

2025-2026



COUNTY *of* VENTURA
Civil Grand Jury

**Wildfire Preparedness
in Ventura County**

June 25, 2026

Wildfire Preparedness in Ventura County

SUMMARY

No one should underestimate the power of nature. Ventura County's topography, cyclical rain/drought seasons, Red Flag Warnings and Santa Ana wind events can all make wildfire occurrence unpredictable.

The Ventura County Fire Protection District, more commonly known as the Ventura County Fire Department (VCFD), is well positioned to respond to wildfire threats. Forward thinking and highly integrated emergency protocols, coupled with robust mutual aid programs, provide VCFD with an excellent chance of success against them. The public can do its part by adhering to fire prevention protocols and remaining vigilant when conditions are warranted.

Urban development tends to expand cities into previously undeveloped areas. The boundary between developed and undeveloped space is referred to as the Wildland-Urban Interface (WUI). Fires that begin in remote parts of the county can cross the WUI into populated areas, so the investigation also examined response capabilities within city boundaries.

The Ventura County Civil Grand Jury investigation included organization, fire responsibility areas, water and hydrants, the Office of Emergency Services, the Fire Communications Center, public awareness, and personal responsibility.

BACKGROUND

Any report about wildfires needs to acknowledge certain realities: Wildfires will occur. Property will be destroyed. Lives may be lost. Fire departments are tasked with mitigating those losses as best they can. They accomplish this through equipment, personnel, plans, procedures and interagency agreements.

Firefighters are routinely confronted with circumstances beyond their control. Wind, terrain, the condition and variety of vegetation, and overall climate conditions all contribute to wildfire behavior.

METHODOLOGY

The Ventura County Civil Grand Jury conducted interviews with senior Ventura County Fire Department (VCFD) personnel and the County Office of Emergency Services (OES). The entire Civil Grand Jury received department-level briefings from both VCFD and OES. Jurors also extensively toured the OES Command Center, the Fire Communications Center and VCFD Headquarters.

Reference material was obtained from online research, prior Civil Grand Jury reports, post-fire reports, newspaper articles and after-action reports from fires outside Ventura County.

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Global warming presents a growing and ongoing threat concerning wildfires. A hotter climate lends itself to greater fire danger, though exact consequences are hard to predict.

In February 2026, the global surface temperature was 1.18°C (2.12°F) above the 20th-century average, ranking as the fifth-warmest February in the 177-year record. The 10 warmest Februaries on record have all occurred since 2016. February 2026 also marked the 47th consecutive February with above-average temperatures. ([Ref-002](#)) By 2050, the annual average of 90°F days in Ventura County is expected to quadruple from 1990 levels. ([Ref-018](#))

The public also has a role to play. Educational and fire prevention guides are readily available. ([Ref-003](#)) Emergency information and communication channels have been established and published. ([Ref-022](#)) Local radio stations used for emergency information are KVTA 1590 AM, KHAY 100.7 FM, and KMLA 103.7 FM (Spanish). County residents must assume some personal responsibility for accessing and utilizing these informational sources. First responders are limited in their ability to fill all the gaps created by an uninformed populace.

DISCUSSION

Ventura County Fire Department

VCFD has 34 stations throughout the county. Adding the local city fire departments brings the total to 51 stations. The combined total of firefighters is approximately 600, plus support staff.

Combining the totals matters because VCFD has working agreements with all the city fire departments, including Naval Base Ventura County, to supplement their assets. Similar agreements exist with county ambulance companies. This has created what is essentially a single, unified emergency fire and medical response force within Ventura County.

A large fire in a particular area may pull all the equipment from nearby stations into the event. VCFD's working agreement allows the department to pull firefighters and equipment from other stations around the county and reposition them into the empty stations. ([Ref-001](#)) Every effort is made to maintain an immediate response capability in all areas of the county regardless of the circumstances.

Fires in undeveloped areas may require a specialized team and equipment. VCFD has created four 18-person wildland crews to attack fires that start in remote parts of the county with the goal of keeping them below 10 acres. ([Ref-001](#), [Ref-031](#))

Anticipation is a critical element of VCFD preparation. Constant monitoring of weather conditions, such as Red Flag Warnings, can trigger upgraded response plans. Monthly testing of moisture levels in the vegetation around the county pinpoints potential danger areas.

MORE THAN JUST FIREFIGHTING

The Ventura County Fire Department is a multi-dimensional emergency response organization whose capabilities go well beyond extinguishing fires.

- Crash and Rescue
- Hazardous Materials
- Urban Search and Rescue
- Water Rescue
- Fire Boat
- Aviation Assets
(Drones and Helicopters)

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Efforts are made to ensure the department continues modernization. Eleven new drones with the latest technology have recently been ordered. (Ref-001)

Mutual Aid agreements are essential components of firefighting. These are written compacts establishing procedures for providing and receiving specific services from other departments. These agreements also specify financial reimbursements for the services rendered. Mutual Aid agreements on regional, state and federal levels expand the breadth of VCFD's firefighting capability. ([Att-007](#))

Cooperation among the local departments has already been mentioned. Should a fire outstrip the ability of Ventura County resources to handle, VCFD's mutual aid agreements allow specific equipment and manpower requests from surrounding counties as well as the California Department of Forestry and Fire Protection (CAL FIRE). VCFD can also reach out to other districts, to the state region and ultimately to federal agencies. Conditions would need to be extreme to reach those levels, but the important point is the agreements and procedures are already in place. ([Att-007](#))

Decision making is pushed down to the ranking officer on scene at a fire, who makes the assessment of equipment needed and initiates the request for any additional resources. (Ref-001, Ref-031)

Ventura County is nearing completion of upgrading emergency communication systems as of this writing. Aging radio towers are being replaced with digital towers to ensure clear, uninterrupted coverage throughout the county. ([Ref-033](#)) VCFD already has the necessary radios and is awaiting the system's turn-on date. The department is also introducing Starlink satellite internet receivers into its communication systems. (Ref-001)

VCFD is also actively involved in fire prevention and inspection activities. It engages in abatement activities when funding allows, including controlled burns and using goat herds to clear brush. ([Ref-029](#)) The new "Zone Zero" requirements will place a heavy burden on the department when fully implemented. ([Ref-016](#)) Property inspections will go from 19,000 current parcels to 60,000. (Ref-001) Either hiring or diversion of firefighters from other duties will be required to fulfill this obligation. ([Ref-029](#))



Figure 1. The Ventura County Fire Department responds to the Mountain Fire, in October of 2024. (Photo courtesy of VCFD)

Fire Communications Center

The VCFD-operated Fire Communications Center (FCC) is the central hub for non-police emergency services dispatch in the county. All 911 calls for fire and ambulances in the county are routed to the FCC for handling. Dispatchers locate the nearest available resource to the incident and send it to the scene.

Law enforcement 911 calls are handled by the respective sheriff, city police agency, or California Highway Patrol dispatch centers.

FCC will dispatch first responders based on location, not jurisdiction. For example, a fire call originating in the City of Ventura could be answered by an Oxnard Fire Department engine if it is the closest available asset. (Ref-001, [Ref-031](#))

One measure of competence is how well an organization manages its routine activities. Failures tend to make the news; daily successes do not. The FCC responds to over 250 emergency service calls every day.

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FCC Service Calls Received 2023 - 2025

| Year | Medical | Fire | Rescue | Public Service | Alarms | Hazardous | Other | Totals |
|------|---------|-------|--------|----------------|--------|-----------|-------|--------|
| 2023 | 73,353 | 2,342 | 5,817 | 4,423 | 5,927 | 466 | 2,633 | 94,961 |
| 2024 | 75,189 | 2,294 | 5,652 | 4,620 | 6,098 | 330 | 2,701 | 96,884 |
| 2025 | 76,807 | 2,267 | 5,348 | 4,993 | 6,095 | 331 | 2,912 | 98,753 |

Figure 2: Data supplied by Ventura County Fire Department ([Att-005](#))

No calls go unanswered. FCC will initiate a response even if the request seems minor.

FCC is also the central monitoring location for wildfires in Ventura County. Utilizing a camera system, AlertCalifornia, developed and administered by University of California San Diego, FCC constantly observes the remote areas of the county for fire. ([Ref-008](#)) Strategically positioned throughout the hillsides, the cameras can “see” as far as 120 miles, depending on weather conditions. In addition to visual and infrared (heat detecting) capabilities, the cameras also use artificial intelligence to detect atmospheric anomalies. Heat waves rising off a fire with not-yet visible smoke can be spotted by the cameras. Heat rising from what is known as the Fillmore Fissure, a seam in the earth north of Fillmore, is routinely detected.

The cameras normally slowly rotate, providing a 360-degree sweep every couple of minutes. Any anomaly automatically triggers an alert indicating the approximate location of the incident. The duty officer can then take control of the camera for further evaluation. ([Ref-008](#))

Firefighting Jurisdictions.

At the federal level, the United States is divided into 10 firefighting regions under the National Interagency Fire Center (NIFC). The purpose of the NIFC is “sharing information, shaping policy, and coordinating resources to ensure a unified approach to wildland fire management.” ([Ref-004](#)) Incorporated into the NIFC is the National Interagency Coordination Center (NICC), whose function is “the cost-effective and timely coordination of land management agency emergency response for wildland fire.” ([Att-002](#)) NICC could direct firefighting resources from other regions into Ventura County and VCFD could be dispatched to other areas, as needed.

California comprises two of the 10 national regions, with the Northern and Southern California regions divided by a line running roughly through Sacramento.

Effective April 3, 2026, the government created the U.S. Wildland Fire Service under the Department of the Interior. The U.S. Forest Service will be incorporated into this new department. According to the U.S. Department of Agriculture’s press release: “Under this reorganization, the agency’s Fire and Aviation Management program will retain its existing Geographic Area Coordination Center structure. There will be no interruption or change to field-based operational firefighters or their positions. The program will continue reporting to the

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Deputy Chief for Fire and Aviation Management at the National Interagency Fire Center in Boise, Idaho. This structure ensures the agency's ongoing, close coordination with the Department of the Interior and interagency partners. It will reinforce the unified, national approach essential to effective wildland fire response until the Forest Service's wildland fire management operations are unified into the U.S. Wildland Fire Service (USWFS) within the Department of the Interior (DOI)." ([Ref-023](#)) The remainder of the U.S. Forest Service will undergo complete transformation.

CAL FIRE further divides California into two regions at the state level. Ventura County is in the Southern region. ([Ref-035](#))

Finally, within Ventura County, VCFD is the primary fire agency, with Oxnard, Ventura and Fillmore each having its own local department. The other seven cities within the county contract with VCFD for fire services. ([Ref-034](#))

Federal, State and Local Responsibility Areas

Ventura County is approximately 1.2 million acres in size. The 10 incorporated cities occupy roughly 10% of that area. The remaining acreage is divided between federal, state and county land. Los Padres National Forest makes up 46% of Ventura County. ([Ref-030](#))

Acreage held by the federal government is labeled the Federal Responsibility Area (FRA). The U.S. Forest Service has primary firefighting responsibility in the FRA. Staffing of its two Ventura County stations is seasonal and not 24 hours. Additionally, VCFD is committed to preventing any fire in federal land from approaching populated areas. (Ref-001) For these reasons, VCFD will immediately respond to any fire in the FRA, holding command until federal units arrive, usually within three or four hours. VCFD is also solely responsible for any structure fires in the FRA. (Ref-001, [Att-007](#))

State-owned land is designated State Responsibility Area (SRA). CAL FIRE is normally the primary firefighting agency, except VCFD is one of six California fire departments under contract with CAL FIRE to fight SRA wildfires. (Ref-001, [Att-010](#))

Land owned by the cities and county is known as the Local Responsibility Area (LRA). VCFD and the local departments are responsible for firefighting in the LRA.

VCFD's oversight includes all acreage in the LRA, SRA, and extends three miles offshore. Its responsibility also includes Anacapa and San Nicolas Islands, including three miles offshore of these islands. ([Att-009](#)) Noted earlier, the department also acts as initial responder in the FRA. ([Att-007](#))

Water Supply and Fire Hydrants

Water is the one vital resource firefighters need yet have absolutely no control over.

There are more than 150 water purveyors in Ventura County, which include cities, water districts, mutual water companies, private water companies, and private wells. ([Ref-010](#)) The

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2022-2023 Ventura County Civil Grand Jury did an extensive report on water availability for wildfires. Briefly, county water suppliers all work independently. Each has its own procedures for filling water tanks in response to impending fire conditions. Readers are encouraged to look at the prior report for more complete information. ([Ref-006](#))

Fire hydrant failures were investigated. Reports of hydrant failures were received after the Thomas Fire. ([Ref-006](#)) Those failures were attributed to electric pumps, designed to furnish water to uphill hydrants, losing power. The failure of uphill hydrants cut off water supply, accelerating the loss of homes. ([Ref-006](#))

Assembly Bill 367 (AB 367), enacted after the Thomas Fire, addresses water supply for critical fire suppression infrastructure and is designed to eliminate those issues. ([Ref-007](#))

Overall, however, interviews revealed that hydrant failures are not a frequent occurrence. (Ref-001) Failures occur for a variety of reasons, with damaged water lines, broken valves or loss of pressure from various causes being the most common. These incidents happen very rarely. If a hydrant does fail, firefighters find the next nearest hydrant and hook up to it. Engines are equipped with hoses up to 500 feet long, and all fire apparatus have interactive map displays that can pinpoint the location of nearby hydrants. (Ref-001)

Office of Emergency Services (OES)

Each city in the county has its own local emergency management office, and Ventura County has a separate OES run by the Ventura County Sheriff's Office (VCSO). (Ref-022)

The function of each office is to serve as a central communication/coordination center for emergencies occurring within their jurisdictions. County OES is activated whenever incidents span multiple jurisdictions, when needs exceed the resources available within one or more jurisdictions, or when an incident is otherwise complex and assistance is requested. ([Att-008](#)) Examples might be flooding, fuel spills, or wildfire. OES provides a space for all involved parties to assemble in one location, collect information and collaborate on developing a strategy for handling the incident.

The Ventura County OES has a wide array of redundant information gathering and communication resources at its disposal. It is nominally staffed during business hours by 10 personnel; a duty officer is present 24 hours a day. (Ref-001)

Depending on the incident, Ventura County OES can assemble a team of around 50 people to monitor the situation and provide expertise to decision makers. The team will remain on duty 24 hours a day until the situation is resolved. (Ref-001)

California also has a state-level OES, Cal OES, which can be called on for additional help. ([Ref-039](#))

All emergencies begin and end at the local level. A city OES initiates the emergency response, requests the county OES involvement if needed, and is handed back control of the situation as the incident winds down. (Ref-001)

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Ventura County OES is also responsible for countywide emergency planning and public emergency notifications. (Ref-022)

The Public

Noted in the BACKGROUND section of this report, emergency information and guides are readily available. A comprehensive explanation of the county's emergency communications plan is located on the OES website. ([Ref-009](#))

Technology has expanded the ease and ability to receive emergency notifications but has also encouraged people to rely on it as a sole source of information. Technical failures can result in citizens waiting for official notices that may never arrive. ([Ref-040](#))

Cell tower coverage, cell tower failures in a disaster, call saturation, electrical power shutoffs or simply a weak signal on one's phone can all prevent emergency notifications from reaching the public. ([Ref-043](#)) Individual cell towers have backup power and overlapping coverage, making those technical failures unlikely. (Ref-001) Still, prudence dictates being prepared for the unexpected in an emergency.

Awareness and cognizance of what is happening are of equal importance to official guidance. Seeing distant flames, smelling smoke or feeling the prevailing wind blowing ashes into one's location are all warning signs that should be heeded. Observing one's neighbors evacuating, even though not personally receiving an evacuation warning, should trigger a response. OES personnel told the Civil Grand Jury they "do not have a magic wand" when it comes to disseminating emergency information. (Ref-001) Despite dedicated efforts at public awareness, complete reliance on official communications may not be enough to remain safe.

Community Involvement

The Ventura County Wildland-Urban Interface has been designated by the Ventura County Fire Protection District in collaboration with CAL FIRE. Fire Hazard Severity Zone mapping is incorporated into this process. ([Att-001](#)) Specific fire prevention codes are incorporated into any construction in the WUI. Additionally, the VCFD has a Fire Hazard Reduction Program with specific requirements for properties in the WUI. ([Ref-024](#)) Owners within these areas receive annual compliance notices from the VCFD. The public must assume personal responsibility in the wildfire prevention equation by adhering to these published guidelines.

Organizations exist to provide assistance for individual communities or neighborhoods to reduce the probability of wildfires impacting their localities. According to the California Fire Safe Council website, "California Fire Safe Council (CFSC) supports communities across the state in wildfire preparedness and resiliency through grant funding, programmatic support, and technical assistance. Our goal is to provide resources and support for community-led wildfire resiliency efforts." ([Ref-025](#)) One such community program currently exists in Ojai Valley. ([Ref-026](#))

Additional individual neighborhoods throughout Ventura County have also joined VCFD's Firewise USA program, emphasizing community/neighborhood responsibility in planning the

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design of a safe community, plus effective emergency response and individual responsibility for safer home construction and design, landscaping, and maintenance. ([Ref-005](#))

Both programs emphasize community participation. Individual homes or businesses cannot singly join on their own. However, neither of these programs requires an entire neighborhood to participate. A condo complex can join. A few surrounding blocks in a development can qualify. The key is finding someone with the desire and leadership qualities to convince a majority of the residents in that defined area to participate.

There is no cost to join. In the case of Firewise USA, members of the VCFD will survey the homes and recommend changes to reduce the chances of fire impacting the properties.

There are also financial advantages. California has passed “Safer from Wildfire” regulations which reduce the cost of homeowners insurance for participating households. Insurance companies are required to recognize Firewise-designated communities by providing discounts to property owners in those communities. ([Att-003](#))

Homeowners associations (HOAs) are good vehicles for educating residents regarding the benefits provided by these organizations. The Civil Grand Jury recognizes HOAs may vary greatly in their effectiveness and governance, but all provide a mechanism for contacting the residents within their boundaries to provide information.

The Mountain Fire

The Ventura County Civil Grand Jury initially decided not to include individual fires as part of its report. However, as the investigation was underway, the Ventura County Fire Department announced plans for outside input regarding the cause of the Mountain Fire. ([Ref-032](#)) The Civil Grand Jury expanded its efforts to include the Mountain Fire. The resulting investigation concluded that ember-detecting canines could play an important role in fire prevention.

On Wednesday, October 30, 2024, a tractor clearing brush in the Balcom Canyon area of Ventura County malfunctioned and ignited a fire. The tractor was destroyed in the ensuing flames. VCFD responded and extinguished the fire after 1.8 acres had burned. ([Att-013](#))

Standard post-fire operations undertaken by VCFD involve hand crews cutting a mineral-level (bare earth) perimeter a few feet wide around the burn area, soaking the burn scar with water, and having firefighters investigate the area with handheld heat detectors looking for hot spots. (Ref-001)

Additional actions were taken after this particular fire. A bulldozer, rather than hand crews, cut the mineral-level containment line around the burn area. This resulted in a much wider protective boundary. An aviation asset on a training flight was re-directed over the Balcom fire scar to drop its load. A drone with infrared heat-seeking sensors surveyed the area. (Ref-001)

Numerous people were present at the burn site in the week after the fire. The landowner, insurance adjusters, and the public, in addition to the firefighters, traversed the area. No one reported seeing anything out of the ordinary. None of the post-fire VCFD inspections detected any anomalies. (Ref-001)

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Undiscovered by anyone, a pocket of hot embers had become encapsulated under a melted tire of the tractor. One week later, on November 6, a Santa Ana wind event dislodged debris around the tire, exposing the lit embers and carrying them into unburned vegetation downwind of the fire area. (Ref-001) The Mountain Fire would grow to consume over 19,000 acres and destroy or damage 331 structures. ([Ref-011](#), [Ref-012](#))



Figure 3. The Ventura County Fire Department used bulldozers to cut containment lines after the Balcom Canyon fire. (Photo courtesy of VCFD)

Embers

Embers are small bits of still-burning wood or debris left after a fire has occurred. They can be carried by wind, sometimes for miles, starting additional fires in a random pattern well away from the main blaze.

They can also just fall straight to the ground where they smolder until exhausting their fuel or are extinguished in post-fire clean-up operations. Problems occur when lit embers become buried by additional fire detritus. They are no longer visually detectable and, depending on the depth and type of material on top, may be insulated from any water sprayed on the surface above them.

Conceptually, it may be difficult to understand how something buried in the ground can still be on fire. The surrounding material allows the heat to remain concentrated on the ember, and lack

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of oxygen exposure prevents the fuel source from being rapidly consumed. Buried embers can remain hot for weeks, possibly even months. As noted above, the embers that ignited the Mountain Fire were buried for a week.

On January 1, 2025, an arson fire, dubbed the Lachman Fire, started in Los Angeles. The Los Angeles Fire Department extinguished the blaze after it consumed eight acres. On January 7, Santa Ana winds dislodged buried embers from the Lachman Fire and ignited the Palisades Fire. The Palisades Fire would ultimately burn 23,448 acres, take 12 lives, and cost \$27.5 billion in damages. ([Ref-027](#), [Att-004](#))

In 2021, the most destructive fire in Colorado history, the Marshall Fire, was ignited by buried embers. The fire burned 6,000 acres and destroyed 1,000 homes. ([Ref-028](#))

Ventura's Mediterranean climate has produced a landscape dominated by grasses and chaparral, including in the Los Padres National Forest. Heavily forested areas found in other parts of the state are not prevalent in Ventura County. This local flora tends to burn completely and down to the surface only. According to county fire officials, residual buried embers are not commonplace in Ventura County. (Ref-001) Yet they do happen, as demonstrated by the Mountain Fire.

Ember Detecting Technology

The most current technology available today for finding embers is infrared detection (IR), often referred to as FLIR (Forward Looking InfraRed).

IR is a heat detection system. Virtually everything on the planet emits heat, from humans, animals, plants, to even rocks releasing heat absorbed during the day. IR systems are designed to detect heat and display heat signatures to the user. The system can differentiate temperature levels, presenting a picture of what it sees on its screen.

IR is not a perfect system. ([Ref-044](#)) It requires the object you are looking for to be at a higher temperature than its surroundings. Certain atmospheric conditions that absorb or dissipate heat can lessen its effectiveness. The heat signature can be blocked by objects between it and the detector.

The fundamental shortcoming of IR in ember location is lack of heat. Heat from buried embers may not penetrate the debris covering them and thus remain undetected. Any heat breaking ground may be so minimal that it is lost in the surrounding surface temperature. IR detection is surface based; sensing capabilities reach, at most, a couple of inches below the ground. Surveys by firefighters in the Balcom Fire area, using handheld detectors and drones, proved fruitless.

The remaining methods for ember detection are rudimentary, relying on visual inspection for smoke or glowing embers and tactile sensing of heat while patrolling. These manual techniques are ineffective at locating deeply buried or subterranean embers.

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Canines

The Civil Grand Jury explored using specially trained canines to detect buried embers.

K-9s have been a staple of law enforcement organizations for decades. In addition to suspect apprehension, they are used for a wide range of detection operations. A dog's sense of smell is anywhere from 10,000 to 100,000 times more sensitive than a human's. ([Ref-013](#), [Ref-014](#))

VCSO, along with Ventura, Oxnard, Simi Valley, and Port Hueneme Police Departments, have K-9 teams. Funding for the programs is handled through nonprofit organizations and local business support. ([Ref-038](#), [Att-012](#))

New K-9s are usually obtained through the trainer the individual department uses. (Ref-001) Lead times for finding and acquiring a new dog can take several months. The dogs arrive "green," with basic skills, and the actual training occurs in-house, taking several months more. Obtaining and training a new canine can take up to a year.

The Civil Grand Jury launched an unsuccessful search to find ember-detecting dogs in California, then the United States. Many K-9 training schools list ember detection as one of the skills taught by them, but the Civil Grand Jury found this not to be the case. The Civil Grand Jury reached out to individual schools to verify their claims or get referrals to a program that does. That effort was also unsuccessful. ([Att-006](#))

The Civil Grand Jury has concluded ember-detecting canines are either not used in the United States or exist in very isolated situations. The Civil Grand Jury could only find these dogs in Sweden. ([Ref-015](#))

Dogs can be trained to detect virtually anything that has a distinct scent or chemical signature. (Ref-045) Typical scenarios include drugs, explosives, and accelerants used in arson fires. Search and rescue organizations use canines for tracking and cadaver location. Some prisons use dogs to find SIM cards from illegal prisoner phones. ([Ref-037](#), Ref-001) Interviews with local law enforcement K-9 handlers have led the Civil Grand Jury to conclude that canines can be trained on the scent of buried embers. ([Ref-015](#), [Ref-041](#), Ref-001)

Canines are also capable of detecting objects submerged under water. ([Att-011](#)) Given the demonstrated capabilities of dogs to detect a wide variety of scents, including above ground, below ground, under water, and supported by the apparent success of the Swedish ember detection program, the Civil Grand Jury concludes canine buried ember detection is a viable avenue of investigation for VCFD to pursue locally.

Detection dogs work either leashed or unleashed. Unleashed dogs, also known as "Area Dogs," are typically employed in cadaver searches. There is no defined scent trail; they are attempting to locate a specifically trained odor. The Civil Grand Jury used cadaver dogs as an example because ember-detecting dogs could not be found.

Cadaver dogs can cover wide areas and detect deeply buried scents. A single dog can cover 1.3 square kilometers (over 300 acres) in a day. They can detect odors from as deep as 15 feet. ([Ref-019](#), [Ref-020](#))

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A volunteer K-9 Search and Rescue team, operating under the umbrella of the VCSO, already exists. ([Ref-017](#)) This team focuses on tracking and locating persons or human remains. They can be a ready source of valuable wilderness detecting expertise.

The Balcom Fire covered 1.8 acres; the Lachman Fire burned eight acres. Civil Grand Jury research found that an Area Dog could readily search an area the size of the Balcom and Lachman burn areas. (Ref-019) It is unknown if a canine search would have prevented the ensuing Mountain and Palisades fires started by embers buried in those locations. What is known is that professional firefighters, using current methods, did not detect the embers. A canine simply adds another tool to the fire prevention toolbox. ([Ref-015](#), [Ref-045](#))

The Civil Grand Jury acknowledges VCFD may have limited need for a dedicated K-9. However, it could be very beneficial to form a team on a regional or statewide basis. Acquisition could be as simple as partnering with local law enforcement agencies to train one or two of their dogs on a new scent. The Office of the State Fire Marshal already has a K-9 unit for arson investigations. ([Ref-021](#)) Seeking cross-training of their dogs for ember detection is an additional option.

The damage from the Palisades Fire stretched into billions of dollars, the Mountain Fire likely into hundreds of millions. Neither of these includes the cost of fighting the fires. A trained canine costs around \$20,000. ([Ref-036](#), [Ref-042](#), [Att-004](#)) Even that expense might be avoided if collaboration with local law enforcement were successful.

Establishing an ember detection K-9 team is a ground-up endeavor necessitating development of efficient deployment protocols and creating a best practices program. The Civil Grand Jury finds the cost/benefit ratio makes it a worthwhile investigation to pursue. None of the obstacles are insurmountable.

Integrating and efficiently using K-9s in a fire prevention strategy is a useful and, to date, neglected piece of the puzzle.

FINDINGS

- F-01.** The Ventura County Civil Grand Jury finds the Ventura County Fire Department (VCFD) is well positioned to respond to wildfire threats.
- F-02.** The Ventura County Civil Grand Jury finds the public has a responsibility for wildfire preparedness by making themselves aware of and heeding Ventura County Fire Department guidelines.
- F-03.** The Ventura County Civil Grand Jury finds the Ventura County Fire Department has primary firefighting responsibility in the Local and State Responsibility Areas.
- F-04.** The Ventura County Civil Grand Jury finds the Ventura County Fire Department acts as first responder for fires in the Federal Responsibility Area.
- F-05.** The Ventura County Civil Grand Jury finds Oxnard, Ventura and Fillmore have local Fire Departments and the remaining cities contract with Ventura County Fire Department for fire services.

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- F-06.** The Ventura County Civil Grand Jury finds the Fire Communications Center responds to all non-law enforcement 911 calls.
- F-07.** The Ventura County Civil Grand Jury finds the Fire Communications Center utilizes a network of cameras to scan for wildfires in the remote parts of the county.
- F-08.** The Ventura County Civil Grand Jury finds emergency preparation guides and emergency notification systems are available to the public.
- F-09.** The Ventura County Civil Grand Jury finds the Ventura County Fire Department has created a unified county fire and medical response force.
- F-10.** The Ventura County Civil Grand Jury finds the Ventura County Fire Department has created four 18-person crews to fight fires in remote areas of the county with the goal of keeping them 10 acres or less.
- F-11.** The Ventura County Civil Grand Jury finds the Ventura County Fire Department has Mutual Aid agreements with neighboring counties, as well as state and federal agencies, to supplement its firefighting capabilities.
- F-12.** The Ventura County Civil Grand Jury finds the Mountain Fire was ignited by embers from the previous Balcom Canyon fire.
- F-13.** The Ventura County Civil Grand Jury finds that current technology cannot detect buried embers.
- F-14.** The Ventura County Civil Grand Jury finds that canines can be trained to detect the scent of buried embers.
- F-15.** The Ventura County Civil Grand Jury finds that expertise in wilderness canine search techniques exists in current K-9 Search and Rescue organizations, including in Ventura.
- F-16.** The Ventura County Civil Grand Jury finds obtaining and training a new K-9 costs approximately \$20,000.
- F-17.** The Ventura County Civil Grand Jury finds the cost of a trained canine vs. the cost of damage from wildfires makes an evaluation of obtaining a K-9 trained in buried ember detection worth pursuing.

RECOMMENDATIONS

- R-01.** The Ventura County Civil Grand Jury recommends the Ventura County Fire Department investigate the feasibility of incorporating a canine into post-fire investigations by December 31, 2026. (F-12, F-13, F-14, F-15, F-16, F-17)
- R-02.** The Ventura County Civil Grand Jury recommends the Ventura County Board of Supervisors, serving as the Board of Directors for the Ventura County Fire Department, support any Ventura County Fire Department effort to obtain and train an ember-detecting canine, including financially up to \$20,000, by December 31, 2026. (F-16, F-17)

RESPONSES

Responses required from:

The following governing bodies within 90 days:

Ventura County Board of Supervisors serving as the Board of Directors for Ventura County Fire Department (F-16, F-17, R-02)

Responses invited, but not required, from:

The following appointed officials within 60 days:

Chief, Ventura County Fire Department (F-10, F-11, F-12, F-13, F-14, F-15, R-01)

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GLOSSARY

| TERM | DEFINITION |
|-----------------|---|
| CAL FIRE | California Department of Forestry and Fire Protection |
| Cal OES | California Office of Emergency Services |
| DOI | U.S. Department of the Interior |
| FCC | Fire Communications Center |
| FLIR | Forward Looking InfraRed |
| FRA | Federal Responsibility Area. U.S. Forest Service primary firefighting agency |
| IR | InfraRed heat detecting technology. Typically identified as FLIR |
| K-9 | Dog (canine) |
| LRA | Local Responsibility Area. VCFD primary firefighting agency |
| OES | Office of Emergency Services |
| SRA | State Responsibility Area. CAL FIRE primary firefighting agency, except VCFD is contracted by CAL FIRE to be primary agency |
| VCFD | Ventura County Fire Department (also known as the Ventura County Fire Protection District) |
| USDA | U.S. Department of Agriculture |
| USWFS | U.S. Wildland Fire Service, created April 3, 2026. |
| WUI | WILDLAND-URBAN INTERFACE (WUI). A geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the Fire Code Official to be at a significant risk from wildfires including Hazardous Fire Area. |