



Creating Community Resilience: Preparing for Wildfires in the SGV

April 10, 2024

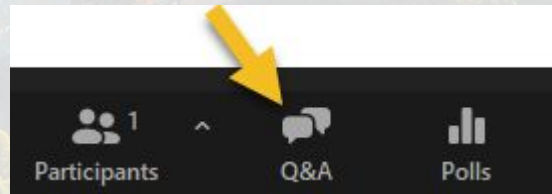
Hosted by
San Gabriel Valley Council of Governments

Zoom Reminders

Please hold verbal questions until all presentations are complete.

Submit a written question for the panel:

Click on the Q&A or chat button towards the bottom of the screen and submit your question.



Agenda

- **Introduction**
Mackenzie Bolger, SGVCOG
- **Wildfire Ready Landscapes**
Cassy Aoyagi and Patrick Barrett, FormLA Landscaping
- **San Gabriel Valley Community Wildfire Protection Plan**
Amelia Pludow and Darlene Rini, Jensen Hughes
- **Q&A Session**

Fire Prep SGV

- Launched in July 2022
- Response to increasing frequency and intensity of wildfires
- **Goal:** Provide education about wildfire preparedness and adaptation to San Gabriel Valley residents
 - Community events
 - Workshops/Webinars
 - Presentations
 - Educational materials



Community Wildfire Protection Plan

- Funded by CAL FIRE grant
- Includes risk and hazard analysis, community input, and an 18-month Action Plan to support preparedness



Fire Prep SGV

My Wildfire Action Plan

Fill in your Wildfire Action Plan and post it in a visible location in your home.

Date Created: _____

When to Go:

Where to Go: **Who To Tell:**

How to Get There:

What to Take:

<input type="checkbox"/> Prescriptions	<input type="checkbox"/> Documents (ID, Insurance, etc)
<input type="checkbox"/> Keys/Cash/Cards	<input type="checkbox"/> Computers & Disks
<input type="checkbox"/> Photos/Mementos	<input type="checkbox"/> _____
<input type="checkbox"/> Emergency Kit	<input type="checkbox"/> _____

Other:

Emergency Kit Location: _____

Notes: _____





Contacts

Save these numbers in your cell phone to save time in an emergency!

Local Fire Department: _____

Emergency Numbers: _____

Family: _____

Friends: _____

School(s): _____

Work: _____

Animal Shelter: _____

Other: _____

Wildfire Adaptation & Prevention Guide

Protect yourself and your home against wildfires



READY!
Make changes to your home and outdoor spaces to protect them when a wildfire occurs. Focus on getting **ready** during the months of April, May, and June.



SET!
Prepare a plan for evacuation. Make sure you are **set** during the months of July, August, and September.



GO!
Take action when a wildfire strikes. Be ready to **go** during the high wildfire risk months of July, August, and September.

 www.sgvkog.org/wildfire
 sgv@sgvcog.org
 (626) 457-1800





Neighborhood Wildfire Action Plan

Date Plan Was Created: _____

Fill in your Wildfire Action Plan with your neighbors and distribute copies.

During High Fire Danger days in your area, monitor your local media for information on wildfires and be ready to implement your plan. Hot, dry, and windy conditions create the perfect environment for a wildfire.



Step 1: Find Your Neighborhood Area
Identify the area that you can coordinate with, for example, your apartment building or your street.



Step 2: Establish A Team of Leaders
Establish a team of leaders that will coordinate communication and begin the planning and preparation for the neighborhood.



Step 3: Explore the Area
Get to know the area that you live in by identifying what resources are around, what the landscape is, and any unique local features.



Step 4: Get to Know Your Neighbors
Reach out to neighbors to meet who is in your area, find out who needs extra help, and share how you can help each other.



Step 5: Create Your Neighborhood Wildfire Action Plan
Begin work on your plan! Collaborate with your neighbors and fill out the information below.





sgvcog.org/wildfire



Wildfire Ready Landscapes

San Gabriel Valley Council of Governments
April 10, 2024



Cassy Aoyagi



Patrick Barrett



Hope Is Rational



How Fire Ignites Homes

1. Wind-Driven Embers

- Fly miles ahead of a fire front
- Collect or land on flammable objects
- **Responsible for 95% of home ignitions**

2. Ambient Heat

3. The Fire Front

10 Fire Defensive Actions

Working together, we can save lives and homes from wildfire.

1. Think Home First

- Connect with Community
- Clean + Store
- Separate Your Home and Danger (Zone 0)

2. Defend with Landscaping

- Hydrate + Elevate Foliage
- Protect Trees

3. Remove Dangers

- Remove Synthetic Turf
- Weed Out Arson Grasses
- Remove Palms, Madeira, Junipers

4. Chart a Course

- Increase Plant-to-Pavement Ratio
- Space+Place Native Foliage



Robyn Beck | AFP | Getty Images

You Are In the Right Place



This Is Fire Defensive



Think Home First



Clean + Store



Aim for Ember Resistance

10 Fire Defensive Actions

Nature is protective - and we can mitigate many dangers.

1. Think Home First

- Connect with Community
- Clean + Store
- Separate Your Home and Danger (Zone 0)

2. Defend with Landscaping

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Irrigate to Hydrate



Mulch to Hold Hydration



Protect+Plant Ember Catchers

10 Fire Defensive Actions

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- Space+Place Native Foliage



Remove Synthetic Turf

**STOP
Fountain
Grass**

**STOP
Feather
Grass**

**STOP
Pampas
Grass**



Remove Arson Grasses



Remove Fire-Bomb Palms

10 Fire Defensive Actions

Working together, we can save lives and homes from wildfire.

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- Clean + Store
- Separate Your Home and Danger (Zone 0)

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3. Remove Dangers

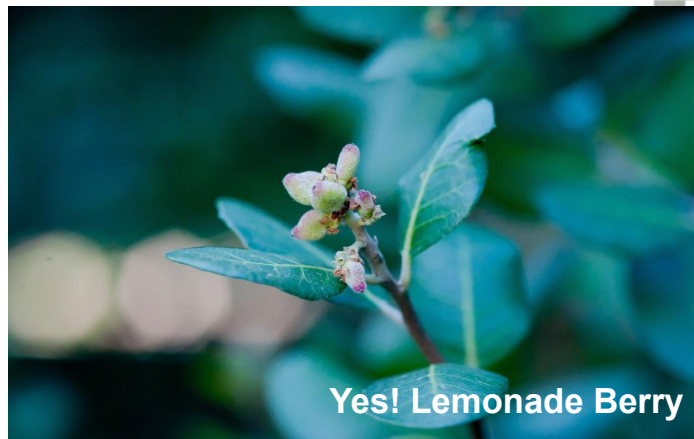
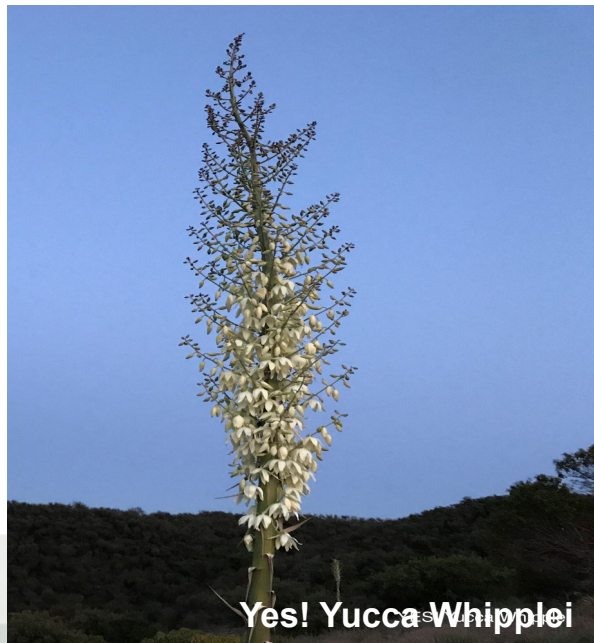
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4. Chart a Course

- Increase Plant-to-Pavement Ratio
- Space+Place Native Foliage



Increase Plant-to-Pavement Ratio



Plant Only Native Foliage



Space+Place for Full Size

10 Fire Defensive Actions

Work together + think home first to save lives and homes.

1. Connect with Neighbors
2. Clean+Store Flammables
3. Separate Your Home and Danger
4. Hydrate and Elevate Foliage
5. Protect Your Trees
6. Remove Synthetic Turf
7. Weed Arson Grasses
8. Remove Fire Bomb Palms
9. Increase Planted Spaces
10. Space and Place for Growth



Questions?



Resources

+ FormLA Landscaping - FormLA.com, [@FormLAinc](https://twitter.com/FormLAinc)

+ Sustainable City Sites - LAGardens.com

+ Resource Conservation District - RCDSMM.org + DefensibleSpace.org

+ The Insurance Institute for Business and Home Safety - [@ibhs_org](https://twitter.com/ibhs_org)

+ Theodore Payne Foundation - TheodorePayne.org



Elevate to Separate



This Is Fire Defensive



San Gabriel Valley - Regional Community Wildfire Protection Plan Virtual Public Workshop

APRIL 2024

Jensen Hughes Introductions

Darlene Rini, P.E.
Principal-in-Charge
Fire Engineer & Wildfire
Resiliency Planner



Amelia Pludow, PhD
Project Manager
Community Wildfire
Resiliency, GIS,
Demography



Dave Kerr
Wildfire Specialist
Wildfire Behavior & Fuel
Treatment Analyst



Tim Metzger
Wildfire Specialist
Wildfire Behavior & Fuel
Treatment Analyst



Reza Mortaheb
Planner
GIS, Architect



Jonathan Lai
Communications
Public Outreach &
Community Engagement



Matt Braughton
Evacuation Analysis Lead
Transit Routing & Analysis
Planner



Grace Carsky
Evacuation Analyst
Transit Data & Modeling



Purpose of Workshop

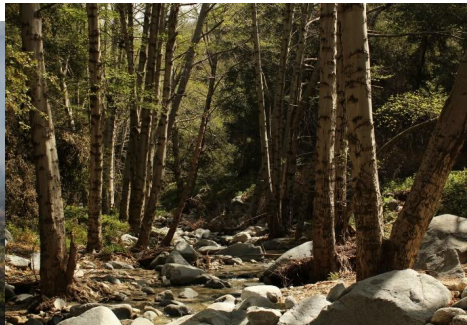
Why are we here?

What is a
CWPP?

Understand the
Process

Participate in
Plan
Development

Share
Knowledge,
Experiences
and Needs



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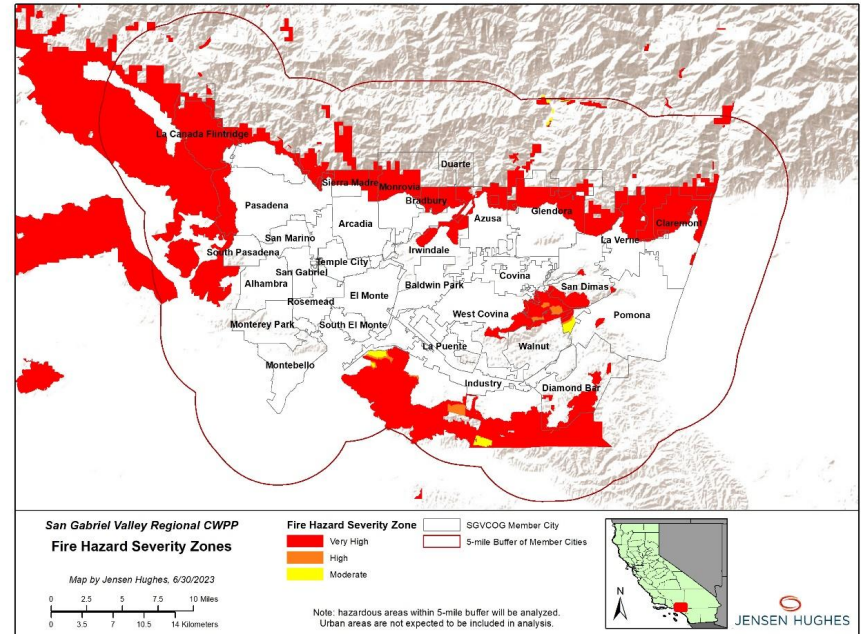
*Motivation for Regional
CWPP*



Motivation

Why a San Gabriel Valley Regional CWPP?

- + High Fire Prone Environment
 - Rugged mountains and steep terrain
 - Mediterranean climate & windy conditions
 - Significant area of very high Fire Hazard Severity Zones
- + Key Vulnerabilities
 - Complicated administrative boundaries
 - Large number of people
 - Limited & congested evacuation routes
 - Communication “dead-zones”
- + Reduced ability to secure resources for wildfire mitigation projects without a CWPP



Motivation for Regional CWPP

- + **Coordination and collaboration** on shared regional planning and implementation needs and sharing of lessons-learned
- + Regional analysis to **complement and support** local wildfire planning efforts (including as a basis for local CWPPs)
- + **Minimize duplication** of efforts
- + Increase **funding opportunities** to implement projects and provide central coordination for regional projects
- + Coordinated **public outreach**, emergency communications & messaging
- + Regional **evacuation analysis and toolkit**



(2)

What is a CWPP?



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What is a CWPP?

CWPP Requirements

- + Minimum requirements:
 - **Developed collaboratively** by local/state/federal agencies & other interested community parties
 - Identification and **prioritization of fuel reduction treatments**, including for the protection of at-risk communities & essential infrastructure
 - Recommend measures for homeowners and communities to **reduce the ignitability of structures**

- + Serve as a living document, with updates expected as a community's needs change and evolve

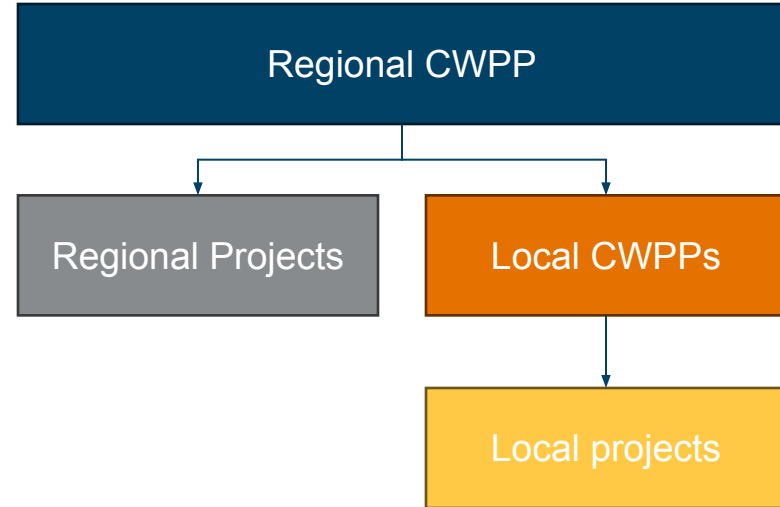


Regional vs Local CWPP

Purpose of the Regional CWPP

In addition:

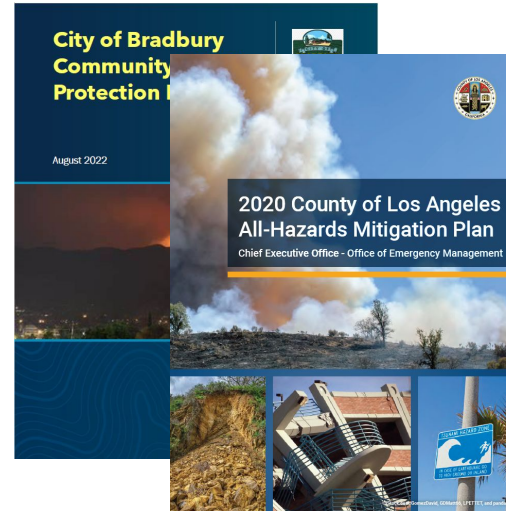
- + Provide a **Road Map** for regional wildfire resiliency planning and preparedness
- + Assess regional wildfire **hazards, risks and vulnerabilities**
- + Guide in **prioritizing projects**, actions and locations at regional scale
- + Complement local CWPPs and projects



Components of Regional CWPP?

Key Components of Regional CWPP

- + Community Profiles
- + Regional Wildfire Hazard Assessment
- + Regional Risks and Vulnerabilities
- + Regional Action Plan
- + Monitoring and Evaluation



(3)

*SGV Regional CWPP Project
Overview*



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SGV Regional CWPP



- + Approximate completion – March 2025
- + Public workshops & outreach throughout 2024

CWPP Project Overview

Partner & Stakeholder Coordination

Project Team

- + San Gabriel Valley Council of Governments
- + Jensen Hughes (Consultant)

Meetings Held to Date

- + 4 Stakeholder Working Group meetings
- + 3 Technical Advisory meetings



Stakeholder Working Group (92 members)

- + Federal, State & Tribal Government Agencies
- + SGVCOG Member Cities
- + Emergency Response Agencies
- + Utilities, Infrastructure & Transit Agencies
- + Community Groups (e.g., Fire Safe Councils, NGOs)
- + Educational Institutions

General Public

- + Individuals
- + Families
- + Interested parties



Goals & Objectives

CWPP Goals & Objectives (as identified by Stakeholder Working Group)

- + Minimize the wildfire threat to **life safety**
- + Reduce the wildfire threat to **values and assets at risk**
- + Develop a CWPP that **prioritizes mitigation actions** for identified risks and hazards at a regional scale
- + **Enhance the resiliency** of the San Gabriel Valley to future **climate change** impacts
- + Improve **accountability, public trust, and efficiency** in implementation of action items identified in the Regional CWPP
- + Provide **support and resources to obtain grant funding** to conduct regional and local wildfire resiliency planning and implementation projects.
- + Provide **resources to support smaller, resource-constrained agencies**



(4)

*Preliminary Regional
Wildfire Hazard Analysis*



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Preliminary Wildfire Hazard Analysis

Overview

+ Purpose:

- Initial steps to evaluate fire threat across the SGV region
- Obtain early feedback on modeling assumptions, areas of concern, errors or omissions.

+ **Key Inputs:** Historic fire data, weather analysis, vegetation/fuel models, and topography

+ **Modeling Tools:** FLAMMAP and FS Pro (USFS tools), and Wildfire Analyst (proprietary)

+ **Sample Outputs:** Historic fire perimeters, ignition hot spots, fire threat or fire frequency



Preliminary Wildfire Hazard Analysis

Overview of Preliminary Wildfire Hazard Maps

+ These maps **show**:

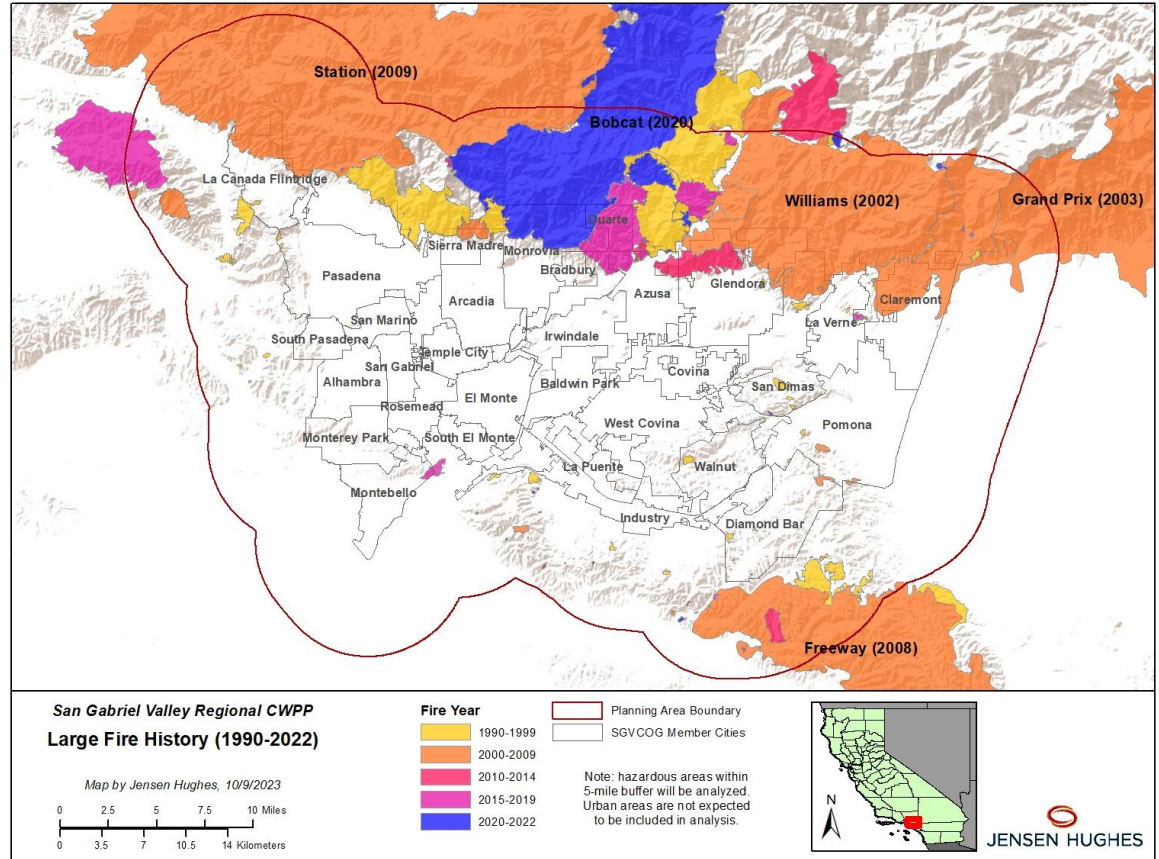
- Historic fire information (perimeters, ignitions, fire frequency)
- Where input data comes from (RAWS locations)
- Results of simulations (fire threat)

+ These maps **do not show**:

- Details of what a specific future fire will look like
- Consequences and losses associated with a potential fire
- Vulnerability of people, structures, infrastructure, or other community assets

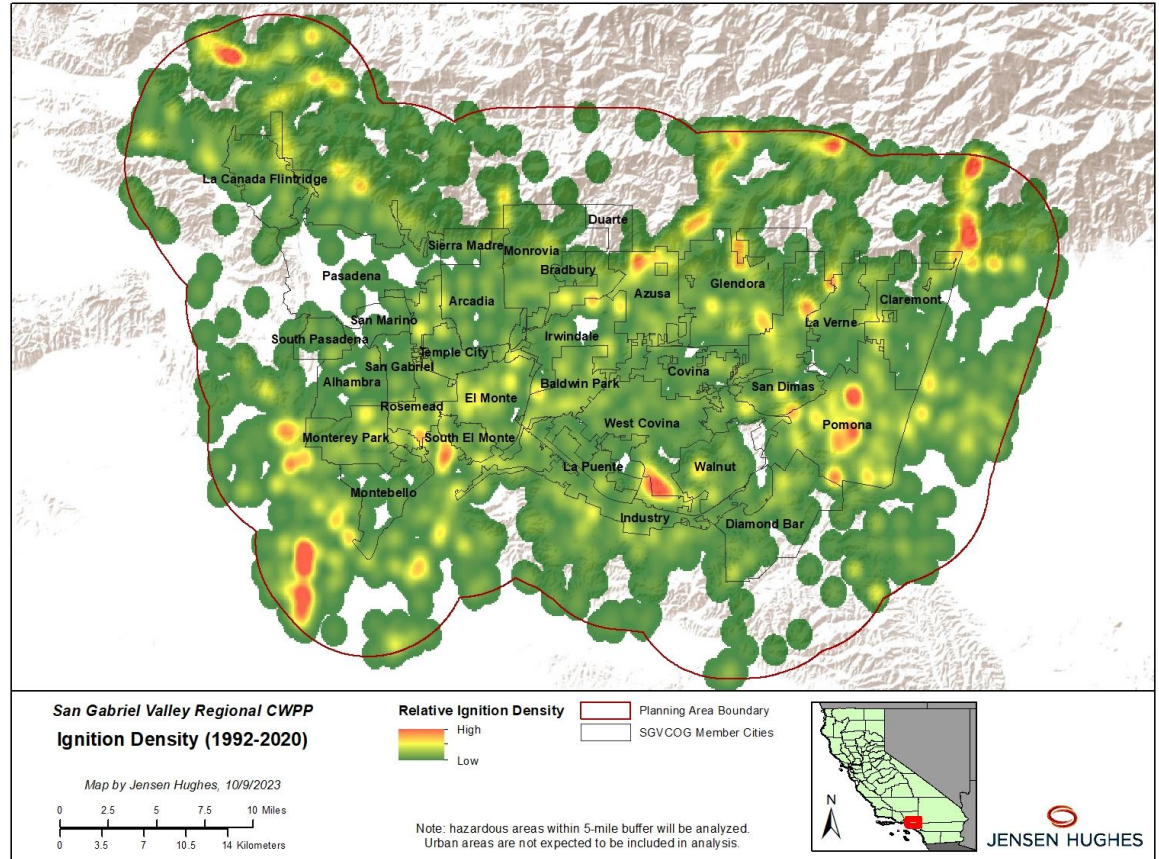
Large Fire History (1990-2022)

- + Perimeters of fires > 10 acres since 1990
- + Five largest fires have been labeled
- + Most fires start, and primarily burn, in Angeles National Forest



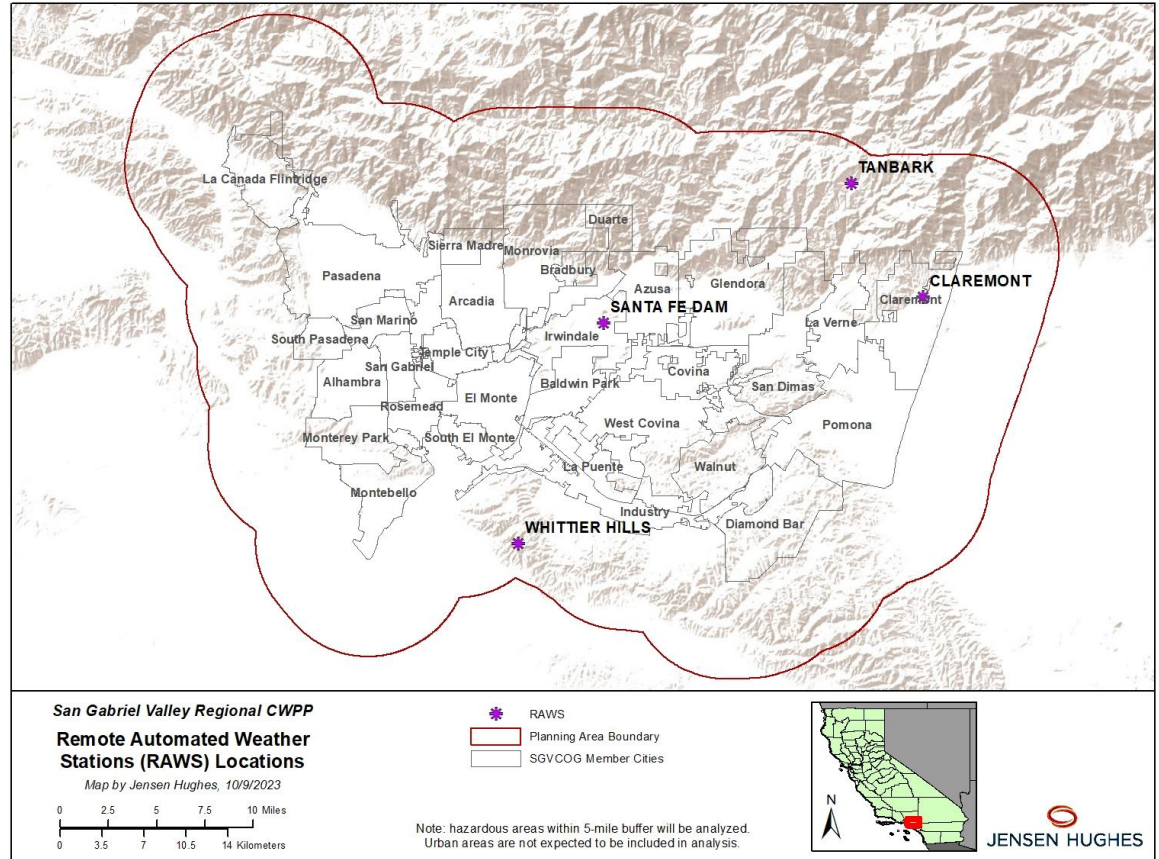
Ignition Density (1992-2020)

- + **Input data:** ignition points of all fires from 1992-2020
- + Based on # of ignitions.
- + No weighting for size of resulting fire.



Weather Station Locations

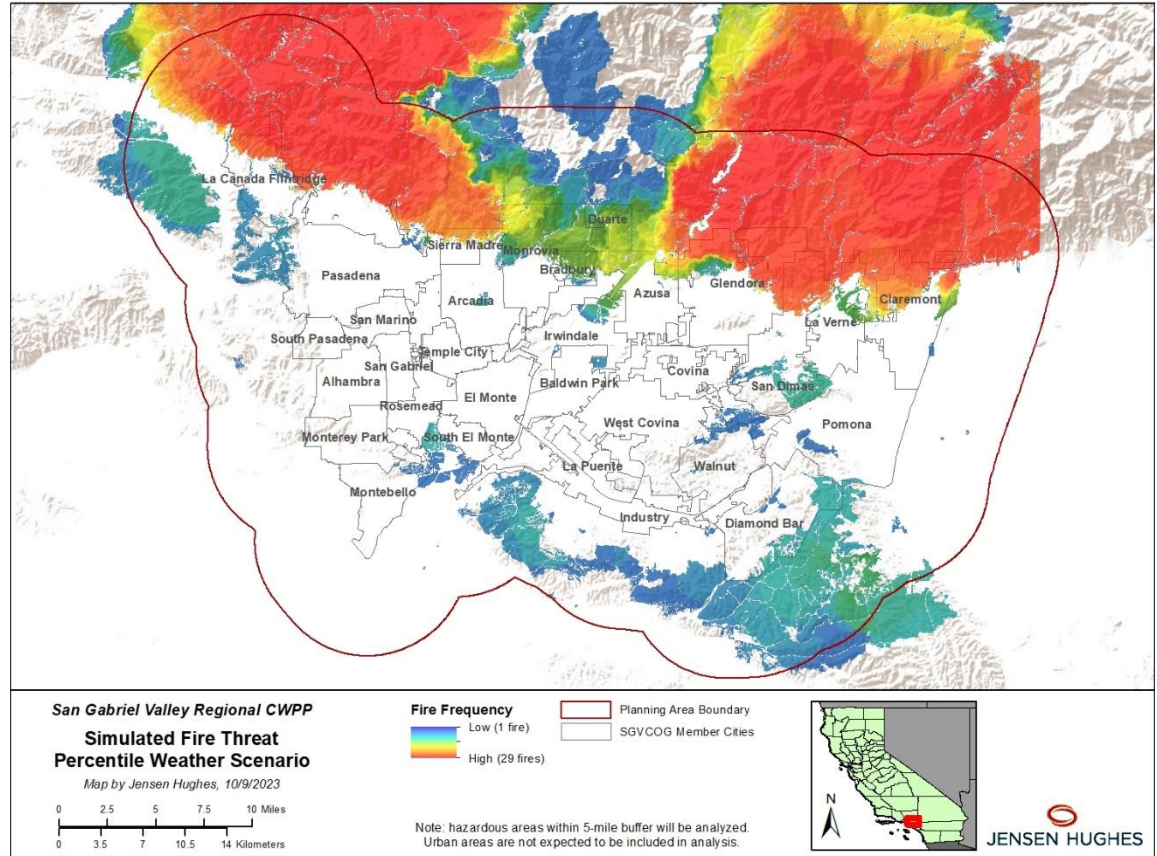
- + Remote Automated Weather Stations (RAWS) within the study area
- + The weather data from these stations is used as inputs for fire analysis & modeling



Fire Threat

Exemplar: Fire threat from Northerly Winds

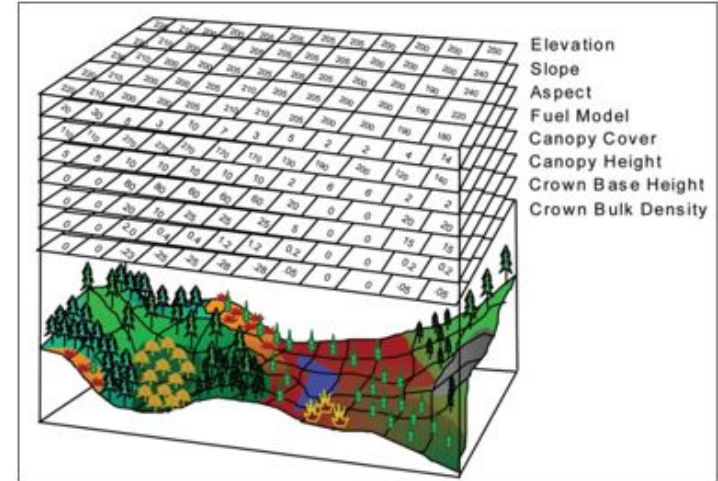
- + Simulated fire frequency under extreme weather conditions (97th percentile)
- + Fire growth and behavior was modeled based on historic ignition locations and 2022 fuel & weather conditions
- + Map represents how frequently each point in the project area was impacted by fire



Preliminary Wildfire Hazard Analysis

Hazard Analysis Next Steps

- + Other analysis undertaken in the process will include:
 - Developing wildfire hazard/risk maps based on fire intensity, fire frequency, potential fire severity
 - Assessing dominant fire flow paths
 - Evaluating fire exposures to assets/values at risk
 - Evaluating vulnerabilities (e.g., social, access/egress)
 - Developing design-basis wildfire scenarios as input to evacuation / transit study



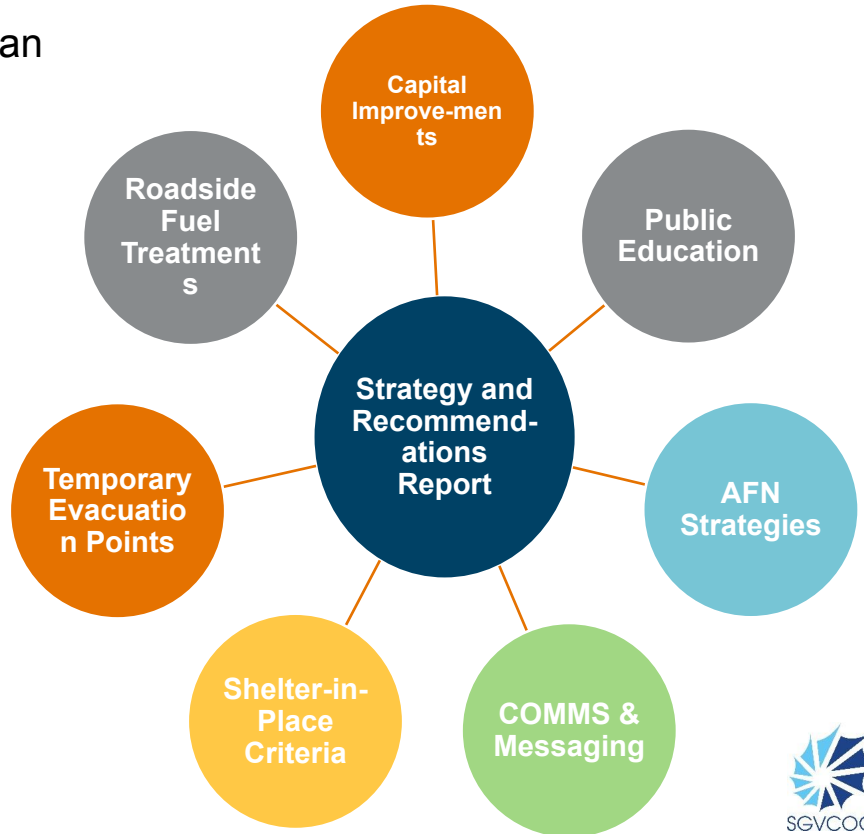
(5)

Evacuation Assessment



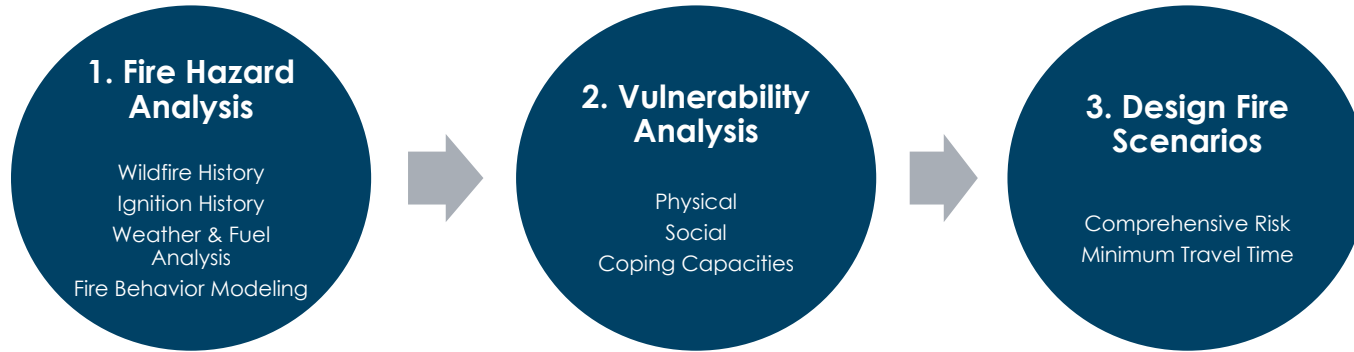
Proposed Objective(s)

- + *NOT* to develop an evacuation operational plan
- + **Primary Deliverable:** Mitigations and Recommendations Report
 - Public education
 - Reduce congestion of roadway network during evacuation
 - **Roadway capacity improvements**
 - **Prioritize roadside fuel treatments**
 - AFN strategies
 - **Shelter-in-place / TEP criteria** and locations (potential)
 - COMMS & Messaging (evac and re-pop)
- + \$\$\$ Funding for future project(s)



Wildfire Hazard Analysis

General Approach – Wildfire Vulnerability Analysis



- Key Outputs:** (1) Integrated hazard map to identify transportation infrastructure exposed to high fire risk
(2) Representative worst-case” wildfire scenarios for input into transportation models
(3) Wildfire risk mitigation recommendations for evacuation

Evacuation & Transportation Capacity Analysis

General Approach – Transportation Analysis



(6)

Q&A and Feedback



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Questions?



How Can the Community Participate?

Seeking Your Input After Today



CWPP Development Website

<https://www.sgvcog.org/wildfire>

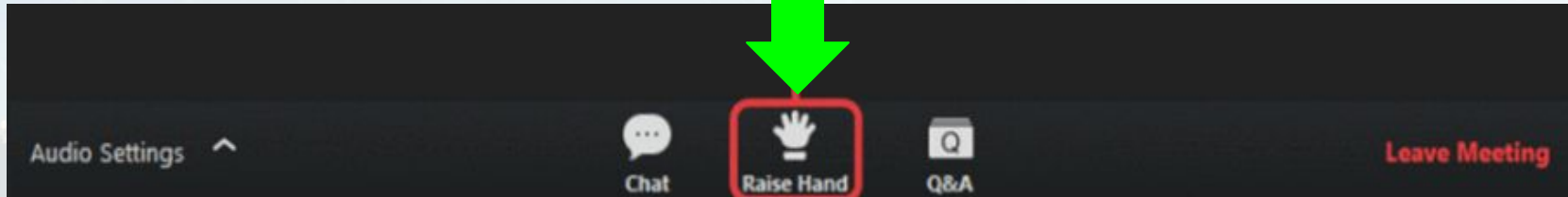


Email Comments

mbolger@sgvcog.org

Q&A Session

Raise your hand to ask a question:



Or submit a written question for the panel:

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Thank you!

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