



**Ventura Regional  
Fire Safe Council**

# Management plan for reducing the risk of wildfire to vulnerable populations in Ventura County

## **Client Proposer**

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## **Student Proposers**

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## **Faculty Support**

Sarah Anderson, PhD, Professor and Associate Dean of Diversity, Equity, and Inclusion | Bren School of Environmental Science and Management | [sanderson@bren.ucsb.edu](mailto:sanderson@bren.ucsb.edu)

## Objectives

The goal of this project is to prepare a management plan that reduces the risk of wildfire to socially and economically vulnerable populations in Ventura County. To do so, this analysis will assess the risk of wildfire in the county and determine the intersection with vulnerable populations living within or in close proximity to the wildland-urban interface (WUI) of the County. The assessment will inform a Ventura Regional Fire Safe Council management plan for reducing risk to vulnerable populations.

### Specific Objectives:

- a. Conduct a social vulnerability assessment of citizens of Ventura County living within or in proximity to the WUI and identify high-risk populations.
- b. Determine methods to reduce wildfire risk to vulnerable populations in Ventura County which will inform a written management plan.

## Significance

Communities across California must be prepared for the threat of catastrophic wildfire. In recent years, catastrophic wildfires in California have increased. While the drivers of fire frequency are complex, in Ventura County the primary driver of the increase is climate change (Keeley & Syphard, 2020). As such, it is imperative that communities have the tools to respond to wildfire.

All communities need these tools, but social conditions, including poverty, poor vehicle access, and crowded households, may significantly affect a community's ability to prevent human suffering and financial loss from a wildfire. Additionally, wealthier, whiter, and more educated communities are more likely to have the resources to rebuild postfire and are also more likely to mobilize and demand government appropriation of fire-mitigation strategies like fuel treatments (Anderson et al., 2020). This highlights the importance of developing a targeted wildfire risk management plan for vulnerable communities in Ventura County.

This project will assess the wildfire risk in Ventura County and the vulnerability of different communities. Understanding a community's social vulnerability is an important factor for emergency preparedness and relief as not all communities will require the same resources and some communities are better equipped to request the help they need (Anderson et al., 2020).

## Background

The Ventura Regional Fire Safe Council has a two-year grant from the California State Fire Safe Council to prepare a Community Wildfire Protection Plan (CWPP) following guidelines set by the federal Healthy Forest Restoration Act of 2003. The primary purpose of the countywide CWPP will be to guide future actions of the county and city fire departments, property owners, business-owners, homeowner associations, and other interested parties in their efforts to reduce the wildfire threat to the county and in individual communities.

The 2017 Thomas Fire burned over 280,000 acres in Ventura and Santa Barbara Counties. 1,063 structures were destroyed while 280 other structures were damaged (Saqui et al., 2017). During the Thomas Fire, many people in Ventura and Santa Barbara County were impacted by poor air quality, interruption to access to safe drinking water, and direct damages created by the fire itself. Damages were felt more strongly by immigrant and working-class families due to language barriers in distributed emergency response information (Central Coast Alliance United for a Sustainable Economy).

## Equity

Recently, the California Department of Forestry and Fire Protection (CALFIRE) designated the communities of Santa Paula, Piru, and Fillmore “low income communities” due to multiple social indicators (Gomez, 2016)<sup>1</sup>. A key element of the CWPP and this project will be to conduct a social vulnerability assessment of these communities to identify vulnerable populations and prepare a management plan to reduce the risk of wildfire to those persons. Deliverables for this project including infographics, will also be provided in Spanish to ensure accessibility.

## Available Data

A variety of GIS data will be used for this analysis and will be drawn from sources at the federal, state, and local levels. Available data include:

- 2020 [Census Data](#), which will become available in Spring 2021
- CDC’s [Social Vulnerability Data](#) (2016): identifies communities that most likely need support before, during, or after a hazardous event
- [National Interagency Fire Center](#): provides information on interagency wildfire incident data and documentation
- [CalFire](#): provides numerous GIS data resources on California’s wildfires, including fire threats, vegetation layers, and fire hazard severity zones
- As needed GIS data, which can be accessed through the Ventura Regional Fire Safe Council and the Ventura County Fire Department.

## Possible Approaches

To identify vulnerable communities at risk for wildfire, social factors will be utilized to complete a social vulnerability assessment informed by the CDC Social Vulnerability Index and U.S. Census data. Vegetation cover and past fire data will be used to access areas in the WUI that are at risk for future wildfires. This set of information will then be crossed with the social vulnerability assessment to determine areas of high priority for mitigation and community planning.

Once high-priority communities are identified, a management plan will be developed to determine methods to reduce the risk of wildfire risk in those areas. The management plan will include assessment of the resources communities need, identification of effective strategies,

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<sup>1</sup> Assembly Bill 1550 requires at least 10% of funds from the climate investments go to low income and 25% for disadvantaged communities or households.

determination of channels of communication with the communities, and recommendation of new policy that can mitigate risk of wildfire in vulnerable communities in the WUI.

## Deliverables

Deliverables for this project include, but are not limited to:

- Map of wildfire risk assessment to vulnerable populations
- Management plan to be incorporated as an element of the Ventura County CWPP
- Executive summary and an information graphic that will be available to the public (shorter, digestible deliverables)

\*These deliverables will also be made available in Spanish.

## Internships

Ventura Regional Fire Safe Council's grant from the California State Fire Safe Council includes \$10,000 for student involvement. This will be used to support at least one paid summer internship. The intern and other students in the group project would be involved in all aspects of this critically important and comprehensive project, including facilitation, research, project planning, persuasive writing, GIS mapping, and leadership development.

# Supporting Materials

## Citations

Anderson, S., Plantinga, A., & Wibbenmeyer, M. (2020). *Inequality in Agency Responsiveness: Evidence from Salient Wildfire Events*. 36.

Central Coast Alliance United for a Sustainable Economy. *Community Resilience in the Thomas Fire*. Accessed: 17 January, 2021.  
<https://causenow.org/our-work/community-resilience-thomas-fire>

Gomez (2016). *AB-1550 Greenhouse gases: investment plan: disadvantaged communities*.

Keeley, J. E., & Syphard, A. D. (2020, March). Nexus between Wildfire, Climate Change, and Population Growth in California. *Freemontia*, 47(2), 4–13.

Saqui, Christine, et al. (2017). *Investigation Report, Ventura County Fire Department*.  
[https://vcfd.org/wp-content/uploads/2020/02/Thomas-Fire-Investigation-Report\\_Redacted\\_3-14-19.pdf](https://vcfd.org/wp-content/uploads/2020/02/Thomas-Fire-Investigation-Report_Redacted_3-14-19.pdf)

## Budget

The budget for this project is not expected to exceed the \$1,300 provided by the Bren School of Environmental Science & Management. Costs will include printing expenses, conference calls, and a Spanish translator for the deliverables.



## Ventura Regional Fire Safe Council, Inc.

A California Non-Profit Public Benefit Corporation

3451 Foothill Rd. Suite 207

Ventura, CA 93003

[www.cvcfiresafe.org](http://www.cvcfiresafe.org)

January 21, 2021

Attn: Sean Kerr, Group Project Coordinator  
UCSB Bren School of Environmental Science & Management  
2400 Bren Hall UC Santa Barbara, CA 93106-5131

Dear Sean and Colleagues,

On behalf of the Board of Directors, the Ventura Regional Fire Safe Council<sup>1</sup> is honored to partner with the Bren School of Environmental Science and Management on a group project from April 2021 through April 2022. The goal of this project is to develop a management plan for reducing the risk of wildfire to vulnerable populations in Ventura County as a part of the Ventura County Community Wildfire Protection Plan (VC-CWPP).

The purpose of the VC-CWPP is to reduce the loss of life, property, and environmental damage to the county and within individual communities through a broad and collaborative process which will include community members, fire departments, county, federal, state and local agencies, nonprofits, tribes, large land managers, and agricultural and community service organizations. Determining methods to reduce wildfire risk to Ventura County's most vulnerable populations living in the Wildland Urban Interface will be a key component of the VC-CWPP.

Not only will the completed VC-CWPP be used by a broad array of governmental agencies for policy decisions and community service groups to target prioritized wildfire mitigation efforts, but we believe it can become a model for the state. The current norm for CWPPs is to address wildfire issues by focusing on land management, hazardous fuel reduction, and the home ignition zone, with very little or no focus on the impact of wildfire prevention, response and recovery on the most vulnerable communities living in the wildland urban interface. This project seeks to address this disparity.

In support of this project, the Ventura Regional Fire Safe Council commits to the following tasks and activities:

- Support at least one student internship in the amount of \$10,000 to help develop and implement the proposed group project.

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<sup>1</sup> Formerly known as the Central Ventura County Fire Safe Council.





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- Support, assist and encourage students to take a leadership role in the development and implementation of the project, which will include organizing and facilitating meetings, accessing data and understanding its implications, research, project planning, and report writing, among other key tasks.
- Through its Board of Directors and Executive Director, we will assist the student team to access existing data, as well as GIS mapping and other resources made available through the Ventura County Fire Department and other entities. Our board president, Mike LaPlant (Retired Ventura County Fire Department Deputy Fire Chief ) has agreed to help facilitate introductions to key individuals within the county and local fire departments, and Jim Kniss (owner of Veteran's Emergency Technical Services, also retired from the Ventura County Fire Department as a GIS analyst) has agreed to help students access GIS data related to this project. Other board members have also offered to share their content expertise.
- One of our key partners for many years, Kenneth VanWig (Fire Captain, Wildland/Aviation Division with the Ventura County Fire Department Vegetation Management Program) has received official permission from Fire Chief Lorenzen to be the point person and assist with accessing data for this project.

This area of work is a critical component of our CWPP, and we are deeply excited to partner with the Bren School to reduce the risk of wildfire to our most vulnerable populations living in the Wildland Urban Interface.

Sincerely,

A handwritten signature in blue ink, appearing to read "Elaine Himelfarb".

Elaine Himelfarb, MPH  
Executive Director

cc: Mike LaPlant, President Board of Directors

***The mission of the Ventura County Fire Safe Council is to reduce the threat of wildfire to farms, ranches, urban neighborhoods, and infrastructures through an aggressive program of action, education, and collaboration.***