How Vulnerable is the Monterey Peninsula to a Wildfire?

By Ray Meyers

It is almost unimaginable to think of a wildfire the likes of the 2018 Camp Fire, the deadliest and most destructive wildfire in California history, happening on our beautiful Monterey Peninsula. But, is it naïve and wishful thinking to believe it is not possible here?



Homes leveled by the Camp Fire in Paradise, CA November 2018

The deadly Camp Fire destroyed the town of Paradise, CA and was ignited by a faulty PG&E transmission power line. The utility filed for Chapter 11 bankruptcy and admitted to 84 counts of involuntary manslaughter due the wildfire. Ultimately in June, 2020 PG&E as part of a complicated settlement, agreed to pay a whopping 25.5 billion dollars to the victims of Paradise and insurance companies. The fire consumed 240 square miles and 18,804 structures while taking the lives of 85 people and injuring 17 others.

But is it fair to compare a coastal city such as Monterey with a hotter and drier inland forested city? Doesn't the fog and temperate climate protect us? Can a wildfire like what destroyed Paradise happen in Monterey?

The answer is a bit complicated, but a qualified yes.

Morse Fire, Pebble Beach, May 1987

Let's start by looking at Monterey County's wildfire history and the fire that raged in Pebble Beach and threatened our very own Monterey Vista neighborhood, among others. Some of us remember it all too well, although it happened back on May 31, 1987. The fire started in the late afternoon by an illegal campfire in the S.F.B Morse Botanical Reserve in Pebble Beach, but due to rainfall totals being down 60 percent in 1987, vegetation was very dry. The fire quickly raced up the steep (56 percent grade) north-west facing hill heading to Highway 68, Community Hospital, Skyline and Monterey Vista neighborhoods. By 5:00 PM an air tanker and three helicopters with water buckets were deployed, along with a bulldozer. The battalion chief on the scene called in three additional engines and two ground crews to setup to protect the closest homes on Los Altos Drive.



Firefighters battle the Morse Fire in Pebble Beach 1987

Official evacuations began by 6:45 PM and just fifteen minutes later the fire had become a firestorm, a fire so intense that it draws in its own wind, as it raced throughout the area. By the time of containment at midnight, the fire known now as the Morse fire, had burned 160 acres and destroyed 31 structures. Later investigations reported that the fire was exacerbated by dry conditions, excess fuel (dry vegetation) and winds coming off the coast fueling the firestorm. Keep this description of the cause in mind when you read further about wildfire risk factors.

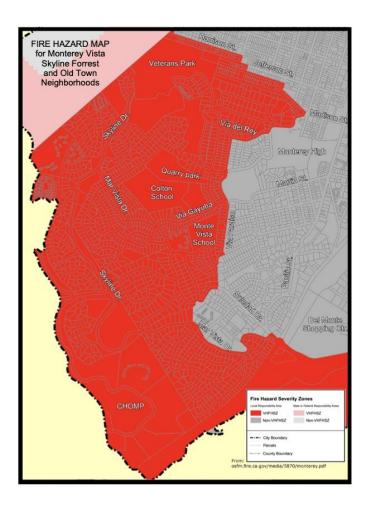
Marble Cone Fire, Monterey County, 1977

Ten years earlier, the Marble Cone fire in Monterey County which burned almost 178,000 acres of land was caused by a lightning strike. It was the third largest fire in California since 1932. Monterey County now has had 15 large wildfires (300 acres or more) since 1999 alone. And, that does not include the estimated 25,000 acres that are burned annually from wildfires in the Los Padres National Forest!

Soberanes Fire, Garrapata State Park, 2016

On July 22, 2016 the Soberanes Fire began as an illegal campfire located in Garrapata State Park in Monterey County. Fed by winds and dry unmanaged vegetation from several years of extreme drought, the fire quickly spread beyond the park to threaten lives, homes, property and the environment across more than 132,000

acres of Monterey County. The fire would ultimately become the 18th largest fire on record in California, and costliest firefight in U.S. history. For over three months it would disrupt the people, communities, and economies of the Central Coast.



Zones Recommended by CAL FIRE Very High Fire Hazard Severity Zones

Much of the Monterey Peninsula, including a significant part of Monterey Vista neighborhood is classified by Cal Fire as a Very High Fire Hazard Severity Zone (VHFHSZ). Areas with this highest designation are the most likely to experience wildfire.

These zones are based on topography (slope of the land), vegetation density, and other factors such as weather. The following is among the criteria that goes into the fire risk classifications:

Topography. The greater the slope of the land the greater the wildfire will spread. South-facing slopes will take more solar radiation, which will make them drier and more likely to increase the wildfire intensity.

Fuel. The type of vegetation is among the most important factors in the spread of wildfires. Some plants will simply burn easier and hotter. Overgrown or dense vegetation increases what firefighter call "fuel load", which is simply the material to fuel the fire. This fuel is made worse in times if drought (exacerbated by global climate change) due to the low moisture content of both the living and dead plant material.

Weather. This is a variable factor that can change daily. PG&E now employs a cast of experts in their fields to evaluate the conditions every day during the fire season to determine if they need to shut off the grid (Public Safety Power Shutoffs) in an area to avoid a repeat of the scenario that causes downed power lines from igniting wildfires. They now monitor temperature, humidity and wind speed with computer precision to assess the risks. Any combination of high temperature, low humidity and strong winds will trigger the conditions that lead to the likelihood of a wildfire, either due to a downed power line, lightning strike, or a careless person with a match.

Based upon this criterion, the areas of greatest concern for a wildfire to ignite will be in our "urban forests" such as Skyline or Monterey Vista neighborhoods. But, don't think you are safe because you happen to reside outside of these high-risk zones. When a fire starts in one of the high-risk zones it will quickly spread to include more developed communities, including city homes and commercial buildings. That means Old Town Monterey and the Presidio will also be at high risk.

We may be able to greatly reduce the likelihood of one type of ignition of these wildfires, by relocating our power lines underground, starting with the most high-risk areas. Many recent devastating wildfires have been the result of power lines coming down and sparking the abundant dry vegetation. We should continue to reduce as much of this dry vegetation (fuel) as possible, understanding that fuel reduction alone is not a long-term solution.

It is hard to face up to this reality, but as a society we will ultimately need to make difficult long-term investments in improving the conditions that are caused by and causing global climate change, resulting in the droughts that fuel these fires. We may also need to think hard when building homes in high risk wilderness zones. In the meantime, we will need to get serious about not only acknowledging man-made global climate change, but actually taking immediate steps to mitigate it.

Look at the evidence of the Very High Fire Hazard Severity Zones and our history of wildfires. It clearly shows that under the right conditions and in the most vulnerable places, our homes can be taken by the ravages of a wildfire. Please factor the cost of losing our precious and beloved peninsula when debating the costs of a long-term solution. Protect your home by making it less vulnerable to fire. Support elected officials who understand we must do something now about global climate change. Consider driving an electric car. Support an effort to underground utilities. Install solar panels. Together we must do our part.