



A COMMUNITY BASED ORGANIZATION SUPPORTING THE LONG-TERM STEWARDSHIP OF CLAREMONT CANYON

President’s Message by L. Tim Wallace

THIS TIME OF YEAR WHEN WE LISTEN TO THE WIND we think of fire. We should, it’s the fire season. Diablo winds are already playing havoc: drying everything out, blowing pine needles every which way, and breaking off eucalyptus branches. These dry winds are powerful and predictable. In 1991, the result was a truly catastrophic loss of homes, human life, and dollars

Our wildfire problem can be blamed in part on the foliage with which we surround ourselves. Non-native species comprise about 18 percent of the trees in the East Bay hills; about 82 percent are native species. The natives have pretty well adapted to fire. In general, they don’t burn as hot as the non-native species, nor do they ignite as easily.

Hill area residents and managers of land in Claremont Canyon agree that it is a good idea to control the spread of non-natives in order to reduce fire risk. The trick is to gain control of the non-natives without going broke in the process. As a professor emeritus of agricultural economics I’m concerned that “managing” our hill-area eucalyptus forest (that is, thinning rather than complete removal) could well break us. We like to see big trees. We enjoy their scent and admire their color, but we nevertheless recognize they are like candles waiting to be lit.

Current research and extensive field testing has shown that eucalyptus can be controlled by cutting them down and then within three or four minutes painting a one-inch-wide ring of herbicide around the perimeter of the stump.

This procedure results in a 95 to 98 percent kill rate, and prohibits resprouting from the root.

Estimates of the cost of removing trees range from \$5,000 to \$10,000 per acre. On the other hand, the cost of thinning ranges from \$4,000 to \$8,000 per acre but must be done every five years with no end in sight until all the large trees have fallen and all of the stump sprouts and seedlings have been cut and removed.

Removing eucs versus thinning them isn’t really much of a choice unless as a public agency one has a bottomless pocketbook and tax-payers who love to support tax levies. We cannot afford the indifference historically given to this issue in the East Bay hills. We have seen that a fast-growing, five-year old “sprout” can be as much as 55 feet tall and twelve inches in diameter. The labor needed to thin, that is to trim, cut, chip, and transport tons of biomass every few years, can be expensive and the use of heavy vehicles—bulldozers, large dump trucks, and tracked chippers or feller/bunchers—is hard on the soil and on plant life on the forest floor.

A good example of what Claremont Canyon could look like, however, can be seen today on the south side of Claremont Avenue—that is, just to the right as one heads up towards Grizzly Peak Boulevard—where eucalyptus were removed earlier in the decade. Native trees and shrubs were already there, but they were hidden under the eucs and suppressed by the lack of sunlight. Once they were released from that situation they began to prosper—to reveal their true beauty and habitat potential.

TEN YEARS AGO this area was an almost solid stand of eucalyptus. Now it is a handsome oak /laurel forest complete with an understory of native shrubs. This ongoing recovery has been entirely natural and spontaneous. Nothing was brought in and planted except a number of redwood seedlings that the Conservancy raised from seed collected from naturally-occurring redwoods high in the Oakland/Berkeley Hills.

We think the canyon is looking just fine. We urge you to see for yourself by walking one of the new trails that the Conservancy has helped build in the upper canyon. Signpost 29 is a good place to begin. It’s right on Claremont Avenue about a quarter-mile east of the intersection of Claremont Avenue and Alvarado Road.



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Restoration Takes a Leap Forward in Oakland's Garber Park

by Shelagh Brodersen

LAST MAY THE GARBER PARK STEWARDS were delighted to host students and their professor David Hanson from an environmental field course at Cal State East Bay. Led by Mike Vukman, restoration ecologist, this enthusiastic and fun group helped the stewards undertake the first year monitoring of the Measure DD-funded Harwood Creek Erosion Control Project in Garber Park. The CSEB students, under the guidance of long-term volunteer Bob Brodersen (bottom, right) collected all the data that will be used to make informed, long-term decisions in controlling bank erosion and enhancing the beautiful native habitat along Harwood Creek.

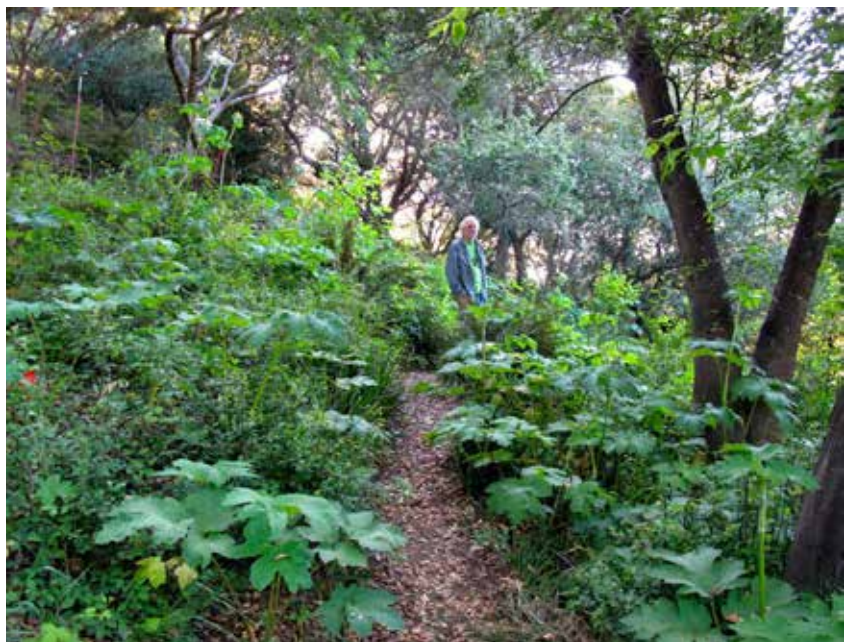
While Bob's group was tackling the rugged and steep slopes along Harwood Creek another group led by Garber Park volunteer Bob Strayer (in green shirt, opposite page) continued to remove invasive plants in Garber Park's restoration area. This group pulled and dug out Himalayan blackberry roots, poison hemlock, thistle, and an entire field of erhardta grass that was surrounding our newly planted natives. A truly awesome job.

Thank you Mike Vukman and Professor Hanson for choosing Garber Park for a hands-on educational experience in watershed restoration. We truly appreciate your help. And, a special thanks to the two Bobs for your leadership.

For more on the Garber Park Steward's activities see our blog: garberparkstewards.org.

STUDENTS FROM CAL STATE EAST BAY join the Garber Park Stewards (above) in John Garber Park, a 14-acre City of Oakland shaded woodland at the bottom of Claremont Canyon.

Two restoration champions: Bob Brodersen pictured below in a field of giant cow parsnips and Bob Strayer pictured on the opposite page (in the green shirt) standing with Shelagh Brodersen and Lech Naumovich in a field of horse tails. Garber Park's many native species are a sight to behold (close-up is of a giant cow parsnip blossom). Photos on this page by Shelagh Brodersen © 2013.



**Annual Meeting at the Claremont Hotel:
Bob Sieben and Mike Martin to Speak**
by Marilyn Goldhaber

MEMBERS, FRIENDS AND NEIGHBORS: You are invited to attend the Conservancy's Annual Meeting at the Claremont Hotel on November 17 (details on page 8). Once again we thank the hotel management for donating the meeting space and Star Grocery for donating libations.

After light refreshments and brief presentations from our board, we will hear two very interesting speakers including Battalion Chief Mike Martin from CAL FIRE who will briefly update us on wildfire in the state of California, including this September's Mt. Diablo "Morgan" fire, and our keynote speaker Bob Sieben who will tell us about the good work he has done in assuring better wildfire safety in the Oakland hills, particularly in and around the Hiller Highlands complex where he lives. What he has achieved will impress anyone living in the Easy Bay where we are vulnerable to wildfire every fall.

Bob, or I should say, Dr. Sieben, is well-known locally for his advocacy and volunteerism. A practicing neurologist, he first became interested in fire ecology in 1998 when he attended a CORE (Communities of Oakland Respond to Emergencies) meeting about earthquakes and wildfires. "The leader said that all you can do is evacuate so I decided not to be in that situation." Bob then went on to learn all he could at local and national meetings and generally immersed himself in learning about living at the wildland-urban interface. "Sort of like Thoreau's intense involvement in Walden Pond," he says. Soon Bob was scooped up by Councilmember Jane Brunner for Oakland's Wildfire Prevention Assessment District Advisory Committee, where he served three terms as a charter member and as chair.

Bob will speak about his 16 years of fire prevention efforts on the 14 acres of steep slopes below Hiller Highlands. His talk will feature a photographic review of the strategies used and the evolution of an attractive fire safe landscape over the years.

EVENTS IN THE CANYON

PLEASE JOIN US FOR OUR FALL/WINTER SERIES in Claremont Canyon. Stewardship outings include twice monthly (first Tuesday and third Saturday) restoration work in Garber Park in the lower canyon, in collaboration with the Garber Park Stewards, led by Shelagh Brodersen; and once a month for weed management and trail maintenance elsewhere in Claremont Canyon. Please check our website for meeting places and last minute additions and changes. When venturing into the canyon, it is good to wear long sleeves, long pants, sturdy shoes and a hat.

All of our events are free and open to the public. To RSVP or ask questions contact us through our website or email info@ClaremontCanyon.org. Be sure to sign up for



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our monthly email blasts if we do not already have your email address.

October 26—The Berkeley Project, 10 AM-3 PM. Cal students join again with Conservancy volunteers for a day of weed removal in the Claremont Canyon Regional Preserve led by Marilyn Goldhaber and Park District ranger Jeff Manley. Includes lunch for all volunteers. Come for an hour or stay all day. Meet at 10 at the main gate of the Clark Kerr campus, 2601 Warring Street.

November and December Stewardship Dates:

Nov 5 & 16, Dec 3 & 21 for Garber Park. Meet at the Evergreen entrance, 10 AM-noon. Nov 9 and Dec 14 for elsewhere in the canyon.

Claremont Canyon is the largest relatively undeveloped canyon on the western slope of the Oakland/Berkeley hills. Most of the canyon's watershed is owned by the East Bay Regional Park District, the University of California, the East Bay Municipal Utility District and the City of Oakland, with about one-fifth in private hands.

The Claremont Canyon Conservancy promotes the long-term stewardship of the entire watershed, coordinated among the stakeholders to preserve or restore a healthy native ecosystem, reduce wildfire hazards, and foster education and research.

Join the Conservancy:

Founding Sponsor: \$1,000 over 10 years.

Family Membership: \$50 per year.

Student or Limited Income: \$25 per year.

Contact Us:

PO Box 5551, Berkeley CA 94705, 510-843-2226

Email: info@ClaremontCanyon.org

Website: www.ClaremontCanyon.org

The Board of Directors: L. Tim Wallace, President; Joe Engbeck, Vice President; Barry Pilger, Treasurer; Marilyn Goldhaber, Secretary; Fred Booker, Steve Holtzman, Jon Kaufman, Jerry Kent, and Dick White, Members at Large.

The Claremont Canyon Conservancy News is edited by Marilyn Goldhaber and Joe Engbeck.

A Walk along the Hayward Fault with Geologist Andrew Alden

by Fred Booker

SATURDAY, LABOR DAY WEEKEND was a perfect day for a walk along the Hayward Fault with About.com geologist Andrew Alden. Thirty-four north hills residents met at the top of Dwight Way at 9 AM where we got our first introduction into movement along the fault as Andrew pointed out the displaced curbs just down the hill from where we stood.

The Hayward Fault is known as a right-lateral strike-slip fault, that is, displacement is to the right of the observer and horizontal rather than vertical. Another way of saying this is if you were to straddle the fault the right hand side of the fault would move towards you while the left side would move away from you no matter which way you were facing. The displacement, as Andrew described it, was due to slow aseismic creep (not characterized by earthquake activity) anywhere from 3 to 9 mm per year depending on location along the fault. Studies have shown that the greatest rate of movement occurs in the area around Fremont while between the Cal campus and Temescal Park movement is in the range of 4 to 5 mm per year. As easy as it was to see displaced curbs on Dwight Way, most of the physical manifestations of the fault that impact infrastructure are constantly being repaired so it is not readily evident where the fault lies. One has to look for geomorphic features (landscape forms), not covered by buildings, that can indicate the fault's presence.

From Dwight Way we walked south up to the Clark Kerr Campus soccer field and stopped at the southeast corner where we could see a creek emanating out of a small canyon. Andrew pointed out that many of the canyons that front the fault are narrower at their mouths than at their heads. This it was suggested is due to the rapid down cutting the creeks did as the hills were being uplifted. The upper canyon areas are less affected by the uplift at the mouth and thus eroded laterally widening the canyon whereas the mouth of the creek has to adjust to the sudden change in elevation across the fault.

From here we walked along the Panoramic Fire Trail to the water tank overlooking Stonewall Road where the discussion turned to other geomorphic features that reflected movement along the fault such as stream courses that come out of the west-facing canyons and are diverted north for a period before continuing westerly to the Bay. Strawberry Creek, Harwood Creek and Vicente Creek all reflect this trend. Much like the displaced curbs, creek channels on the east side of the fault are traveling slowly to the south while that portion of the channel on the west side of the fault are traveling slowly north and the creek does its best to catch up.

We had time to enjoy the view before heading downhill to Stonewall Road where we saw en echelon fracturing of the asphalt. The term en echelon refers to



A MAP SHOWS THE FIVE LOCATIONS where we paused on our walk to ponder the Hayward Fault. At the site of the EBMUD Stonewall water tank (Stop 2, above) geologist Andrew Alden (in pony tail and green shirt, below) reviews maps of locations where geologic studies helped define the fault and its rate of movement.



© 2013 Fred Booker

closely spaced, parallel or subparallel, overlapping or step-like tension fractures (minor cracks), which lie oblique to the trend (direction) of the fault.

We turned onto Tanglewood to enjoy the many beautiful homes that hark back to the early history of Berkeley with a stop for additional questions. As we headed back to campus there was one last stop at a staircase where the bending of the handrail suggested the presence of the fault.

One thing I took away from our morning with Andrew was that, despite the overwhelming scientific evidence as to the precise location of the fault, for most of us the interpretation of its existence is with a lot of arm waving and extrapolation.

The last business of the morning was a stop at Fournée Bakery for a well-deserved treat and fuel for the walk back up the hill to home.



HIKERS DESCEND the main fire trail of the Claremont Canyon Regional Preserve in lower Claremont Canyon (left).

In upper Claremont Canyon, land that was once water company property is now owned by UC. Old signs forbidding trespass, like the one pictured below, left, have been replaced with a friendly system of trails open to the public.

Trails in Claremont Canyon

by Joe Engbeck

THERE WAS A TIME SOME YEARS AGO when most of Claremont Canyon was off-limits to recreational hikers. I especially remember the perimeter fencing. It was about four feet high and consisted of multiple strands of barbed wire firmly attached to steel uprights. There were metal signs, too. One of them featured a whole list of things that were not permitted. Another featured black lettering on a bright yellow background. Typically, these signs were placed on the fence itself or on nearby trees where the message was still clearly visible but the sign was a bit harder for vandals to reach.

Roughly the size of an automobile license plate, the old signs made it clear that this was watershed land and that public entry to the area was prohibited. A section of the penal code was cited along with the amount of the fine for anyone caught violating the ordinance.

That was the situation during the 1930s and 1940s and on into the 1950s. Later, the East Bay Municipal Utility District adopted a more conciliatory stance toward recreational use of its watershed lands. Today, fences remain in some places to protect the watersheds of “terminal” reservoirs. But in other places, the fences are gone and the “No Trespassing” signs have been replaced by more attractive signs that simply read: “Protected Watershed, No Entry.”

More importantly, there are trails now where fences and signs once used an authoritarian or even hostile tone to discourage access. In Claremont Canyon, for example, the whole upper canyon was owned by EBMUD and closed to recreational hikers by means of barbed-wire fences, locked gates, and no-trespassing signs. Eventually, however, the upper canyon (approximately 120 acres) was classified as surplus to the needs of EBMUD and turned over to the Uni-

versity of California, which has been admirably supportive of trail development.

The Claremont Canyon Conservancy is now working with the East Bay Regional Park District to develop some version of the “cross-canyon trail,” which has been part of a long-range plan for nearly thirty years. This long-delayed trail development would start at Norfolk Road and go down through Gwin Canyon to Claremont Avenue. It would then cross the creek in the vicinity of Gelston Road before climbing up the south-facing slope of the canyon to Panoramic Ridge with its spectacular vistas of the San Francisco Bay Area and the forested slopes of upper Claremont Canyon.

If you would like to help plan or actually construct trails in Claremont Canyon please contact us through our website or email info@ClaremontCanyon.org.



Conservancy Prepares Press Package on Euc Removal

The Conservancy has prepared a four-page document that addresses major concerns that have been raised about the plan to remove eucalyptus trees from Claremont Canyon through a FEMA grant to UC Berkeley, the City of Oakland, and the East Bay Regional Park District. Material for the document was prepared in anticipation of FEMA’s issuance of the Final Environmental Impact Statement and FEMA’s certification of it later this fall. Those events will trigger release of funds to enable the trees’ removal.

Among other questions, the Conservancy addresses the extremely flammable nature of eucalyptus trees and their debris, the weather conditions that exacerbate the risks, why chemical treatment of tree stumps is both necessary and safe and what will happen once the eucalyptus are removed. The document is now available on our website.

The Wisdom of Thinning Versus Removal of Blue Gum Eucalyptus

The 1995 the Hills Emergency Forum Fire Hazard Reduction Plan recommended thinning all hill area eucalyptus forests and removing the seedlings and stump sprouts that grew up after the 1972 freeze.

In 2010, the Park District's Fire Hazard Mitigation Plan and EIR recommended 20 to 25-foot spacing (100 trees per acre) for eucalyptus and pine trees, and 30-foot spacing for mature eucalyptus trees (50 trees per acre), and conversion of ridge top and residential-edge eucalyptus trees to native vegetation.

Cost projections for the Park District alone indicate a spending of more than 100 million dollars over the next 50 years to thin and maintain 60,000 aging blue gums on 1,293 acres. The actual cost may turn out to be in excess of \$100,000 per acre over the time period and must necessarily include the eventual removal of dead and dying trees that will have completed their life span.

The proposal to thin rather than remove planted, non-native trees is not realistic. It is neither feasible nor sustainable given current agency budgets. Our land managers need to identify the most efficient and economical way to make our hills safe from wildfire devastation. Only then will public agencies stand a realistic chance of obtaining the financial support they need from grants and taxes.

Jerry Kent

Living with Wildfire: Large Tree Quandary

by Jerry Kent

THE THREAT OF WILDFIRE IN THE EAST BAY HILLS has been recognized by all of the public agencies that own land in Claremont Canyon.

In addition, CAL FIRE places Claremont Canyon, along with other densely developed portions of the East Bay hills, in its Very High Fire-Severity Zone. A major contributor to the *very high* designation is the presence of dense plantations of eucalyptus, pine, and acacia. Local agencies, including the Hills Emergency Forum in their 1995 Fire Mitigation Plan, the East Bay Regional Park District in their 2010 Fire Mitigation Plan and EIR, and the consultants to FEMA in the recent 2013 East Bay Hills Hazardous Fire Risk Reduction EIS, concur that the East Bay hills have an unusually high wildfire risk due, in part, to those trees.

Most of the tree plantations in the hills are the result of large-scale business ventures featuring the very promising, fast-growing Tasmanian blue gum eucalyptus, Monterey pine, acacia, and cypress. These "pioneer trees," planted between 1870 and 1910, were expected to quickly create forests on land that was then considered barren. Local planters dreamed

of groves that would control sand, buffer winds, landscape new parks and universities, and provide mountain home sites. They would create timberland for reduced property taxes, increase the water supply by increasing fog drip, and, most important, generate revenue from the sale of hardwood lumber and other forest products.

The plantations can be traced back to Frank Havens and his Mahogany Eucalyptus & Land Company or to the Havens/Smith Realty Syndicate residential plantings. Unfortunately for Havens, blue gum wood was not suitable for commercial purposes and his timber venture was a complete failure. Ironically, while the plantations attracted early home buyers, they later contributed to home loss in the 1923, 1970, and 1991 fires.

Frank Havens' trees have now grown into thickets containing hundreds of variable sized trees. Some are mature trees of 24-plus-inch diameters, but each acre also includes numerous young trees and seedlings that increase the density and thus the fire hazard for both eucalyptus and pine.

Havens' original intent was to let his trees grow for ten or twenty years before harvesting them for lumber. His groves, however, were never harvested, or thinned, or otherwise maintained.

Several public agencies and a number of private landowners have acquired Havens' lands including 2,500 acres of eucalyptus and pine. Until recently, landowners have not worried too much about the general liability and increasing cost of growing large, flammable trees. Now, however, there is growing recognition that these trees are a major threat to the spread of wildfire and ongoing management is going to be costly.

Blue gums have dry, oily leaves and large amounts of peeling and shredded bark that accumulate on the forest floor. Once ignited, leaves, bark and duff are susceptible to lofting and downwind spotting by flying embers. In Australia this habit enabled the trees to spread out and survive wildfire. Here in California blue gums are often more than 150 feet tall. Fires that reach their crowns in high wind conditions are extremely dangerous.

Monterey pine is another potentially dangerous tree with abundant flammable resin and a tendency to shed large quantities of dry needles and thus provide an excellent source of kindling. With low-hanging branches and dense foliage, Monterey pines tend to burn quickly and at high temperature.

In a wind-driven fire, flames of both species can soar 100 feet above the forest treetops and throw burning embers a half-mile or more downwind. The removal of Tasmanian blue gum and Monterey pine forests is an essential step, along with better management of homes at the wildland urban interface, for reducing wildfire devastation in the hill area.

People tend to like big trees so it has not been easy for the public to recognize certain problems. Eucalyptus, Monterey pine, acacia and cypress, the pioneer trees that were planted in the late 1800s and early 1900s, are rarely

used today by landscape managers and city planners. As a general rule, these trees grow too large and become too difficult to maintain. They also suffer from pest problems and can be costly to treat or remove.

Living with the possibility of wildfire in the East Bay hills involves much more than reducing or eliminating tree hazards. Homes—especially those closely spaced on steep and windy slopes—are the most flammable “fuel,” far exceeding the fuel load and flammability of either wildland or backyard landscapes. Individual homes and residential neighborhoods in the hill area must meet fire and ember-resistance standards and have ample defensible space around them so that firefighters can control and eventually stop a fire.

Everyone needs to do their part on both sides of the wildland-urban landscape. There are many good sources that residence can use to learn how to protect their homes from wildfire. Oakland’s fire department has some excellent recommendations including “Fire Prevention Matters” by Bob Sieben. Copies will be available at our annual meeting on November 17, or go to the City of Oakland’s website and link to Oakland’s Wildfire Prevention Assessment District to access a copy.

Understanding the nature of wildfire and learning how to live with it is everybody’s responsibility.



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Wildfire Prevention Assessment District Oakland Residents Please Vote by November 13

In 2003, residents of the Oakland hills established the Wildfire Prevention Assessment District (WPAD) to provide annual funding to assist home and property owners in preventing urban wildfires through vegetation management and education. The legislation enabled this district for ten years. That ten years is up in January. In order to continue this work, the district must be renewed by voters living in the WPAD area (basically all of the Oakland hills, including Claremont Canyon.)

For the past 10 years, the WPAD has successfully reduced the risk of wildfires in our fire-prone Oakland Hills through:

- Goat grazing to clear brush
- Maintaining firebreaks
- Fire patrols on high fire danger days
- Roadside mowing
- Dead tree removal
- Brush cutting for emergency routes
- Free chipping/removal of branches

Registered voters who live within the boundaries of the district should receive a mail-in ballot by approximately October 21. Please mail it back to the City before Wednesday, November 13.

Keep Oakland Firesafe is a grassroots campaign to renew WPAD for another ten years. For more, go to www.keepeoaklandfiresafe.org.

BRIAN GATES OF EXPERT TREE SERVICE takes down a giant eucalyptus tree from the Eucalyptus Grove on the UC Berkeley campus.

UC’s grove was planted in the late 1800s as a windbreak for a running track that was located where the Life Sciences Addition now stands. Brian estimates that the tree was about 136 years old, one of the oldest in the East Bay and one of the original “pioneer” trees. The tree was an “unstable leaner” and had to be removed at a cost to UC of \$4,000. Brian says that there are 63 trees in the grove and they all have hazard tags for ongoing maintenance for safety.

Some trees in Claremont Canyon are as old as UC’s Eucalyptus Grove and may eventually have to be removed at substantial cost to the landowner.



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THE CLAREMONT CANYON CONSERVANCY

SUPPORTING THE LONG-TERM STEWARDSHIP OF CLAREMONT CANYON

Dear FRIENDS AND NEIGHBORS

Please join us on

Sunday, November 17, 2013, 4-6 PM

The Claremont Hotel

Annual Meeting

Reception	4:00 PM
Presentations	4:30 PM
Open Forum	5:30 PM

Keynote Speaker: Robert Sieben, MD, Charter Member
Advisory Committee for Oakland's Wildfire Prevention District
"Sixteen Years of Fire Prevention in a Parallel Canyon"

Complimentary wine bar and refreshments. Bring a friend or neighbor.

RSVP: info@ClaremontCanyon.org or call 510-843-2226