1) The current PG&E WMP risk model does NOT include these extremely critical risk factors:

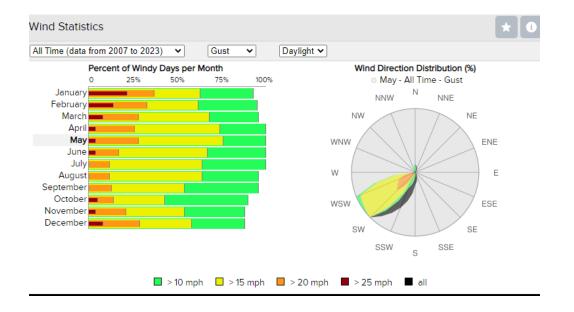
- population density

- limited ingress/egress

Due to the dense population in Montclair, coupled with the very limited narrow and windy roads available for evacuation and fire-fighting access, these risk factors are a matter of life and death in a wildfire. These factors should be weighted heavily in the risk model in evaluating wildfire risk in Montclair.

I would like to share with you my personal experience of being pregnant and having to evacuate my house in Montclair during the 1991 firestorm. If you have never gone through a forced evacuation during a firestorm, you have no idea of what it is like. If you have no idea of what the road system is in the Oakland Hills, you have no idea of what an even greater tragedy an uncontrolled fire could mean in the future. Montclair has three major exit routes to the village and to safety (Colton, Snake and Shepherd Canyon). Snake and Shepherd Canyon merge together near the village. When we evacuated (and we didn't wait for the last minute because I was pregnant) it took us over 60 minutes to get from Skyline to the village because the roads were so congested. It would have taken us even longer but one of our neighbors had the foresight to be a traffic manager at the stop light – allowing rescue vehicles up Snake and allowing cars to use both lanes and exit the hills. If the fire had spread south, the lives lost could have been significantly greater than the lives lost in any California wildfire due to the population density of Montclair. Clearly this foresight prevented people from being trapped in their cars. The 1991 firestorm had 25 confirmed deaths, while the total for 2019 to 2022 was less than 50 deaths.

It is a tragic oversight that the PGE model did not reflect basic factors like limited ingress/egress and population density. When you couple this with the wind dynamics in the Oakland Hills you have one of the most dangerous geographies for firestorms. You do not have to be a meteorologist to understand that the wind in the Oakland Hills was the reason that the first storm was uncontrollable. Winds of 30 to 40 miles an hour make a fire unable to manage. The Oakland Hills is known for getting wind gusts of this speed especially in the fire prone months as you can see from the diagram below. For those of us that have lived in the Oakland Hills for decades we still call this the Diablo winds.



2) The WMP risk model should place strong emphasis on areas located adjacent to sites that were burnt in disastrous firestorms. Montclair is adjacent to the site of 1991 firestorm in the Oakland Hills. Montclair's

- topography,
- dense vegetation and tall trees,
- climate patterns,
- dense population, and
- proximity of houses

are similar to the area of the 1991 Oakland Hills Firestorm. With climate change and the increasingly longer, hotter and dryer fire seasons in recent years, the wildfire risk in Montclair is multifold higher than that in 1991. These risk factors should be weighted heavily in the risk model in evaluating wildfire risk in Montclair.

3) **The WMP risk model should factor into the unique weather pattern of a locality**, such as a neighborhood located near a forested canyon and subjected to strong and dry canyon winds.

Montclair is next to Shepherd Canyon, which is like a wind tunnel drawing strong canyon winds into the Montclair neighborhood. This strong canyon wind is unique in Montclair and does not affect other areas. Shepherd Canyon is covered with tall trees and dense and dry vegetation. Residential houses are densely located around Shepherd Canyon. A small spark caused by an overhead powerline will quickly be fanned into a firestorm by the canyon wind fueled by the trees and vegetation. The consequence will be disastrous losses of human lives and properties. The WMP risk model should take into account the *unique* nature of local weather pattern in Montclair.

4) The WMP risk model should take into account the history of fires caused by PG&E powerlines in the neighborhood.

In 1995, a fire in Montclair was caused by sparks falling from PG&E's overhead powerlines that were whipped by wind. The sparks ignited a fire on the slope of Shepherd Canyon below Asilomar Drive and destroyed several houses. PG&E admitted fault and accepted liability. *(If you witnessed the 1995 fire, please add your personal experience.)*

5) The WMP risk model should identify a location for undergrounding when overhead hardening is <u>not</u> considered effective.

PG&E's WMP (page 339) states that: "Overhead system hardening, including [Covered Conductor] installation, is effective in several environments including:

(a) areas with low PSPS risk that have minimal tree fall-in risk with more short, grassy fuels;

(b) areas with limited risk associated with entering and exiting (referred to as ingress and egress); or

(c) in extreme terrain where undergrounding is not feasible."

None of these environments stated above is applicable to Montclair:

(a) Montclair has high PSPS risk and high tree fall-in risk, as evidenced by the numerous PSPS incidents during the dry and windy season and the many tree falling incidents involving tall trees;

(b) Montclair has only 2-3 narrow and windy roads as main evacuation routes for a dense population, so it has tremendous high risk associated with ingress and egress;

(c) Montclair's terrain is feasible for undergrounding, as evidenced by PG&E's ongoing undergrounding of powerlines in adjacent neighborhood Piedmont Pines that has similar terrain.

As such, according to PG&E's own statement cited above, overhead hardening is <u>NOT</u> effective for wildfire mitigation in Montclair. This is contrary to PG&E's reason for not including Montclair in their undergrounding plan. When overhead hardening is not effective, PG&E should include Montclair in their underground plan.

6) **The risk model should factor in the vulnerability of the residents in the community**, such as the elderlies and young children.

A considerable percentage of the population in Montclair are elderly residents and young children. These residents are much more vulnerable in the event of a wildfire and power shut-offs (PSPS).

7) In addition to risk factors, PGE should be considering the cost effectiveness of undergrounding versus the cost of surveillance. Hardening power lines in a wooded geography with this high a population density and frequent wind gusts of over 30 miles an hour is not an option. PGE currently incurs costly maintenance of trees near power lines. Montclair is a heavily wooded urban area with trees that are 50+ years old spanning across front yards. PGE also incurs costs of aerial and land surveillance (helicopters, PGE trucks are frequent visitors to our neighborhood). A dollar spent on prevention can prevent hundreds of dollars spent on surveillance and maintenance.