TO: UC Berkeley Physical & Environmental Planning

FROM: Jerry Kent, Claremont Canyon Conservancy Member of the Board

ATTENTION: Raphael Breines, Senior Planner, 300 A&E Building, Berkeley, CA 94720-1382

INTRODUCTION:

The following comments are submitted by Jerry Kent on behalf of the Claremont Canyon Conservancy in response to the draft UC HILL WILDLAND VEGETATIVE FUEL MANAGEMENT PLAN/EIR (WVFMP/EIR). The Conservancy has been a strong supporter of University efforts to mitigate fire hazards on the Hill Campus since the 1991 fire. Including the significant fire hazard reduction improvements that were achieved by removing eucalyptus, pine, acacia, and other flammable planted and invasive vegetation between 2000 and 2007 in Claremont Canyon, at Chaparral Hill, and along the partial and incompleted joint EBRPD and UC Grizzly Peak Boulevard Ridgetop Fuelbreak.

The Conservancy has been waiting 14 years, since fire hazard mitigation grants were awarded in 2006 for Claremont Canyon and Strawberry Canyon and was disappointed by the disastrous FEMA EA and EIS process that otherwise would have resulted in fire mitigation projects being completed by now. We are also becoming impatient while seeing increasing fire damage occurring throughout California in the past five years, but are encouraged that the University will again begin significant fire mitigation work based on the “new fire reality” which demands a new comprehensive approach. While visiting Napa Valley and the Glass Fire on Thursday October 1, 2020 with Governor Newsom,

Cal Fire Chief Porter was quoted as saying that it's not just firefighters and more aircraft, it's not just more fuels reduction project work, it's not just defensible space or home hardening—it is absolutely every one of those things." Porter also said "We need every piece of the system to be raised to meet the challenge that the changing climate is giving us and that California is going to be in the future." The Conservancy supports the type of comprehensive approach described by Chief Porter for the East Bay Hills and for the UC Hill Campus.

COMMENTS:

A. However, we find that the current UC HILL WVFMP/EIR is not comprehensive, represents a significant change in policy, and is inadequate. The final draft did not fully respond to the highlighted issues submitted in the attached comments to the draft Plan and NOP. In fact, I can't find any substantive changes in the draft Plan that modified the Cal Fire Grant project list or added other essential provisions as a result of comments made to the draft Plan. The draft Plan is also fragmented because it is based on unspecified ongoing projects funded by Cal Fire, and on a grant request for new projects using untested treatments for managing flammable vegetation on steep hillsides above dense urban development that is periodically subjected to Diablo winds.

The draft WVFMP/EIR is also faulty because its unstated purpose is to justify an incomplete list of Cal Fire funded grant projects that are based on biased and untested assumptions about thinning dense seedling and coppice eucalyptus forests instead of recommending converting to a lower growing native oak and bay woodland and native shrubland similar to what has already been done by UC above signpost #29 along the South side of Claremont Avenue, on Chaparral Hill, and along Frowning Ridge below

Grizzly Peak Boulevard. (Attachment A- Unresolved comments (highlighted) submitted as a response to the draft Hill Campus Wildland Vegetative Fuel Management Plan)

The vegetation fuel management details and listed mitigation in the WVFMP will also not fulfill the stated objectives of the Project (objective numbers 1, 4, 5, 6, 8), and is crafted and analyzed as a political mid-option alternative that will not result in managed vegetation safe enough for agency firefighting to stop a Diablo Wind wildfire on steep hillsides before it spreads by flame or embers over fuelbreaks into the Campus, Panoramic Hill residential area, Claremont Canyon open space and residential areas, and other residential communities of Oakland and Berkeley.

To serve as a potential Program and Project EIR, the final UC Hill Campus WVFMP/EIR must result in a comprehensive Plan (that is not limited to the current Cal Fire grant) that will result in a change of the current Hill Campus Cal Fire Resource Assessment Program (FRAP) rating that is currently a Very High Fire Hazard Severity Zone status noted in Figure 3.12-1 to a post project Moderate Fire Hazard Severity Zone status.

Further, the UC Hill Campus should not be characterized or managed as a wildland. The UC Hill Campus is currently a collection of historic university and privately owned lands that is now a highly urbanized and already manipulated landscape on a very steep hillside that has not been adequately managed for 120 years. We are faced with increasingly dangerous global warming and 3.6 million acres burning in California while this WFVMP/EIR is being considered, and it's both a fire scientific and political reality that the Hill Campus must now be managed using specific vegetation prescriptions that will result in a fire-safe and manageable greenbelt located above the Campus and urbanized Berkeley and Oakland residential areas.

However, the current WVFMP/EIR is a political plan that relies on inadequate vegetation mapping, inadequate fire behavior modeling, inadequate treatments of flammable blue gum eucalyptus and Monterey pine forests, and on haphazard management of planted flammable vegetation and unmanaged native vegetation without adequately funded and assigned staffing for 800 acres of high risk and sensitive university land. The Draft WVFMP/EIR must be redone to provide required vegetation risk reduction and management detail for public transparency before a final project is selected, analyzed, and approved. (Attachment B- pdf of panels for review and discussion of UC Hills WVFMP/EIR issues)

B. The draft WVFMP failed to prepare accurate and useful vegetation and plant community information and detail needed for public disclosure and environmental analysis. The draft Plan and final WVFMP/EIR's discrepancies in communities to be managed and fire modeling must be made consistent. The draft Plan and the WVFMP/EIR should have used an accurate vegetation map to provide baseline integrity for everything that followed. The draft Plan was a piecemeal plan illustrated by the project maps and policies represented in figures 5, 10, and 23. The 34 different vegetation and land use types used in the statewide Figure 10 LandFire map, even if accurate, resulted in a kaleidoscope of vegetation and fire behavior that the public and agency officials could not be expected to understand. The map used in the draft plan was not clear enough for public review and understanding or for comparison with the McBride Alternative A Vegetation Map. And an Alternative B vegetation map was not prepared for comparison. The WVFMP/EIR map represented by Figure 3.5-1 map should have been used in both the draft Plan and the recommended plan for fuel modeling to determine flame height, rate of spread, and other fire behavior information based on clear vegetation management prescriptions. (Attachment C- McBride map of UC Hills vegetation for comparison purposes)

C. There is now worldwide public awareness about the flammability of blue gum eucalyptus and pine trees that can't be denied. However, there is a code of silence based on fear of conflict, inadequate funding for either capital costs or ongoing maintenance, and unverified opinions about the flammability of eucalyptus and pine forests on the part of UC and other East Bay agencies. Instead, agencies have attempted to apply concepts developed for Sierra timberlands which have been controversial and not yet applied successfully by state and federal agencies. In addition, the fire mitigation details and long-term maintenance costs and history of failed ongoing maintenance of flammable forest and open space lands by UC and other agencies is not adequately described in the draft Plan or the draft WVFMP/EIR. As a result, the public and agency officials are clueless about eucalyptus and pine forest fire hazard exposure and the costs and environmental impacts of short and long time care and eventual removal of hazard and decadent trees. (Attachment D- folder of flammable eucalyptus tree articles and applicable science)

D. Surveys of vegetation to be managed and a simple forest analysis was not done, and actual before and after project completion numbers are not described. There is nothing in the draft Plan, the draft WVFMP/EIR, and in the record about the actual type of eucalyptus and pine stands currently found on the UC Hill Campus. Tree numbers are needed for public information to document and analyze before and after treatments of tree stems/acre, coppice, seedling, and mature tree numbers, and information about native and non-native understory to be removed or retained. The draft WVFMP/EIR also did not provided adequate fire safe standards and analysis for initial thinning, removal, conversions to natives, and for the ongoing management of eucalyptus, pine, oak/bay woodlands, shrublands, and grasslands.

Only generalizations like accomplishing tree fire hazard reduction by selecting removals and retention “one tree at a time”. Generalizations of this type are used to keep the public in the dark about the scale of potential projects noted in figure 3.5-1. Specific forest details should be included in both the draft Plan and the final WVFMP/EIR to determine if the WVFMP is feasible. Without details it will not be possible to make comparisons with Alternative A and to analyze the differences between alternatives for environmental impacts and for final Project selection. (Attachment E- pdf of eucalyptus grove photos along Claremont Canyon Avenue as an example for flammable groves logged after the 1972 freeze, with 1,000 eucalyptus and native tree stems per acre)

E. The final Hill Campus FM Plan/EIR should recognize that thinning of eucalyptus stands will not be a viable long-term strategy for reducing fire hazards in the steep and windy hill areas of the Campus and that the WVFMP therefore would not meet project objectives. The draft Plan should have reported that a thinning strategy is unproven or at least controversial for blue gum eucalyptus and Monterey pine where tree canopies and ribbon bark are impacted by fire on steep slopes by Diablo winds periodically exceeding 40 mph.

Thinning of pine forests in the Sierra and management of eucalyptus forests in Australia are commonly combined with a program of regular prescribed burning (every 5 to 10 years) which has never been done at scale in the East Bay Hills, and may not be possible in the UC Hill Campus. We do support the eventual use of prescribed fire on already made safe plant communities, but not for eucalyptus and pine groves on steep hillsides with 40 percent and above slopes.

Given the history of failed and successful fire hazard mitigation efforts that have been sustainable. Only removal of the 1972 freeze and logged eucalyptus coppice stumps and

seedlings is financially and environmentally warranted to release and manage the lower growing and potentially safer native plant understory community as has already been done successfully by UC. Currently available examples are to be found at the South side of Claremont Canyon. At EBRPD's side of the Frowning Ridge Fuelbreak. At UC's Chaparral Hill. And at the East side of the EBMUD Grizzly Ridge Fuelbreak and its ongoing effort to remove eucalyptus at Grizzly Ridge and Grizzly Peak. (Attachment F Stephanie Lin 2009 Thesis about the Restoration of Native Flora Following Eucalyptus removal. Referrals are also made to three papers by Jerry Kent posted on the Claremont Canyon Conservancy web page including: Diablo Winds, Wildfires, and Flammable Vegetation in the East Bay Hills, How the East Bay Got its Eucalyptus and Pine Forests, and the Risks and Costs of Eucalyptus and Pine)

F. The WVFMP/EIR did not describe and analyze the adequacy of fire mitigation projects of its neighbors or the cumulative impacts of projects by major agencies East of the UC Hill Campus. The University is clearly not a self-contained island that is isolated from other high risk public lands and residential areas that have experienced repeated wildfires. EBRPD and EBMUD contain extensive open space areas with substantial fuel loads of highly flammable, eucalyptus and pine groves. Diablo Winds come from the East and LBL has modeled the potential for a 60 ft high wall of wildfire coming from EBRPD and University land. The following quotes are from a publication titled Project Shields Lab as Well As Berkeley Neighbors From Wildfire by Jeffery Kahn dated January 12, 2001.

"The Laboratory manages the entire site under the assumption that in a firestorm, thousands of firebrands will descend upon the Laboratory," says McClure. "These firebrands will ignite vegetation across the site and fire will consume the vegetation around individual buildings in less than ten minutes. But because of the vegetation

management effort we have done, these fires will be low-temperature and low-flame. This is the keystone of our defenses: we have reduced fuel levels so that these fires cannot penetrate and ignite the buildings."

Throughout the landscape, the fire characteristics of the site have been evaluated. Where the risks are excessive, the Laboratory has modified native plant communities along the spectrum of the natural succession. The goal is to retard and to accelerate successional forces in selective areas so that fire risks are effectively managed using natural plant communities.

Six years into this complex effort, the Lab has expended a very modest $1.1 million with $600,000 of remaining corrective vegetative work to be done over the next two years. This represents about three-tenths of one percent of the value of just the Lab's buildings (not counting that which is inside). After this initial work is completed, the annual vegetation management bill to ensure the future existence of the Lab will be approximately $100,000.

At the lab's flanks, additional firebreaks and enhancement of existing breaks have been engineered using computer models. Within these firebreaks and within selected wooded areas throughout the site, trees have been felled or thinned and had their lower limbs removed.

You manage in a way to stop an incoming crown fire. You bring it down to the ground," said McClure. "Before, we would have had 60-foot flames burning uphill toward the Laboratory firehouse. Now, with the breaks and vegetation management, we would get three-to-five-foot flames.

Fifty acres of the Lab had been overgrown with French broom, a highly flammable exotic brush. Now, all of the French broom is gone. Every year, a crew comes in and removes any regrowth, a job that must be continued in perpetuity. But every year, the job becomes easier.

To sustain the fire-safe landscape that has been created by this project, the principles are relatively simple, said McClure. "Grasses we cut. Bushes or brush we thin. Trees we limb up. The end result is a wooded, park-like setting for a complex of buildings that is able to survive a wildland fire."

Computer modeling consistently indicated that the eucalyptus trees above Building 74 on the Lab's critical eastern flank would shower the Lab and Berkeley neighborhoods with firebrands. Now, said McClure, those trees are gone and there is not going to be a storm of firebrands streaming out of the Lab into neighboring residential areas."

LBL proceeded with its own unique fire mitigation approach to create defensible space for its buildings and for its neighbors. However we do not believe the approach used by LBL complies with existing UC policy for the larger Hill Campus or is appropriate for the remainder of Strawberry and Claremont Canyons. For the past 25 years UC has adopted policies and programs which we have supported to successfully remove flammable eucalyptus and pine in Strawberry and Claremont Canyons, along Frowning Ridge below Grizzly Peak to Claremont Avenue, and on Chaparral Hill. We find the potential use of thinning represented in the draft Plan and draft WVFMP/EIR to be significant and not adequately described or analyzed. (Attachment G- Revised map of completed and proposed UC and adjacent agency eucalyptus and pine removal project areas based on WVFMP/EIR map 3.5-1)

G. The University should have included in its draft WVFMP/EIR, a dedicated rapid response and early fire ignition detection and suppression wildfire mitigation addition. Specifically, the final draft WVFMP/EIR should include a fire mitigation provision for twenty four hour annual camera and satellite coverage for early ignition detection, coordinated fire behavior modeling during a fire, and for providing initial fire suppression response from a new Campus or Cal Fire Unit with fire trails wide enough for Cal Fire or local agency Type 3 Fire Engines.

The WVFMP/EIR also did not address how the University vegetation and fuel management plans relate to State Cal OES and Cal Fire suppression programs or consider the potential addition of Cal Fire Unit to be in charge of ignition discovery and response to early fires followed by a coordinated agency suppression program for the East Bay Hills. Currently the WVFMP/EIR states that fire services will be the responsibility of Berkeley, Oakland, Alameda County Fire District, Moraga Orinda Fire Protection District, with mutual aid support from EBRPD and other nearby fire departments. No agency is assigned the lead role even though the University is a State Agency. The UC Hill Campus is exposed to wildfire threats common to the East Bay Hills at an areawide scale, and both protection and suppression must be addressed at this large scale. The final Hill Campus FM Plan/EIR should include in its fire mitigation provisions an East Bay Hills Cal Fire Unit near the Campus. Currently, the Santa Clara Cal Fire Unit headquarters are located too far South in Mountain View with local fire stations near Sunol and Morgan Territory that are strategically placed in rural areas to respond to grassland fires common to Eastern Alameda and Contra Costa Counties, and not to the higher risk East Bay Hill urban interface where major lose in life and homes have happened and can be expected to happen again.

H. The WVFMP should not have been selected as the preferred alternative in the EIR process because it did not provide for an adequate Grizzly Peak Boulevard ridgetop fuelbreak that would include solving the joint-agency vista turnout problem that has increasingly become a known location for fireworks, bonfires, and large day and night-time gatherings. The title of the Oakland Tribune article of Monday August 22, 1932 when 2000 Onlookers witnessed the opening of the new roadway was "New Scenic Road Opened in Berkeley". The article stated that the new road served a three-fold purpose. "namely that work has been provided for hundreds of men (during the great depression) who otherwise would have been out of employment; that a new scenic drive will attract many tourist in years to come has been developed; and the Eastbay has been given a natural fire break which will add further protection from hill blazes".

Since then, the saga of Grizzly Peak Boulevard has become more complex because Berkeley, Oakland, UC Berkeley, EBRPD, and EBMUD are now responsible for specific elements of the "New Scenic Road" including planning for and developing roadside turnout improvements and maintaining public viewing areas where many tourists and residents come to enjoy spectacular views of the San Francisco Bay Area. These agencies are also responsible for maintaining their lands adjacent to Grizzly Peak Boulevard to ensure that this high ridge corridor will serve its stated purpose as a fire break for protection from hill blazes.

However, Grizzly Peak Boulevard between Claremont Avenue (four corners) and Centennial was designated as a sheltered fuelbreak in the McBride Plan, but was amazingly not designated as a fuelbreak of any kind in the WVFMP/EIR. Grizzly Peak Boulevard is one of this Region's most important roadways, and should be listed and managed as an evacuation corridor with fuelbreak vegetation treatments similar to the provisions for Claremont Avenue. The treatments for turnout parking in the draft Plan and

the draft WVFMP/EIR are also inadequate. The final WVFMP/EIR should provide for a capital plan and management program needed to replace existing temporary logs, paving of gravel areas, roadway edge control, joint agency staffing or gates for road closure, and policies for red flag and night time closure of vista parking areas.

I. The WVFMP/EIR failed to include a mitigation provision for jointly working with Oakland and Berkeley to harden homes against potential embers adjacent to University Hill lands in Strawberry and Claremont Canyons. The WVFMP/EIR was obviously developed to justify the provisions of a recent Cal Fire grant in the absence of an approved regional fire mitigation plan for the East Bay Hills that covers flammable and high-risk agency open space vegetation and adjacent high risk urban residential areas. Firestorms in California are growing larger and more destructive, and experts and state legislation make it clear that it is now necessary to focus on houses at the same time that strategic fuelbreaks and wildland vegetation fire mitigation projects are being planned and analyzed. The University is obviously unable to ensure that vegetation fires originating on its property, whatever the cause of ignition could be, will not produce burning embers during Diablo wind driven fire that could ignite adjacent public or private vegetation and homes in residential areas. Therefore, the University should have included a mitigation provision to work with the cities of Berkeley and Oakland to ensure that homes adjacent to the University Hill Campus in mapped Cal Fire VHFHS zones are hardened based on the proposals of Jack Cohen and the USFS and current Cal Fire recommendations for home hardening that are necessary for residential resiliency and home survival. (Attachment H. Fire Brands in Large Scale Fires)

J. The WVFMP/EIR project analysis and project selection is inadequate. The Hill Campus FM Plan/EIR needs to investigate and analyze feasible mitigation measures or alternatives that could mitigate or avoid significant project impacts. If any mitigation

measure or alternative is to be rejected as infeasible, the DEIR needs to present substantial evidence to support a decision to find the measure or alternative infeasible, using CEQA's definition of feasibility.

The McBride Plan is a comprehensive plan prepared by the most informed and experienced individual who knows more about the UC Hills than any staff member or hired consultant. Dr. McBride is Professor Emeritus of Forestry, Landscape Architecture, and Environmental Planning, Department of Environmental Science, Policy, and Management, UC Berkeley. He has specializations in vegetation and ecological analysis, urban forestry, and historic landscape restoration. In addition to his teaching, Professor McBride has worked as a consulting Forester and Landscape Ecologist in the Bay Area for over 40 years. His consulting work focuses on the preparation of vegetation analysis and management plans. His clients included federal, state, county, and city agencies, legal firms, corporate land owners, private land owners, and foreign governments. Education includes: Ph.D. Botany, University of California, Berkeley; M.S. Forestry, University of California, Berkeley; BS Forestry, University of Montana, Missoula.

The McBride Plan (Alternative A) is discussed and reviewed as an extreme opposite of the Alternative B proposal. The draft UC Hills WVFMP is then justified and selected as the middle of the road political fire mitigation plan using an infeasible and incomplete WVFMP for the faulty EIR analysis found in pages 367 through 452.

The WVFMP does not meet project goals, and is included a 1,200 page cumbersome document that is beyond the review capability of the public with short notice to meet an October 2, 2020 deadline.

The stated reasons for rejecting the McBride Plan (alternative A) included:

- No broadcast prescribed burning would be conducted.

- No temporary refuge areas would be developed.

- No chipping of biomass or reuse onsite would occur; accordingly, pile burning would substantially increase relative to the WVFMP.

- A 300-foot-wide non-shaded fuel break would be created on the ridgeline between Strawberry and Claremont canyons (the WVFMP includes a 126-foot-wide non-shaded fuel break that extends from Frowning Ridge to Claremont Canyon).

- Water tanks would be installed on Grizzly Peak Boulevard.

- An Alameda whipsnake preserve would be created on the upper south facing slopes of Strawberry Canyon.

- Fire roads throughout both Strawberry and Claremont canyons would be widened and graded to accommodate the Type 3 fire engines purchased.

All of these items or some reasonable modification are required to meet the eight listed objectives of the project. Rejection of the McBride alternative for these stated reasons did not allow for an accurate comparison with the draft WVFMP alternative during a faulty DEIR process.

ATTACHMENT B- List of Maps and Panels submitted as a pdf along with Jerry Kent comment letter about the draft UC HILL WILDLAND VEGETATIVE FUEL MANAGEMENT PLAN/EIR (WVFMP/EIR).

1. Fire Hazard Severity Map (Figure 3.12-1)

2. Fire History Map (Figure 6)

3. UC Hills Area Topographic Map- showing areas where firefighting will be problematic

4. Map of Ongoing Treatments Funded by Cal Fire (Figure 5)

5. Map of Current Vegetation Types, from 2016 LandFire Data (Figure 10)

6. Fuel model distribution in the Hill Campus (Figure 11)

7. Flame Length Projections with 40 mph NE winds (Figure 19)

8. Rate of Spread Projections with 40 mph NE winds (Figure 20)

9. Map of All Project Area Treatments (Figure 23)

10. Map of Current Vegetation Communities (Figure 3.5-1)

11. Map of Identified Treatment Projects (Figure 2-2)

12. Map of Roads, Trails, and Grizzly Peak Blvd. Turnouts (Figure 3.11-1)