

date: Tuesday, January 22, 2019

to: Dianne Jacob, Greg Cox, Jim Desmond, Nathan Fletcher, Kristin Gaspar

cc: Sarah Aghassi, Mark Wardlaw

from: JP Theberge, Jacqueline Arsivaud and the Grow the San Diego Way team

subject: Fire Safety and Planning Processes - Evacuation infrastructure

Dear Board of Supervisors:

As a resident and representative of the unincorporated area, I would like to share concerns on the fire issues we are facing there. In the spirit of collaboration we hope will be the hallmark of this new Board, we are proposing some policy recommendations below, in order to better protect public safety.

The State of California is forecasting a 50% increase in wildfire frequency and intensity in the coming years.¹ Having seen nine of the largest fires in California history occurring in the last 18 months², we are concerned that the County has not taken a closer look at the intersection of land use policy and public safety.

One of the core issues is about ensuring that the infrastructure for evacuating people is adequate to accommodate any new proposed housing in Very High Fire Hazard areas that are served by limited infrastructure (typically single two-lane rural roads). Given the horrors we've witnessed unfolding on residents of Paradise, Tubbs, Thomas, but also on evacuees from Portugal to Napa County, this is probably the number one issue for those of us living in the unincorporated areas.

Many of us chose to live here understanding that there is an inherent risk. Nonetheless, the semi-rural areas we live in have sufficient road infrastructure to handle the lower density prescribed by the 2011 General Plan which specifically took into account fire risk when siting density. Our risk is mitigated (at the moment) by an ability to evacuate relatively efficiently.

With prospective projects coming down the pike, many of which are not adding any capacity on the two-lane roads that serve much of the unincorporated areas, the likelihood of a safe evacuation for both existing neighbors and future residents is severely compromised, and County staff has not sufficiently analyzed these risks. Making matters worse, the County has agreed to waive fire code standards for some of these projects (including Harmony Grove

¹ MarketWatch, Sept. 1, 2018, [California wildfire frequency could surge 50% by 2050, report finds](#)

² NPR, April 2018, [Why Today's Wildfires Are Hotter And More Destructive](#)

Village South, where it waived the requirement for a secondary egress on a dead-end road despite State Law requiring it).³

It is our hope we can collectively take a closer look at the risks that all new projects will have on public safety, and really go above and beyond to ensure that future residents, as well as the surrounding existing neighbors, are truly able to evacuate in a timely fashion. Please take a moment to read the most recent op-ed, if you haven't already, and the policy suggestions below.

Thank you all for your service to this great county and your efforts to help it grow, but in a way that respects public safety, the environment, the communities and creates opportunities for all.

Respectfully,

- JP Theberge

Founder of Grow the San Diego Way
Chair of Elfin Forest Harmony Grove Town Council
Business owner and father of three

³ San Diego Union Tribune, [Opponents of Harmony Grove housing projects warn of possible fire evacuation tragedy](#)

Op-Ed

San Diego Union Tribune Commentary: *Why San Diego can't afford to build in high-risk fire areas* <https://www.sandiegouniontribune.com/opinion/commentary/sd-utbg-wildfires-building-risks-20190102-story.html>

- ▶ Note, the headline was chosen by the editorial staff; I am not necessarily advocating for banning all construction in high-risk fire areas, only that it be done judiciously and with an eye on keeping existing and new residents safe.

Policy Suggestions:

Assessing Community-wide Evacuation and Modeling:

The general public is under the impression that our decision-makers, County staff and our public safety professionals are thoroughly analyzing and modeling evacuation and fire risks to the entire community prior to approving a project. In fact, they are not. Incredibly, there are no County or PDS policies that require this analysis and CEQA does not require it either.

The Fire Protection Plans (FPP) developed by the applicants do not include in their analysis, the impact on the ability of the *existing* residents in the immediate vicinity to evacuate; it simply outlines evacuation routes for the future project residents and them alone. **Let me repeat: the FPP only analyzes the new residents' evacuation without considering the residents in the adjacent areas.** We understand that CEQA does not mandate such an analysis, but given the new normal in terms of both intensity and frequency of future wildfire storms to be expected, we believe our elected officials and County government have a duty to go above and beyond to ensure that projects will be safe for both existing and future residents.

Recommendations:

- ▶ Direct staff to investigate which existing land use policies would need to change to achieve the goal of including full evacuation analysis for not just the new residents of the proposed project, but also **the existing residents** for General Plan Amendment projects, and to propose the needed changes.
- ▶ For every GPA project, an analysis of the entire evacuation area should be required, including but not limited to:
 - Calculating maximum evacuation capacity of the existing road infrastructure in terms of vehicles per hour;
 - Calculate vehicle volume of new residents being proposed;
 - Calculating vehicle volume of existing community residents evacuating along the same evacuation routes;
 - Cumulative analysis of all vehicles evacuating from all proposed projects and existing housing;

- Determine whether or not existing infrastructure is sufficient to evacuate residents in a reasonable amount of time during an extreme fire event;
 - Require widening roads or secondary egress if infrastructure is insufficient to maintain the safety of new and existing residents or reducing density to the point where evacuation of all residents is safe.
- ▶ Consider using Old Dominion University's Virginia Modeling, Analysis and Simulation Center (VMASC)⁴ to create community-wide evacuation models for projects in the Very High Fire Severity Zones. VMASC has conducted highly respected work for FEMA in modeling hurricane damage and evacuation and is an authority on the topic of evacuation. They have a modeling program called "Real Time Evacuation Planning Model" (or RtePM)⁵ available to planners and jurisdictions. We should assess its utility for this purpose. It is time we start taking this seriously before it is too late.

Transparency and Selection of Applicant Consultants:

For most projects, the applicant chooses fire consultants and these consultants have a strong incentive to find an outcome that will benefit the applicant. Otherwise, they don't get picked again. This creates an incentive to downplay risks (unintentionally or otherwise). This is not about necessarily manipulating data, but about the interpretation of that data that can err on the side of the applicant, or even determine what data to include.

- ▶ In some jurisdictions, Planning Staff picks the consultant. The city of Stamford, Connecticut, for example, *recently passed a law*⁶ that required planning staff to pick the consultants, rather than the applicant. This takes the pressure off the consultants who fear repercussions if the findings don't favor the applicant. It also allows for greater transparency⁷ more concern for public safety.
- ▶ County has its "approved list" of consultants but the fact that the applicant chooses the consultant creates a serious conflict of interest. Also it is not entirely clear how the list is generated and what clear criteria are being used to allow consultants on the list.
- ▶ The Elfin Forest Harmony Grove Town Council had to hire a fire consultant outside the area (from Riverside County) because local consultants did not want to "bite the hand that feeds them." This consultant found serious flaws in the HGVS Fire Protection Plan (FPP) and stated "catastrophic losses were not only likely, but probable⁸" given the severely constrained infrastructure. Had this information been available to our fire

⁴ Channel 10, WAVY.com, *ODU research team studies individual evacuation decisions for major storms*

⁵ Old Dominion University's Virginia Modeling, Analysis and Simulation Center; *Real Time Evacuation Planning Model*

⁶ Stamford Advocate, 11/30/2017, *New law allows Stamford officials – not developers – to select project experts*

⁷ *City of Stamford, CT; Text of Ordinance*

⁸ Rahn Conservation Consulting, LLC; *Comment Letter on Harmony Grove Village South DEIR*

professionals, they may have required further mitigation or lesser density to protect the public.

Recommendations

- ▶ Let County staff pick consultants for each project based on objective criteria.
- ▶ Create more transparency in selecting consultants for the allowable list of consultants. It is currently not clear what criteria are being used to list consultants as “approved by the County.”

Revisit the current list of “approved” consultants on the County’s list to ensure they meet the standards set forth by the County. **Staggered Evacuations and Public Safety Officials’ Claims:**

The worthy folks charged with our safety are largely dependent on the word of the fire consultants hired by the project applicant to make a public safety determination. Chief Mecham and Captain Brown recently gave public testimony and put forth untested theories about staged or controlled evacuations as a way to mitigate the increasingly congested evacuation scenarios that these projects are inevitably going to generate. These reassurances fell flat for those living in affected areas as intuitively, everyone knows that residents do not act in predictable or controllable ways during fire scenarios. In addition residents cannot be forced to forgo evacuating if they fear for their life.

- ▶ Beyond common sense, established, peer-reviewed data show that staged evacuation only works in very specific circumstances where there is a grid-based road network, such as that found in urban areas⁹. Most of the areas in the unincorporated County have a “ring” or “unstructured” road network. It does not offer any benefits over simultaneous evacuation in most circumstances and in fact could create circumstances where residents aren’t able to escape in time once finally directed to leave.
- ▶ As noted in the aforementioned op-ed, the staggered evacuation scenario was meticulously planned for by the public safety professionals in Paradise, and it failed spectacularly¹⁰. The County **has not** implemented the level of planning the Town of Paradise conducted in advance of the Camp fire¹¹ in the unincorporated communities, and as such, any assurances by fire or law enforcement personnel that they will be able to control evacuations are based on wishful thinking, not sound planning.
- ▶ During testimony from our public safety professionals, Supervisors should require their responses to be based on sound science and studies, not on anecdote or personal experience.

⁹ Chen, Xuwei & B Zhan, F. (2008). *Agent-Based Modelling and Simulation of Urban Evacuation: Relative Effectiveness of Simultaneous and Staged Evacuation Strategies*. Journal of the Operational Research Society.

¹⁰ Los Angeles Times, November 15, 2018, *As California’s deadliest wildfire closed in, evacuation orders were slow to arrive*.

¹¹ New York Times, November 12, 2018, *Camp Fire Matches Deadliest Fire in State History*

- ▶ Public officials' experience with fighting wildfires from past decades may not be relevant to future wildfires¹², because fires are expected to be stronger, more frequent and change in nature to wind-driven ember firestorms.

Increased scrutiny on fire safety for GPAs in Very High Fire Hazard Severity Zones (VHFHSZ)

Given the increasingly violent and destructive wildfire danger in our state and the increasing housing density in the wildland urban interface (WUI), we need to take additional measures to ensure public safety is not jeopardized.

Recommendations

- ▶ Consider adding a requirement to mandate adequate community-wide evacuation infrastructure to applicants who are seeking GPAs in the VHFHSZ, particularly where there have been fire losses in the past.
- ▶ Evacuation analysis should ALWAYS include the surrounding community and homes within the same evacuation area.
- ▶ The threshold for fire safety should be higher in GPA projects that are in the Very High or High Fire Severity Zone, particularly where there have been major losses in the past. It is one of the main reasons that the General Plan Update (approved in 2011) maintained those areas as low density in the first place.
- ▶ The onus should be on our decision-makers to be 100% certain that county residents are not being put in harm's way through amendments to the General Plan not accompanied with changes in road infrastructure. At the moment, we rely on the applicant and their consultants to reassure us that all will be fine.

¹² Los Angeles Times, December 7, 2018, [Why are California's homes burning? It isn't natural disaster it's bad planning](#)