



May 18, 2022

## Addressing Disparities in Sonoma County's Agriculture Pass Program

When governments confront the challenges of climate change and extreme wildfires, they often fail to embrace and engage farmworkers, in particular, undocumented Latino/a and Indigenous migrants. They are disproportionately affected by racial discrimination, exploitation, economic hardships, less English and Spanish proficiency, and fear of deportation. Yet, few studies examine the consequences of disaster for undocumented migrants. In this policy brief, we study how wildfires and Agriculture Pass Programs can exacerbate existing inequities.

### Introduction:

The 2020 wildfire season in California set a record for the number of fires that burnt across the state. In a single year, wildfires cost the state more than \$12 billion in total, making it the third costliest wildfire season on record (National Large Incident Year-to-Date Report, 2020).

One of the economic sectors most impacted by these catastrophes is the wine industry. The damage to the wine industry in 2020 was approximately \$3.7 billion (Mobley, 2021). As the threat of wildfires intensify, wine sector employers, particularly in Sonoma County, adapt by altering emergency response protocols.

In 2017, Sonoma County established an interim Agriculture Pass (Ag Pass) program. This program authorizes farm and vineyard employers to bring their workers into mandatory evacuation zones (considered hazardous to the general population) to continue agricultural work during a wildfire event.

Supporters of the Ag program argue it is intended to safeguard and harvest crops. However, migrant and labor rights advocates claim it puts farmworker's health and safety at risk (Moe, 2021). While this program was implemented administratively by Sonoma County, and several other agricultural counties in California, it has not been enacted through legislation (Lander, 2022).

Our research examines two wildfire events from 2020 in which Ag Passes were utilized, and how the program may harm the occupational health and safety of farmworkers, in particular undocumented migrants.

**Table 1. 2020 Sonoma County Wildfires Information**

Fire Information	LNU Lighting Complex (2020)	Glass (2020)
Dates	08/17 – 10/02	09/27 – 10/20
Acres Burned	363,220	67,484
Structures (residential, commercial and other)	282 damaged & 1,555 destroyed	232 damaged & 1,491 destroyed
Deaths & Injuries	5 injuries 6 deaths	None

*"When the wildfires started, we were called into work...We had red eyes and itchy throats from the smoke...All we knew is that we were being called into work we didn't have another option" – Sonoma County Farmworker (PBS, 2021)*

### Results:

#### Lax Oversight of Ag Pass Program

To conduct our study, we investigated the results of a public records request for approved Ag Pass applications granted during the 2020 Glass and LNU Complex wildfires from the Sonoma County Agriculture Commissioner's office. We received hardcopy applications (PDF forms) and excel data versions of the applications. There is no centrally located database for tracking, evaluation, or monitoring for compliance with applicable state or federal occupational health and safety laws.

The applications for approval were granted through an ad-hoc process. No protocols or clear standards for approving or denying Ag Pass permits were provided by the county or described in the application form. In addition, no protocols related to violations for noncompliance with the Ag Pass program were provided in the application form.

For workers to enter mandatory evacuation zones, employers were required to submit a simple one-page application to the Sonoma County Agricultural Commissioner. The application consists of the following information:

1. Dates for request access, and start to finish times.
2. Location of places workers will labor.
3. Working activities, such as harvesting, workers will perform.
4. Number of workers and number of vehicles to enter the worksite.
5. Employer contact information, and business name.

No other information is required.



## Key Findings

**Table 2. Ag Pass version comparison**

Application Information	LNU (PDF)	LNU (Excel)	Glass (PDF)	Glass (Excel)
Number of applications	370	499	96	106
Number of worksites	590	862	120	130
Number of workers	1,603	2,182	633	674

### Overall Inaccurate Data

In review of the hardcopy applications (signed, and scanned into a PDF), and a separate Excel dataset that contained the same application information, there were numerous data inconsistencies. The Excel version had a greater number of applications; number of worksites; and number of workers that were granted an Ag Pass compared to the hardcopy applications (PDF). Of the 605 Ag Passes granted in 2020, the County did not have records for the signed, hardcopy application for 139 (23%).

#### 1. Worksite Locations Inaccuracy:

In the Excel version, there were additional addresses that were not listed in the hardcopy applications. It is unknown if the additional addresses in the excel version were approved, or why they were listed. Additionally, some employers listed multiple addresses (ranging from 2 to 50) per application.

#### 2. Unknown Number of Workers:

For each application, applicants listed the number of workers that were going to enter the worksites. In many cases, the number of workers did not match from the PDF to the Excel dataset – especially for the LNU fire. Additionally, applications with multiple addresses did not state if workers were spread throughout each location, or if workers went to every location – or when (dates/times) or duration. For the LNU wildfire, 305 (61%) of the approved Ag passes did not list any number for workers (PDF and Excel data).

#### 3. Spatial Inaccuracy:

Applications require worksite locations and request employers to “be descriptive as possible.” Yet, many applicants only listed street names, and/or a city. Several addresses listed in both datasets also did not exist or were unable to verify. The lack of complete addresses can cause uncertainty about the location of workers in evacuation zones and spatial inaccuracy during mapping analysis.

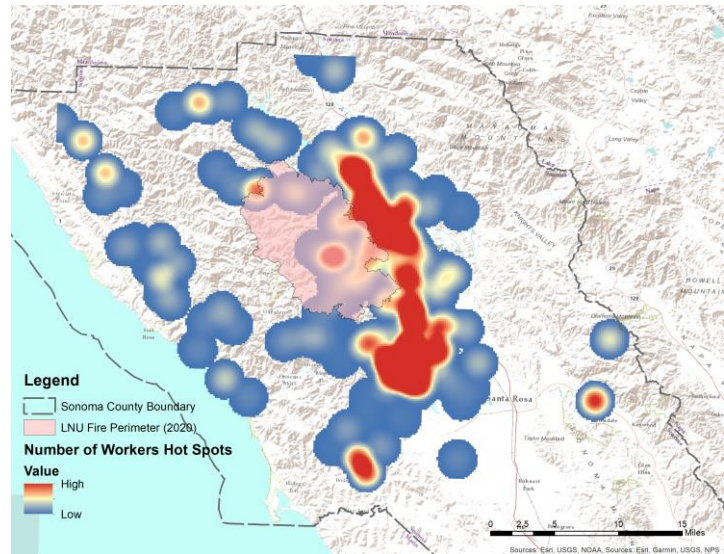
#### 4. Lack of Emergency Plans, Insurance, and Exposure Monitoring:

The County does not require as a condition of approval that employers first produce an emergency plan to protect workers from multiple hazards during a wildfire event. For example, a written document describing safety and evacuation protocols that are approved by police and fire agencies. Moreover, there is no verification whether insurance companies will extend coverage to persons, vehicles, and equipment issued an Ag Pass for mandatory evacuation zones. Finally, there is no post-exposure health and wellbeing monitoring for farmworkers.

#### 5. No Training Requirement

Prior to approval of an Ag Pass in 2020, no formal training was required of employers or workers that provided an overview of hazards and health/safety issues, entrapment avoidance, incident organization, fire behavior, and working with law and fire liaisons.

**Map A: LNU Fire (2020): Number and Location of Workers**

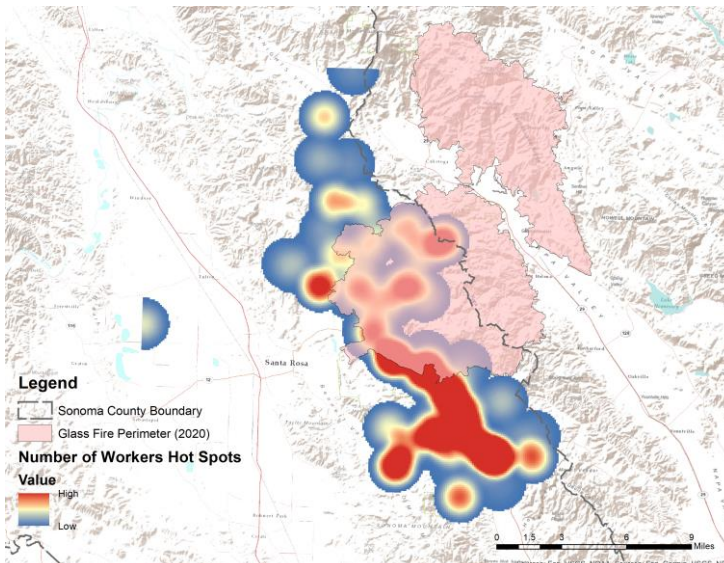


These two maps (based on the county’s Ag Pass PDF data), indicate where the majority of workers were located during the fires. The color red indicates a higher number of workers, whereas the colors yellow and blue imply a lower concentration. Additionally, fire perimeters are displayed to highlight the proximity of fires.

These maps illustrate that the Sonoma County’s Ag Pass in 2020, allowed employers to bring workers to locations that were in close proximity to extreme wildfires, and in some cases within the perimeter of the fires.

For the LNU Fire, the Ag Pass program (PDF data) allowed 41 worksites and 115 workers within the fire perimeter. During the Glass Fire, the Ag Pass program (PDF data) allowed 37 worksites and 178 workers within the fire perimeter. However, the number of workers is likely larger, in particular for the LNU Fire, since 233 of the approved Ag passes did not list the number of workers (PDF data).

**Map B: Glass Fire (2020): Number and Location of Workers**





## Recommendations:

If a county chooses to develop and implement a program to allow agricultural workers into mandatory evacuation zones, significant improvements need to be made to ensure health and safety, especially for socially vulnerable workers, including but not limited to:

### 1. Post-Incident Accountability and Data Accuracy:

Following wildfire incidents, where Ag Passes are provided, a county should evaluate the accuracy and efficacy of the program. This analysis will be critical in ensuring compliance and the assessment of potential risks in the implementation of the Ag pass program. The results and data should be made publicly available.

### 2. Clear Protocols for Identifying Workers and Location:

Clear and accurate lists of workers and their specific work locations should be kept to ensure occupational health and safety. These lists should be updated daily and provided to first responders.

### 3. Participation by Farmworkers in Ag Pass Program:

Ensure that there are opportunities for workers to participate in their primary languages, in the development of the Ag Pass program and emergency plans.

### 4. Require Employer Emergency Plans:

Prior to issuing an Ag Pass, the county should require employers to produce an emergency plan to protect workers from multiple hazards during a wildfire event. At minimum, it should include safety and evacuation protocols that is approved by police, fire, and public health agencies.

### 5. Verify Employer Insurance Coverage:

The county should verify whether insurance companies will extend coverage to persons, vehicles, and equipment issued an Ag Pass for mandatory evacuation zones. Ag passes should only be provided to employers with eligible insurance coverage.

### 6. Post-Exposure Health Screenings and Hazard Pay:

The county and employers should provide funding to workers for post-exposure health and wellbeing monitoring. These funds can be in addition to any hazard pay provided to workers laboring in evacuation zones.

### 7. Emergency Training:

Workers should be provided with training in their primary languages, that provide an overview of hazards and health/safety issues (including short and long-term health risks), entrapment avoidance, incident organization, fire behavior, and working with law and fire liaisons.

### 8. Real-time Monitoring of Air Quality:

Employers should be required to monitor hazardous air quality in real-time at worksites through mobile air monitoring devices.

## Conclusion:

Each year, the impacts of climate change and extreme wildfires continue to worsen, and migrant and Indigenous farmworkers find themselves on the frontlines. Since California has not provided a statewide policy on the issue of employers bringing workers into mandatory evacuation zones, the responsibility has fallen to county governments to regulate access in these situations.

When county governments take on the challenges of evacuation zones and agricultural work, key elements of success will depend on accuracy, transparency, accountability, as well as substantive participation by the most impacted workers.

In developing these policies, local authorities should acknowledge how these issues are gaining more attention in the public realm. This is exhibited for example, in a recent poll by UC Berkeley's Institute of Governmental Studies (2022). That poll found that voters overwhelming support protections for farmworkers in evacuation zones, including hazard pay, paid wage replacement in disasters, and trainings in workers' primary languages.

All predictions point to worsening wildfires in the coming years, and addressing the challenges for the most vulnerable communities will be critical for governments.

### Authors:

Michael Méndez, Assistant Professor, Urban Planning & Public Policy, UC Irvine

Carlo Chunga Pizarro, PhD student, Urban Planning & Public Policy, UC Irvine

### Major Funding:

National Science Foundation and National Center for Atmospheric Research

### Subgrant Funding:

The James Irvine Foundation (through the North Bay Jobs with Justice)



## References

- [Burke, Marshall \(2020\). "Indirect mortality from recent wildfires in CA". Retrieved from G-FEED: Indirect mortality from recent wildfires in CA](#)
- Fazel-Zarandi, M. M., Feinstein, J. S., & Kaplan, E. H. (2018). The number of undocumented immigrants in the United States: Estimates based on demographic modeling with data from 1990 to 2016. *PLoS one*, 13(9), e0201193.
- Kenward, Alyson (2016). *Western Wildfires: A Fiery Future*. Climate Central.  
<https://assets.climatecentral.org/pdfs/westernwildfires2016vfinal.pdf>
- [Mobley, Ester \(2021\). The 2020 wildfires could cost California's wine industry \\$3.7 billion — but it doesn't have to be that way \(sfchronicle.com\) January 21, 2021. San Francisco Chronicle.](#)
- Moe, Kristin (2021). As Wildfires Collide with Harvest Season, Who's Protecting [Sonoma vineyard workers fight for safety ahead of fire season. It's an uphill battle \(sfchronicle.com\) Sonoma's Vineyard Workers? – September, 2021. Sonoma Magazine](#)
- Méndez, M., Flores-Haro, G., & Zucker, L. (2020). The (in) visible victims of disaster: Understanding the vulnerability of undocumented Latino/a and indigenous immigrants. *Geoforum*, 116, 50-62.
- Mollenkopf, J., & Pastor, M. (Eds.). (2016). *Unsettled Americans: Metropolitan context and civic leadership for immigrant integration*. Cornell University Press.
- National Interagency Fire Center (2020). National Large Incident Year-to-Date Report. Geographic Area Coordination Center. December 21, 2020. Archived from the original on December 29, 2020. Retrieved January 13, 2021.
- PBS News Hour (2021). Worsening wildfires in California's wine country threaten low-wage farm workers. August 3, 2021.  
<https://www.youtube.com/watch?v=YTUPLC-s5J8&t=99s>
- [Standards Board Adopts Emergency Regulation to Protect Outdoor Workers from Wildfire Smoke | California Department of Industrial Relations](#)
- UC Berkeley (2020). Voters overwhelmingly support farmworker protections in wildfire evacuation zones and hazard pa, UC Berkeley Institute of Governmental Studies  
<https://escholarship.org/uc/item/9124z4nw>