



September 12, 2015

Vince Crudele
Vegetation Manager
Oakland Fire Department
150 Frank H. Ogawa Plaza Suite 3354
Oakland, CA 94612

Dear Mr. Crudele,

At roughly noon on Friday, September 4, 2015, I was running on Skyline Blvd. in Oakland when I passed you and some local residents standing in front of a large pile of mulch just west of the Redwood Regional Park entrance. When I returned approximately 10 minutes later, a fire truck had arrived, and firefighters were dousing the mulch pile with water. I approached a firefighter and asked what was happening, and he explained that the mulch pile was from a recently felled and chipped pine tree which had started to compost and had become so hot, it had begun to let off steam. I could not help but think of the fire risk that will result from the over 400,000 trees that will be cut down and converted into mulch piles across the East Bay as part of the FEMA funded deforestation agenda being pursued by the City of Oakland, UC Berkeley and the East Bay Regional Parks District.

Since that plan was announced, Save East Bay Hills has been working tirelessly to educate our neighbors about how it will exacerbate that very risk. By eliminating both the shade and moisture in the form of fog drip which our trees provide our public lands, and by transforming healthy, green, moisture rich and therefore fire resistant trees into hot, composting piles of shredded wood and leaves that will be spread in thick carpets throughout the hills, this plan would not only create ground cover that is at risk of spontaneous combustion, but a massive source of ground fuel for any fire that may ignite. Far from abating fire, this plan creates circumstances which will encourage it, and once ignited, would allow for its rapid and wide spread. As David Maloney, former Oakland firefighter and Chief of Fire Prevention for the Oakland Army base notes in the enclosed report, this plan justifies itself by “standing fire science on its head.” It does so by embracing a strategy for 2,059 acres of public lands spanning 7 East Bay cities best exemplified by the FEMA EIS language for the North Hills-Skyline area near the Caldecott Tunnel in Oakland:



Above: A photo of you (second from the right), a hills resident, and several firefighters on Friday, September 4, 2015 at the incident of a streaming mulch pile on Skyline Blvd in Oakland referenced in this letter.

3.4.2.3.1 North Hills-Skyline - This proposed 68-acre proposed project area is on the southwest side of Grizzly Peak Boulevard north of State Route (SR) 24 and above the Caldecott Tunnel. It includes eucalyptus, pine, and brush... Oakland's goals are to remove eucalyptus and Monterey pine and to convert brush to grassland along Grizzly Peak Boulevard ... Eucalyptus would be chipped, and the chips would be spread over a maximum of

**A coalition of hills residents opposed to the
deforestation & poisoning of East Bay public lands**

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20% of the site at a maximum depth of 24 inches... To suppress resprouting of eucalyptus, the cambium ring of stumps would be chemically treated with a combination of Garlon4 and Stalker ... Eucalyptus resprouts and new seedlings would receive follow-up herbicide treatment twice a year with Garlon4, Stalker, or Roundup as required to remove eucalyptus from the site.

Note that because the FEMA plan calls for the ultimate elimination of vast stands of forest, such as the one overlooking the playing field at the North Oakland Sports Complex, those in Claremont Canyon, Strawberry Canyon and Frowning Ridge, virtually all shade in these areas would eventually be eliminated by this plan, placing the composting mulch piles in direct sunlight. As the mulch pile I witnessed steaming did so in a relatively shady, cool area with many tall trees and on a day that was by no means hot - Oakland weather on September 4 reached its high, at noon, of 72 degrees - we fear the incredible fire risk presented by this plan. We are not alone. In speaking to an Oakland firefighter about this incident, and the plan, we've come to learn that many of them oppose it for these very reasons, too, and that they have expressed those concerns to you.

Consider also that the mulch pile I witnessed steaming was not only on a lot between two homes but given that it was near the entrance to a frequently visited park, was in a heavily trafficked area and therefore able to be witnessed and reported to authorities. Yet there are areas in the plan that are to receive this treatment that are far more remote and therefore will have few to no people to witness and thereby report to the fire department steaming or burning mulch piles; a problem that will be further exacerbated by the destruction of trees and spreading of toxic herbicides which will discourage visitation and therefore result in even fewer witnesses to potential fires. For instance, the FEMA EIS describes one remote area of Anthony Chabot Regional Park to be targeted as such: "4.10.6.2.2. *There are no adjacent communities because the proposed and connected project areas are entirely surrounded by parkland.*"

But the warnings I am bringing to your attention are by no means news to you, not only because you were present at the scene of the steaming mulch pile on Skyline and because as the Vegetation Manager for the Oakland Fire Department, you are no doubt already aware of the danger of spontaneous combustion posed by decomposing mulch piles, but because your agency has already been warned of the danger this strategy presents by several experts.

URS, an environmental consulting company which was originally hired to write the EIS for the FEMA projects, warned that the plan to cut down vast stands of trees and spread their chipped remains in 2 foot thick carpets throughout the hills would create a prolonged - perhaps decade long - risk of not just spontaneous combustion, but of providing fuel that would enable a fire's spread:

Studies have shown that mulch layers actually can pose a fire risk depending upon the type of material, the depth of the mulch, and the climate at the mulch site. Studies at the Ohio State University Agricultural Technical Institute demonstrated that sparks from cigarettes or matches can lead to a subsurface smoldering fire in a variety of mulch materials 4 inches deep. The recommended depth for landscape mulch is less than 4 inches (Appleton and French 1995) ... to avoid spontaneous combustion that can occur when decomposition of organic materials creates enough energy in a pile to ignite a fire... Fire Engineering Magazine recommends that, to reduce the potential for fire in mulch, one should recognize that mulches high in oils ignite more easily and that mulch fires start more readily in hot climates where rain is scarce (and fuel moisture is low). Eucalyptus material is high in oils, and the East Bay Hills are subject to long annual periods that are hot and dry.

In lieu of more relevant data, we generated a simple model using an average of the decomposition rates of the two studies, modified for negative exponential decay, as shown by Faber and Spiers (2004), Goya et al. (2008), and Grove et al. (2008). This model predicts that 24 inches of eucalyptus mulch would take 10 years to decompose to a depth of less than 1 inch... In summary, the UC does not provide convincing evidence that the mulch at the depth proposed would decompose in 3 to 5 years.

The proposed project assumes that regardless of the type and kind of vegetation community that forms in the newly cleared areas, the eucalyptus chip layer will retain adequate moisture to remove it as a concern in the fuel profile. As explained in the response to Issue 2, it may be inaccurate to assume that the chip layer, given its depth, can be ignored as a potential fuel source. However, such a deep chip layer may have the potential to not only sustain a localized burn but to connect fuels in vegetation types located adjacent to the treatment areas.

Given our recent drought and record heat, these dangers are greatly exacerbated. Unfortunately, and perhaps because of this and other withering criticisms of the plan by URS, that organization was replaced with a different consulting agency. However, while their warning may not have been politically expedient for the purposes of those seeking to transform our beautiful, lush and fire resistant forests into “grassland with islands of shrub,” as the FEMA EIS prescribes, they were indeed prophetic and not without merit as the steaming mulch pile you and I witnessed prove - an incident that posed a significant enough danger to warrant not just your personal visit to the location, but a team of firefighters to the scene to douse the potential fire hazard in cooling water.

Nor is the creation of mulch piles in danger of spontaneously combusting and enabling the spread of fire the only paradox in the FEMA funded “fire abatement” plan. The very goal of the plan itself, to “promote conversion” of our pine and Eucalyptus forests to “grassland with islands of shrub,” seeks to replace some of the most fire-resistant vegetation - trees - with the most flammable - grasses and shrub – a form of vegetation the EBRPD admits on its website is “one of the most dangerous vegetation types for firefighter safety due to the rapid frontal spread of fire that can catch suppression personnel off guard.” And while promoting “native” grassland may be the stated goal of the plan, there is no reason to assume that other, also highly flammable species such as French Broom - considered by plan proponents to be as “non-native” as the trees to be destroyed - will not also grow or simply grow instead, as URS explains:

...we question the assumption that the types of vegetation recolonizing the area would be native. Based on conditions observed during site visits in April 2009, current understory species such as English ivy, acacia, vinca sp., French broom, and Himalayan blackberry would likely be the first to recover and recolonize newly disturbed areas once the eucalyptus removal is complete. These understory species are aggressive exotics, and in the absence of proactive removal there is no evidence to suggest that they would cease to thrive in the area, especially the French broom which would be the only understory plant capable of surviving inundation by a 2-foot-deep layer of eucalyptus chips.

Indeed, brush has already been responsible for at least three fires in the Oakland hills this summer (see: <http://abc7news.com/news/firefighters-put-out-small-grass-fire-in-oakland-hills/958830/> and <http://abc7news.com/news/crews-put-out-brush-fire-in-oakland-hills/828747/> and <http://www.sfgate.com/bayarea/article/Brush-fire-in-Oakland-Hills-threatening-structures-6479217.php>), making the plan to eliminate shade and recreate such vegetation throughout the hills as reckless as the spreading of decomposing mulch, as further explained by Chief Maloney in his critique of the EBRPD Wildfire Hazard Reduction and Resource Management Plan upon which the FEMA plan is based:

Section IV: Fuel Treatment Methods; subsection A.2 of the Plan advocates clear cutting of trees. Not only does it advocate clear cutting with the phrase “...completely removing an overstory canopy;” it justifies this by standing fire science on its head by ignoring the significant role that tree canopies play in facilitating moisture which dampens ground fuels, and ignoring that volatile grasses will grow on the ground below the canopy gaps. Clear cutting is anathema to the Fire Service. Clear cutting to effect wildfire hazard mitigation violates every Fire Science principle relative to wildfire mitigation. Clear cutting dramatically increases the chance of a wildfire. It is a tool of land transformation. Therefore the Plan has a prominent self-contradiction. Fire Science has proven that every living tree — regardless of its species — due to its moisture content and canopy coverage of ground fuels, contributes to wildfire hazard mitigation.

In fact, the U.S. Geological Survey notes that only 3% of fires occur in forests. The remainder - 97% - burn mostly in shrublands and grasslands (and urban areas), the exact type of vegetation in which the 1991 Firestorm ignited and which this plan seeks to recreate in the hills. Says Chief Maloney about this plan, “If it is implemented it will endanger firefighters and the general public; and it will be an outrageous waste of the taxpayer's money.”

Nor are URS and Maloney alone in their criticism. During the FEMA environmental review process, the U.S. Forest Service also weighed in, objecting to the plan to remove all Eucalyptus trees. Doing so, they said, would “increase the probability of [fire] ignition over current conditions” because “removal of the over story trees can introduce changes to the environment which increase fire behavior in undesirable ways.” How?

1. Removal of the trees would lead to growth of highly flammable brush species: “the removal of the

overstory, is likely to result in rapid establishment of native and non-native herbaceous and brush communities, bringing an increase in available surface fuels.”

2. Increase in “available surface loads” would “result in increases in potential surface fire behavior” and thus, “a dramatic increase in fire hazard.” According to the U.S. Fire Administration Technical Report on the 1991 Fire noted that “brush fuel types played a significant role in the progression of the fire” and that brushland made up “a large portion of the available fuel.”
3. Cutting down tall trees “does little to address the surface fuels which are typically the primary carrier of an advancing fire.”
4. “Removal of the eucalyptus overstory would reduce the amount of shading on surface fuels, increase the wind speeds of the forest floor, reduce the relative humidity of the forest floor, increase the fuel temperature, and reduce fuel moisture.”

These factors would increase the probability of a fire starting and once started, the probability of the fire spreading faster and burning more intensely, the exact opposite of what this plan claims to want to do. Doing so would “result in a more severe range of fire behavior effects.”

Mr. Crudele, I am writing you not with the naïve hope that a group of Oakland residents and homeowners opposed to this plan pointing out these dangers and, to quote Chief Maloney the “prominent self-contradiction” of your “fire abatement” plan, will convince you to reject it when the advice of expert after expert has already fallen on your defiant ears. Rather, I am writing merely to create a public record documenting how our concerns and those of others have been brought to your attention and ignored. This letter is being sent to you and the other public officials who are likewise championing this dangerous plan and therefore its multifaceted threats in spite of overwhelming scientific evidence that doing so is dangerous, and a great threat to public safety. This includes your boss, Oakland Fire Chief Teresa DeLoach Reed, Oakland City Council members Dan Kalb and Annie Campbell-Washington, Oakland Mayor Libby Schaaf, EBRPD Manger Robert Doyle and the EBRPD Board, as well as UC Berkeley Chancellor Nicholas Dirks.

Should your various agencies proceed with this dangerous plan and should a disastrous fire from spontaneous combustion of mulch piles or of resulting grass and brush occur, Save East Bay Hills will be certain to avail local media of this communication and the various reports I have referenced herein. In so doing, we would demonstrate that you and other public officials were forewarned time and again about the potential for just such a fire, but that those concerns - just like those of Oakland firefighters who bravely and willingly put their lives at risk to protect public safety and do not deserve to have the need for such sacrifice intentionally nurtured - were ignored in favor of seeing to fruition the reckless, dystopian vision of a small but vocal group of zealous, native plant ideologues, such as those at the Claremont Conservancy and the Bay Chapter of the Sierra Club. When the fire subsides and the search begins for who is to blame, we want the public record to reflect that like Captain Joseph Smith of the Titanic, you had the iceberg warning in your hand and yet rather than proceed with caution, you ordered “full steam ahead.”

Sincerely,

Jennifer Winograd