City of Napa, California

Napa County Department of Health and Human Services

Wildfire Disaster Plan

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Preface

The city of Napa is located in the heart of Northern California's Napa County (see Figure 1 below). According to the 2020 City of Napa's Annual Report, the population of Napa County was approximately 136,699, with the city's population at 78,373. About 54% of the land is residential and there are a total of 5 fire stations due to the high frequency of wildfires that the area endures annually.[1] In 2020, there were a total of 214 calls pertaining to fires. [1] Since 2013, Napa has experienced a total of 33 wildfires, according to CAL FIRE data.[2] With a dry climate and high winds increasing the threat of wildfires, there is a need for an updated Napa Valley disaster plan in order to prevent, mitigate, respond, and recover from wildfires in Napa Valley. This disaster plan is intended to be utilized in conjunction with the state and federal operational procedures and protocols.
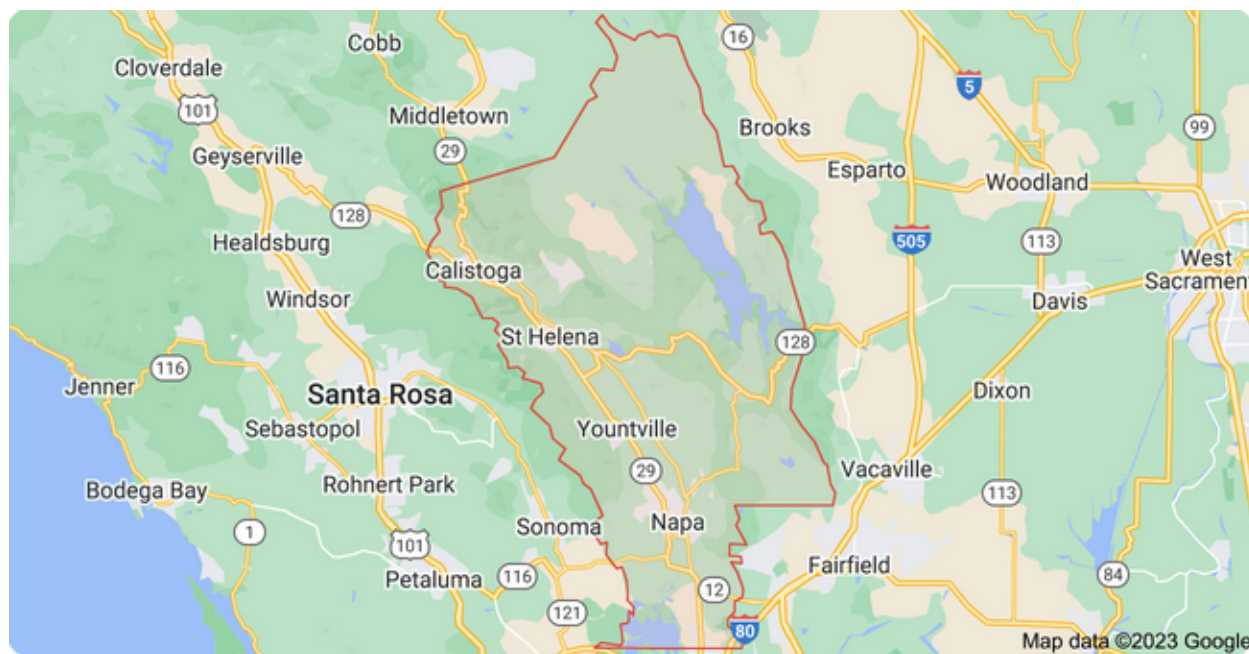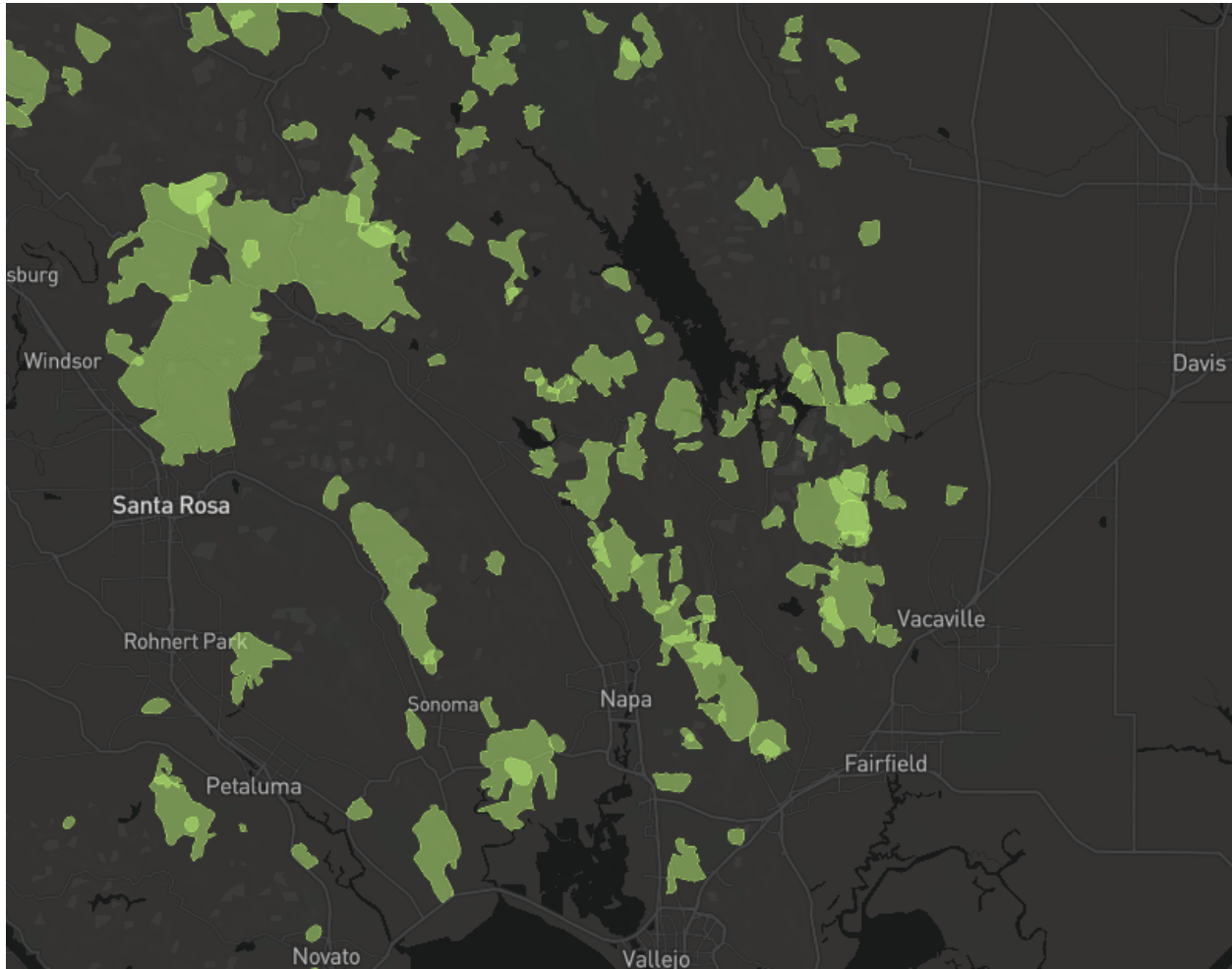
Map of Napa County[3]

Figure 1. Google maps (2023) view of Napa County's county lines (outlined in dark red on map).

Napa County Fires 1878-1969[4]

Figure 2. All historical wildfires that were located in and around Napa County between the years 1878-1969. Here, fires are smaller in size, compared to later years, and sporadically placed around Napa County. These fires, highlighted in green, were recorded via the Capredio.org Interactive Wildfire Map of California. Regions with lighter green highlighted portions represent overlap- or re-occurrence- of wildfires in that same area between the years 1878-1969. Many overlaps can be seen in the Northeastern region of Napa County.

Napa County Fires 1970s-2010s[4]

Figure 3. All historical wildfires that were located in and around Napa County between the years 1970-2010. This data, highlighted in multiple colors, was recorded via the Capredio.org Interactive Wildfire Map of California. Here, yellow indicates the 1970's, orange is 1980's, green is 1990's, blue is 2000's, and purple is 2010. Fires have grown in size and range in the Northeastern edge of Napa County. It can also be seen that multiple locations have suffered from wildfires more than once (as seen in the frequent overlap of highlighted wildfires).
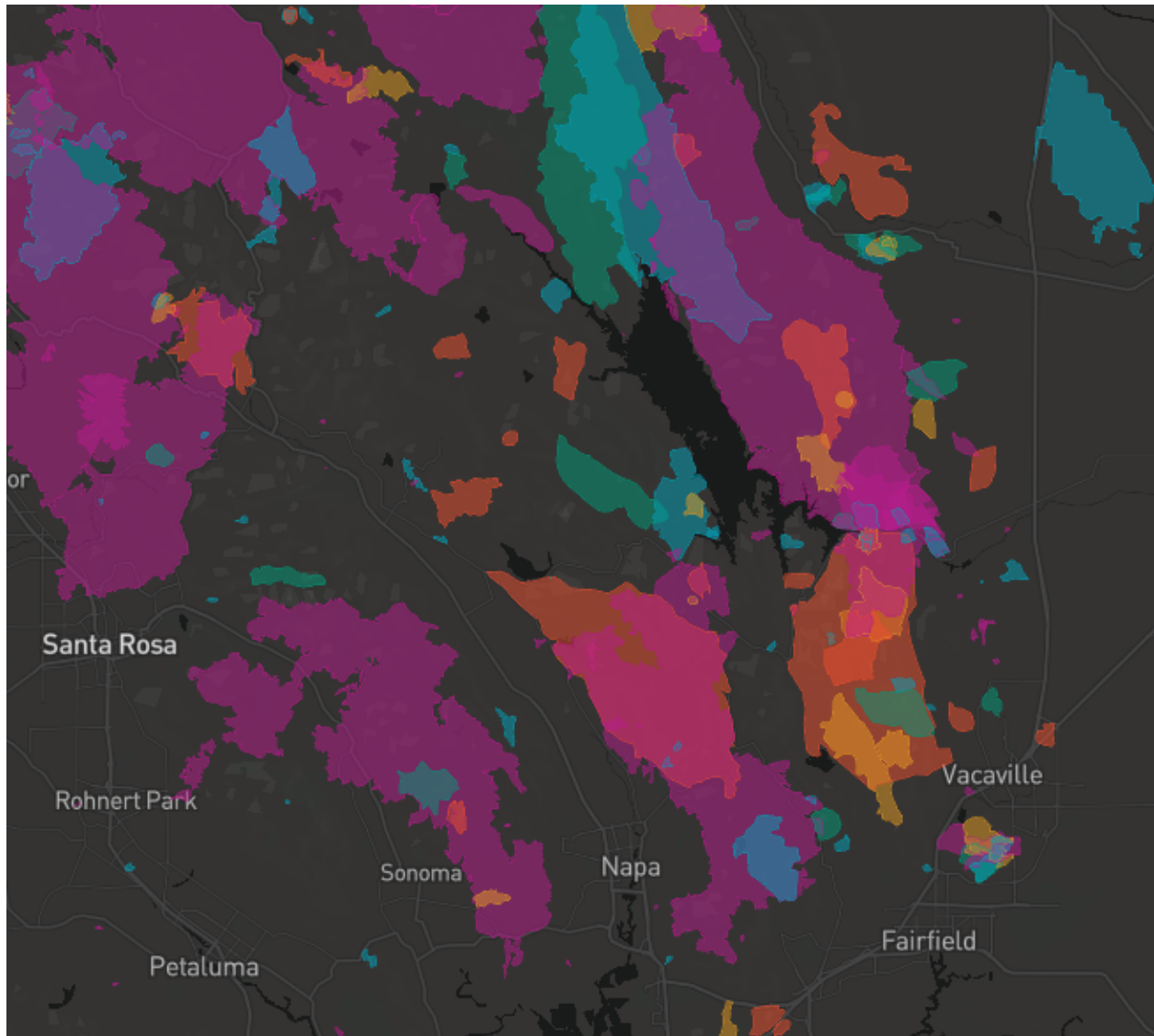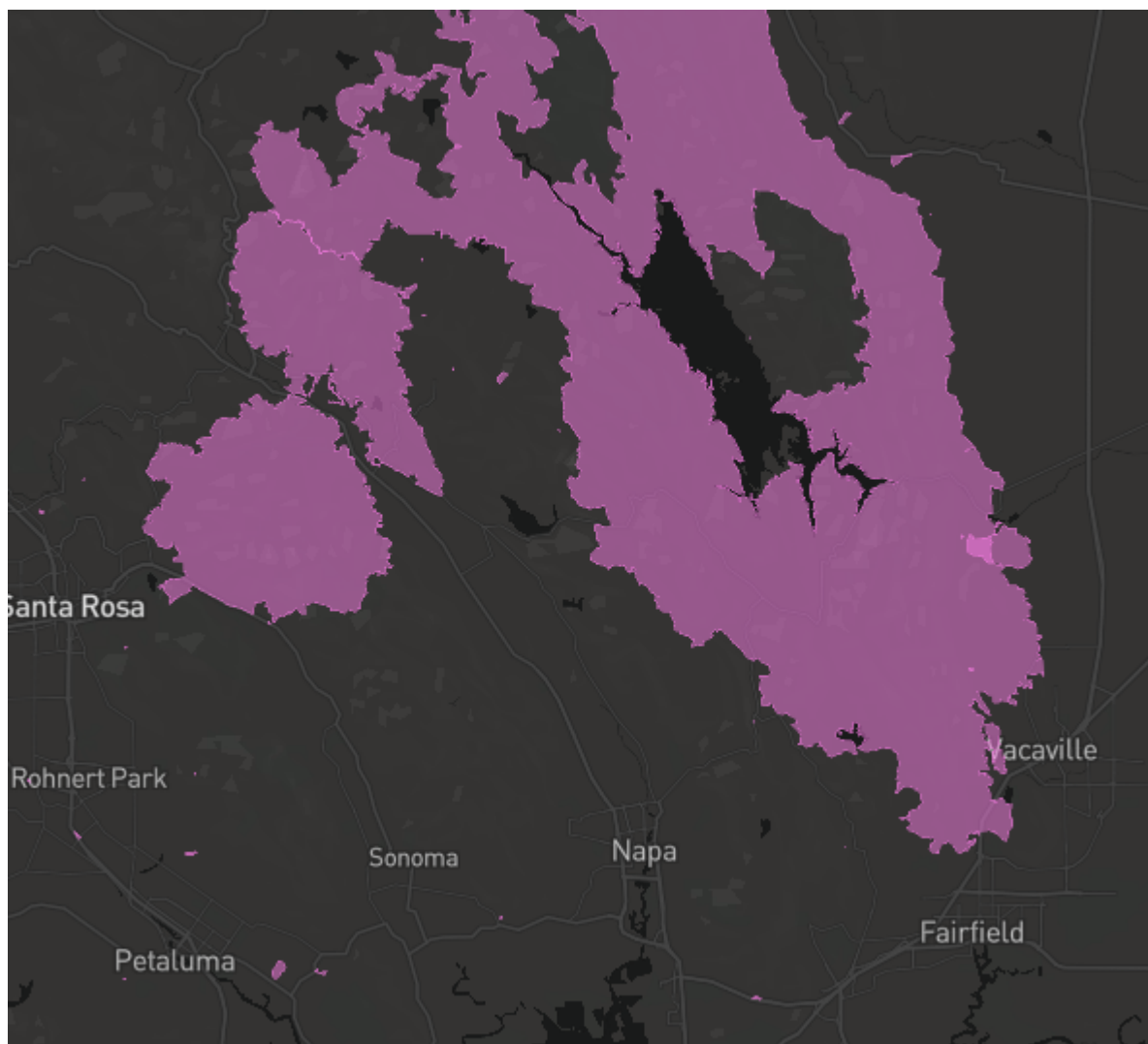
Napa County Fires 2020s[4]

Figure 4. All historical wildfires that were located in and around Napa County between the years 2020-present day. This data, highlighted in purple, was recorded via the Capredio.org Interactive Wildfire Map of California. Here, it is shown that Northern Napa County, as well as the Eastern edge of Napa County, continue to face the highest numbers of wildfires compared to other regions of the county. As seen in previous maps, these regions have faced the most- and largest spreading- wildfires since the 1970's-1980's. As this location range has proven to be most vulnerable and at-risk of wildfires, it is important to protect it and regions surrounding it.

Signature Page

THE UNDERSIGNED SIGNEES CONCUR WITH THE JURISDICTIONAL AND DEPARTMENTAL FEATURES OF THE FOLLOWING WILDFIRE DISASTER PLAN GUIDE:

Date

Director of Emergency Services _____

Napa County Sheriff _____

Fire/Rescue Chief DOH _____

Sonoma Valley Fire Chief _____

Yountville Deputy Fire Chief _____

Yountville Police Department _____

Sonoma Police Department _____

CALSAR Representative _____

Sonoma Valley Hospital Board Chair _____

Hillside Christian Church Lead Pastor _____

Napa Department of Health

December 8, 2023

Base Plan

Mission

Our mission is to serve our community and support its health and well-being.[5]

Statement of Purpose

The purpose of this base plan is to address concerns regarding wildfire preparedness in Napa County. Historically, Napa County has been prone to several types of natural disasters, including earthquakes, landslides, and flooding, however, wildfires remain a severe and consistent threat. The main reason for this is the fact that climate change has shifted weather patterns, causing extended periods of heat, dryness, and drought, atypical of the region's renowned Mediterranean climate. These factors create prime conditions for fires to ignite and spread, and dictate the need for this department to revisit and renew its base plan for wildfire management and response.

Authorities

This Wildfire Disaster Plan may be utilized by the Director of Emergency Services in any of the following situations:

- As directed by the Emergency Operations Plan of Napa County
- Upon order by the Governor that a State of Emergency is occurring in the area
- Upon a State of War Emergency as stated in the California Emergency Services Act
- If the President declares a state of National Emergency
- Upon occurrence of a catastrophic disaster that requires government response immediately

I. **Federal:**[6]
   a. California Emergency Services Act
   b. Governor's Executive Order W-9-91
   c. Administrative orders under the W-9-91

d. State of Emergency Orders and Regulations

e. State of War Emergency Orders and Regulations

f. Robert T. Stafford Disaster Relief and Emergency Assistance Act

g. California- Federal Emergency Operations Center Guidelines: Integrating Federal Disaster

h. Title 44 Code of Federal Regulations

i. California Catastrophic Incident Base Plan: Concept of Operations

Communication Plans

Internal Communications:

When there is evidence of a wildfire, witnesses are required to call 911, which will bring them to a dispatcher. It is their job to then provide the dispatcher information about the wildfire, such as the location, if they have seen where, or how it was started, and how large it is at that moment in time. Once the dispatcher is aware of all necessary details, they will notify nearby police officers as well as the Napa Fire Department. Depending on the size of the fire and the speed of its growth, further resources- such as the neighboring fire and police departments mentioned in the mutual aid agreement- will be dispatched and called upon to help contain the wildfire and perform search and rescue missions if necessary.

External Communications:

All external communications, with some of the most important ones being *wild fire alerts*, are sent from the Napa County Sheriff's Office by email, as well as by landline phone and cellular device. Cellular device alerts will be delivered via both phone calls, *along with* text message notifications. In addition, the Sheriff's Office will utilize all social media accounts (Facebook, Instagram, Twitter, etc.) for further outreach to those who may be non-residents. It is the Sheriff's duty to develop a brief summary explanation of the situation which will be used for media and additional news coverage. Napa Fire Department and Napa Police Department will also be notified to post the alerts on their social media accounts

in order to reach those who do not receive the phone and email alerts. Local media/news outlets will then be allowed to notify the public using the Sheriff's brief statement.

Mutual Aid Agreements

I. The Napa County Office of Emergency Services (NCOES) Mutual Response Agreement will receive mutual aid from:

- Sonoma Fire Department
- Sonoma Valley Police Department
- Yountville Fire Department
- Yountville Police Department
- Northern California Volunteer California Search & Rescue (CALSAR)
- Sonoma Valley Hospital
- Hillside Christian Church (potential shelter)

This Napa County Office of Emergency Services (NCOES) Agreement was made for the purpose of carrying out the mutual exchange of emergency services between fire, rescue, and emergency medical service agencies of the Napa County/ Northern California/ American Viticultural Area (AVA) jurisdictions that are signatories to this agreement.

Wildfire Safety in Napa, California

I. Needs Assessment of the Affected Population

As stated in this Base Plan, Napa County is at high risk for wildfires due to several factors. These include a dry climate, high winds, and extended periods of drought and warm weather. The geography and topography of the Napa region also increases the risk of wildfires. The city of Napa is an 18.15 mi^2 urban area with over 78,000 residents. It is situated in the center of Napa Valley and close to Napa River's outlet into the San Pablo Bay. This urban area is surrounded by farmland on all sides, with hilly areas to the West and East that create the Napa valley, and bordered by sources of water to the South. It is important to note that Napa has only 5 major routes leading out of its city limits, 2 of them head further into the valley, 1 heads into the hills in the East, and 2 other routes head South and West away from areas that may be at greater risk of fire spread, ie. away from the valley and towards water.
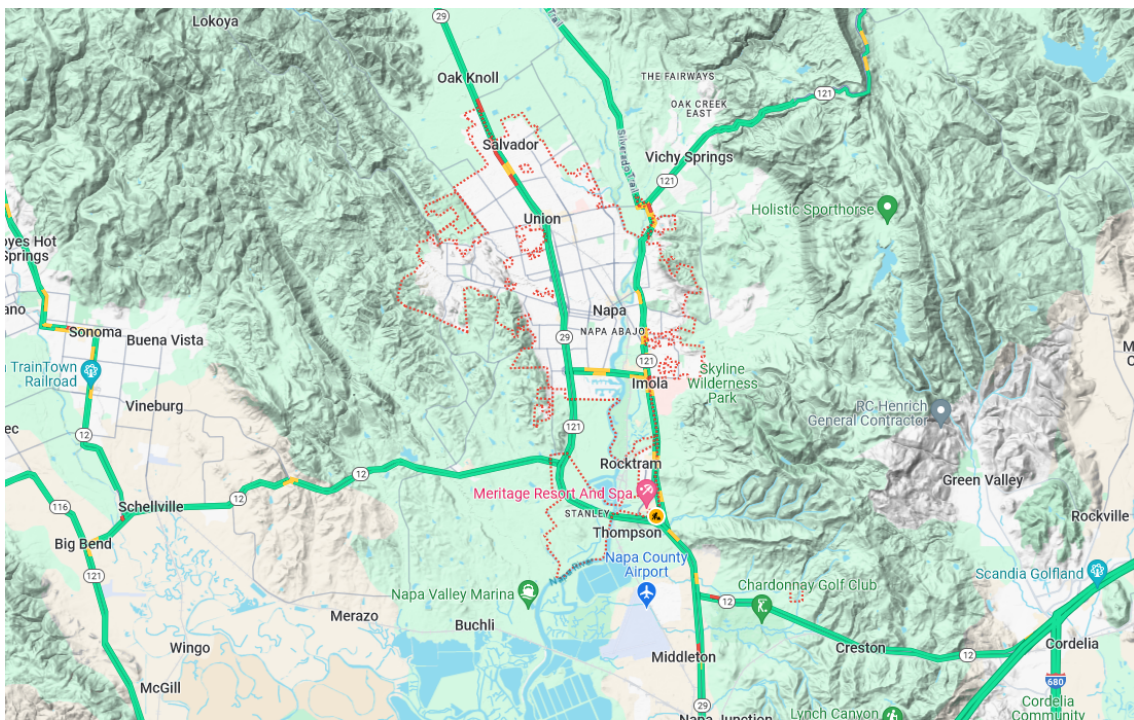
Taken from Google Maps[7]

According to Census bureau data, about 18% of Napa's population is over the age of 65, and about 22% is under the age of 18.[8] These 2 groups create concern in regard to evacuation because there may be difficulties in an emergency evacuation. Older people in particular may have mobility issues.

Wildfires present a risk of death and both short and long-term injury among other adverse impacts. Between 2017 and 2022, fires affecting Napa that led to fatalities included the LNU Lightning Complex fire of 2020 with 6 deaths, the Atlas fire of 2017 with 6 deaths, the Tubbs fire of 2017 with 22 deaths, and the Nuns fire of 2017 with 3 deaths.[9] Additionally, wildfires may result in long-term health and mental health problems and vulnerabilities related to exposure to hazardous products of combustion, psychological trauma, and economic losses.[10] More frequent wildfires and increasing intensities have already created extensive and lasting damage to the Napa economy, with smoke damaging the grapes that make Napa's world-class wine, and flames scorching and destroying vineyards and other areas that often attract tourism.[10] Ongoing wildfire risk can create long-term adverse impacts for most residents as their livelihood depends either directly or indirectly on Napa tourism. Without many other sources of income, Napa residents are largely dependent on tourism: according to census data, the median income in Napa is $44,621 with a poverty rate of 7.9%, and an uninsured rate of 8.8%.[8] These factors indicate a bleak future for the majority of Napa residents in wildfires continue to affect the area at this rate of consistency.

Another crucial concern is the impact of wildfires on agricultural workers, who are at the greatest risk of exposure to wildfires. Agricultural fields and surrounding unworked land are likely to fuel fires. In the current setting, these factors could also contribute to residents' ability to evacuate an area in the event of a wildfire. For example, many agricultural employees may be working in the fields when a fire starts. They may not have immediate access to transportation, and they may not have access to cellphones or wireless signals and may receive late alerts. In addition, the location of the agricultural fields deep in the valley could cause these groups to become trapped in the fields, surrounded by flames. Those who are able to evacuate may receive immediate

healthcare assistance, but long-term, they may have difficulty accessing healthcare services due to financial hardship.

II. Available Resources

At the time of the disaster, this plan will be activated in order to ensure that all supervisors in different departments are aware of their responsibilities. Normal services may be suspended at the time of emergency. The Incident Commander will oversee these departments to make sure that the emergency response is being followed correctly. This plan is put in place to coordinate available resources between the departments to ensure the needs of vulnerable populations.

Evacuation: The support branch within the logistics department will ensure that there are emergent transportation services for vulnerable populations at the time of a disaster. This will ensure that elderly and younger residents and agricultural farmers are evacuated as timely as possible. Local police and fire departments will also be responsible for evacuating the main wildfire zones. The planning department will have a plan in place for roadway clearance coordinated with public communications so that alerts can inform the public regarding roadway policies and priorities during a disaster. Additionally, the communications unit within the logistics department will send out alerts frequently to ensure people who need additional assistance can be safely evacuated from the area.

Medical Care: The medical unit within the logistics team will be responsible for the delivery of the healthcare services during the event of an emergency. Hospitals and clinics outside of the wildfire areas will be utilized to give patients suffering from wildfire-related injuries medical care. The service branch will oversee this delivery of care. EMS will be in charge of bringing patients to the hospital and helping with initial aid. Then, the triage team will be responsible for providing the specific medical treatments. Necessary supplies should be stockpiled before the event of a disaster in

order to prevent hospitals from becoming overcrowded or running out of supplies. In the event that supplies or space runs out, EMS will transport patients to other nearby hospitals. Personnel that possess all-terrain vehicles will be contacted to help transport patients and essential staff. The city will furnish records of all resources that were used during a disaster including supplies, personnel (ex. Healthcare workers), and materials. A local list of resources for emergency situations will also be developed.

Shelter/Water/Food: General shelters for evacuees displaced by wildfires will be opened for immediate housing purposes. People that cannot be exposed to the air or travel far can take shelter in these centers for up to 48 hours. This will ensure that vulnerable populations are not exposed to the hazardous health outcomes of wildfires. There will be meals, water, blankets, pillows, and cots supplied in the shelters. These will be in limited quantities, so if the emergency is to take longer than 48 hours, then long-term shelters will need to be opened.

III.   Effectiveness of Disaster Response

When responding to wildfires, it is important to heavily rely on communication. The Incident Commander will man all channels of communication and launch prompt alerts of potential uncontainable wildfires and other hazards, along with their locations. It is understood that notifications that grant ample lead-time to react to dangers, are crucial for ensuring the safety of the general public, and especially, for vulnerable groups- those who are immobile- that are most at-risk. Apart from this, the Incident Commander will also activate necessary sectors and deploy designated personnel to contain such disasters. Necessary sectors may include neighboring fire departments, police departments, as well as hospitals- depending on the size of the wildfire. This emphasis on swift communication and established understanding of the plan, will contribute to the efficiency of evacuation efforts- especially for those most vulnerable. In the case that communication is cut-off via mobile devices, there is also a standard protocol- predominately reliant on satellite communication- as well as plans put in place that will *not* require these devices, and still ensure safety.

Prioritizing ways to coordinate groups of people- through communication- in the wake of a fire is extremely crucial. However, in addition to this, there will be an emphasis on personal preparedness as well. Household preparedness is extremely important in the case of wildfires and therefore, presents a push for evacuation plans, communication plans, and disaster supply kits established and prepared within families and households. Personally planning ahead of time will increase people's chances of seeking safety quicker and decrease chances of life-threatening danger. Organizations such as Habitat for Humanity, provide excellent examples of the correct steps to take in order to handle wildfires during and after the threat. Furthermore, by increasing awareness, as well as the adoption of these safety practices, more people would be able to protect themselves- leaving room for wildfire disaster teams to seek out and assist disadvantaged, and overall more vulnerable groups of people that may not be able to carry out these practices on their own.

By keeping these plans in mind, and highlighting the importance of individual fire safety, disaster management and wildfire safety officials will be able to shift their focus to the population in need. In addition, after every wildfire, there will be response reviews held for every department involved, that will analyze the quality of actions taken during the disaster in order to evaluate effectiveness and efficiency. If it was reflected that actions were not conducive to the goal at hand, then necessary changes will be implemented in the standard action plan.

Annex 1: Threat and Hazards Assessment Table: Wildfire and Evacuation in Napa, California

Natural	Technological	Human-caused
Resulting from acts of nature	Involves accidents or the failures of systems and structures	Caused by the intentional actions of an adversary
Wildfires Napa Valley has a long history of wildfires because of its hot and dry climate. 60% of the land in the Napa Valley has been touched with fires. The LNU lightning complex fires that took place in August 2020, was the largest fire to take place in Napa. It burned 306,000 acres in four counties and 165,000 acres in Napa County while destroying 522 structures. **Flooding** Napa is at-risk for slow-rise and flash flooding. Typical flooding in Napa is slow-rise which can range from hours to days. Over the next 30 years, about 5,500 properties have a 26% chance of being flooded severely. There are been 22 serious floods since 1865. **Air Quality/Pollution** Napa does not have as much wind flow because it is surrounded by mountains. Thus, the flow of fresh air is limited in order to clear out smoke from wildfires. This traps PM 2.5 particles in the area. **Landslides/Debris Flow** The Napa area is more prone to landslides and debris flow because of the amount of wildfires and flooding that takes place. The slopes are more vulnerable since they become more slippery.	**Transportation Accidents** Napa is a common tourist destination and traffic is congested on the roads often. The cars and bus transit system make the city at risk for accidents on the road. The city also has a wine train that is three hours long and several accidents have taken place on this train and derailment is a possibility. Smoke from the wildfires can cause bad road conditions and flooding and debris flow can cause roads to be unsafe for driving. **Structural Accidents** Since Napa is prone to various natural disasters, the structural integrity of the buildings are not always up to standard. Wildfires, flooding, and earthquakes have all caused homes and structures to collapse in Napa. **Power Outages** Power outages are relatively common in Napa due to the electric grid that cannot keep up with the changes in the climate and increased demands of the users. Power also gets shut off in order to reduce the risk of wildfires that could be triggered by the power lines.	**Crime** 1 in 44 people living in Napa have a chance of being a victim to either property or violent crime. Napa county's crime rate is higher than 62% of California's other cities and towns. Since the town has a lot of tourists, more people are prone to violent attacks. **Air Quality from Black Carbon** Farm and lawn equipment, residential fuel combustion, and heavy-duty diesel trucks are some of the human-caused form of black carbon that is lowering the air quality in Napa County.

Annex 2: ICS Chart

Incident Commander

- Safety
- Information
- Liaison

Finance
- Compensation claims unit
- Cost unit
- Time unit
- Procurement unit

Planning
- Resources unit
- Situation unit
- Demobilization unit
- Documentation unit
- Technical specialist

Logistics
- Service branch
  - Communication unit
  - Medical unit
    - EMS
    - Triage
  - Food unit
- Support branch
  - Supply unit
  - Ground support
  - Facilities unit

Operations
- Incident Action Plan Unit
- Divisions
  - Strike team
  - Task force
  - Single resource
- Air Ops
  - Air support group
  - Air tactical group
- Environmental unit
  - Surveillance unit
  - Hazard Evaluation and Response team

Annex 3: Community Training

Community Training Title: Wildfire Safety in Napa, CA	
Objectives of your Community Training (What mitigation strategy are you advocating?)	Prepare the community with an emergency response plan in the event of a wildfire in Napa County.
Estimate Length of Training	3-4 hours
Target Audience and Max Size of Audience.	Personnel from: Napa County Sheriff's Office, Napa Fire Department, Napa Police Department, American Canyon Fire Department, American Canyon Police Department, Sonoma Fire Department, Sonoma Police Department, Yountville Fire Department, Yountville Police Department, Northern California Volunteer California Search & Rescue (CALSAR), Sonoma Valley Hospital Maximum audience: 100
Who Would Be a Good Candidate (e.g., structural engineer, health dept. official, first responder?) as Facilitator of this Session? Why?	Napa County Fire Chief or another high-ranking fire official with many years of experience Napa County Sheriff or another high-ranking police official with many years of experience The County Sheriff and County Fire Departments will be able to collaborate and provide knowledge based on their years of experience and will further deliver a plan of action that is founded on that experience. The two disciplines will come together to promote alliance and cooperation.
What Do You Want Community Members to Do as a Result of Their Attending this Session?	As a result of attending this session, community members will be able to: - Identify each organization's role - Know how to report fire and to whom - Identify fire hazards - Know the best evacuation route for their area - Understand the risks they will encounter in the event of a fire and measures to circumvent them - Assemble an emergency preparedness kit
Strategies to Increase Community Uptake of Your Mitigation	- Laminated posters hung up in highly visible areas in offices and other high traffic facilities such as schools - Pamphlets with guidelines for emergency preparedness kits - Maps of Napa County with evacuation routes highlighted - Phone stickers with reminders to call 911 to report a fire - Post-training social / networking event

Resources

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