



Oakland's Draft Vegetation Management Plan:

An environmentally destructive land transformation that increases the risk & severity of fire.

INTRODUCTION

Save the East Bay Hills is a coalition of Oakland hills families opposed to deforestation and the use of herbicides on our public lands. Like the vast majority of residents in the Oakland and Berkeley hills, we do not want the forests where we live, which we cherish for their spectacular beauty and the vital animal habitat they provide to our wild neighbors, and which are the very reason we chose to live here to be destroyed by our public officials. We also do not want our families—ourselves, our children, our pets—our neighbors, visitors, and the multitudes of animals who reside in the hills to be repeatedly exposed to hazardous, carcinogenic chemicals that will threaten our health and well-being.

Our coalition was formed to protect the forests from a Federal Emergency Management Agency (FEMA)-funded plan by the City of Oakland and others to clearcut an estimated 400,000 healthy trees and spread thousands of gallons of toxic herbicides across several thousand acres of East Bay public lands. In fighting the plan to replace the forests of the East Bay hills with “grassland with islands of shrubs,” we share the views of the tens of thousands of citizens who likewise voiced their opposition to this proposal when FEMA was debating federal funding. During that process, over 13,000 comments were submitted, over 90% of which were—by FEMA’s own admission—opposed. Public

hearings about the plan resulted in standing room only crowds speaking out against the proposed devastation, all of which went ignored and unheeded by our local officials who forged ahead with the plan.

When the prior plan was defeated in court by an organization of environmentalists and survivors of the 1991 Oakland Tunnel fire, Save East Bay Hills turned its attention to influencing the Vegetation Management Plan the City of Oakland began pursuing in its stead, a plan that would dictate policy relating to the management of vegetation growing on 1,975 acres of city owned lands, including parks, and 308 miles of roadway.

Our goal was not only to protect our forests, but also to expose the ruse of fire safety used by City officials to justify their radical agenda as not only dishonest, ahistorical, misdirected, and scientifically unsound, but perilous, as well, seeking, as it does, to replace the most fire abating forms of vegetation—trees—with the most fire-prone and therefore, dangerous: grass and brush. That said, in good faith and the spirit of democracy, our organization participated in the process of public input created by the City and its consulting company, Horizon, including attending public meetings, answering online surveys, and writing numerous letters expressing our concerns. It was our hope that by making our views in support of a species-neutral fire abatement plan for the hills heard—a plan that would meet its goals while preserving our forests and eschewing the use of poisons—and by continually sharing the scientific evidence in support of our positions, that we could influence the City to craft a plan for our collectively owned lands that elevated fire science over ideology and represent the interests and wishes of *all* Oaklanders, and not—as the previous plan had done—only those of a very small yet vocal minority that had been intensely lobbying our public officials to destroy our forests for decades because they deemed the trees “non-native.”

With the recent release of the city’s Draft Vegetation Management Plan (DVMP), we have concluded that our optimism was misplaced, our hopes for the plan naive, and our participation in the process, ultimately pointless. Our worst fear has been confirmed: that rather than engaging in the public participation process to develop a plan that was science-based and would genuinely reflect the will and concerns of the people of Oakland, it was conducted only because it had to be. It was a charade made in compliance with a legal formality and nothing more, with the die in support of a radical, nativist agenda having already been cast, regardless of fire science, public safety, and what outreach to Oaklanders revealed about public opinion.

Like many other individuals and groups which have participated in the various processes created to channel the public’s energy and activism on this issue, we are

deeply disappointed that once again, the will of the majority of Oaklanders is being undemocratically ignored to favor an extremist agenda of the very few, and that the two primary environmental concerns of Oaklanders emerging from the City's online survey and public participation process were utterly disregarded: that healthy trees be preserved and the use of herbicides rejected. Adding injury to insult, not only does the DVMP ignore the will of the people, it also places them in increased mortal danger as discussed below.

Instead, we have been presented with a DVMP that undermines its stated goal of protecting natural resources by calling for the destruction of hundreds of thousands of healthy trees, eroding Oakland's 2004 prohibition on the use of herbicides on public lands, and counterproductively, dangerously, and dishonestly conflating a native plant agenda with its publicly stated aim of wildfire prevention.

Despite claiming to seek protection of natural resources, the DVMP prescribes the killing of every healthy eucalyptus, closed-cone pine/cypress, and acacia tree growing in oak woodlands, scrub, brush, redwoods, or riparian zones (that is, *every single tree of these species that is not growing in a grove of like-trees across 918.6 acres*). It also euphemistically calls for the "thinning" of groves of such trees growing across another 329.7 acres which will result in the killing of upwards of 90% of them (see pages 127-130). And it further gives city officials unlimited discretion—without any form of public participation or manner in which to express opposition—the ability to remove even more, should officials so "desire" (see pages 110 and 170). Given that we have already witnessed Vince Crudele, the Oakland Fire Department (OFD) official in charge of vegetation management, state at a press conference that he plans to make our hills "look like they are supposed to look" by eliminating "non-native" trees, we do not doubt that if he or any other City official be given the power to translate their personal "desire" to radically transform our public lands by clearcutting groves of trees into action, they will choose to do so. Horizon's report admits as such, noting that, "*Broad tree removal is used where a conversion of vegetation types is desired (e.g. from forested to grassland)*" (page 110).

Crudele's statement is problematic not only because it reveals his destructive intentions for our public lands, but his conflation of two, unrelated issues; a conflation that is likewise at the very heart of what makes the approach described in the DVMP so counterproductive to its other stated goals of reducing the risk of wildfire. As the OFD vegetation management official, Crudele is tasked with managing vegetation so as to abate the risk of fire in a way that does not cause harm. It is *not* his mandate to pursue a personal, horticultural agenda for lands belonging to all Oaklanders, nor to unilaterally

decide how our collectively owned lands “should” look. “Non-native” does not, by definition, mean more flammable, though the perpetuation of this myth is core to what makes the DVMP not only dangerous, but pernicious, given that eliminating “non-native” species is neither the stated mission of this plan, nor was it issued as a mandate by the Oakland public.

Indeed, the DVMP is not a plan to ensure a scientifically supported wildfire mitigation plan for our hills, but rather, a native plant agenda masquerading as one; a plan that seeks to eliminate the forests planted by early Oaklanders—forests which were initially planted both to beautify the region, and, according to U.S. Forest Service senior scientist David Nowak, “primarily as a measure against the recurring fires that almost every year swept over the hills” which is common to grassland ecosystems.

As will be explained in a point-by-point rebuttal of the DVMP, wildfire mitigation and a native plant agenda are in no way compatible and function at extreme cross-purposes, greatly imperiling public safety in the process by replacing the naturally fire-abating qualities of forests (moisture in the form of fog drip, cooling shade, windbreaks, and the naturally fire resistant quality of living tree trunks), with highly flammable grass and brush. Moreover, by transforming the green, fire-resistant wood of living trees into the piles of dried out logs and mulch to be spread throughout the hills as the DVMP prescribes, trees that while living posed little fire danger will represent a significant threat once they are dead, turned into logs and into kindling by chipping and then drying out. That is why the only trees that burned during last summer’s Grizzly Peak fire were the dried out remains of those in the area that had been earlier killed for “fire abatement” purposes, while those that were living ultimately resisted ignition. This naturally fire resistant quality of living trees helps explain why a mere 3% of fires burn in forests, while the remainder—97%—burn in grasses and shrubs (and urban areas), the very environment this plan seeks to recreate throughout the hills and which has been the source of ignition for the fires that burn every late summer and early fall in the East Bay hills, including the devastating fire of 1991.

Nor is the destruction of healthy trees, the increased risk of fire, and exposure to toxic chemicals the only harms to human and animal well-being that would result from the implementation of the DVMP, though none of these other dangers—which will be discussed further in our report—are adequately addressed by the DVMP, and some, not even mentioned at all. These dangers include:

- The widespread destruction of animal habitat that will result from killing trees and razing groves and stands of trees;

- The impact deforestation will have on destroying the iconic character and aesthetics of our region;
- The destruction of the historical legacy embodied by our forests;
- The impact deforestation and the destruction of healthy trees will have upon erosion and soil stability in the hills;
- The massive loss of carbon sequestration which the destruction of hundreds of thousands of healthy trees will result in (a direct violation of Article 5 of the Paris Climate Talks mandating that governments protect and expand existing carbon sinks and reservoirs);
- The impact of deforestation on home values for those who live near or adjacent to forested public lands (a proximity to natural beauty that factored into the costs such residents paid for their homes);
- The psychological impact deforestation and the destruction of towering, healthy trees will have upon park visitors and residents who live near such trees, or who visit such parks, precisely to be the near or among the spectacular natural beauty they create;
- The failure of the DVMP to acknowledge the impact Sudden Oak Death Syndrome (SODS) will have upon East Bay oaks and other “native” trees this plan seeks to favor—a disease that is predicted to wipe out all California oaks by 2060, which is spreading rapidly, and which, according to UC Berkeley scientists, is to blame for the ferocity of the fires that burned in Napa and Sonoma last Fall by providing fuel in the form of dead oaks killed by the fungus; and,
- The lack of faith fostered in democratic process when public input about a particular issue is sought from public officials, only to have those opinions disregarded when they conflict with the narrow agenda of a powerful lobby (in this case, native plant proponents).

At the prospect of losing that which is so cherished and beloved by our members and so many other Oaklanders—our beautiful forests and the stunning vistas, shady hiking trails, and animal habitat they create—and with an acute awareness of the multifaceted dangers this plan poses to human and non-human health and safety, we submit our rebuttal with heavy hearts and little hope that they will make any difference. Clearly, allegiances to particular agendas for this plan have been declared in spite of public opinion and the lessons of fire science and experience.

Yet we submit them nonetheless for the historical and legal record. Should the DVMP be finalized without significant alteration and thus remain irresponsible, reckless, dangerous, and environmentally catastrophic, the likely predictions we have made about the devastating potential of this plan will tragically come to pass. When this invariably

occurs, we can refer to this and prior communications we have made to the City and its pay-to-play contractor Horizon during this sham of a public input process, in order to answer those questions that will inevitably be on everyone's lips in the aftermath of those disasters: *Why did this happen? Who is to blame? What should have been done differently?*

Should such a unfortunate day arise, and given the deceit and pseudoscience upon which the DVMP is based, we fear that it is likely, it is our hope that this and our other communications will serve to place those disasters into the proper, historical context: that such harms should have come to pass should surprise no one, for they were predicted by fire science, common sense, and experience, and repeatedly brought to the attention of those entrusted by the public with decision making authority to no avail. Like Cassandra who, in Greek mythology, was cursed with the insight of prophecy but doomed to have her warnings go unheeded, those of us who brought such concerns to light were time and time again ignored, our opinions and concerns on this matter, disregarded—by Horizon, by OFD, and by the City officials who chose to forge carelessly ahead in spite of them.

Moreover, by choosing to further an environmentally destructive, intolerant, and xenophobic horticultural agenda under the false guises of “resource protection” and “fire safety,” those officials not only undermined the gravity with which such important deliberations should have been undertaken (and therefore the authenticity and effectiveness of their prescriptions), but even more egregious—by also promoting a plan that in fact *exacerbated* harm to our natural resources and the very risk of fire it disingenuously claims to abate—they were guilty not only of dishonesty, but malfeasance.

To the native plant ideologues pursuing this agenda as if our collectively own lands and the collective inheritance they represent belong to them and them alone and not each and every Oaklander in equal measure, and to their enablers and allies in city government who do their bidding without regard for the results of democratic inquiry or the opinions of all the citizens whose interests they are pledged to serve and respect, we urge caution.

They should be careful what they wish for, be careful of what they prescribe, and ultimately, pursue. For facts are stubborn things and cause and effect, real, despite reckless ideologies and manufactured fictions to the contrary.

ANALYSIS

The Draft Vegetation Management Plan (DVMP) betrays its stated goal of implementing practices to *Uj c]X'cf`a]b]a]nY]a dUMg]c`bUhi fU`* *fYgci fWg] fU[Y`* and its equally false claim that “*Vtbg]fi V]j YVta a Ybhg` UbX`fYVta a YbXU]cbg\ Y`dYX`[i]XYXYj Y`cda Ybhcz]h Y`J A Dž]bVM X]b[ž` Vi hbch`]a]hYX`c` F YhYbh]cb`cZhfYYg`UbXj Y[YhU]cb]b`hfYUha YbhUfYUg`* *Q]bXODfchV]cb`cZbUhi fU` fYgci fWg] fU[Y`*, - *Ł* by calling for the destruction of hundreds of thousands of healthy trees: virtually every eucalyptus, Monterey pine, and acacia tree growing on Oakland public lands.

Specific Standards. Section 9.1.4.2 at pages 127-130:

“Remove individual eucalyptus, pine, and acacia trees from within oak woodlands;”

“Remove individual eucalyptus, pine, and acacia trees from within redwood vegetation communities;”

“Remove individual eucalyptus, pine, and acacia trees from within riparian vegetation communities;”

“Thin mature eucalyptus [closed cone-pine cypress (primarily Monterey pine) and acacia and mixed tree] stands to reach an average 35-foot horizontal spacing between trunks and 10-foot horizontal spacing between tree canopies... remove all single-stem eucalyptus with trunk diameters measuring less than 8 inches.”

“Thin second-growth stands to reach an average 25-foot spacing between trunks and 10-foot horizontal spacing between tree canopies... remove all single stem eucalyptus with trunk diameters measuring less than 8 inches.”

Treatment Prioritization. Section 9.3.3 at page 170:

“During its annual assessment effort and work plan development process, OFD will identify the areas requiring treatment, h`Y`m]dY`UbX`Yi h`Ybhcz]hfYUha Ybh` bYVggUf]mž` and will prioritize treatment as outlined below...” (emphasis added).

Tree Removal. Section 8.3.6 at page 110:

“Broad tree removal is used where a conversion of vegetation types]g`XYg]fYX` (e.g. from forested to grassland)” (emphasis added).

Vegetation Communities and Associated Fuel Models in the Plan Area

Vegetation Community/Land Cover	Fuel Models*	Acres	Percentage
Annual Grassland	GR1, GR4	254.5	13.22%
Chamise-Redshank Chaparral	SH5	8.1	0.42%
Coast Oak Woodland	GR1, GS2, TU1, TL2	604.6	31.41%
Coastal Scrub	GR1, GS2, SH1, SH5	169.7	8.82%
Closed-Cone Pine-Cypress	SH5, TU1, TU5, TL2, TL3, TL6	170.8	8.87%
Eucalyptus	GR1, SH5, TU1, TU5, TL2, TL3, TL6, TL9	152.1	7.90%
Freshwater Emergent Wetland	NB1	0.2	0.01%
Perennial Grassland	GR1	11.6	0.60%
Redwood	TU1, TL3	138.2	7.18%
Valley/Foothill Riparian	SH1, TU5	6.7	0.35%
Urban (Developed)	GR1, NB1	397.9	20.67%
Urban (Acacia)**	TU1	6.8	0.35%
Urban (Mixed Tree Stand)**	GR1	3.7	0.19%
Total		1,924.9	100.00%

The destruction of hundreds of thousands of trees growing on Oakland public lands called for by the DVMP would be accomplished by eliminating the vast majority of eucalyptus, Monterey pine/cypress, and acacia trees growing in groves or stands across 329.7 acres, or 17.1%, of the Oakland public lands this plan targets. It does so by requiring them to be “thinned” to a spacing of 35 feet between trunks and killing every tree with a diameter of less than 8 inches. In other areas, trees would be “thinned” to a spacing of 25 feet. The average tree density after implementation would be roughly 50 trees per acre from average densities of between 400 to 900 trees per acre, a decrease of more than 90%. This is not thinning. This is near wholesale destruction.

Worse, on another 47.7% of the land—or 918.6 of the 1,924.9 acres covered by this plan—it prescribes the killing of *every* eucalyptus, Monterey pine/cypress, and acacia tree growing in oak woodlands, among brush, redwoods, or in riparian zones. Indeed, the only reason the remaining 35.2% or 676.6 acres of land targeted by this plan will *not* suffer this sort of tree loss is because they already do not have those species of trees in any significant numbers, being either grassland, chaparral, emerging wetland, or are urban/developed areas.

Even worse, these are minimums. The DVMP further gives OFD officials discretion as to whether or not they wish to remove even more trees in order to engage in broad tree removal to convert our forests to grassland: “*Broad tree removal is used where a conversion of vegetation types is desired (e.g. from forested to grassland)*” (page 110). It also gives OFD officials great discretion to determine what is the “type and extent of treatment necessary” every year when they create an annual plan (page 170). Finally,

under what the DVMP calls “adaptive management,” OFD can unilaterally determine that all these trees should be removed (pages 202-203).

Combined, these statements and principles lay bare their true motivations and intentions to annihilate trees, a massive land transformation long the goal of the DVMP’s proponents under the guise of fire mitigation and by falsely claiming it is “science-based” in order to thwart the desires of Oakland residents and true scientific findings. With survey results undertaken by the City revealing that along with herbicide use, the top concern expressed by Oaklanders about this plan was the destruction of healthy trees, the claim that this plan in *any way* reflects the will of the people of Oakland is absurd. This agenda represents not only the *antithesis* of what the people of Oakland claimed they wanted in a vegetation management plan, but a plan that also undermines the primary stated purpose of the goal: to minimize the risk, spread, and ferocity of wildfire.

The DVMP betrays its stated goal of reducing the likelihood of ignition by replacing fire resistant trees with flammable grass and brush.

“Vegetation Management Goals and Objectives... Reduce the likelihood of ignitions and extreme fire behavior to enhance public and firefighter safety” (page 4).

David Maloney, the former Chief of Fire Prevention for the Oakland Army Base and a member of the 1991-1992 Task Force on Emergency Preparedness and Community Restoration (Task Force) writes that, "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." Why? “All trees perform three vital functions in preventing or slowing the spread of grass and chaparral fires: they collect, with their leaves, moisture from the night air and drip it on the natural vegetation beneath them; the tops (canopies) of the trees create shade so this moisture is not evaporated by the sun by mid day; [and] they act as windbreaks which slow the velocity of the wind that pushes grass and chaparral fires.” As a result, “Removing trees of any species and wanting grasses and chaparral to replace them greatly increases the chance of a catastrophic, unstoppable fire.”

In his critique of the use of deforestation as means of fire abatement, Chief Maloney has noted that any approach to mitigating fire risk in the East Bay hills by destroying trees:

- “Ignores the U.S. Forest Service analysis dated September 27, 2013, which recommends against removing eucalyptus trees;”

- “Violates the recommendations made by the 1991/1992 Task Force on Emergency Preparedness and Community Restoration;”
- “Has no basis in fire science;”
- “Violates fundamental principles of Wildland Fire Prevention;”
- “Is ideologically motivated;” and,
- “Creates the conditions for a perfect firestorm” (Maloney, D., *The Next Major Fire in the East Bay Hills*, Nov. 2016).

And yet, that is precisely what the DVMP seeks to do.

Chief Maloney’s concerns are echoed by:

- The U.S. Fire Administration Technical Report on the 1991 Oakland Tunnel fire which concluded 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.”
- The U.S. Geological Survey which notes that only about 3% of fires occur in forests. The remainder—97%—burn mostly in shrublands and grasslands (and urban areas), which, again, is the exact environment in which the 1991 Oakland Tunnel fire ignited and which native plant ideologues want to recreate in the hills.
- A two-part report by environmentalist and 1991 Fire survivor, Peter Scott, who concludes that the 1991 fire neither started in trees nor was fueled by trees, but was the result of a grass fire and incompetence on the part of the OFD. It also concluded that improving OFD practices and not clearcutting trees would reduce fire risk.
- URS, the original environmental consulting company hired by FEMA to review a fire mitigation plan for the hills which likewise prescribed deforestation, which not only warned about fire danger and herbicide exposure as well, but concluded that, “There is no scientific reason to support this project as proposed.”

The DVMP betrays its stated goal of protecting public and firefighter safety by encouraging the most dangerous and unpredictable type of fire: grassfire.

“Objectives were developed to achieve desired levels of... public and firefighter safety” (page 9).

The East Bay Regional Parks District (EBRPD) correctly admits that grassland and shrubs are “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.” To seek the replacement of forests with grassland as the DVMP does means jeopardizing the safety and welfare of our firefighters, not protecting them.

Both the public and firefighters are most effectively protected from the risk and spread of fire by focusing mitigation efforts not on wildlands, but the immediate surroundings of homes. A U.S. Forest Service study, “*Reducing the Wildland Fire Threat to Homes*,” concludes that reducing the risk to homes from a wildfire does not involve clearcutting vast amount of trees as the DVMP prescribes, nor does it require 300 feet of “defensible space” as it also prescribes (see, for example, page 164). The study shows that “home losses can be effectively reduced by focusing mitigation efforts on the structure [such as requiring a fireproof roof] and its immediate surroundings.” The study notes that “ignitions from flames occur over relatively short distances—tens of meters not hundreds of meters.” At 30 feet of “defensible space,” there is upwards of a 95% chance the home will not burn. At about 50 feet, there is no chance. As such, 30 feet eliminates almost all of the risk, not 10 times as much, at 300 feet. Moreover, if Oakland mandated fireproof roofs and structures, then the trees could stay because when trees burn (which is not common), they catch fire from the houses, not the other way around. In other words, protect the trees by making the structure fireproof. It’s a win-win.

By contrast, this plan does not focus on residences or their immediate surroundings, but rather on our public lands and parks. And as that same study noted, “Extensive wildland vegetation management does not effectively change home ignitability.” Therefore, claiming that the destruction of thousands of healthy trees is necessary to protect the public or firefighters is dishonest. Moreover, the use of deforestation as a means to protect public safety, when doing so both eliminates the fire abating qualities of trees while prescribing the chipping and spreading of the trees’ remains throughout the landscape as the DVMP does, increases the risk of both ignition and the means by which a fire could rapidly spread once ignited. Indeed, in critiquing a similarly flawed wildfire mitigation plan by the EBRP, Chief Maloney noted that removal of eucalyptus, pine, cypress, and acacia trees “will create an enormous belt of grass and chaparral that will stretch from Richmond to Castro Valley to the eastern edge of Contra Costa County. This grassland belt will be many times more flammable than wooded terrain.” In fact, “the speed of grass fires can be at least twice that of fires involving trees, especially if there are only a few trees, or none, to act as windbreaks.”

Experience has born this out. This photo of the Scripps Ranch fire of 2003 shows that all the homes burned (150 in total), but not eucalyptus trees abutting many of those homes:



Likewise, when Angel Island erupted in flames in 2008, it was the areas where the eucalyptus were cut down that burned; burned to the very edge of the eucalyptus forest, then stopped for lack of fuel: “At the edge of the burn belt lie strips of intact tree groves...a torched swath intercut with untouched forest.” (Fagan, A., *After fire, Angel Island is a park of contrasts*, San Francisco Chronicle, Oct. 15, 2008.) A 1991 Oakland Tunnel fire survivor writes: "I was a student at Cal during the 1991 fires. I lived in the Berkeley hills above campus near Strawberry Canyon. The eucalyptus and other trees saved the houses on my street by serving as a barrier between us and the fire." And more recently, photos of the Napa and Sonoma fires show intact eucalyptus trees, but destroyed homes. Indeed, where trees burned in the recent Napa and Sonoma fires, they were dead and dying oak trees succumbing to the effects of climate change and Sudden Oak Death Syndrome (SODS), the very trees the DVMP keeps.

The conspicuous lack of discussion of the increased fire risk of oaks killed by SODS compared to the comparatively reduced fire risk of eucalyptus reveals the corrupting, ideological motivation in favor of “native” plants at the expense of a sound fire abatement policy in the DVMP.

SODS, a fungal disease that has infected California’s “native” trees such as oaks, bay laurels, and manzanitas, is increasing throughout California and doubling in parts of the Bay Area. For example, the SODS infection rate in Marin has doubled to more than 21

percent since 2015, according to an ecologist from the University of California, Berkeley. (*Id.*) This should alarm everyone concerned about the risk of devastating wildfires like those that erupted in Sonoma and Napa counties as "oak trees that have been killed by sudden oak death 'ignite very easily and they can burn very hot'." (Halstead, R., *Marin sudden oak death infections soar*, Marin Independent Journal, Oct. 28, 2017.)

Another report notes that, "A dramatic increase this year in the number of oaks, manzanita and native plants infected by the tree-killing disease known as sudden oak death likely helped spread the massive fires that raged through the North Bay..." The article notes that, "Dead and dying oak trees make wildfires hotter and cause them to spread more quickly." (Fimrite, R., *Sudden oak death likely exacerbated deadly Northern California wildfires*, San Francisco Chronicle, Oct. 20, 2017.) In addition, *all* oak trees in California are expected to succumb by 2060 and there is no cure, nor expected to be one; one recent study calling it "unstoppable." (Cunniffe, N., *et al*, *Modeling when, where, and how to manage a forest epidemic, motivated by sudden oak death in California*, Proc. Natl. Acad. Sci., May 17, 2016.)

And yet there is no discussion of this disease *anywhere* in the DVMP, and therefore no discussion of its impact on the City's oak population, the increased fire risk represented by its spread, or any sort of strategy to deal with its devastating implications. And while we are opposed to the destruction of any healthy tree, no matter the species, and recognize the role all healthy trees play in mitigating the risk of fire, failing to acknowledge or plan for the significant fire threat represented by dead oak trees while suggesting that currently healthy "non-native" trees be destroyed, to favor a species ultimately doomed not only to extinction but at risk of exacerbating the very threat the DVMP claims to mitigate, shows the intensity of the influence the nativist plant ideology played in the crafting of the DVMP. Reality, pragmatism, sound science and therefore, public safety, were all sacrificed on the altar of nativism.

This bias is further revealed in the DVMP's discussion of the "flammability" of eucalyptus trees: "*Eucalyptus leaves produce a volatile (Gabbert 2014), highly combustible oil, and flammable gases may be released from trees at very high temperatures, further increasing fire hazard*" (page 62). Yet, as Chief Maloney notes, "One example of their true intentions is revealed by their refusal to tell the public that the California bay laurel tree, which they consider 'native' to the Bay Area has more volatile oil than any eucalyptus tree. For years we've been hearing that the volatile oils of the eucalyptus trees make them a supreme fire hazard. Yet the bay laurel contains 7.6% volatile oils of the samples tested, according to the *Journal of Agricultural and Food*

Chemistry (1974). The amount of volatile oils in eucalyptus trees range from 1 to 7% of the samples tested. But no bay laurel trees are to be cut down—nor ever mentioned.”

Even if this were not true, he notes that “essential/volatile oils of any tree [are] irrelevant to the flammability of a tree...” for two primary reasons. First, “Every species of tree in the East Bay hills is at least 30% water. This moisture is far greater than the amount of essential/volatile oil in any tree. It overwhelms by far any chance the essential/volatile oil has to set the tree on fire.” Second, “the volatile/essential oil in any tree cannot sustain heat long enough to ignite the highly dense wood of the tree.”

That is why, he notes, “only 1% of all wildland fires start in trees. The other 99% start in grasses, bushes and shrubs. (The Oakland Hills Tunnel fire started in grass.) And only 8% of all wildland fires catch trees on fire. This means that 91% of all wildland fires do not involve trees at all but are restricted to grasses, bushes and shrubs. If we decrease the amount of trees in the hills and replace them with grasses we will have dramatically increased the chances of a wildland fire occurring.”

By contrast, eucalyptus and Monterey pine trees are not only thriving in the Bay Area, they “reduce the risk of fire because their leaves collect moisture from the air and drip on the ground beneath. They provide shade that slows the sun’s heat from drying this moisture. They act as windbreaks, which slow down wind-whipped fire...” (Maloney, D., *Trees retard, don’t spread, wildfire*, San Francisco Chronicle, Jun. 21, 2017.)

And yet because they are deemed “non-native,” they are to be destroyed by the many hundreds of thousands, even if it means that eventually, trees favored by the nativists will also die, leaving us, in time, a barren, treeless, and exceptionally fire-prone landscape. Indeed, the very trees targeted for destruction were planted “primarily as a measure against the recurring fires that almost every year swept over the hills” which is common to grassland ecosystems. (Nowak, D., *Historical Vegetation Change in Oakland and its Implications for Urban Forest Management*, Journal of Arboriculture, Sep. 1993.)

The fire behavior modeling of the DVMP is purposely designed to reach a predetermined conclusion based on assumptions that contradict the most common experience of fire in the hills.

Casting further suspicion on the integrity of both the stated goals of the DVMP and processes it uses to reach its conclusions is the fictionalized fire modeling that defies real world experience. Again and again the report states that the modeling

demonstrated that the biggest danger to public safety were groves of trees, primarily “non-native” trees. The stated goal, therefore, of the plan is to eliminate forests in favor of grassland and oak woodlands. Yet such statements not only contradict the principles of fire science, as previously explained, but also the experience of fires that have actually occurred in the hills. The vast majority of fires in the hills have both ignited and burned in grasses, while trees have not been involved beyond the singeing of their bark.

Indeed, all of the fires which occurred in the hills last summer were grass fires, including (but not limited to):

- A 20+ acre grass fire near Mountain Blvd. and Edwards Ave., which burned “at a rapid rate of spread on a steep hill.” (Kirschenheuter, E., *Grass fire burning in Oakland hills, threatening homes*, KRON, Sep. 26, 2017.)
- A 20+ acre grass fire that burned in the Grizzly Peak-Fish Ranch Rd. (Bodley, M., *Firefighters appear to get upper hand on blaze in Oakland hills*, San Francisco Chronicle, Aug. 2, 2017.)
- A grass fire that also broke out in the Grizzly Peak area, several miles away from the larger fire. (*Id.*)
- A grass fire that broke out near the Oakland Zoo. (Harris, H., *Small grass fire at Oakland zoo*, East Bay Times, Jul. 26, 2017.)
- A grass and brush fire that forced the partial closure of Route 13. (Staff, *Brush Fire Burns in Oakland, Forces Partial Closure of Highway 13*, NBC, Jun. 17, 2017.)
- A grass fire along Highway 24 which covered nearly 20 acres in one hour. (Ioannou, F., *Grass fire in Orinda contained after partly shutting down Hwy. 24*, San Francisco Chronicle, Jun. 5, 2017.)

In summary, the plan crafts a fire management plan that encourages the expansion of *more flammable vegetation*, eliminates windbreaks, increases the temperature of the soil, leaves behind kindling in the form of wood chips, and results in the widespread destruction of fire-abating trees. It does so because it is based on fire behavior modeling that misrepresents the *actual* behavior of the majority of fires that burn in the Oakland hills. As such, it leads to the inescapable conclusion: the assumptions used in modeling were chosen to favor pre-conceived outcomes.

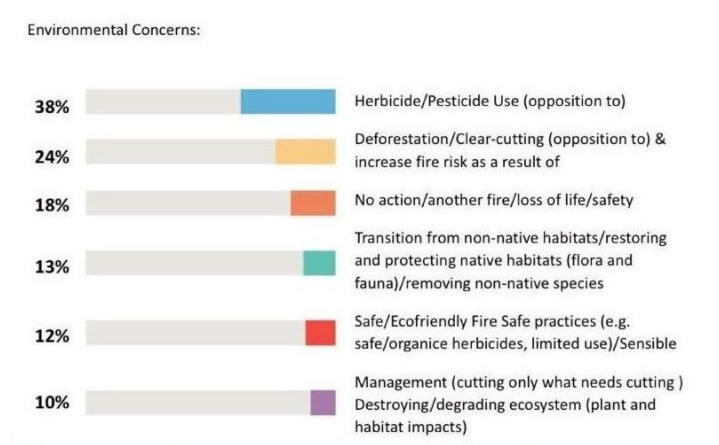
Of equal relevance are the recommendations made by the Task Force following the weather-driven, grass 1991 Tunnel fire that had catastrophic consequences. In the aftermath of even that most extreme of fires, experts who studied that fire did not recommend the destruction of trees as the DVMP does, noting 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.” Rather, they stated that a sound fire abatement strategy for the hills should include common-sense improvements, including reforming the dysfunctional OFD, better procedures for putting out grass fires, upgrading OFD equipment, better coordination and equipment sharing between agencies of different cities, and putting electrical wires underground.

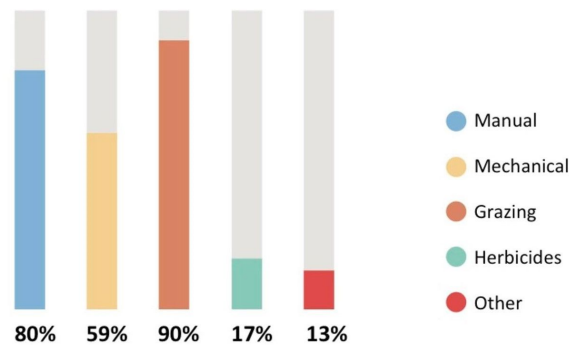
As such, not only does the modeling presented in the DVMP fail to reflect the reality of the vast majority of fires, the DVMP’s prescriptions for preventing even the most dire ones are not supported by past experiences of the most devastating fire that has occurred in the Oakland hills. Instead, the DVMP seeks to recreate conditions that would increase ignition possibility, through the conversion of forests to flammable grassland. It also threatens to reduce moisture and increase wind speed (i.e., removal of trees), as well as increase flammable fuel load (i.e., grass and brush), which in turn would increase the spread and severity of any fire.

The DVMP betrays its goal of implementing practices in such a way as to [Uj c]X'cf 'a]b]a]nY]a dUVhg'hc bUhi fU`fYgci fVWg' fBU[Y'(t and its claim that “Vtbg'fi Vmj YVta a YbhgUbX'fVta a YbXU]cbg\ YdYX[i]XY' XYj Y'cda YbhcZ'h Y'J A Dî VmU`ck]b[žUbX'dfYgV]V]b[ž'h Yi gY'cZ' \ YfV]V]XYg]b'gd]hY'cZ'h Y'ZUMVt'bwfb UVci h'h Y]f i gY'k Ug'h Y'a cgh' Vta a cb Vt'bwfbgYl dfYggYX Vm'h Y'CU_`UbX'di V`]W

“A robust public and stakeholder engagement effort was conducted to support development of this VMP... Many constructive comments and recommendations helped guide development of this VMP...” (page 89).



Preferred Vegetation Management Techniques:



“Herbicide application should be used following removal of all tree and other perennial species that have the ability to regenerate from root fragments when removal of plant material is not feasible” (page 119).

Despite claiming that the DVMP was crafted to reflect prevailing public sentiment, it allows for the use of herbicides to target a wide array of plant species, including specifically prescribing their application on every one of the hundreds of thousands of eucalyptus tree stumps its implementation would create. This not only ignores the fact that opposition to the use of herbicides was the most prevalent concern expressed by the public (38%), with 83% opposing their use, but the DVMP further erodes Oakland’s 2004 prohibition against herbicide use on Oakland public lands.

In addition, the only “disadvantages” acknowledged by the DVMP to the use of pesticides are cost and “the social stigma associated with the use of chemical controls, particularly in wetlands situations.” Nowhere in this list of “disadvantages” is the *reason* there is a social stigma associated with their use: toxicity and danger to human and animal health. In other words, Horizon and the City believe that it is not that the City plans to intentionally spread poisons in our parks, our forests, and in the open spaces near our homes that is the problem, the problem is that Oakland citizens *object* to being exposed to such poisons against their will. This is a perverse inversion of priorities.

As communities in California ban the use of pesticides on public lands, including Fairfax, Irvine, Malibu, and the Marin Municipal Water District, current Oakland officials are intent on jeopardizing public health and ignoring the clear trend against their use by more progressive, forward thinking communities shielding their citizens and wildlife from chemicals known to present a host of health risks, including cancer.

Of particular concern is the use of herbicides at the North Oakland Sports Complex where families congregate for games and other forms of recreation. Thousands of eucalyptus trees growing on the hills above the sports fields are to be destroyed and then treated with herbicides. Page 170 notes that eucalyptus trees will be destroyed during December, January, and February in order to avoid the possibility of seed spread, even though this means such efforts will be undertaken during the rainy season, allowing such poisons to wash down the hillsides to the fields below where children, pets, and families will be further exposed to them (in addition to the inevitable herbicide drift that will also expose them and nearby homeowners during application).

Because the DVMP is so similar in approach (and, in actuality, more perilous given the significant increase in acreage) to that prescribed by the earlier FEMA-funded plan which this plan was meant to replace, the Environmental Protection Agency (EPA) assessment about that plan is relevant. The EPA stated that that plan was predicated on “extensive use of herbicides” and “risks posed to human health and the environment from that use,” including impact on water supply and animals. (Of note, it also went on to express concern about the “potential impacts of climate change,” including “the length and severity of the fire season.” Ultimately, even FEMA concluded that their plan would cause “unavoidable adverse impacts ... to vegetation, wildlife and habitats, protected species, soils, water quality, aesthetics, community character, human health and safety, recreation, and noise.”)

The DVMP takes a devastating toll on wildlife.

The DVMP contains no discussion, nor does it attempt to address, the devastating impact deforestation and herbicide spread will have on the animals who live in and among the trees to be destroyed and the lands to be treated with toxic chemicals. Squirrels, birds, deer, skunks, opossums, lizards, and raccoons are just a few of the many animal species who call our forests and trees home, and who will be at risk from loss of habitat, herbicide exposure, the contamination of the food and water supply resulting from herbicide spread, as well as the disruption of their habitats caused by the activities and noise resulting from the presence of humans, including heavy machinery such as trucks, and loud, destructive tools such as chainsaws, fellers and bunchers, chippers, stump grinders, and air compressors.

The Draft VMP lacks democratic legitimacy because it does not reflect the results of the public participation process, nor therefore, the will of the people of Oakland, and because stakeholders promoting a nativist agenda were granted private meetings with and access to the consulting company,

Horizon; access which was denied to stakeholders with contrary points of view.

Holding public meetings and surveying public opinion does not make for democratic process. The ultimate plan must also take into account and reflect the public will for it to bear any such legitimacy. Once again, the interests of a small, intolerant minority whose views are out of step with mainstream public opinion are being elevated to decide how lands collectively owned by all Oaklanders in equal share, should be managed.

The results of the public survey indicate that killing healthy trees/decimating “non-native” forests (as it is unrelated to fire mitigation and doing so increases the risk) and using pesticides (as it undermines the stated goal of public health and safety) are goals that the public indicated they wanted the plan to avoid, yet the entire DVMP is oriented around those two outcomes, to the detriment of the authentic achievement of all the others, including protecting public health and promoting fire mitigation.

This was by design. The language of the Horizon Scope of Work itself, and the company’s lack of responsiveness to residents concerned with deforestation and pesticide use while meeting with advocates of a nativist land transformation, suggest the same. Specifically, the Scope of Work gave individuals who promote clearcutting preferential treatment, including meeting with Horizon early to discuss how the process should unfold. Concerned citizens were prevented from attending this meeting and Horizon did not respond to emails or letters expressing that concern.

Moreover, the Scope of Work noted that the contractor was to consult with agencies and organizations that have a pro-clearcutting, nativist agenda, but not with those who value the forests. While the City solicited public input from all parties as part of the process, it promptly ignored that input and only worked closely with agencies that advocate cutting down healthy trees. This bias is also reflected in the Appendices which were included in the DVMP, many of which were documents created by organizations promoting a native plant agenda. These documents include a *Rare and Endangered Plant Inventory* from the California Native Plant Society, *A-Ranked Native Plants of the Oakland Hills City Parks* by the Oakland Wildland Stewards (OWLS), and *The Weed Worker’s Handbook: A Guide to Techniques for Removing Bay Area Invasive Plants* by California Invasive Plant Council (The Watershed Project).

Furthermore, the Scope of Work noted that the proposal was to develop a 10-year plan which, not coincidentally, is the same time frame of the prior FEMA grant and EBRPD deforestation plan. It appears that the City underwent procedural requirements to reach

the predetermined conclusion that will allow it to resurrect the failed FEMA grant plan and survive judicial review. For example, the Scope of Work explicitly noted that Horizon will rely, in part, on the flawed FEMA analysis for its conclusions despite its withdrawal following litigation because it includes the very (false) assumptions it used about the alleged flammability of “non-native” trees and the desire to remove the trees. As such, the conclusions in the DVMP were a *fait accompli*. Moreover, the City specifically compelled the contractor to identify areas for native plant “restoration,” a euphemism for the destruction of existing ecosystems, despite its lack of bearing on fire mitigation. Indeed, to the extent that this means conversion to grassland as it does, it exacerbates fire risk.

In light of this, the City’s further indication in the Scope of Work that it retained the right to revise recommendations and conclusions without input from the consultant doing the CEQA review takes on ominous and potential dire consequences. The City is reserving the power to reach a predetermined conclusion it wants, consistent with its nativist aims, regardless of what the evidence suggests, rendering the process a sham and the conclusions dishonest.

The DVMP lacks transparency.

Hcc`a i W X]gWYh]cb]g[fUbhX`c: 8 k]h ci ha YUb]b[Z `di V]W]bj c`j Ya Ybh The DVMP grants far too much decision making authority to OFD without the opportunity for public input, granting officials the ability to engage in “Broad tree removal...if desired” (page 110) including converting forests to grassland, to “identify... the type and extent of treatment necessary” (page 170), and to *unilaterally determine that all these trees should be removed* under a broad grant of authority called “adaptive management” (pages 202-203).

H Y`8J A Dd`d\ chc`g]a i `Uh]cbgUfYXYWdhj Y. Pages 2 and 4 of Appendix G of the DVMP (*Visual Simulations of Recommended Treatments for Select Areas*) contain photos of eucalyptus groves to be targeted at the North Oakland Sports Complex and Shepherd Canyon. The “after” photos, however, do not demonstrate what the groves will look after the destructive prescriptions of the DVMP are undertaken. They merely show a partial treatment.



Simulation 1 – Existing Condition: North Oakland Regional Sports Field, area above dirt access road within the recommended 30-foot roadside treatment area.



Simulation 1 – Simulated Condition: Area treated to remove all but the dominant tree trunk for multi-trunk trees and achieve an average 10-foot spacing between retained tree canopies. Subsequent treatments would be necessary to achieve desired 25-foot spacing between retained trees. Surface vegetation treated to remove ladder fuels and retain some shrubs and native non-pyrophytic trees (note retained oak tree in foreground).
 Note: eucalyptus stand in background not treated for this simulation, which focuses on 30-foot road buffer area.

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Simulation 3 – Existing Condition: Shepherd Canyon Park, area along the west side of Shepherd Canyon Road, looking west.



Simulation 3 – Simulated Condition: Area treated to remove broom understory, apply surface mulch, prune select lower limbs to remove ladder fuels, and mow weeds along roadside edge. Also treated to remove select trees to achieve an average 10-foot spacing between retained tree canopies. To achieve a desired 35-foot spacing between retained trees, future treatments would be necessary. The depicted interim treatment will allow for retained trees to become more wind-firm before additional thinning occurs.

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The caption for the “after” photos deceptively admit as much, explaining that both show how the areas would look after merely one of two prescribed treatments is undertaken: the first being the spacing of trees so that the canopies are 10 feet apart (which the images claim to depict), and the second, depicted in neither, is spacing the trees so that there is a 25 foot distance between trunks in second growth forests (North Oakland Sports Complex) and 35 feet between trunks of mature forests (Shepherd Canyon). Because the manipulation of the photo was done by “photoshopping,” there are no time constraints precluding an accurate depiction of how the grove would appear after full treatment. So why only simulate partial treatment? Because a photo accurately depicting both treatments would be a graphic and accurate visual depiction of the devastation to come and the lasting and dramatic toll this plan would take upon our public lands.

Moreover, including trees in the background that are part of the roadside buffer zone as do the images on page 2 obfuscates as well, making it appear that the tree cutting that will occur will not be nearly as dramatic as it actually will be, for only a small portion of the area to be targeted at the North Oakland Sports Complex is along a roadside, with most being well within the interior of the park.

The lack of a visual depiction of how many trees will actually be destroyed, the deliberate inclusion of background roadside buffer zone trees, and how little of the North Oakland Sports Complex and Shepherd Canyons the images actually show (essentially, close ups of one small section each), work in concert to create a false impression that the final results in these parks will not be nearly as radical and transformative as the near clearcutting the DVMP actually prescribes. This demonstrates a nefarious intention to mislead. Indeed, the maintenance of a roadside buffer zone itself is designed to deliberately hide the devastation from the public, since ignition is more likely along the roadside and not the interior. The DVMP admits as much noting that *“wildfires are mostly human-triggered”* (page 11).

The second accompanying caption on page 4 regarding treatment in Shepherd Canyon also highlights both the absurdity of the DVMP’s rationale of destroying trees for fire abatement purposes while simultaneously revealing how doing so will actually exacerbate such risk, explaining, *“The depicted interim treatment will allow for retained trees to become more wind-firm before additional thinning occurs.”*

Obviously, there is no need to wait until trees in a photograph adjust to the loss of other trees in the photograph (and therefore no reason not to depict full treatment), nor is there any reason to believe that any trunk growth within the timeframe of the plan’s implementation would in any way significantly affect spacing of trees when the prescribed spacing is so vast (35 feet). Additionally, the statement that the trees must become “wind firm” is itself an admission that this plan would exacerbate fire risk by creating conditions that would allow for accelerated wind speeds within groves. By stating that groves of trees would have to adjust to stronger winds because they would no longer be shielded from the intensity of such winds by a higher concentration of neighboring trees, shows how a wind-driven fire would more easily, and rapidly, spread among groves treated per the DVMP’s mandates than they would have prior to such treatment.

HA Y'8J A D ~UV\gHfUbgdUfYbVhUgHc h YUa ci bh'hdYgžUbX ~cVh]cb 'cZ \ YfVJ\XYgHc VYi gYX. While we know that an enormous amount of herbicides will be used given that the DVMP calls for every one of the many thousands of eucalyptus trees cut down to be treated with herbicides, it is unclear when/which herbicides will likewise be used to kill other targeted so-called “invasive” species. The public has the right to this information, especially when concern about herbicide use was expressed.

Providing this sort of concrete information to the public is not without precedent. The FEMA analysis for the prior plan on which the DVMP is based contained estimates from

the EBRPD on a park-by-park basis. The City of Oakland should likewise be compelled to provide how much and which pesticides will be spread on public lands and where, so that the public can understand the extent of the threat, and exactly how much a backsliding from the 2004 herbicide ban on public lands the DVMP represents.

The DVMP does not balance, or even acknowledge, a wide variety of other harms to the Oakland public that would result from its implementation.

The DVMP treats the goal of eliminating “non-native” species as a goal of such preeminent importance as to justify fostering a wide variety of other harms the people of Oakland would be forced to endure as a result of the radical, transformative agenda it prescribes. These additional harms include undermining Article 5 of the Paris Climate Agreement which mandates the preservation of existing carbon sinks and reservoirs (i.e., trees), destruction of community character, displacement and killing of animals/wildlife, excessive and oppressive noise, and the psychological and physical health of residents due to deforestation and the use of “chemical means” (i.e., pesticides).

Studies show that trees have a profoundly positive effect on the physical and psychological well-being of people who live with or near them, or who visit them. Not only would these benefits be lost if trees are destroyed, but the impact of having to witness the deliberate destruction of healthy trees, including groves of them, to no greater end but to satisfy those who hate them, has the potential to cause great emotional anguish for those who care about trees and the animals who rely on them. In fact, many people chose to live in the Oakland hills precisely because of the stunning natural beauty created by the very trees the DVMP has slated for destruction. And because those who have by virtue of living near the trees already self-selected for their affection, some of the very people who would suffer most from their destruction are those who are not only the most familiar with them, but who could not escape witnessing, and listening to, the emotionally devastating spectacle of their destruction.

Other harms include, but are not limited to:

HA Y]a dUMicb hci f]ga UbX h YfYZcfYZ`cWV Vi g]bYggYg The popularity of Oakland’s parks would be impacted not only by the destruction of the trees that draw people to them but the legally mandated posting of signs when herbicides are applied to public lands. Discouraging this visitation by killing trees and spreading poisons would not only deny the public the continued joy of experiencing our forests, but it would impact the local businesses who are economically reliant on their tourism.

HA Y`j]b[`]b_ ci f ZcfYg'g'dfcj]XY'hc`CU_`UbX`dUghz]bVM X]b[`gYa]bU`
Z[i fYg]b`CU_`UbX\]ghcfm Eucalyptus and Monterey pine/cypress trees were planted not only to abate the risk of fire, but as a means of beautifying our city by preeminent, historical figures. These figures include Joaquin Miller, the naturalist and poet, who planted 70,000 trees (most of them eucalyptus) on the Oakland lands that are now the park that bear his name (trees which would be destroyed according to the DVMP). It also includes Frank Havens, the man most responsible for creating a unique, 20-mile greenbelt of stunning, forested beauty that is the East Bay hills. This oasis of green in a region otherwise dominated primarily by empty grassland, chaparral, and scrub owes its existence in no small part to this real estate developer who understood that planting trees increases beauty and recreation, and therefore property values; benefits that continue to serve the interests of homeowners today, but which would be negatively impacted should the soaring trees on the public lands near their homes be replaced with poisoned tree stumps and signs warning the public to keep out or risk exposure to toxic chemicals.

The DVMP's stated goal of fire abatement works at cross-purposes to the native plant agenda it prescribes. It is also contradicted by the DVMP's prescription to destroy Monterey pines (which are "native" to the East Bay) and eucalyptus (which have been "naturalized").

When referring to Monterey pine trees, the DVMP states, as many native plant proponents do, that they are "non-native" to our region. The fossil record shows otherwise. (Perry, F., *The Monterey pine through geologic time*, Monterey Bay Paleontological Society Bulletin, Sep. 2004.) Because changing climate patterns caused the tree's natural range to expand and contract along the California coast over eons, fossilized remains dating back millions of years have been found in the East Bay, proving that these trees grew here naturally, with no human assistance: "The species expanded, shifted, or colonized new sites during periods of favorable climate. Its range contracted and some forest stands died out during periods of unfavorable climate."

Though it is a mere accident of history that these trees may not have been growing in the East Bay at the moment European settlers arrived, to native plant proponents, they are therefore "non-native" to the East Bay but "native" to the San Francisco Peninsula where they were in fact growing at the time, a location a mere eight miles across a bay that is itself a relatively new phenomenon. Until melting glaciers raised global sea levels at the end of the Ice Age 10,000 years ago, there was no geographical boundary between the two regions.

As the four stands of Monterey pine considered “native” to California by nativists—the Año Nuevo-Swanton area in San Mateo and Santa Cruz Counties, the Monterey Peninsula and Carmel in Monterey County, and Cambria in San Luis Obispo County—are in danger due to climate change and drought now threatening the trees in record numbers, U.S. Forest Service officials suggest a different strategy than is championed by native plant proponents who advocate for their destruction outside their tiny “native” (according to their arbitrary definition) range: “expanding conservation efforts beyond the five native populations... This would help ensure survival of genetically diverse forests.” Notes one scientist who studies and advocates for the conservation of Monterey pines, “With the possibility that Monterey pine will be petitioned for listing as a threatened or endangered species in the near future...it is vital to review the eco-evolutionary foundations of its biogeography with a fresh perspective.” (Millar, C., *Reconsidering the Conservation of Monterey pine*, Fremontia, Jul. 1998.)

In fact, as many of the Monterey pines planted here in the Oakland hills are transplants from the Monterey Peninsula, we can and should view our care and preservation of these magnificent trees as our environmental duty. Not only because of the wholly arbitrary, and in this case false, claim they are “non-native,” but because of all the other benefits they confer: great beauty, habitat for wildlife, carbon sequestration, as well as shade and fog drip, both of which contribute to fire mitigation. In fact, according to the East Bay Municipal Utility District’s Fire Management Plan, Monterey pine stands “serve to minimize fire hazard.”

Likewise, eucalyptus trees are not only fire resistant for the same reasons (e.g., moisture and windbreaks), but they are majestic and beautiful, provide nesting sites for hawks, owls and other birds, are one of the few sources of nectar for Northern California bees in the winter, prevent soil erosion in the hills, trap particulate pollution all year around, and sequester carbon. For example,

- Over 100 species of birds use eucalyptus trees as habitat;
- Monarch butterflies depend on eucalyptus during the winter;
- eucalyptus trees increase biodiversity. A 1990 survey in Tilden Park found 38 different species beneath the main canopy of eucalyptus forests, compared to only 18 in oak woodlands;
- In a climate such as the San Francisco Bay Area, eucalyptus trees can live 400-500 years. As such, the oldest trees in the East Bay have plenty of life left in them;

- Eucalyptus trees benefit other trees. Eucalyptus forest boundaries remain stable and in fact, eucalyptus forests in the Bay Area have naturally declined between 1939 and 1997. Meanwhile, they create an environment for other trees—like California Coast live oaks and California bay laurel trees—to grow beneath them.

Indeed, one of the reasons why oak trees are growing under the canopy of the eucalyptus forest is that they are being irrigated by the fog drip from the eucalyptus. They are also being sheltered from the wind, which dries out the trees and the forest floor. These trees are unlikely to survive on the south-facing slopes if the eucalyptus are destroyed because they did not grow on the south-facing slopes prior to settlement. It's too dry and windy for them. Cutting down eucalyptus trees, therefore, will also kill trees native plant ideologues claim to value.

Moreover, even accepting the unscientific underlying premise that the world can and should be divided into two camps: "native" plants and animals who are worthy of protecting and "non-native" plants and animals who deserve to die, the claim that that eucalyptus trees, which can be found growing all over California, are “non-native” is being challenged as well. Since eucalyptus readily hybridizes with other species, some rightly claim “we might now have some California eucalyptus hybrids that could rightly be considered native, or at least have earned full citizenship.”

..

The DVMP Exacerbates Climate Change.

“Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests.” (Article 5, Paris Climate Agreement.)

The DVMP fails to acknowledge, let alone address, the release of carbon and the loss of carbon sequestration that would result from cutting down hundreds of thousands of healthy trees. Eucalyptus trees are particularly efficient at capturing CO₂, fixing carbon, and generating oxygen. This is because such trees have a higher growth rate than other trees and other properties which enable them to accumulate more carbon per unit of volume.

In the similar FEMA-funded plan, not only did the EPA express concerns about the “potential impacts of climate change on the Project area,” but FEMA itself admitted that the project would release 17,495 metric tons of greenhouse gases. (FEMA analysis, Sec. 6.5, Climate Change and Greenhouse Gases.) This is in addition to the loss of over 9,600 tons of CO₂ absorption per year by the trees. The DVMP would lead to even more

carbon sequestration loss as it adds hundreds of acres to the overall land area in the San Francisco East Bay subject to broadscale tree removal.

The DVMP results in heightened risk of soil instability and therefore, landslides.

The DVMP acknowledges that up to a fourth of the land targeted by this plan consists of sloped terrain: *“One quarter of the City has moderate to high potential for landslides” (page 94)*. It also acknowledges that vegetation is important to prevent hillside erosion: *“Vegetation helps stabilize slopes and minimize soil erosion by providing root strength and by absorbing soil moisture. Plant roots can anchor into bedrock or more stable soils and can bind weaker soils through fibrous root development. Excessive, haphazard, or indiscriminate vegetation removal can result in the loss of root strength in the soil and their decay can increase soil moisture levels, increasing the potential for erosion and slope failure” (page 94)*. And lastly, it acknowledges that the actions prescribed by the DVMP have the potential to create soil erosion: *“The vegetation treatment techniques identified in this VMP have the potential to affect soil stability” (page 195)*.

Yet merely acknowledging these realities and the dangers of landslide resulting from the techniques and actions prescribed by the plan are not the same as taking the action necessary to prevent it, which in this case, is actually inaction: *do not needlessly destroy the vegetation to begin with*. Because the DVMP prescribes broadscale tree removal on slopes, including the area above the North Oakland Sports Complex and along areas of Grizzly Peak, there is no way of avoiding the erosion that will inevitably result. While the plan prescribes leaving some logs of felled trees and spreading mulch to limit the risk of erosion (pages 127-130), it ignores what will happen when the combination of rain, the chips and roots eventually rotting away, and even earthquakes act upon resulting hollow, unstable spaces in the soil. In short, the DVMP sets up areas of the Oakland hills for catastrophic landslides.

The DVMP undermines the quiet enjoyment of property by residents.

While the clearcutting of beautiful, 150-year old forests, the repeated exposure to thousands of gallons of cancer-causing herbicides, and the threat posed to the safety and habitat of our wild neighbors are big concerns that, by comparison, may make worries about the noise caused by chainsaws, wood chippers, road building, and trucks seem trivial, few things will be as difficult for nearby residents to withstand.

The sound that that will result from chainsaws, fellers, bunchers, haul trucks, chippers, stump grinders, and air compressors echoing through the hills will be a loud and ever present reminder of the assault on nature that is taking place near homes, and worst of all, will be inescapable. As anyone who lives in the hills can attest, the sound of one neighbor cutting down a tree can be incredibly disruptive and annoying. The DVMP will multiply that noise by hundreds of thousands of trees, day in and day out, for many months at a time, over the course of a decade.

CONCLUSION

Instead of an ecologically safe, effective, and least destructive plan to reduce the risk and severity of fire in an economically feasible manner (indeed, at a fraction of the cost) by, for example, setting up a rotational schedule so that every several years, ground crews go into areas immediately surrounding structures and remove ground fuels and ladder fuels, the DVMP proposes a costly, destructive, native plant land transformation that will actually increase both the risk and severity of fire. It is also predicated on the extensive use of herbicides, which will further erode public health and safety. Finally, the DVMP will result in a whole host of additional and unavoidable harms including exacerbating climate change, killing wildlife, negatively impacting local businesses and property values, destruction of community character, increasing the threat of landslides, and ruining the quiet enjoyment of people's properties. Eventually, as a result of the impact of climate change and SODS, it will result in a treeless landscape. It is undemocratic, lacks transparency, and was designed to achieve a predetermined conclusion unrelated to its stated goals. As such, it is also unlawful.

And to what end? To satisfy the perverse agenda of those who champion plants they deem "native" and disdain those they call "invasive" (even while ignoring that Monterey pine are native, eucalyptus-hybrids are naturalized, and neither is invasive). Moreover, "non-native" and "invasive species" are terms that have entered the lexicon of popular culture and become pejorative, inspiring unwarranted fear, knee-jerk suspicion, and a lack of thoughtfulness and moral consideration. They are language of intolerance, based on an idea we have thoroughly rejected in our treatment of our fellow human beings—that the value of a living being can be reduced merely to its place of ancestral origin.

People are also "non-native" to North America. People belong to a species that is the most "invasive" the planet has ever experienced, causing virtually all of the environmental destruction. And yet for reasons based entirely on narrow self-interest, proponents of clearcutting do not hold their own actions to the same standards which

they impose upon trees. We need a kinder, gentler, and more tolerant way of viewing the world and the distribution of plants and animals upon it. We also need one more firmly grounded in science.

Each species on Earth, writes ecologist Ken Thompson, “has a characteristic distribution on the Earth’s land surface... But in every case, that distribution is in practice a single frame from a very long movie. Run the clock back only 10,000 years, less than a blink of an eye in geological time, and nearly all of those distributions would be different, in many cases very different. Go back only 10 million years, still a tiny fraction of the history of life on Earth, and any comparison with present-day distributions becomes impossible, since most of the species themselves would no longer be the same.” (Thompson, K., *Where Do Camels Belong?*, Profile Books, 2014.)

This never-ending transformation—of landscape, of climate, of plants and animals—has occurred, and continues to occur, all over the world, resulting from a variety of factors: global weather patterns, plate tectonics, evolution, natural selection, migration, and even the devastating effects of impacting asteroids. A look at any map or any region on a map will reveal that at some point in time, that location looked very different than it does today, as did the plants and animals who resided there. Over 10,000 years ago, a sudden burst of monsoon rains over the vast Sahara desert transformed its dunes into a savannah which could sustain life, including people and giraffes who migrated into the area which today is once again a barren expanse of sand. Roughly 74 million years ago, Tyrannosaurs, Ceratopsians, and Sauropods roamed the continent of North America which was divided down its middle by a vast, ancient sea. In the distant past, the now frigid polar regions of the Earth were moist, temperate and blanketed by forests. The geographic and fossil records tell us that there is but one constant to life on Earth: *change*.

To propose the deforestation of the Oakland hills is not only to propose a hopeless war on nature itself, but a plan that is expensive, environmentally disastrous, and threatening to human and animal health and safety. Thankfully, as the harmful and cruel consequences of the nativist call to “restore” the environment by embracing the very things the environmental movement was first formed to combat—chainsaws, toxic pesticides, and the killing of wild animals—are being increasingly felt across the world, a growing number of scientists and environmentalists are reexamining the premise of this arbitrary and xenophobic vision.

The question is whether here in the Bay Area, the birthplace of the modern environmental movement by the very men who planted the trees now under siege as a

result of Horizon's corrupt and decidedly unscientific DVMP, that reformation will occur in time to counter the nativist bid to destroy trees in records numbers so that we might preserve our threatened forests, their defenseless inhabitants, and their enjoyment by those of us who remain true to the founding spirit of the American environmental movement.