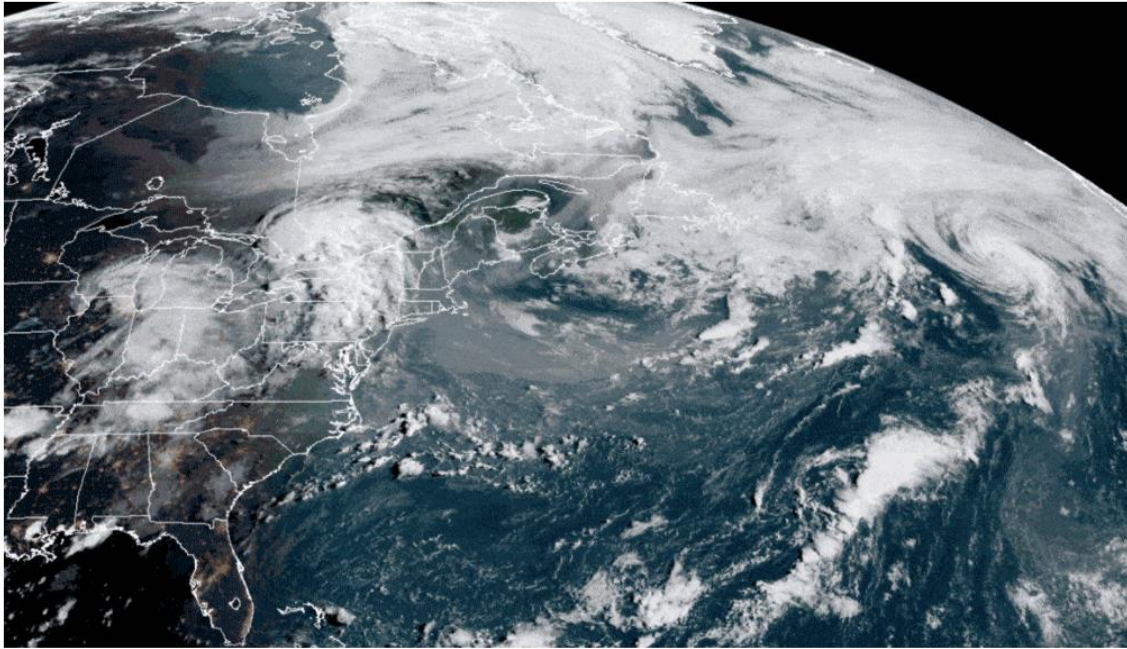
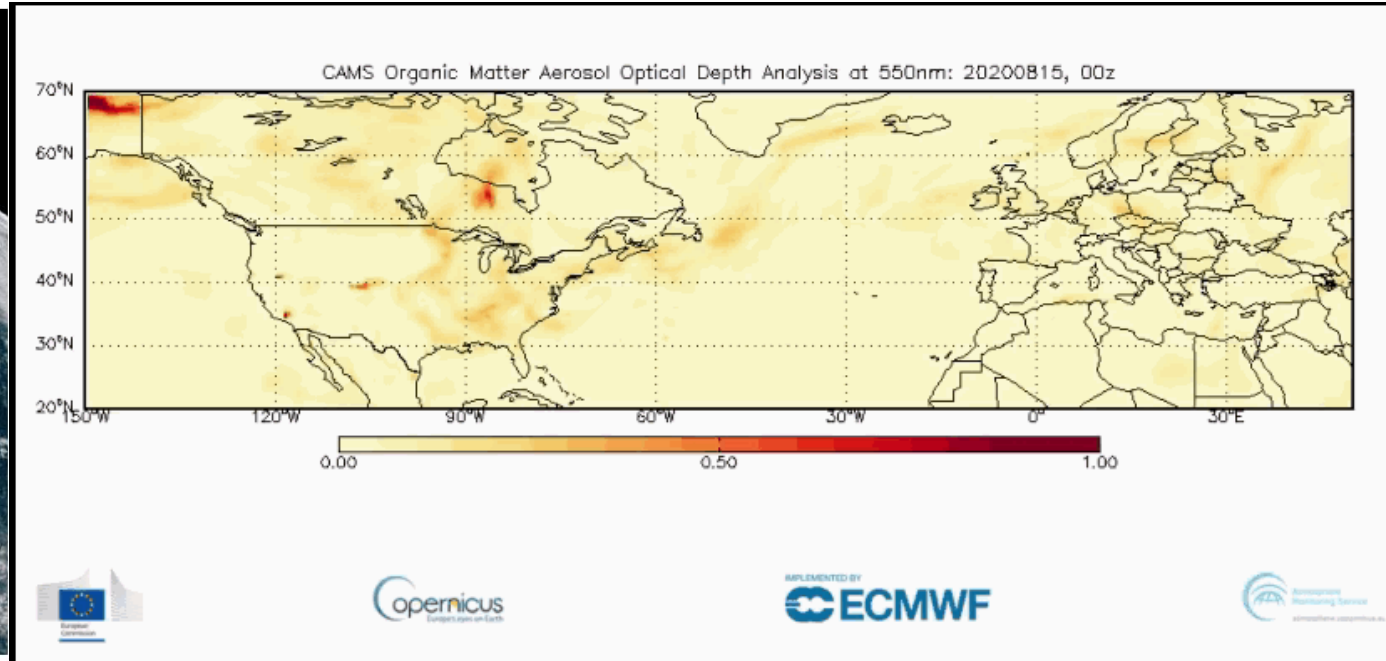


Photo: Colorado State University/CIRA/RAMMB



(Copernicus Atmosphere Monitoring Service, ECMWF, 2020)

**Organic matter aerosol optical depth analysis, showing smoke transport:  
Aug. 15 through Sept. 14, 2020.**





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## The (in)visible victims of disaster: Understanding the vulnerability of undocumented Latino/a and indigenous immigrants

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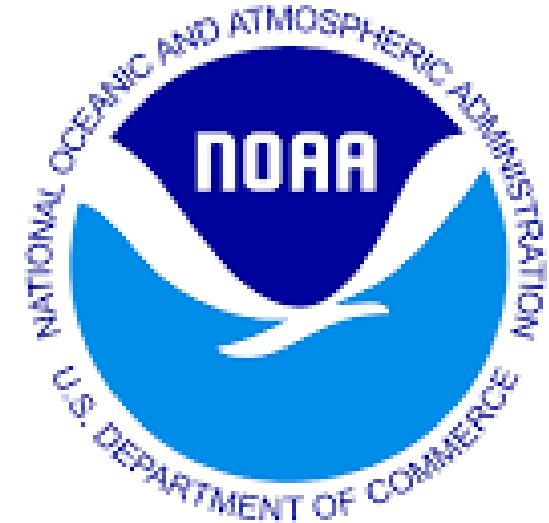
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Slow violence

### ABSTRACT

As climate change advances, communities across the United States are adapting to the increased threat of wildfires, drought, heatwaves, and infectious diseases. Such disasters are expected to become more frequent and severe. Now more than ever, it is crucial to understand how these events amplify existing inequalities, and how to lessen the resulting harms. Differences in human vulnerability to disaster stem from a range of social, economic, historical, and political factors. We argue that given their social status, undocumented Latino/a and Indigenous immigrants are particularly vulnerable to disasters and require special consideration in disaster planning. They are disproportionately affected by racial discrimination, exploitation, economic hardships, less English and Spanish proficiency, and fear of deportation in their everyday lives— their pre-disaster marginalized status. In the case of the Thomas Fire in California's Ventura and Santa Barbara counties, we show that emergency response and recovery efforts ignored their needs. Resources were directed toward privileged individuals, leaving local immigrant rights and environmental justice groups to provide essential services such as language access to emergency information in Spanish and Indigenous tongues; labor protections for farmworkers endangered in the fields; and a private disaster relief fund for undocumented immigrants ineligible for federal aid. The article concludes with preliminary participant observations from the COVID-19 pandemic response in the region, indicating how lessons from the fire have informed official actions. As governments grapple with the increasing severity of disasters, understanding the differential impacts on undocumented immigrants can help improve disaster planning to protect the most vulnerable and stigmatized populations.



INTERNATIONAL ORGANIZATION FOR MIGRATION

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Cal OES

GOVERNOR'S OFFICE OF EMERGENCY SERVICES

# *Behind the Bougainvillea Curtain:* **The Context of Extreme Wildfires**







## Key Impacts from Wildfire to Undocumented Migrants

- Language Access
- **Workers Health and Safety/Rights**
- Immigration Status, Disaster Aid, and Unemployment Insurance
- Housing/Transportation

# PM<sub>2.5</sub> Exceedances



Credit: MICOP (2017)

- Fine particulate matter (PM<sub>2.5</sub>) from wildfire smoke is more harmful than car exhaust (Aguilera et al., 2021).
- Annual mean PM<sub>2.5</sub> has increased as a result of extreme wildfire events, which are now the main source of exceedances (Liang et al., 2021).
- The harm to farmworkers may be greater than previously thought; further research and new policies are needed (Méndez et al., 2020).

*“We all got sick. **Our throats closed** in from breathing too much smoke and our kids couldn't go to school. We had to buy masks and medicine for our throats and some goggles because my eyes were irritated when I worked.”*

*--F.C.P., Indigenous Farmworker*

\*Black Saliva

*“I could not get to the homes where I worked because the streets were closed. Two of the homes I worked at were destroyed. One of my good friends was lost during the disaster. He had only been living in area for 3 weeks before **he died**. I myself am a **cancer survivor** and am the only one who provides for the family.”*

*--SZ, Landscaper*

\*Syndemic and existing health disparities



Research Implication: *Thinking beyond* Property Values



Credit: MICOP (2017)

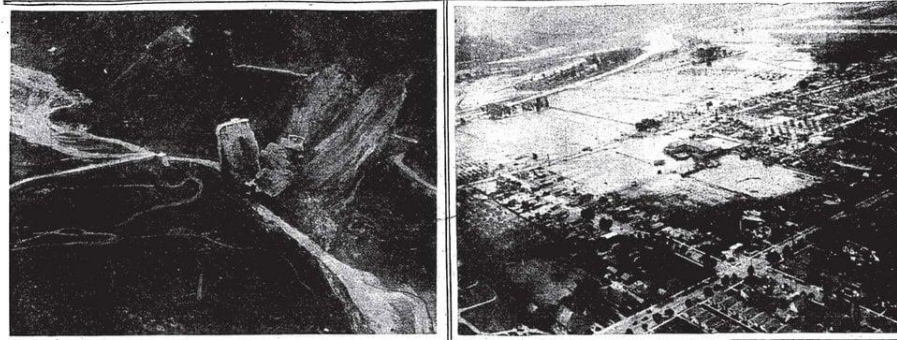


# Ventura, CA March 12, 1928

## Los Angeles Times

# Los Angeles Times

200 DEAD, 30 MISSING, \$7,000,000 LOSS IN ST. FRANCIS DAM DISASTER



THOUSANDS RUSH TO AID IN WORK OF RESCUE AND RELIEF  
PARTIAL LIST OF PERSONS DEAD, INJURED AND MISSING IN FLOOD  
SCORES MORE THOUGHT BURIED IN DEBRIS OF WILD WATERS



Floodwaters surround homes and vehicles in the community of Pajaro in Monterey County. (Noah Berger / Associated Press)

BY MICHAEL MÉNDEZ AND MANUEL PASTOR  
MARCH 14, 2023 2:15 PM PT

# Pajaro, CA March 12, 2023

