



# HILLS EMERGENCY FORUM

## Annual Report 2018



**City of Berkeley  
City of El Cerrito  
City of Oakland  
California Department of Forestry and Fire Protection  
East Bay Municipal Utility District  
East Bay Regional Park District  
Lawrence Berkeley National Laboratory  
Moraga Orinda Fire District  
University of California at Berkeley**



## **HEF Mission**

The mission of the Hills Emergency Forum is to coordinate the collection, assessment and sharing of information on East Bay hills fire hazards and further, to provide a forum for building interagency consensus on the development of fire safety standards and codes, incident response and management protocols, public education programs, multi-jurisdictional training, and fuel reduction strategies.



October 19, 2018

### Letter from the Chair

Dear Friends:

On behalf of the Hills Emergency Forum (HEF), I am pleased to report on the twenty-sixth year of HEF activities. The Hills Emergency Forum was formed in October 1992 in direct response to the need for a coordinated regional approach to urban wildland interface fires. The 2017 fires in California heightened community awareness of emergency preparedness and coordinated response. 2018 continued with record setting wildfires, reinforcing the importance of continued collaboration.

In May, HEF members briefed local media on how the hills fire agencies were preparing for the 2018 wildfire threats. Members urged hills residents to get ready for fire season and be ready if called upon to evacuate. New and updated public information was released throughout the year. In August, we had the opportunity to share lessons learned with thirty-two (32) participants from around the world through a field tour, as a part of the three-week US Forest Service International Disaster Management Seminar.

Members' fuel mitigation projects throughout the East Bay hills have expanded our system of strategic fuel reduction zones through use of goats, hand crews and machinery. This year, the East Bay Regional Park District began utilizing FEMA Pre-Disaster Mitigation grants, matched with local funds, for hazardous fuel reduction projects and will continue over the next ten years. Other grant programs through CAL FIRE, California Fire Safe Council, Diablo Fire Safe Council, Pacific Gas and Electric Company and USA Forest Service, have provided additional funds for projects in our region. A joint project at Russell Reserve, sponsored by multiple HEF members, benefitted from these grant funds. We look forward to 2019, when additional grant funding for hazardous fuel reduction projects has been awarded to East Bay Regional Park District and the University of California through the CAL FIRE California Climate Investments program.

The 2018 Annual Report serves to document positive changes our agencies have brought to the Oakland-Berkeley Hills region. This report highlights efforts of both Hills Emergency Forum and individual members during the past year; we recognize that our work is by no means completed.

On behalf of all the members of the Forum, I would like to thank the many individuals and organizations whose support and input have enabled us to advance our agenda of emergency preparedness.

We welcome your participation and comments.

Sincerely,

A handwritten signature in black ink that reads "Darin White".

Darin White, Fire Chief

City of Oakland  
HEF Chair 2017-2018

♦ City of Berkeley ♦ City of El Cerrito ♦ City of Oakland  
♦ California Department of Forestry and Fire Protection ♦ East Bay Municipal Utility District  
♦ East Bay Regional Park District ♦ Lawrence Berkeley National Laboratory  
♦ Moraga Orinda Fire District ♦ University of California Berkeley  
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## 2018 Highlights

1. **Sustained Multi-agency Partnership to Manage East Bay Hills Fire Risk.**
  - Interagency issues and collaboration with other agencies.
  - Mutual aid. Joint response/ mutual aid for wildfires fire both locally and outside of region.
  - Partnerships to reduce fire hazards including Student Conservation Association, Civicorps and groups such as Friends of Beaconsfield, Claremont Canyon Conservancy, Diablo Fire Safe Council, Garber Park Stewards and Kensington neighborhood groups.
  - Response to continued effects of drought, dead/ dying trees and increased risk of wildfire.
  - Grant Funding: CAL FIRE SRA California Climate Initiative, California Fire Safe Council and US Forest Service, Pacific Gas and Electric Company drought related funding.
2. **Mitigation Planning, Environmental Review and Research**
  - EBMUD Watershed Master Plan Update and EIR.
  - Updates of Local Hazard Mitigation Plans in Contra Costa County
  - Continued research on accelerating decomposition of woody debris.
3. **Vegetation Management**
  - Joint hazardous fuel reduction project at Russell Reserve. Partner projects with PG&E in Berkeley, Canyon and Orinda.
  - EBRPD: FEMA funded projects underway. Eucalyptus and other hazardous fuels reduced in several East Bay hill parks.
  - EBMUD: second growth eucalyptus thinning, pine bark beetle damaged pine removal, brush removal, mechanical mowing and native grassland enhancement.
  - Fuel reduction by goats on EBMUD, EBRPD, LBL, Oakland and UC Berkeley parcels throughout the hills.
  - Fuel removal projects by CAL FIRE/ CDC, Civicorps, Student Conservation Association and private contractor hand crews in El Cerrito, EBRPD, Oakland and Orinda.
  - Volunteer broom busting Oakland, El Cerrito Natural Area and UC Berkeley.
  - On-going maintenance of previous fuel reduction project areas.
4. **Outreach, Training, Emergency Exercises and Communications**
  - May 22, 2018 briefing for local media on how hills fire agencies are preparing for 2018.
  - Coordination of member public information officers and releases.
  - Update of EBMUD "Firescape: Landscaping to Reduce Fire Hazard."
  - Update of HEF "Wildfire Evacuation Tips" and website: [www.hillsemergencyforum.org](http://www.hillsemergencyforum.org).
  - Field tour for US Forest Service International Disaster Management Seminar.
  - Site visits to joint community hazardous fuel reduction projects in Orinda.

## **1.0 Hills Emergency Forum (HEF) Overview**

### **1.1 2018 Highlights**

The primary mission of the HEF continues to be to provide a sustainable framework for interagency communication, joint planning and coordinated response to the needs of our various constituents. The organization's goals, developed over the years and grouped into the four areas of Assessment, Mitigation, Preparedness and Response, continue to serve as milestones for our collective efforts. However, many of these goals are now in a "maintenance" mode as evidenced by the proposed 2018 Work Plan.

#### **Sustainability and Funding**

One of the on-going challenges faced by members is funding and implementing fuel reduction projects. The HEF continues to explore ways to make the forum sustainable, including pursuing additional funding mechanisms.

#### **Prolonged Fire Season Leads to Continued Wildfire State of Emergency Response Funding**

After a severe, prolonged 2017 fire season, HEF members continued to observe effects of long-term drought with an increase in pests and diseases, higher tree mortality and below normal fuel moisture levels earlier in the fire season, similar to what was being experienced throughout California.

Throughout the 2018 fire season, National Interagency Fire Center Predictive Services forecasted above normal significant fire potential conditions.<sup>1</sup> CAL FIRE received augmented funding to bring their staffing levels up early in the spring and retain staffing level as operationally needed through December 31st. Pacific Gas and Electric Company received a third year of drought response funding to increase their vegetation management efforts and support community fuel reduction projects through local fire safe councils and HEF member agencies.

#### **2017-2018 California Climate Investments (CCI) Grant Program and other Funding**

Through the California Climate Investments (CCI) Fire Prevention Grant Program, CAL FIRE aims to reduce the risk of wildland fires to habitable structures and communities, while maximizing carbon sequestration in healthy wildland habitat and minimizing the uncontrolled release of emissions emitted by wildfires. Three grants were awarded within the Santa Clara Unit. East Bay Regional will receive \$750,000 for hazardous fuel reduction in four wildland urban interface parks, protecting over 200,000 habitable dwellings. Diablo FireSafe Council will receive \$324,020 for hazardous fuel reduction in very high fire severity zones and locally identified high fire areas in Alameda and Contra Costa County. University of California Berkeley will receive \$3,621,000 for vegetation treatment in the Hill Campus to reduce potential damage to approximately 3,000 habitable structures and improve life safety for 3,000 plus residents and approximately 1,000 daytime users of the hill campus. For more information see [http://calfire.ca.gov/fire\\_prevention/firepreventiongrants](http://calfire.ca.gov/fire_prevention/firepreventiongrants).

UC Berkeley submitted three applications for hazardous fuel reduction projects in support of evacuation to the Federal Emergency Management Agency (FEMA) Hazardous Mitigation Grant Program. The campus submitted an additional application with the same program for the Blake Gardens site in Kensington. The grant application is for improved Defensible Space work at the site.

#### **EBRPD Measure CC Funding**

The District continues to move forward with planning and implementing fuels management on several sites within the Measure CC area. In 2018, the District's Fire Department will have treated over 800

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<sup>1</sup> Source [http://www.predictiveservices.nifc.gov/outlooks/monthly\\_seasonal\\_outlook.pdf](http://www.predictiveservices.nifc.gov/outlooks/monthly_seasonal_outlook.pdf)

acres using contractors, crews, and goats, including brush reduction and eucalyptus stand thinning. The EBRPD Board has placed an extension measure has been placed on the November 2018 ballot to continue local, voter approved funding. For more detail see their website at [www.ebparks.org/activities/features/measure\\_cc\\_commitments\\_made\\_improvements\\_delivered/default.htm](http://www.ebparks.org/activities/features/measure_cc_commitments_made_improvements_delivered/default.htm)

### **Interagency Issues and Collaboration with Other Agencies**

HEF members have a long history of collaborating with Fire Chief organizations including the Alameda County Fire Chiefs Association and Contra Costa County Fire Chiefs Association. This year, HEF members also continued their activities with local groups, and State and Federal Agencies. The group regularly outreaches to collaborate with potential partners with similar missions of fire safety, as well as assist other agencies to understand our unique fire related issues.

Alameda County Fire Chiefs and Contra Costa County Fire Chiefs Associations: HEF Fire Chiefs continue to be active with these two organizations.

CAL TRANS: At the request of the Oakland Fire Department, CAL TRANS completed vegetation removal along both Highway 580 and Highway 13. CALTRANS removed hazardous ground fuels, brush, sapling invasive tree species (eucalyptus and acacia) and dead trees from 106<sup>th</sup> Avenue on Highway 580 to the intersection of northbound Highway 13 and Highway 24 on both sides of the freeways and the center divider median. Additionally, CAL TRANS used goats to graze approximately 110 acres of State owned lands along Highways 24 and 580.

Civicorps: Over the years, many HEF members have contracted with Civicorps (formerly East Bay Conservation Corps) for crews for fuel reduction projects. In 2018, EBRPD continued to use Civicorps and California Conservation Corps crews to enhance the existing fuel breaks by cutting, piling, and burning 1-hour and 10-hour fuels in Redwood Park, Anthony Chabot Park, Leona Open Space, Tilden Park, and Wildcat Canyon Park.

National Weather Service: The Monterey Forecast Office of the National Weather Service provides HEF members vital fire weather updates several times a day that are instrumental in developing local urban interface and wildfire response plans. For more information on fire weather updates see [www.wrh.noaa.gov/Monterey/](http://www.wrh.noaa.gov/Monterey/). Area wide outlooks and updates of seasonal predictions can also be found at the Northern California Geographic Area Coordination Center (ONCC) [gacc.nifc.gov/oncc/predictive/outlooks/index.htm](http://gacc.nifc.gov/oncc/predictive/outlooks/index.htm). For most of 2018, Predictive Services in their Seasonal Outlook and National Significant Wildland Fire Potential Outlook, reported that the fire potential would increase to above normal over northern California due to the 2017-18 rainy season producing 150-300% normal precipitation and a robust fine fuel crop and brush growth. Warmer and dryer than normal conditions are expected into the fall months.

Claremont Canyon Conservancy: HEF members continue to actively collaborate with this non-profit group on fuel management and restoration projects in Claremont Canyon. The citizen-based Claremont Canyon Conservancy focuses on long-term stewardship of Claremont Canyon to reduce wildfire hazards, improve public access and preserve or restore a healthy native ecosystem. The University of California Berkeley (UCB) and the Conservancy continue to implement the joint stewardship Memorandum of Understanding for select UC lands. The Conservancy continues to host monthly volunteer work projects toward fire management and revegetation efforts in the canyon. In 2012 East Bay Regional Park District and the Conservancy developed an on-going Right of Entry agreement, which has been renewed annually and allows neighborhood groups to conduct fuel reduction work on District lands. Several volunteer sessions were held in Claremont Canyon to find and remove eucalyptus, pine and acacia sprouts, as well as controlling broom and improving the trails needed to provide emergency access. East Bay Municipal Utility District (EBMUD), who own lands in the canyon,

also coordinates with the organization. For more information see their website at [www.claremontcanyon.org/](http://www.claremontcanyon.org/).

**Fire Safe Councils:** HEF members are regularly involved with the Diablo Fire Safe Council (representing Alameda and Contra Costa Counties), the Santa Clara County Fire Safe Council and the California Fire Safe Council. These groups provide the opportunity to collaborate with local homeowners, businesses and policy makers. For more information see their websites at: [www.diablofiresafe.org](http://www.diablofiresafe.org), [www.sccfiresafe.org/](http://www.sccfiresafe.org/) and [www.firesafecouncil.org](http://www.firesafecouncil.org).

HEF members coordinate with Diablo Fire Safe Council (DFSC) to develop grant proposals for fuel reduction, education and outreach projects throughout Alameda and Contra Costa counties. In 2018, DFSC completed two federal grants: \$178,320 to continue “filling the gaps in defensible space projects” throughout the two counties and \$260,000 for a community hazardous fuel reduction program for the communities of Orinda, Moraga and adjacent EBRPD lands. DFSC completed a State grant from the CAL FIRE SRA grant program for projects in Sunol. They also received \$75,000 in grant funds from Pacific Gas and Electric Company to work with community members in Alameda and Contra Costa Counties and the Sunol Fire Safe Coalition. Matches to these federal and state dollars are from local funds, such as EBRPD Measure CC funds, in-kind service from HEF members and local fire agencies, as well as sweat equity from residents. Projects included chipping and fuel reduction in HEF member communities of Canyon, Berkeley, El Cerrito, Kensington, Moraga, Oakland, Orinda and Sunol. Grant funds were used to support fuel reduction along the City of Oakland right of way on Grizzly Peak Boulevard and adjacent UC Berkeley lands. HEF members worked with other stakeholders to complete a community specific update for Sunol to the Alameda County Community Wildfire Protection Plan (CWPP), which was adopted in January of 2018. This type of planning process facilitates regional collaboration, as well as provides access to federal funding.

**Pacific Gas & Electric Company:** Pacific Gas & Electric Company worked with several HEF partners in 2018 to increase the amount of hazardous fuel reduction around their transmission and distribution lines. These included projects with University of California, Berkeley on Panoramic Hill and at the Lawrence Berkeley Laboratory. They also worked with Moraga Orinda Fire District (MOFD) and City of Orinda for a project along Miner Road, as well as with MOFD and East Bay Municipal Utility District in the community of Canyon.

In 2018 PG&E rolled out their Community Wildfire Safety Program. This includes a dedicated center to monitor wildfire risks in real time and coordinate prevention and response efforts and expansion of the PG&E weather station to enhance weather forecasting and modeling. They are also investing in longer-term electric system hardening with stronger, coated power lines and non-wood material poles. In January 2018 the California Public Utilities Commission adopted new High Fire Threat District Maps. HEF member jurisdictions include areas identified as Tier 3- Extreme risk for wildfire and Tier 2- Elevated risk for wildfire. Enhanced safety measures in these areas also include refinement of protocols to proactively turn off electric power where extreme fire danger conditions are occurring. More information is available at [www.pge.com/en\\_US/safety/emergency-preparedness/natural-disaster/wildfires/community-wildfire-safety.page](http://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/community-wildfire-safety.page)

## **Mitigation Planning and Research**

This past year HEF members have assisted in discussions of planning, environmental compliance documents and research related to urban wildland fire and fuel removal.

### **Complying with SB1241 for Wildfire Safety**

Senate Bill 1241 was signed into law in 2012 and requires counties with the State Responsibility Area (SRA) and with lands designated as “*Very High Fire Hazard Severity Zones*” in Local Responsibility Area (LRA) to comply with revised Government Codes and changes in the Public Resources Code. HEF

members continue to improve wildfire safety in conjunction with revisions to the General Plan Housing Element and the Safety Element.

### **Oakland Vegetation Management Plan and Environmental Impact Report**

The Oakland Vegetation Management Plan and Environmental Impact Report (EIR) addresses how vegetation is managed on more than 1,400 acres of city owned property and treatment of approximately 300 miles of roadway. Vegetation management activities conducted on these lands currently includes goat grazing on nine sites covering approximately 1,300 acres, vegetation clearing along 16 roadways (58 miles), monitoring for vegetation clearance along approximately 300 miles of road within the High and Very High Fire Hazard Severity Zones (16.5 square miles), and brush clearance on critical City-owned properties (~332 acres). The Plan and EIR evaluate these and additional vegetation management practices to reduce fire hazard. A draft plan was released May 2018, with draft environmental report expected in April 2019, and final EIR and certification/ notice of determination anticipated at the end of 2019. For more information see <https://oaklandvegmanagement.org/>

### **East Bay Watershed Management Plan**

East Bay Municipal Utility District updated their Watershed Management Plan in 2018. The plan will help reduce the threat from wildfire to life and property, while preserving the high quality drinking water and biodiversity for the citizens of the East Bay. The management plan included an initial study and negative declaration to comply with the California Environmental Quality Act.

### **Local Hazard Mitigation Plans**

In 2018 City of El Cerrito adopted an update to its Local Hazard Mitigation Plan (LHMP). The plan was included as an annex to the Contra Costa County plan also adopted in 2018. The LHMP serves as a coordinating document to help reduce risks from a wide range of potential events -- earthquakes and floods to wildfires and extreme heat. The Contra Costa County LHMP covers more than three dozen local agencies and special purpose districts, including HEF members Kensington Fire District and Moraga Orinda Fire District.

On August 22<sup>nd</sup>, The State Board of Forestry and Fire Protection approved the 2018 Strategic Fire Plan for California. The plan represents a vision for a natural environment that is more fire resilient, buildings and infrastructure that are more fire resistant, and a society that is more aware of and responsive to the benefits and threats of wildland fire, all achieved through local, state, federal, tribal, and private partnerships. Since the last plan update in 2010, State fire officials say it appears the impacts of climate change have resulted in increased severity of wildfires, longer fire seasons, increased extreme weather conditions, historic drought, and led to California's worst tree mortality epidemic in history. The new plan addresses those issues and highlights the need for heightened levels of fire prevention and protection of natural resources. The Santa Clara Unit Strategic Fire Plan was updated in 2017. <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf1591.pdf>

### **Research Developments and Sharing of Best Management Practices**

In 2018, EBMUD continued field testing fungi to break down plant matter. Thirty eucalyptus stumps treated with mushroom spawn showed diminished re-sprouting on most stumps and many stumps with no re-sprouts at all. Treated pine tree logs showed mycelium and fruiting bodies on many logs.

Staff Liaison Committee site visits to share best management practices included visits to two multi-agency projects at Bear Ridge and Happy Valley Road in Orinda. These projects were undertaken in collaboration with two homeowner associations, Moraga Orinda Fire District and CAL FIRE.

## Vegetation Management

Extraordinary rains after years of drought meant above average dry fuel conditions for Bay Area fire protection agencies. This past year we have continued to focus on expanding fuel mitigation projects throughout the East Bay hills. We have expanded the system of strategic fuel reduction zones through use of goats, hand crews and machinery.

The management strategy for some of the projects promotes a forest conversion: the more fire resistant emerging native forest of California bay, oak, maple and redwood are retained or augmented while the fire prone existing eucalyptus/pine/acacia dominated exotic canopy forest are eradicated. The native species produce either considerably lesser fuel loads or are most fuel productive well before the peak of the regional fire season. Projects this last year included thinning pine and eucalyptus stands to reduce fuel loading and ladder fuel continuity, while promoting a healthy and vigorous understory of native plants. Other projects reduced fire hazards through the use of hand crews, grazing animals or use of prescribed fire to reduce fuel volumes and eliminate ladder fuels.

During the removal projects, the more fire resistant native trees were protected, while the trees with high fuel loads were removed and their stump cambium chemically treated with herbicide to prevent re-sprouting. Felled trees were either chipped or retained whole on the project site. Removed stems were recycled as roadside timbers, retained as habitat, or positioned for erosion control on the project site. Projects included:

- **East Bay Regional Park District (EBRPD)** completed pile burning in several of their hill parks to remove cut biomass. Much of this year's focus was on maintaining over 800 acres of existing East Bay hills fuel breaks by weed-eating, mechanical and hand removal of brush, goat grazing and eucalyptus stump re-sprout control.

In 2018, the Park District began implementation of the FEMA hazard mitigation grant, removing hazardous fuels on several sites in Tilden, Wildcat, and Anthony Chabot parks using contractors and Civicorps.

- **East Bay Municipal Utility District (EBMUD)** managed vegetation to reduce fuel loading on 20 acres along the Oakland/Berkeley watershed interface. Combined management tactics, including herded goats, mechanical mowing and hand labor, were used to reduce fuel loading and enhance native plant populations. A volunteer group continues to assist in the removal and reduction of noxious weeds and in the enhancement of the diverse and abundant native plant species growing throughout the fuel treatment area. With support from Cal Fire Conservation Crews, EBMUD Rangers removed 580 decadent Monterey Pine trees and burned 370 brush piles on the east side of San Pablo Reservoir. EBMUD and Cal Fire Conservation Crews continued thinning and removal of eucalyptus trees and the understory vegetation at California Shakespeare entrance. Cal Fire crews and EBMUD rehabbed and continue the maintenance of the Sleepy Hollow Elementary emergency exit trail.

- **City of Oakland** The Oakland Fire Department has a dedicated Vegetation Management Unit within the Fire Prevention Bureau. The Unit is responsible for inspecting City owned parcels, managing fuel reduction in open space and parklands, inspecting private property vacant lots, responding to complaints of fire hazards and enforcement on chronic non-compliant residential and vacant lot properties. The Unit is staffed with full time inspectors.

Fuel breaks are treated and maintained through a variety of means within the City's approximate 1,300 acres of parklands and open space primarily in conjunction with their extensive goat grazing program. In 2018, City Council approved 5-year goat grazing contract for \$2.6 million to continue the program. The following locations were grazed resulting in achieving the goal of

ground fuels vegetation not exceeding 4 inches in height within 100 feet of established fuel breaks and access fire trails for Type III and Type VI apparatus.

- Sheffield Village
- Joaquin Miller Park
- Shepherd Canyon Park
- Kings Estates
- Grizzly Peak Open Space
- Dunsmuir Heights
- Castle Canyon Open Space
- Knowland Park
- Oak Knoll Naval Redevelopment

The hazardous fuel reduction enables firefighters to establish a safe anchor point when responding to wildland fire events. Additionally, Oakland did follow up treatment on 7 acres broom removal project adjacent to the Shepherd Canyon Public Works yard. In 2017 they removed 40 tons of broom; this year the follow-up removed 6 tons.

Joint Projects: Working together with East Bay Regional Parks Fire Department, U.C. Berkeley, PG&E and East Bay Municipal Utility District, Oakland Fire's Vegetation Management Unit was able to reduce hazardous vegetation through roadside clearances, fuel breaks and goat grazing throughout the Oakland Hills. Major fuels reduction occurred inside the Shepherd Canyon area where EBRPD grazed their hillsides, PG&E cleared their transmission line right of ways of brush and dead trees and EBMUD cleared vegetation from all of their water reservoir properties. U.C. Berkeley assisted in roadside clearances along upper Claremont Avenue to Fish Ranch Road. Thank you to our partners in Fire Prevention for your assistance and cooperation.

- **Lawrence Berkeley Lab (LBL)** has completed all of the recommendations in its previous 10-year Wildland Fire Plan. The Berkeley Lab is expanding their fire protection program. A new fire management plan was completed to comply with federal requirements. LBL continues to maintain their property using goat herds and hand-labor to reduce annual fuel loads. This year they increased their use of goats with 400-700 goats on the lab for 4-5 weeks, with additional resources directed to tree removal. Invasive eucalyptus and diseased/dead trees of other species were removed and chipped in conjunction with low-level limb maintenance and other surface fuel removal
- The **El Cerrito / Kensington Fire Department** continues to aggressively manage the fire fuel loads, fire trail and the fuel breaks within their 90 plus acres of city owned natural parkland and the miles of urban interface with Wildcat and Tilden Regional Parks. This is achieved through multiple partnerships with Diablo Fire Safe Council, East Bay Regional Park District, CAL FIRE and their own community groups. Their fuel management efforts include: prescribed burns and mechanical methods (i.e. weed eating, chainsaw and mowing). Since 2012-13 the El Cerrito / Kensington has significantly reduced the acreage of prescribed burns with no broadcast burns this year due to the extreme fire hazard brought on by drought. During 2018 they completed tree and brush removal projects. These included private residential and commercial properties.
- **Moraga Orinda Fire District** sponsored two joint projects with the CAL FIRE Conservation Crews, and Diablo Fire Safe Council along Bear Creek Ridge and Orinda Downs Open Space. In collaboration with the Diablo Fire Safe Council, MOFD also worked with the communities of Bollinger Canyon and Canyon for community chipping days, as well as a juniper removal project in Sleepy Hollow. A collaborative pilot project was also completed with MOFD, PG&E, and the City of Orinda for line clearance, road paving and removal of hazardous roadside vegetation on Miner Road from Lombardy to San Pablo Dam Road.

MOFD's new Fire Chief David Winnacker was active throughout 2018 meeting with homeowner and community groups to talk about wildfire prevention, early warning systems,

evacuation and hazardous fuel management. In addition to vegetation management, MOFD added two 10,000 gallon water tanks at Sleepy Hollow School and Wagner Ranch School for firefighting. They also identified critical water sources in Bollinger Valley and provided new fittings. A new tiller truck also was added in 2018.

- **University of California, Berkeley (UCB)** continues to work with its Fire Mitigation Committee to plan and implement fire hazard reduction projects in the Hill Campus. UCB has focused on defensible space and maintenance, while planning for future projects. UCB has managed, extended and improved its 8-mile trail network, cleared roadsides, turnouts and neighborhood interface zones with contract crews. Removal of parking along Rim Way improved emergency access and reduced congestion.

During 2018, the campus contracted crews to perform French broom removal along Centennial Drive. The crews removed broom from each side of the road up to 30 feet. Cut broom was subsequently treated with herbicide. The work will continue next year as the campus moves to improve evacuation and access along established evacuation routes.

In August, PG&E and UCB met to review a project to remove dead and dying pines along Panoramic Way. UCB worked closely with PG&E to reduce the impact of this project on the community by providing access to the project via the hill campus fire roads. The work consisted of removing over 50 hazardous, aging Monterey Pine and Cypress trees. The campus hosted a neighborhood meeting that resulted in complete neighborhood support of the work.

In August, UC Berkeley was selected for a \$3.6 million grant from CAL FIRE to reduce fire hazard in the Hill Campus and improve access, egress and carbon sequestration. The grant funds will be allocated over the next three years and will be instrumental in improving fire safety within the UC Berkeley Hill Campus. With the award of the CAL FIRE grant UC Berkeley is required to prepare appropriate documents. The campus is in the process of developing a Request for Proposal and Qualifications for a consultant to prepare the documents. The documents will not only cover the scope of the grant work, but also encompass all work planned for the foreseeable future.

Diablo Fire Safe Council awarded \$5,000 cost share to support use of the Cal Fire Conservation Crew on the Russell Reserve and adjacent EBRPD lands. In 2018 the project completed defensible space work around the observatories and road entrance. PG&E completed removal of trees under distribution lines and over gas lines. The project will continued to focus on reducing fuel loads and fire ladders to reduce the chance for a fire to move over the ridge from the reserve into the neighborhoods of the City of Lafayette. UC Berkeley led the coordination of the Russell Reserve joint project, a collaboration of UC Berkeley, East Bay Regional Park District, Contra Costa Fire Protection District, Moraga Orinda Fire Department with CAL FIRE Conservation Crews. In addition, the local chapter of the Society of American Foresters has adopted the Reserve as a “project”, sponsoring an open house on April 21, 2108, several work days and more to come.

Cal FIRE firefighters and Conservation Crew members participated in a one-day training exercise at Russell Reserve. The crews felled over a dozen aging, hazardous pines at the site.

- **CAL FIRE Santa Clara Unit**

The CAL FIRE Director set goals for FY17-18 for acres of prescribed fire, acres of hazardous fuels reduction and number of defensible space LE-100 inspections. Santa Clara Unit treated 648 acres using prescribed fire with EBMUD and MOFD at Briones Reservoir, as well as at Grant Ranch County Park. CAL FIRE is continuing to work with the Regional Air Quality Control Board with additional prescribed fires being planned in the Unit. The unit also

completed 138 acres of hazardous fuel reduction projects, as well as 3,513 LE-100 defensible space inspections around homes. Overall the State met 95% of its prescribed fire acre, 65% of its fuel reduction projects acres and 87% of its defensible space inspection goals.

In addition to vegetation on public lands, HEF members work with property owners to enforce local requirements for hazard abatement and creation of defensible space on private lands.

- **City of Berkeley:** The Berkeley Fire Department annually inspects over 1,000 parcels in designated high fire risk zones for hazards such as excess vegetation. This year due to excessive vegetation cover City of Berkeley included inspection of 330 additional parcels with no additional staffing. The Fire Department also conducts complaint-driven inspections throughout the City. Residents must clear combustible brush and vegetation adjacent to building property lines and roadsides. Tree branches must be cleared from any chimney, stovepipe, or overhang over a building. All leaves, needles, and dead vegetation must be swept from roofs. This program is operated in cooperation with the East Bay Regional Park District, which has programs to limit combustible material in the wildland-urban interface zone on its property adjacent to Berkeley residences and roadways.
- **City of El Cerrito and Kensington Fire Protection District.** The City of El Cerrito and the Kensington Fire Protection District began vegetation and fire safety inspections of every one of the 10,500 plus properties within their jurisdictions and completed the inspection in early June. As a result, more than 192 letters of non-compliance were sent to property owners informing them of their violations and directing them to bring their properties into compliance with the vegetation management standards. All but three properties voluntarily brought their properties into compliance. The City abated the three properties that did not comply.
- **City of Oakland:** The City of Oakland Fire Department Fire Prevention Bureau staffs a Vegetation Management Unit specifically for the wildland urban interface areas of the city. This unit consists of four Inspectors and one Supervisor. The unit is responsible for overseeing and maintaining the records of over 21,000 residential inspections and 4,000 vacant lot parcels within the WUI area. This area is 10,590 acres in size, approximately 16.5 square miles with over 300 miles of interior roadways. In 2018 OFD brought on line a new ACCELA database to maximize efficiency of inspections and reporting. The system allows for data entry during inspection and automatic generation of letters to property owners.

In May and June of 2018, annual vegetation management inspection training was conducted with Oakland Fire's firefighters. The Engine Companies received 2.5 hours of inspection training regarding residential defensible space inspections and the ACCELA database. The 11 Engine Companies located in the Oakland Hills completed over 19,000 initial residential inspections (compliant parcels) and 2,800 re-inspections on non-compliant residential parcels between July and September 2018. Vegetation Management Unit Fire Inspectors completed inspections on 2,020 privately owned vacant lot parcels, 416 City owned vacant lot parcels and 2,018 residential parcels between May and September 2016. As of September 2018 a total of 18,889 residential parcels and 1,389 vacant lots were compliant with Oakland defensible space requirements. 670 residential parcels and 523 vacant lots were non-compliant.

- **Moraga Orinda Fire District:** Moraga Orinda Fire District sent out notices in mid April to all 4,000 homes in their District. A second mailing was sent to those living in the high fire severity zone. They began follow-up inspections in June and continued throughout the fire season. 2018 continued a program enhanced with outreach and education. Fire personnel offered homeowners home assessments with more detailed advice on abatement and remodeling of their homes. Firewise activities included assessments for homes in Lost Valley.

To support the various City inspections and required compliance, some vegetation management programs offer services to assist homeowner in reducing fuel loads on privately owned property. City of Berkeley's Fire Fuel Chipper Program is a popular yard waste collection service. The program serves properties in the hills from June through September each year. The Department of Public Works Solid Waste Division coordinates the Fire Fuel Debris Bin Program. The Program delivers and removes 30-yard roll-off boxes from requesting neighborhoods, an effort yielding an average of 20 tons of plant debris per year. Additionally, 14,000 tons of residential plant debris is collected annually through weekly curbside collection. From mid-June to mid-August each year, a fire fuel abatement program removes an average of 125 tons of debris from 95 public sites, including parks, pathways and medians. This program is a joint effort of the City of Berkeley and the East Bay Conservation Corps.

### **Biomass Utilization**

Disposal or use of biomass continues to be a major issue with the large hazardous fuel reductions projects currently underway. University of California Berkeley has begun discussions with PG&E about biomass utilization and the potential development of a regional gasifier. As part of the CAL FIRE grants recently award to UC Berkeley, further research will be conducted regarding installation and operations of a mobile, on-site gasifier.

### **Use of CAL FIRE Conservation Crews**

Alameda and Contra Costa Counties are two of the few counties in the state that do not contain a CAL FIRE Conservation Camp. The nearest facility is the Delta Camp out of Suisun City. The CAL FIRE Conservation Crews have been used successfully on several local fuel mitigation projects in the East Bay. In 2002 a sixth crew was established in the Delta Camp and has been an asset to the Bay Area.

A joint HEF member agency project along Grizzly Peak Boulevard project focused on road-side clearance of brush and pruning up trees located in the road right of way from Claremont Avenue in Oakland to Centennial Road in Berkeley. This 7.1-mile stretch is both a commute route and a popular destination for locals and tourists for spectacular views of the San Francisco Bay, resulting in an increased potential for ignitions. This project supported other HEF agencies' projects along Grizzly Peak Boulevard.

An additional, multi-year, joint HEF member agency project using the Conservation Crews continued at the UC Berkeley Russell Reserve located on Happy Valley Road. The Russell Reserve project includes removal of understory shrubs and small trees, pruning of lower limbs and removal of dead and dying trees to reduce the potential of a crown fire on the valley floor. Along the southern ridge, similar fuel reduction will prevent a fire from spreading into the adjacent neighborhoods in the City of Lafayette.

This past year the CAL FIRE Crews assisted with brush cutting and pile burns in several maintenance areas on EBRPD lands in the East Bay Hills. They worked with cutting brush, trimming trees, creating brush piles and conducting pile burns from cut materials on EBMUD watershed lands, adjacent to Grizzly Peak Boulevard, and the San Pablo Reservoir Recreation Area. Their work included hand thinning to reduce fuel loading and preparing for pile burns later this winter.

The El Cerrito/ Kensington Fire Department has developed a partnership with CAL FIRE and their Conservation Crews. This partnership has been instrumental in the maintenance of crucial fire fuel reduction zones between their Natural Area Parks and the neighborhood interface zones surrounding these parks. This relationship has been so effective that El Cerrito/ Kensington Fire Department has expanded the program and the partnership with East Bay Regional Parks (EBRPD) to maintain the existing fire fuel reductions zones along the miles of EBRPD parkland urban interface with the City of El Cerrito and the Community of Kensington.

The Moraga Orinda Fire Protection District and the Town of Moraga, in partnership with CAL FIRE and Diablo Fire Safe Council, utilized the Conservation Crews for a project on Mulholland Ridge in Moraga.

The crews removed brush, cut dead trees and limbed up branches of aged Monterey Pine trees along the old ridge top roadway.

### **Prescribed Burn Program**

Prescribed fire continues to be used by the East Bay Regional Park District, City of El Cerrito and East Bay Municipal Utility District, in cooperation with local fire agencies in the Berkeley-Oakland hills. This past year, pile burns were conducted in Tilden, Wildcat, Sibley and Anthony Chabot Regional Parks, on the San Pablo Watershed and in El Cerrito's Hillside Natural Area. Written plans are prepared for each project, with agency staff working closely with the Bay Area Air Quality Management District (BAAQMD) and CALFIRE for approvals and coordination with local fire agencies. Incident Action Plans are written for each project to define procedures for establishing control lines, making proper notifications, briefing personnel on safety considerations, managing smoke and applying appropriate burning techniques. The prescribed burns enhance firefighter skills and interagency cooperation, in addition to meeting resource and fuel management goals.

Prescribed burning within the City of El Cerrito has been used for more than twenty years to reduce wildland-urban-interface fuels. In recent years, prescribed burns have been conducted in conjunction with mechanical means of vegetation management. This year El Cerrito restricted their prescribed burning to pile burns due to the extreme fire hazard brought on by the years of drought. They instead focused more on hand labor to remove heavy brush and limb trees. Historically, the brush and branches that were cut were either chipped in place and broadcast spread in the area or moved to safe areas and piled for burning. By taking this approach they were able to reduce the fuel loads in areas that were considered unsafe for prescribed burning. This has enabled the City to provide pinpoint accuracy in reducing the fuels that create the greatest risk of wildland-urban-interface fire loss within the City.

The City of El Cerrito and the community of Kensington continue to manage their two demonstration vegetation management projects, along Leneve Place to Camp Herms, developed in conjunction with the East Bay Regional Park District. They continue to manage 90 acres of city property with a year round program that use hand labor, control burns and mechanical methods to maintain fuel management zones at the borders of the city and parklands.

## **Preparedness**

### **Evacuation planning**

After the 2017 fires in the North Bay, HEF members increased their focus on helping their communities prepare for evacuation. City of Berkeley expanded their wildfire evacuation preparedness including new materials on when and how to evacuate at <https://www.cityofberkeley.info/WildfireEvacuation/>. A new evacuation brochure and map of potential routes was developed and widely distributed, including through Berkeley High School students. In Kensington, their April annual wildfire safety presentation focused on *Ready! Set! Go!*, highlighting evacuation and the community warning systems. An article in the monthly Kensington Outlook reinforced that "emergency preparedness must start block by block."

Lawrence Berkeley Lab provided a campus-wide training/ informational session on evacuation planning and general wildland fire safety to its general population. The training session included the concept that a site-wide evacuation may not be a realistic or executable strategy, and rather some personnel may need to relocate to pre-specified buildings known as SAFE Buildings (Safety Area For Emergencies). Evacuation history has demonstrated that approximately 2 hours are required to completely evacuate the Lab; therefore, alternative options were developed. Additional information covered the FireWise program, defensible space, and what to do in a wildfire emergency at home, on vacation, or at the Lab. Much of this training was spawned from LBL personnel attending the National Fire Academy's class on "Wildland Urban Interface: Fire Adapted Communities."

In conjunction with the Russell Reserve hazardous fuel reduction project, UC Berkeley drafted an evacuation guide to inform first responders of resources available. HEF SLC members reviewed and updated the “Wildfire Evacuation Tips” and “Why is Evacuation from Wildfire Different?” available on the HEF website <http://hillsemergencyforum.org/wildfireevacuation.html>. They also shared new research findings such as “Should I Stay or Should I Go Now? Or should I Wait and See? Influences on Wildfire Evacuation Decisions.” <https://www.fs.usda.gov/treesearch/pubs/55590>

## **Ignition prevention**

In April 2018, CAL FIRE Santa Clara Unit shared copies of their “Operational Guide for Use of Equipment in Grass, Brush or Forest Covered Areas” with HEF member agency representatives. Each year, the region experiences vegetation fires started by local agency mowing, equipment operations and private residences yard mowing. Mower use can ignite fires even with the relative humidity at 30% or higher. The document offers guidelines for:

- Equipment inspection prior to working season and in preparation for each work day (including: spark arrestors for all equipment powered by an internal combustion engine)
- Tools required on each piece of equipment (including: round pointed shovel and backpack pump water (5 gallon) fire extinguisher)
- Operational procedures within 24 hours of a predicted red flag event as determined by the National Weather Service, including on-going weather sampling and immediate operations cessation if relative humidity is at or below 30% or sustain wind speeds reach 10 mph or higher
- Applicable laws and regulations
- Contact information
- Equipment Use Safety.

Guidelines apply to both agency owned and hired or contracted private equipment and operations. CAL FIRE also partnered with the California Wildland Fire Coordinating Group to promote the “One Less Spark, One Less Wildfire” campaign. <http://www.preventwildfireca.org/OneLessSpark/>

HEF is also interested in developing remote surveillance to increase regional detection capabilities. The surveillance could be through remote devices, cameras, or potentially drone operations. The goal of the surveillance devices is early detection of ignitions and other potential hazardous behavior to support rapid response.

UC Berkeley Facilities Services recently funding a comprehensive patrol of the area through UC Police Department. The Hill Patrol, consisting of UCPD Security Patrol Officers, tours the area bi-monthly and reports on activity and conditions along established fire roads and trails.

## **Weather Monitoring and Fire Danger Operations Plan**

The local uses of Remote Automated Weather Stations (RAWS) data are important. Weather information is used to maximize the efficiency and effectiveness of fire patrols and deployments. National Weather Service (NOAA) forecasters in Monterey issue Fire Weather Watch and Red Flag Warnings for the East Bay (see web site at [www.wrh.noaa.gov/Monterey/](http://www.wrh.noaa.gov/Monterey/)). These watches and warnings trigger heightened alert and deployment of additional local fire suppression resources when responding to a fire. RAWS provide more current local microclimate data in five zones that can be used to confirm the NOAA red-flag warning. This confirmation of local weather can prevent the over deployment of resources when the local conditions are not as severe as general statewide conditions. Occasionally, local RAWS data will also provide data that recommends the use of additional suppression resources even when no NOAA red-flag warning has been issued. These red-flag warnings and fire weather watches signal cooperative patrols throughout the high hazard areas. The information is also used by EBRPD, Oakland and El Cerrito as a part of their high fire danger park announcements, use restrictions and to set dispatch levels by EBRPD, LBL, Berkeley, Oakland, El Cerrito and EBMUD. The data from the

RAWS can be accessed at a web site developed by the East Bay Regional Park District at [www.ebparks.org/about/fire/raws](http://www.ebparks.org/about/fire/raws).

### **Mutual Aid**

HEF agency personnel and equipment participated in the suppression of several large fires throughout California during 2018. EBRPD personnel staffed OES engine 348 on the Cranston Fire, in Riverside County, and the Mendocino Complex Fire. Berkeley Fire sent personnel to the County Fire in Yolo County in July. Local firefighters also provided mutual aid to the Lake County fire and others in northern and southern California.

In addition to record setting fires across the state, there were several local fires during 2018. Fortunately these remained relatively small. Prior, hazardous fuel reduction efforts and coordinated response resulted in no damage to homes or loss of life.

- Tunnel Road, Oakland (near Firestorm Memorial Garden) 1.5 acres. June 7, 2018.
- La Salle Drive, Moraga. 5 acres. June 8, 2018.
- Buckingham Fire, Moraga. 45 acre Ignition caused by tractor installing defensible space adjacent to 20 homes. Evacuation required. July 2, 2018.
- Lime Ridge Open Space, Walnut Creek. 368 acres Crystal Ranch subdivision evacuated June 29, 2018. Restarted June 30 and burned additional acres.
- Marsh Fire along Marsh Creek Road, Morgan Territory. 247 acres Wed July 24 - July 25, 2018 Mandatory evacuation lifted Friday 7/26.
- Canyon, multi-agency response, September 13, 2108.

### **Interagency Exercises and Preparedness Training**

In August 2018, CAL FIRE, EBMUD, Moraga Orinda Fire District and Contra Costa County Fire District conducted a wildland training burn on the Briones watershed near Bear Creek and Happy Valley Roads in Orinda. The exercise allowed for not only fuel reduction, but also multi-agency drill using live fire.

In December 2017 Lawrence Berkeley National Laboratory completed an annual drill focused on a simulated evacuation event.

City of Berkeley Fire Department conducts regular training and drills to keep firefighters ready to respond to a wind-driven WUI fire in the hills, which could transition into a fast-moving urban firestorm in the flatlands. All firefighters are certified in basic wildland firefighting and receive four sessions of wildland training, including fire behavior, structure protection, tactics and off-road driving. All firefighters receive annual training to understand “fire weather” and to perform surveillance of critical fire weather patterns. Additionally, firefighters hone these skills in annual wildland firefighting training drills with Alameda and Contra Costa Counties, as well as regional communications and staging drills to familiarize outside agencies with Berkeley target hazards and staging areas. The department also provided extensive off-road driver training. Due to the extreme drought conditions the department has provided additional training for the potential extreme fire behavior.

The University of California, Berkeley is creating an updated Wildland Fuel Management Plan for the Hill Campus. During 2018 the campus continued the process of developing GIS layers for fire management in the Hill Campus, including access and gates, management responsibilities, water supply, and treatment history. All are compatible with and available to HEF members. The University shared the spatial data with the City of Berkeley so they can include it in their response maps. The University of California Office of Emergency Management developed an ‘app’ to assist awareness of students and staff of the need for emergency preparedness plans and to help development individual plans. It is at <http://oem.berkeley.edu/download-our-app-main-page>.

## **Heli-tack Support**

EBRPD maintained its two helicopters, Eagle VI and Eagle VII, for use on fires this year. During the prolonged hot, dry months of the summer and fall, the Helicopter Unit teams up with the EBRPD Fire Department to provide Heli-tack and water bucket responses to fires. Bambi Bucket® equipment is carried on all routine patrol flights, enabling a rapid response to fires. If a fire should erupt, the Bambi Bucket is quickly attached to the helicopter for direct attack. Ponds, streams and lakes are ready water sources for providing rapid delivery of water on active fires via the Bambi Bucket. During times of extreme fire hazards, selected, specially trained Park District Fire Fighters act as Heli-tack crewmembers and are transported swiftly to fires. Once deployed at the fire scene, Heli-tack crews act in concert with the water-dropping helicopter in an effort to extinguish fires quickly.

## **Outreach, Media Relations and Disaster Communication**

### **Public Outreach**

HEF members have used a variety of methods over the years to distribute fire safety information to their constituencies including newspaper articles, brochures and hands-on workshops in neighborhoods. During “Red Flag” days many HEF members fly fire weather flags at fire stations, on the watershed and at recreation facilities. These bright red pennant flags were provided in 2008 by the Diablo Fire Safe Council to increase public awareness of periods of increased fire danger. Several members also participated in open houses at local fire stations during National Fire Prevention Week in October. Berkeley hosted a community wildfire forum in July.

Throughout 2018, HEF SLC members continued their public outreach efforts. In May, HEF members briefed local media on how the hills fire agencies were preparing for the 2018 wildfire threats and urged hill residents to prepare for fire season and be prepared if called upon to evacuate. New and updated public information was released throughout the year including an update to the EBMUD booklet “Firescape: Landscaping to Reduce Fire Hazard.” HEF SLC members reviewed and updated “Wildfire Evacuation Tips” and “Why is Evacuation from Wildfire Different?” available on the HEF website <http://hillsemergencyforum.org/wildfireevacuation.html>. Lawrence Berkeley Lab and Moraga Orinda Fire District installed new fire danger signs. HEF members also supported the California Native Plant Society in distribution of their new “Fire Recovery Guide,” available digitally at <https://www.cnps.org/give/priority-initiatives/fire-recovery> and through CNPS’s Sacramento Office.

HEF members also coordinated their public information officers with updated contact lists and invitation to participate in monthly meetings. A presentation by MOFD Emergency Preparedness Officer Dennis Rein shared lessons learned during large fires and the continual challenge of delivering unified messages during complex incidents.

In September 2018, the City of Oakland developed a public service announcement on the importance of defensible space and hazardous fuel reduction. Aerial footage shows how the partnership of homeowners and agencies is making a difference in reducing the fuel loads of the East Bay Hills. The PSA will be shown on the Oakland station KTOP TV10 <https://www.oaklandca.gov/topics/ktop-tv-10>. High definition aerial footage was also shared with HEF member agencies.

### Training:

City of Berkeley provides a 20-hour training to give residents the skills to organize on their own when disaster strikes and ensure they’re ready with crucial information when emergency crews arrive. The CERT academy, run by the Berkeley Fire Department, is a city program that brings free training to Berkeley residents, who can then go on to take more specialized classes and share information with their neighborhood groups. The weekend training program teaches participants how to set up a chain of command structure and organize into key groups with the aim of turning a chaotic situation into order. Training modules include fire suppression, search and rescue operations and disaster first aid.



## 2018 HEF MEDIA OPPORTUNITY *Hills Fire Agencies* **Prepare for 2018 Wildfire Threats**

On Tuesday, May 22, at 11:00 AM, representatives from Alameda and Contra Costa fire agencies briefed local media on how the hills fire agencies are preparing for 2018 wildfire threats. The media opportunity was held on Grizzly Peak Boulevard at the site of the “Grizzly Fire,” above University of California, Berkeley and Lawrence Berkeley National Laboratory.

The August 2, 2017, “Grizzly Fire” showcased success from working together to prevent wildfire. Approximately 200 fire fighters from 14 Alameda and Contra Costa fire agencies contained the “Grizzly Fire.” There were many favorable conditions that resulted in successful firefighting that day: previous hazardous fuel management, fire agencies’ response through the mutual aid system, rapid public notifications, closures and evacuations. However, the Grizzly Fire also highlights opportunities for improvements as fire agencies recognize wildfire as a year-round threat.

Participants at the media opportunity included representatives from:

- Alameda County Fire Department
- CALFIRE
- City of Alameda Fire Department
- Berkeley Fire Department
- East Bay Regional Parks District
- El Cerrito – Kensington Fire Department
- Lawrence Berkeley National Laboratory
- Moraga – Orinda Fire District
- Oakland Fire Department
- University of California Berkeley

Media that attended and produced stories urging hills residents to prepare for fire season and be prepared if called upon to evacuate, included:

- Berkeleyside (on-line 400,000 views/month)
- KCBS Radio
- KNTV - NBC Bay Area/ Telemundo
- KRON 4
- San Francisco Chronicle (164,800 daily circulation)



Noah Berger / Special To The Chronicle



Daphne White, Berkeleyside



David Yee



Noah Berger / Special To The Chronicle

*The Hills Emergency Forum facilitates a cooperative approach among nine governing organizations addressing urban wildland interface fire issues in the Oakland-Berkeley hills.*

The City of Oakland Fire Department's Emergency Management Division has a similar training program called Communities of Oakland Respond to Emergencies (CORE). This includes workshops where participants received training in Fire Prevention, First Aid, Evacuation Preparedness and Community / Neighborhood Disaster response. CORE also provided classes with interpretation in Spanish, Cantonese, Mandarin and Vietnamese.

In March, EBMUD, with assistance from HEF SLC members, incorporated presentations on vegetation management for fire prevention into their annual staff training workshops on Integrated Pest Management. These workshops highlighted how EBMUD staff work contributes to ignition prevention, improved fire control, as well as use of prescribed fire.

Lawrence Berkeley Lab provided a campus-wide training/ informational session on evacuation planning and general wildland fire safety to its general population. (See Evacuation Planning on page I.II. For further detail)

Media Coverage: HEF members regularly contribute and share relevant information in local and national news coverage and special interest series that address wildland fire safety, fuel management and other environmental issues such as reduced visibility and degraded air quality. 2018 news stories included:

California News Wire Services. "Overnight Fire in Oakland Hills Tamed by 3 departments." Piedmont Patch. June 7, 2018.

White, Daphne. "Urban wildfires are the new normal and everyone should be prepared, Berkeley Filmmaker Says. Berkeleyside. May 21, 2018.

Kundu, Anisa. "Berkeley air quality safe despite wildfire in Yolo County." Daily Californian. July 3, 2018.

"Bay area sky turns orange as northern California wildfire forces evacuations." Associated Press. July 2, 2018

Due, Linnea. "Emergency Preparedness must start block by block." Kensington Outlook. March 2018.

Gomez, Mark. "No spare the air alert in effect for Saturday." San Jose Mercury News. August 24, 2018.

Hurd, Rick. "Three alarm wildfire contained near Campolindo." East Bay Times. July 3, 2018. "Three-Alarm grass fire in Moraga contained, evacuation order lifted (20 homes evacuated)." KPIX TV. July 2, 2018.

Hurd Rick. "Fire crews extinguish wildfire near Campolindo High School in Moraga." Bay Area News Group. June 8 2018.

Johnson, Autumn. "Moraga Brush Fire: 45 acres charred." Patch National Staff. July 2, 2018.

Stone, Erin. "Large brush fire forces evacuations near Moraga High School." SF Chronicle. July 2, 2018.

#### Community Outreach:

In May, several members of the HEF SLC participated in the *California Fire Science Consortium "Living with Fire in California's Coast Ranges"*. This conference was designed to provide an understanding the October 2017 Fires for property owners, the public, policy makers, planners, managers, scientists, educators, and any others who are interested in the intersection of human communities and fire. The event was sponsored by a coalition of educational, fire and resource management, and extension organizations. Two days of presentations by experts, with question-and-answer sessions and ample opportunity for audience participation was followed by a day of field tours.

<http://www.cafiresci.org/events-webinars-source/category/livingwithfirecoastranges>

In summer 2018, Diablo Fire Safe Council and CAL FIRE Santa Clara Unit joined the residents of Sunol expanding their defensible space education program and fuel reduction activities. Through funding from Pacific Gas and Electric Company that paid professional crews to remove dead and dying trees and a

chipping program that leverage homeowners sweat equity efforts to remove vegetation fuels from around their homes

This past year also saw continued outreach and coordination with local neighborhood groups. East Bay Regional Parks District partnered with Diablo Fire Safe Council and the Kensington homeowners to facilitate the neighborhood group's efforts through a right of entry agreement to reduce fuel levels on public lands adjacent to their homes. A similar right of entry partnership has also been established with the Claremont Canyon Conservancy in Claremont Canyon.

Moraga Orinda Fire District hosted two open house / safety fair events to provide residents with information about emergency preparedness and wildfire risk reduction. Regional partners participating in these events included Diablo Fire Safe Council, Red Cross, Community Emergency Response Team, Contra Costa County Community Warning System, East Bay Regional Park District, East Bay Municipal Utility District and Pacific Gas & Electric

UC Berkeley Facilities Services and the Cal Forestry Club continue their annual reforestation project on Tightwad Hill above Memorial Stadium. Over 20 Forestry Club members planted over 100 native trees and shrubs throughout the are. The Campus has a strong interest in continuing the annual work.

#### Presentations and Tours

**Society of American Foresters (SAF):** The Society of American Foresters, along with UC Berkeley Facilities Services and the Cal Forestry Club, hosted an Open House at the Russell Reserve site in Lafayette. The event was geared towards introducing the public to not only the site, but also to the many community groups performing land management, wildlife and native plan advocacy. Over 25 community members visited the site. UCB is investigating the idea of hosting another Open House in the near future.

**International Seminar on Disaster Management:** On August 13, 2018, HEF SLC members hosted a field tour for the US Forest Service International Programs Disaster Management Seminar. The program shares U.S. expertise with an international audience helping them build capacity in their own countries and develop a network of disaster managers worldwide. Thirty two participants attended from 23 countries. Attendees were representatives from national, regional and municipal disaster management offices, the US Agency for International Development (USAID), US Embassies and USFS International program. Five of the participants have direct responsibility for wildfire related activities. Other participants are concerned about disaster management and risk reduction from both natural and man-made disasters. The program showcased disaster management systems at the federal, state, local and private levels. HEF focused on the 1991 Tunnel Fire and lessons learned. Presentations included an overview of the Tunnel Fire with footage from the fire, background on the HEF and a driving tour of the fire area. They also participated in a computer simulations exercise based on the 2017 Tubbs Fire. The day provided a variety of opportunities for interaction and highlighted the Hills Emergency Forum cooperative approach.

**Web Site:** The Forum pursues effective methods of communicating information on East Bay hills fire hazards and mitigation techniques. The HEF continues to update their web site to provide information on the forum, fire hazards in the East Bay hills and fuel mitigation <http://www.hillsemergencyforum.org>. The e-mail address provides another point of access for residents at [hillsemergencyforum@comcast.net](mailto:hillsemergencyforum@comcast.net).

#### **Legislative Outreach**

Since the formation of the HEF, members have provided support to state legislators to help shape legislation related to fire safety and fuel mitigation. The HEF continued to monitor legislative issues and the impact of current and past legislative.



**2018  
DISASTER MANAGEMENT SEMINAR  
USDA FOREST SERVICE INTERNATIONAL PROGRAMS**

On August 13, 2018, HEF SLC members hosted a field tour for the 2018 International Seminar on Disaster Management through the USDA Forest Service (USFS) International Programs. The seminar shared U.S. expertise with an international audience helping them build capacity in their own countries and develop a network of disaster managers worldwide.

32 participants attended from 23 countries:

Bangladesh	Bhutan	Botswana	Brazil
Chile	Ethiopia	El Salvador	India
Indonesia	Malasia	Morocco	Mozambique
Myanmar	Namibia	Nigeria	Palau
Peru	Philippines	Russia	South Africa
Tunisia	Ukraine	Uzbekistan	

Attendees were representatives from national, regional and municipal disaster management offices, the US Agency for International Development (USAID), US Embassies and USFS International program. Five of the participants have direct responsibility for wildfire related activities. Other participants are concerned about disaster management and risk reduction from both natural and man-made disasters.

The 15-day seminar showcased disaster management systems at the federal, state, local and private levels. HEF members focused on lessons learned from the 1991 Tunnel Fire. Presentations included an overview of the Tunnel Fire with footage from the fire, background on the HEF and a driving tour of the fire area. The group visited the area impacted by the Tunnel Fire. They also participated in a computer simulated wildfire exercise based on the 2017 Tubbs fire.

The day provided a variety of opportunities for interaction and highlighted the Hills Emergency Forum cooperative approach. Speakers included representatives from:

- CAL FIRE Santa Clara Unit
- East Bay Municipal Utility District
- East Bay Regional Park District
- Oakland Fire Department
- Moraga Orinda Fire District.



*The Hills Emergency Forum facilitates a cooperative approach among nine governing organizations addressing urban wildland interface fire issues in the Oakland-Berkeley hills.*

Sudden Oak Death (SOD). In 2018 HEF members continue to be affected by and to monitor the spread of this disease in the region. Members received up to date science-based recommendations on SOD management and treatment from a 4-hour training on 4/18/18. The SODMAP Project (SOD Blitz) is a partnership of scientists and citizens, working together to create the most complete distribution map of a forest disease ever produced in North America. The SOD Blitz training of 2018 took place April through June. Results are typically released in the Fall at [https://nature.berkeley.edu/matteolab/?page\\_id=148](https://nature.berkeley.edu/matteolab/?page_id=148). In 2016, the surveys documented a substantial increase in SOD from 2015 levels associated with high rainfall levels. 328 Blitz volunteers surveyed nearly over 14,300 trees. The first outbreaks of the pathogen south of Monterey County were documented. It was also found for the first time on Mount Diablo and in the City of Piedmont. In the East Bay-West (UC Berkeley) area 739 trees were surveyed with 5.8% showing symptoms. 241 trees were sampled with 18.3% testing positive for the pathogen (estimated true infection rate 6.4%). The infection rate was higher in the East Bay-East areas where 654 trees were surveyed with 13.3% showing symptoms. 75 trees were sampled with 29.3% testing positive for the pathogen (estimated true infection rate 4.7%). Past surveys have identified the pathogen on UC Berkeley Campus and southward movement of SOD in the Orinda area. Both Alameda and Contra Costa County are under State and Federal quarantine. This quarantine placed special rules regarding movement and use of susceptible plants, as well as sanitation practices that must be followed to minimize spread of the pathogen. While the course of the disease is unpredictable and variable, death of the shrub or tree is almost certain. The pathogen is known to attack 17 species, 16 of them found in California including madrone, bay laurel, redwood, Douglas fir and two species of native oaks. The three-step SOD management practice has been updated. Up-to-date information can be found through the at [https://nature.berkeley.edu/matteolab/?page\\_id=2345](https://nature.berkeley.edu/matteolab/?page_id=2345).

Light Brown Apple Moth (*Epiphyas postvittana*): Early spring 2007, an outbreak of light brown apple moth was positively confirmed in Alameda and Contra Costa counties. The moth is considered a High-Risk pest; if left unchecked it has the potential for significant economic losses due to major impact on fruit crops. During 2017, quarantines remain in effect restricting intrastate shipment of plant materials, including biomass from fuel reduction projects. The moths live on eucalyptus and can affect a wide variety of plants. All materials leaving the counties must be inspected, including materials produced during fuel reduction projects.



## **ANNUAL ROTATION OF HEF CHAIR**

2019	University of California, Berkeley
2020	City of Berkeley
2021	Lawrence Berkeley National Laboratory
2022	City of El Cerrito
2023	California Department of Forestry and Fire Protection
2024	Moraga Orinda Fire Protection District
2025	East Bay Municipal Utility District
2026	East Bay Regional Park District
2027	City of Oakland



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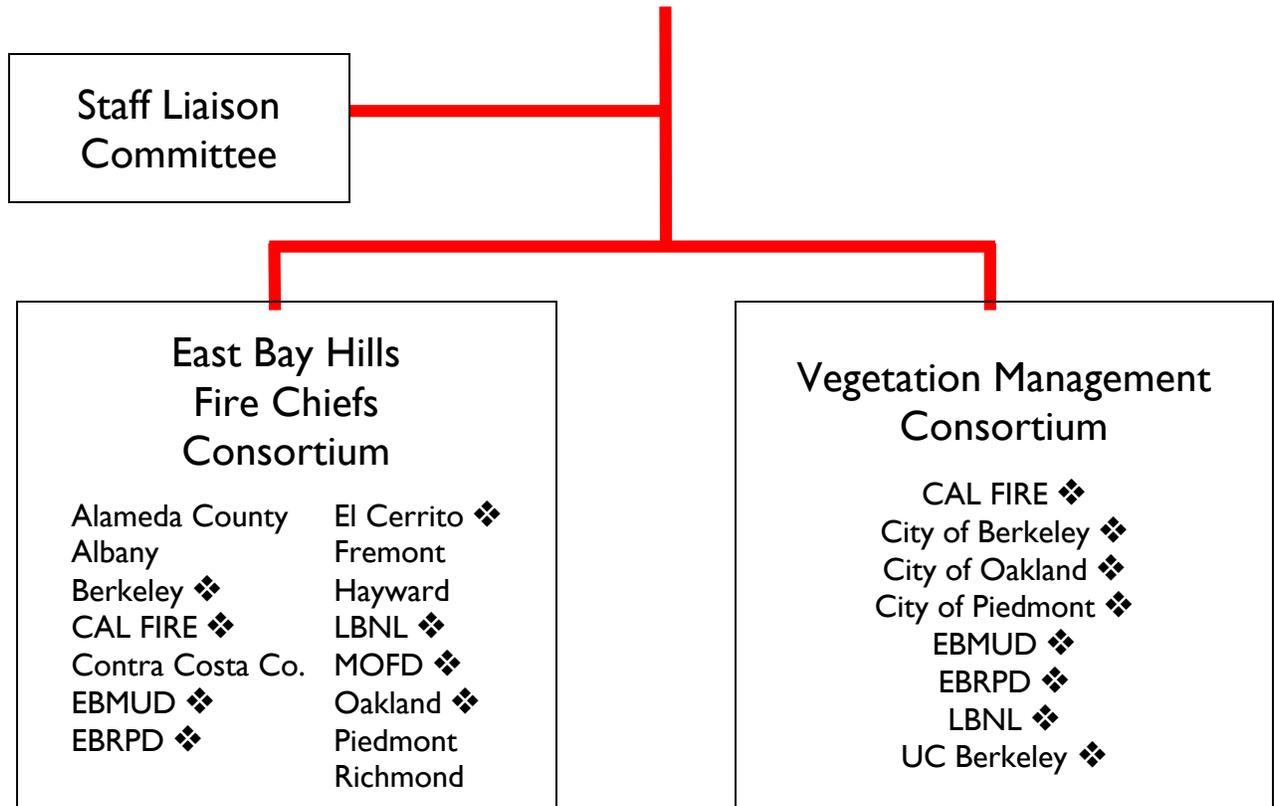
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9/10/18

# Organization Structure



City of Berkeley  
 City of El Cerrito  
 City of Oakland ☆  
 California Department of Forestry and Fire Protection (CAL FIRE)  
 East Bay Municipal Utility District (EBMUD)  
 East Bay Regional Park District (EBRPD)  
 Lawrence Berkeley National Laboratory (LBNL)  
 Moraga Orinda Fire Prevention District (MOFD)  
 University of California, Berkeley ☆



☆ 2019 Chair  
 ☆ 2018 Chair  
 ❖ HEF Member

## **2.0 Report Background and Overview**

This report describes activities undertaken to achieve the HEF's 2018 workplan. The workplan, which appears in the Appendices, identified goals and projects in four critical areas of emergency management: assessment, mitigation, preparedness and response. It sets a milestone or due date for action and it designates the lead or responsible standing committee, organization or jurisdiction. We have organized the report by these goals and include the group with the primary responsibility.

### **The Staff Liaison Committee:**

The HEF's administrative component -- the Staff Liaison Committee (SLC) -- is comprised of representatives from all member agencies. The SLC is responsible for developing and monitoring progress on the Forum's annual workplan, analyzing HEF policy issues for agency executives, identifying issues for possible legislative support, and coordinating the HEF annual public meeting.

Two subcommittees are activated by the SLC as needed to address specific issues -- the East Bay Fire Chiefs (EBFC) and the Vegetation Management Consortium (VMC).

### **East Bay Fire Chiefs**

EBFC consists of the chief officers from fire departments in Alameda and Contra Costa Counties and representatives of allied agencies, such as the California Department of Forestry and Fire Protection (CAL FIRE). It aims to standardize equipment and training for the two counties, assure coordinated responses to major incidents, and educate the East Bay community about wildland fire safety. Fire Chiefs from the East Bay meet on a regular basis in conjunction with the Alameda and Contra Costa County Chiefs Associations.

### **Vegetation Management Consortium**

The VMC includes representatives from the East Bay cities, other public agencies and utilities, who have a stake in fire safety and fuel management in the East Bay hills. Its focus is fire-hazard reduction through vegetation management strategies.

The third section of the report summarizes the accomplishments of the HEF member agencies during 2018. All activities are discussed in terms of the four key areas -- assessment, mitigation, preparedness, response -- and in light of HEF's goals in each area. Finally, Section 4.0 is a summary of the proposed 20189 Goals and Workplan.

This report is not an exhaustive list of ongoing efforts by each agency to manage fire risk. It simply highlights important interagency efforts conducted under the Forum's auspices.

## 3.0 Workplan Accomplishments

### Assessment

**Goal:** *Assess critical infrastructure support systems, operation plans, and public concerns.*

**Objective:** *Continue quarterly meetings with fire jurisdictions regarding water supply and delivery issues.*

**Status:** The Berkeley Fire Department Disaster Firefighting Water System is operational for those times when the regular firefighting water system is not available or has limited flow. Department wide training was completed October 2010. The system has two 6,000 gallon per minute pumps HS-900s, six hose-layer units each with a mile of 12 inch ultra large diameter hose and the necessary connections to create a firefighting water main flowing up to 12,000 gallons a minute. Normal distance the hose can be deployed depending on elevation is three miles. Longer deployments of up six miles are possible at 5,000 to 6,000 gallon per minute flows.

The pumps do not depend on drafting for access to the bay or lakes for water. The system is truck transportable and the hose is deployed at speeds up to 15 mph. Deployment time from pump at water source to hose deployed with water flowing over a two mile distance is one hour or less depending on conditions with a crew of five people. The system has hose recovery units that assist loading hose back into the hose-layers. The equipment is containerized and only two transport trucks are needed to deploy the system.

In addition the system has a smaller pump HS 150 and 5-inch hose system, which can provide 1,000 gallon per minute flows over a mile for smaller operations or extension of the larger system. The system is not part of the mutual aid system at this time but regional events that impact on Berkeley could warrant use of the system outside of Berkeley.

The City of El Cerrito provides fire protection services for the adjacent unincorporated community of Kensington. The Kensington Fire Protection District continues to improve the waterflow at its interface edge with East Bay Regional Park District lands. This is a five-phase project of which, four of the five phases have been completed. Phase V of the project originally consisted of installing cisterns in strategic locations. Completion of geotechnical studies indicated the soil was unstable and would not support cisterns in close proximity to residential units. Because of this, phase V was reevaluated, and the determination was made that looping the existing fire mains would provide the best water supply for the area in consideration. Along with enhancing the areas of concern, they found the looping would greatly enhance the water main system in adjoining parkland urban-interface neighborhoods. They are currently working with property owners to establish easements to install new water mains to facilitate the looping of the fire main system. The City of El Cerrito has been undertaking a similar water flow study for their area.

The California Water/ Wastewater Agency Response Network (Cal WARN) supports and promotes statewide emergency preparedness, disaster response and mutual assistance matters for public and private water and wastewater utilities. At least annually, each of the 6 regional chairs provides member utilities an updated list of emergency contacts and a database of available equipment. Website: [calwarn.org](http://calwarn.org)

**Objective:** *Revise fire response plans to incorporate review comments.*

**Objective:** *Conduct annual review of local fire response plans for urban wildland intermix fires.*

**Status:** All participating fire jurisdictions have response plans for urban/wildland intermix fires in the East Bay hills. These plans identify equipment and staffing levels for different levels of response, incident coordination procedures and guidelines for resource deployment during major incidents, and are periodically reviewed and updated.

In 2011 the East Bay Regional Park District updated their Fire Danger Operating Plan. Fire restriction levels were supported with more focus on visitor behavior changes as fire danger increases. Additional minor adjustments were made in 2012. In 2018, the District's Fire Department continues to provide timely information on weather and fuel conditions to park staff, visitors, and contractors in the parks. The information is found on its webpage and through the use of fire danger rating signs.

The El Cerrito/Kensington Fire Department continues their commitment to maintaining complete comprehensive emergency response plans. In 2018 they completed, and the City Council approved and adopted, the updated Local Hazard Mitigation Plan (LHMP). The City of El Cerrito and the Kensington Fire Protection District have worked in conjunction with other Contra Costa County Cities and Special Districts to update and enhance their LHMP that identify risks within their jurisdictions and allow them be able to receive pre disaster mitigation grants. High-risk priorities identified in the LHMP include reducing the risk of wildfire within their jurisdictions. The Contra Costa County updated LHMP was also completed in 2018, and includes the communities of Kensington, Moraga and Orinda.

In addition to emergency response plans and the LHMP, the El Cerrito/Kensington Fire Department has an unyielding dedication to providing the most effective urban interface fire response possible. This has been demonstrated over the past couple of years by the purchase two type 3 fire engines. These engines are specifically designed for wildland and wildland-urban interface fires and have been strategically assigned to their two most demanding wildland interface stations.

City of Berkeley also adopted their updated Local Hazard Mitigation Plan in 2014 and City of Oakland in 2016. Both cities participated in the parallel but separate initiatives "Resilient Berkeley" and "Resilient Oakland." The programs were part of the Rockefeller Foundation 100 Resilient Cities program <http://www.100resilientcities.org/cities/>.

**Goal:** *Support continued funding for fuel hazard assessment and mitigation programs.*

**Objective:** *Develop plan for updating 1995 GIS base date (vegetation & residential hazard).*

**Objective:** *Re-evaluate programs in light of Proposition 218 funding challenges.*

**Status:** Agencies update data regarding their individual properties on an on-going basis. Forum members continue to search for an effective methodology to update the data on fuel hazard assessment on a region-wide basis.

Funding remains the primary challenge to completing the regional assessment update and mitigation programs. A variety of funding sources have been pursued at the Local, State and Federal levels.

EBRPD, UC Berkeley and the City of Oakland have continued to work with supporting Claremont Canyon Conservancy and their fuel removal projects in Claremont Canyon area to improve fire safety. The Claremont Canyon Conservancy continues to be a major supporter with both volunteers to assist in the management and stewardship of wildlands as well as financial gifts towards Claremont Canyon fuel reduction projects. EBRPD, El Cerrito Fire Department, Kensington Fire District, and Diablo Fire Safe Council have supported similar stewardship projects with the residents of Kensington and Berkeley along the interface with Wildcat Canyon and Tilden Regional Parks, as well as El Cerrito parklands.

The citizens of the City of Oakland voted in Fall 2004 to fund their Wildfire Prevention Assessment District (WPAD) to provide funding for a period of ten years. In November 2013 registered voters within the boundaries of the Oakland Wildfire Prevention Assessment District (WPAD) received mail-in ballots to vote for the renewal of the District. The results of the vote were just 66 votes shy of the 67% approval rating necessary. The final assessment for the WPAD was collected in 2014. The program expended all of those funds in 2017.

## **Prevention/ Mitigation**

**Goal:** *Incorporate recommendations from the Fuel Management Plan and support AB 337 information sharing requirements.*

**Objective:** *Incorporate the Fuel Management Plan (FMP) in all planning and mitigation projects.*

**Status:** The FMP has been incorporated into each member's guiding policy documents and projects that are underway.

**Objective:** *Monitor 2018 plans for goat-grazing and joint maintenance operations.*

**Status:** HEF members continue to benefit from joint Request For Proposal for multi-year contracts that were issued in past years. This resulted in a more coordinated effort throughout the region and the identification of new goatherds. Grazing has proven to be a cost-effective wildfire prevention measure in specific areas. Goat contractors have helped reduce fuel loads on properties managed by City of Oakland, East Bay Municipal Utility District, East Bay Regional Park District and Lawrence Berkeley Laboratory. Over 500 acres were managed using goats. This continues to be a popular fuel reduction technique with some neighboring residents, while being anathema to others. The City of Oakland issued new RFPs in 2018 and awarded multi year contracts, including for goat grazing with enhanced treatment precautions and controls. EBMUD continues using goats to reduce fuel loading and convert from brush to grassland.

**Objective:** *Share Geographic Information Systems (GIS) report and data with other agencies (upon request)*

**Status:** The GIS data was distributed to HEF members on CD-ROM. As the data is refined and updated it will continue to be shared with HEF members and others.

**Goal:** *Promote implementation of fire code compliance programs*

**Objective:** *Provide public education about code requirements.*

**Objective:** *Conduct and track inspections on private property.*

**Objective:** *Issue notices of violations, monitor corrective action.*

**Objective:** *Report on inspection and compliance programs.*

**Status:** During 2018, the **City of Berkeley** completed inspections with compliance for 100% of the over 1330 properties in the Berkeley Hazardous Fire Area. The Fire Department also conducts complaint-driven inspections throughout the City.

**El Cerrito** has over 4,000 properties it inspects in its very high fire hazard severity zones (VHFHSZ) and 6,000 properties outside of the VHFHSZ, with an additional 2,000 in Kensington. To date, the El Cerrito Fire Department continues a very proactive public education program to make the citizens aware of the extreme fire dangers in the community. Along with this public education, El Cerrito aggressively pursues citizen compliance with the City Council's approved vegetation management standards. These standards require property owners to maintain these minimum vegetation standards or risk having the City Council declare the properties a fire hazard and forcefully abating non-compliance properties. This past year, the fire safety inspection program had voluntary compliance rate over 99%. As a result the El Cerrito / Kensington Fire Department had to abate the fire hazard on only three properties this year.

**MOFD** inspected all of the properties in the Orinda and Moraga District to assure compliance with their vegetation management program. This includes about 1,800 properties located in the Very High Fire Hazard Fire Severity Zones. District staff works closely with property owners to educate as they bring their properties into compliance with District standards. If deficiencies are not corrected the District can place work orders to have the work done and the property owner is billed for the work. This year over 99% of properties complied with District standards.

**Oakland** In May and June of 2018, annual vegetation management inspection training was conducted with Oakland Fire's firefighters. The Engine Companies received 2.5 hours of inspection training regarding residential defensible space inspections. The 11 Engine Companies located in the Oakland Hills completed over 19,000 initial residential inspections (compliant parcels) and 2800 re-inspections on non-compliant residential parcels between July and September 2018. Vegetation Management Unit Fire Inspectors completed inspections on 2,020 privately owned vacant lot parcels, 416 City owned vacant lot parcels and 2,019 residential parcels between May and September 2018. As of September 2018 a total of 18,889 residential parcels and 1,389 vacant lots were compliant with Oakland defensible space. 670 residential parcels and 523 vacant lots are non-compliant.



**Goal:** Continue annual fuel reduction actions.

**Objective:** Continue annual maintenance of existing fuel breaks

**Objective:** Continue fuel reduction (including removal of hazardous trees on public property)

**Objective:** Evaluate options for restoring curbside vegetation recycling programs for private lands in hills (June – October).

**Status:** HEF members have continued and expanded on-going fuel reduction projects.

**East Bay Municipal Utility District (EBMUD)** thinned understory and expanded fuel treatment on the Oakland/Berkeley watershed interface. With support from Cal Fire Delta Camp crews, EBMUD Rangers removed 580 decadent Monterey Pine trees and burned 370 brush piles on the east side of San Pablo Reservoir. With support of Cal Fire Delta Camp, EBMUD continued thinning and removal of eucalyptus trees and understory vegetation at California Shakespeare entrance, and continued maintenance of the Sleepy Hollow Elementary School emergency exit trail. Combined management tactics, including herded goats, mechanical mowing and hand labor, were used to reduce fuel loading and enhance native plant populations.

**East Bay Regional Park District (EBRPD)** continued their on-going fuel mitigation projects using tree hand falling, prescribed fire, goats, mechanical treatments, and hand crews, maintaining over 800 acres of existing East Bay hills fuel breaks. These include removal of eucalyptus and Monterey pines, broom and other brush in existing fuel management zones along the urban wildland interface in Miller Knox, Tilden, Claremont, Sibley, Leona, Redwood, Wildcat Canyon, Lake Chabot, and Anthony Chabot Regional Parks. In 2018, the District began implementation of the FEMA hazard mitigation grant, removing hazardous fuels on several sites in Tilden, Wildcat and Anthony Chabot Regional Parks.

**UC Berkeley** continues to managed, extended and improved its 8-mile fire road/ trail network, cleared roadsides, turnouts and neighborhood interface zones with contract crews for fire access while addressing erosion and invasive species concerns. UCB has focused on defensible space and maintenance. Treatment areas include: near homes on Panoramic Hill, corporation yard in Strawberry Canyon, Russell Reserve, and reducing fire hazard in advance of football games on “Tightwad Hill” is ongoing.

The cities have found creative ways to find dedicated funding sources for urban wildland fire prevention services. **Berkeley’s Fire Fuel** Curbside Chipper and Debris Bin Programs for residents of the Berkeley hills high-risk fire area continued to be popular. Debris bags are available throughout the year.

The **City of Oakland** Fire Department, Fire Prevention Bureau staffs a Vegetation Management Unit that planned and scheduled a variety of fuel reduction activities this year, including: contracts specifically targeting invasive French broom, fuel breaks within the City’s approximate 1300 acres of parklands and open space primarily in conjunction with their extensive goat grazing program. Working together with East Bay Regional Parks Fire Department, U.C. Berkeley, PG&E and East Bay Municipal Utility District, Oakland Fire’s Vegetation Management Unit was able to reduce hazardous vegetation through roadside clearances, fuel breaks and goat grazing throughout the Oakland Hills. Major fuels reduction occurred inside the Shepherd Canyon area where EBRPD grazed their hillsides, PG&E cleared their transmission line right of ways of brush and dead trees and EBMUD cleared vegetation from all of their water reservoir properties. U.C. Berkeley assisted in roadside clearances along upper Claremont Avenue to Fish Ranch Road.

The **City of El Cerrito** and the community of Kensington continue to manage their two demonstration vegetation management projects, along Leneve Place to Camp Herms, developed in conjunction with the East Bay Regional Park District. They continue to manage 90 acres of city property (parks, trails, fire trails etc.) with a year round program that use hand labor, prescribed burns (pile burns) and mechanical methods to maintain fuel management zones and manage the areas along the fire trails at the interface of Kensington and Tilden/ Wildcat Canyon Regional Parks (EBRPD).

**Objective:** *Evaluate the potential for sharing specialized equipment (for brush-clearing and chipping) among HEF agencies.*

**Objective:** *Foster inter-jurisdictional cooperation in the buffer zone identified in the Fuel Management Plan*

**Status:** Member agencies actively seek new ways to foster inter-jurisdictional cooperation and share information on specialize equipment or operators coming into the region.

HEF members collectively are seeing the results of the multiple, regional on-going fuel reduction projects with additional contractors interested in bidding on projects and improved efficiencies and cost effectiveness. Members are have also been able to share information about the options for dealing with biomass generated by fuel reduction projects.

## **Preparedness**

**Goal:** *Provide continued support for coordinated safety planning in Agency and City Plans.*

**Objective:** *Ensure that General Plans contain updated state-mandated Safety Elements that are compatible between jurisdictions.*

**Status:** This is an ongoing effort to ensure that the elements in agency plans are compatible and in compliance with SB1241 for wildfire safety. To this end, the SLC shares information and seeks to establish strong lines of communication between agencies.

Many HEF members have adopted long range plans and environmental compliance documents incorporating wildland fire hazard reduction. Existing plans include:

In 2010, the East Bay Regional Park District Board of Directors adopted the Wildfire Hazard Reduction and Resource Management Plan and certified its Environmental Impact Report. The study focus was the wildland-urban interface along the western edge of the East Bay hill parks, including Wildcat Canyon, Tilden, Claremont Canyon, Sibley, Huckleberry, Roberts, Redwood, Leona, and Anthony Chabot. Best Management Practices incorporated in this hazard reduction plan are also applied to fuels treatment projects elsewhere within the Park District

The University of California, Berkeley 2020 Long Range Development Plan (LRDP), and the 2020 LRDP Environmental Impact Report (EIR). UC Berkeley 2020 Hill Area Fire Fuel Management Program informed the 2020 LRDP and provides the organizational and technical basis for continued vegetation management on Regent's land. In 2016 UC Berkeley finalized an Addendum to the UC Berkeley 2020 Long Range Development Plan Environmental Impact Report, which completed its CEQA requirements for the FEMA-funded projects.

Lawrence Berkeley Laboratory finalized its 2006 Long Range Development Plan and Environmental Report in July 2007. A new fire management plan was completed to comply with federal requirements.

Oakland Safety Element Update to the Oakland General Plan, Initial Study and Negative Declaration adopted November 2004. Oakland is currently developing a comprehensive Vegetation Management Plan and Environmental Impact Report with an anticipated certification in 2019.

East Bay Municipal Utilities District adopted its East Bay Watershed Management Plan in 2018, updating the 1996 Watershed Master Plan and 2000 Fire Management Plan.

HEF members participated in the 2010 update of "Taming Natural Disasters," the Multi-jurisdictional Local Hazard Mitigation Plan (LHMP) for the San Francisco Bay Area prepared by the Association of Bay Governments. This was the required five-year update of the annexes to the initial plan prepared in 2004. The Disaster Mitigation Act of 2000 (DMA 2000) required state and local communities to have an approved multi-hazard mitigation plan in place by November 1, 2004, in order to be eligible for FEMA pre- and post- hazard mitigation grant funds (Public Law 106-390). This Act established a pre-disaster hazard mitigation program and new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP). Since 2010, HEF members have updated their LHMPs on an individual basis, Oakland's being last updated in 2016.

In 2004, the City of Berkeley developed and adopted its first Hazard Mitigation Plan. The Plan identified natural hazards in Berkeley and a five-year strategy to further protect Berkeley's people, buildings, infrastructure and environment from their impacts. Staff used the latest research and an extensive public review process to develop the 2014 Plan update. This update allows Berkeley to apply for federal mitigation grant programs and State recovery funding.

In 2018 City of El Cerrito adopted its LHMP and had it included as an annex to the Contra Costa County plan, also adopted in 2018. The unincorporated area of Kensington, City of Orinda and Town of Moraga are also included in the Contra Costa County LHMP.

**Goal:** *Continue Citizen emergency training programs.*

**Objective:** *Maintain citizen emergency programs, such as CORE and CERT.*

**Status:** Berkeley, El Cerrito, Moraga Orinda Fire District (MOFD) and Oakland have continued to find funding to support their CERT programs that help prepare citizens for emergencies. Lawrence Berkeley Laboratory also offers training to their employees.

City of Berkeley provides a 20-hour training to give residents the skills to organize on their own when disaster strikes and ensure they're ready with crucial information when emergency crews arrive. The CERT academy, run by the Berkeley Fire Department, is a city program that brings free training to Berkeley residents, who can then go on to take more specialized classes and share information with their neighborhood groups. The weekend training program teaches participants how to set up a chain of command structure and organize into key groups with the aim of turning a chaotic situation into order. Training modules include fire suppression, search and rescue operations and disaster first aid.

El Cerrito and Kensington continue to enhance public awareness and provide public education in disaster preparedness and response. Their program is an all risk emergency preparedness program, training for earthquake, flood, wildland urban interface fire defensible space, terrorism and will begin training citizens to handle large-scale pet emergencies and sheltering. To reach a broader citizen base, El Cerrito and Kensington has begun working with their neighborhood watch programs to ensure a diverse and comprehensive training program is delivered. The program teaches all required CERT components and standards and adds these additional programs for continuing education.

MOFD continues to support their District's CERT program that trains citizens in Moraga and Orinda in emergency preparedness. Their Emergency Preparedness Coordinator continues to build relationships with these groups to increase efficiency, cooperation and consistency. Education relating to creating defensible space and surviving fires in the wildland urban interface is included in the curriculum presented to all CERT students. In 2014 the Sleepy Hollow neighborhood of Orinda was recognized as the first FIREWISE community in Contra Costa County. The Ready Set Go! Program continues to prepare residents for wildfire.

Oakland continues to train its citizens through Communities of Oakland Respond to Emergencies (CORE) in addition to public education program in the schools. Since its inception in 1990 they have trained more than 22,000 residents. This includes workshops where participants received training in Fire Prevention, First Aid, Evacuation Preparedness and Community / Neighborhood Disaster response. CORE also provided classes with interpretation in Spanish, Cantonese, Mandarin and Vietnamese.

Lawrence Berkeley Laboratory's Emergency Services Staff has also taught CERT classes in the last few years. The class is designed to educate people about disaster preparedness for the hazards that may impact their work areas and trains them in basic response skills. It is voluntarily open to all staff.

All three cities coordinate and train amateur radio enthusiasts and promote citizen involvement in awareness programs. The Oakland Radio Communications Association (ORCA) ham radio operators continue to refine their emergency system by participating in monthly training and testing of equipment, as well as conducting a formal annual test of their full system with a Simulated Emergency Testing (SET) at all Oakland fire stations.

**Goal:** *Continue interagency preparedness coordination and training.*

**Objective:** *Continue to evaluate the performance of the Remote Automated Weather Station (RAWS) equipment*

**Status:** The Remote Automated Weather Stations (RAWS) continues to be included as a line item in East Bay Regional Park District's annual budget to support maintenance of four stations that are representative of large portions of the East Bay Hills and surrounding regions. In 2009 Oakland fire Department replaced its two nearly obsolete RAWS with new, state-of-the-art equipment. These stations, together with four RAWS owned by other agencies in the two county area, form part of a National Fire Danger Rating System network. Up to date information from these stations and others that serve the HEF membership can be found at [http://www.ebparks.org/about/fire/fire\\_danger\\_and\\_weather\\_information.htm](http://www.ebparks.org/about/fire/fire_danger_and_weather_information.htm)

**Objective:** *Conduct interagency training in systems operations and development of user protocols.*

**Objective:** Expand interagency prescribed burns for training and fuel management purposes. 1) Conduct a two day Wildland Fire Academy. 2) Conduct two interagency fire exercises and prescribed burns.

**Status:** In August 2018, CAL FIRE, EBMUD, Moraga Orinda Fire District and Contra Costa County Fire District conducted a wildland training burn on the Briones watershed near Bear Creek and Happy Valley Roads in Orinda. The exercise allowed for not only fuel reduction, but also multi-agency drill using live fire.

During the region's MRA drills and training, the City of El Cerrito and the Kensington Fire Protection District participated in the annual Mutual Response Area Exercise (MRA) with the City of Berkeley and other participating agencies. During this exercise, participating agencies conducted strategic fire apparatus assignment and response for a major wildfire. Firefighters attending the exercises practiced hose lays and mobile attack. As in years past, EBRPD will invite HEF members and other agencies to join their Basic Wildland Training courses (S-190, S-130) in years when the courses are scheduled for new firefighters at the District.

**Objective:** *Expand public education programs*

**Status:** HEF members continue to provide information to the local communities through various programs and direct homeowner association contacts. During "Red Flag" days many HEF members fly fire weather flags at fire stations, on the watershed and at recreation facilities. Lawrence Berkeley Lab and Moraga Orinda Fire District installed new fire danger signs. In 2018, Berkeley hosted a community wildfire forum in July. Several members also participated in open houses at local fire stations during National Fire Prevention Week in October.

**Goal:** *Plan and conduct public safety and outreach programs to improve public awareness during the 2018 fire season*

**Objective:** *Issue information on fire safety to newspapers and other media outlets.*

**Objective:** *Conduct Public Safety Programs during fire season.*

**Objective:** *Maintain and update HEF website and e-mail*

**Objective:** *Develop a compendium for homeowners of existing research about common landscape plants and fuel management treatments.*

**Status:** SLC members participated in public safety and education outreach programs including response to requests for information from local newspapers, radio and television. Oakland continues to educate and prepare students through its Junior Fire Marshal and Public Education programs in the Fire Prevention Bureau, as well as through CORE. The HEF web site [www.hillsemergencyforum.org](http://www.hillsemergencyforum.org) and [hillsemergencyforum@comcast.net](mailto:hillsemergencyforum@comcast.net) e-mail continues

to provide information about the HEF and an electronic method to connect with the organization. In September 2018, the City of Oakland developed a public service announcement on the importance of defensible space and hazardous fuel reduction. Aerial footage shows how the partnership of homeowners and agencies is making a difference in reducing the fuel loads of the East Bay Hills. High definition aerial footage was also shared with HEF member agencies.

New and updated public information was released throughout the year including an update to the EBMUD booklet “Firescape: Landscaping to Reduce Fire Hazard.” HEF SLC members reviewed and updated “Wildfire Evacuation Tips” and “Why is Evacuation from Wildfire Different?” available on the HEF website.

The SLC continues to look for opportunities to link with other relevant research. They regularly share information about continuing or new pests in the area such as the Light Brown Apple Moth and the spread of Sudden Oak Death. This includes incorporating quarantine restrictions and best management practices into fuel reduction contracts. This year the group continued to share best management practices with field trips for staff and visitors.

**Goal:** *Strengthen media coordination among Agency Representatives*

**Objective:** *Provide information briefing materials and sessions as required to cover local issues.*

**Objective:** *Support the HEF joint information system, including the prescribed burn notification protocol.*

**Status:** The Staff Liaison Committee distributes materials and conducts briefing sessions with information officers (IOs) highlighting issues attractive to local media in order to continue reinforcing regional protocols, multi-agency preparedness and response actions. HEF members also coordinated their public information officers with updated contact lists and invitation to participate in monthly meetings. In May, members briefed local media on how the hills fire agencies were preparing for the 2018 wildfire threats. Local media helped urge hill residents to prepare for fire season and be prepared if called upon to evacuate.

**Goal:** *Inspect and maintain readiness level of infrastructure, such as fire roads.*

**Objective:** *Evaluate storm damage from winter rains and refurbish fire roads as needed.*

**Objective:** *Maintain existing fire roads.*

**Status:** HEF members continue the annual process of evaluating storm damage and maintaining fire roads where required. The 2017-18 winter storms lead to creeks running full and local flooding. Downed trees and aggressive growth of flashy fuels resulted in an increase of fuels.

## **Response**

**Goal:** *Maintain and refine formal Mutual Response*

**Status:** Formal Mutual Response Agreements (MRAs), some of which are over twenty years old, continue to be effective between fire agencies in the Oakland-Berkeley hills area.

Several wildfires during 2018 proved the effectiveness of local response agreements. The area covered by MRAs has expanded to the east side of the hills through discussions with Moraga Orinda Fire District. City of Berkeley is updating MOUs with Albany, El Cerrito, Kensington, Lawrence National Laboratory, and Moraga/Orinda. These are in addition to the existing agreements in place with Oakland and East Bay Regional Parks District.

During fires in areas of “mutual threat,” both Alameda County and Contra Costa County Fire Departments also provide aid. The Santa Clara Unit of CAL FIRE continues to provide support; backfilling positions of suppression personnel. City of Berkeley and Oakland MRA radio procedures are consistent with the rest of Alameda, Contra Costa and CAL FIRE

agencies using the statewide mutual aid channel CAL FIRE Tac2, V-Fire 22, V-Fire 23 and CAL FIRE Tac 6.

#### Countywide Emergency Notification System

In 2013, the Alameda County Civil Grand Jury recommended that the County take the lead in developing a countywide emergency notification system. Berkeley staff members provided subject matter expert guidance to Alameda County on its procurement of a countywide emergency notification system for joint use by the County and its cities. This countywide system provides an opportunity for the City to harness new emergency alerting technology from the federal Integrated Public Alert and Warning System (IPAWS). This system sends wireless emergency alerts to mobile phones based on their real time location, instead of relying on pre-emergency signups. IPAWS will also automatically coordinate alert deliveries from multiple systems, instead of requiring a manual activation process for each system. In May 2015 the countywide system contract began. The notification system was utilized during several of the 2018 wildfires.

**Goal:** *Monitor and support the implementation of SEMS by EBFCC/ HEF agencies*

**Objective:** *Monitor implementation of Gov. Code 8607 (SEMS) requirements.*

**Objective:** *Expand mutual aid agreements with water utilities. Work with statewide program to increase signatories.*

**Status:** Each agency in the HEF monitors their own plans and training related to the state-wide Standard Emergency Management System (SEMS) and National Incident Management System (NIMS). Continued training and coordination in the uniform Incident Command System (ICS) is provided at each of the mutual aid drills. As of this year, the state wide mutual aid agreement has been signed by 135 water utilities. <http://www.calwarn.org>. EBMUD also has signed a mutual assistance agreement with Los Angeles Department of Water and Power (LADWP) and Las Vegas Valley Water District.

# 2019 Hills Emergency Forum Goals

## Annual Focus

- Collaboration with Other Agencies
- Legislative Outreach
- Public Education
- Special Projects

*Primary  
Responsibility*

## Assessment

- Assess critical infrastructure support systems, operation plans, and public concerns. (SLC)
- Support continued funding for fuel hazard assessment and mitigation programs. (SLC)

## Prevention/ Mitigation

- Incorporate recommendations from the Fuel Management Plan and support AB 337 information-sharing requirements. (SLC)
- Promote implementation of fire code compliance programs. (SLC)
- Continue annual fuel reduction actions. (SLC)

## Preparedness

- Provide continued support for coordinated safety planning in Agency and City plans. (SLC)
- Continue Citizen emergency training programs. (SLC)
- Continue interagency preparedness coordination and training. (EBFCC)
- Plan and conduct public safety and outreach programs to improve public awareness during the 2018 fire season. (SLC)
- Strengthen media coordination among Agency Representatives. (SLC)
- Inspect and maintain readiness level of infrastructure, such as fire roads. (EBFCC)

## Response

- Maintain and refine formal Mutual Response Agreements. (EBFCC)
- Monitor and support the implementation of SEMS by EBFCC/ HEF agencies. (EBFCC)

# Hills Emergency Forum 2019 Workplan

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Projects	Objectives	Milestones	Lead
<p><b>A. Assessment</b></p> <p>1. Water system</p> <p>2. Fire Response</p> <p>3. Public Comment</p> <p>4. Hazardous Fuel Assessment</p> <p>5. Funding for Mitigation Programs</p> <p><b>B. Prevention/ Mitigation</b></p> <p>1. Fuel Management Plan (FMP)</p>	<p>a. Continue quarterly meetings with fire jurisdictions regarding water supply and delivery issues.</p> <p>a. Revise fire response operation plans to incorporate 2018 review comments.</p> <p>b. Conduct annual review of local fire response plans for urban-wildland intermix fires.</p> <p>a. Acknowledge and evaluate public comments on threat zone management issues.</p> <p>a. Develop plan for update of 1995 GIS base data (vegetation &amp; residential hazards).</p> <p>a. Re-evaluate programs in light of Proposition 218 funding challenges.</p> <p>a. Incorporate FMP in all planning.</p> <p>b. Monitor 2019 goat grazing contracts and joint maintenance operations.</p>	<p>Ongoing</p> <p>October 2019</p> <p>Annual</p> <p>April 2019</p> <p>October 2019</p> <p>October 2019</p> <p>October 2019</p> <p>October 2019</p> <p>October 2019</p>	<p>EBMUD</p> <p>EBFCC</p> <p>EBFCC</p> <p>SLC</p> <p>SLC</p> <p>SLC</p> <p>SLC</p> <p>SLC</p> <p>SLC</p>

# Hills Emergency Forum 2019 Workplan

2

Projects	Objectives	Milestones	Lead
<p>2. Support implementation of AB 337 (Bates)</p> <p>3. Promote and support full implementation of municipal programs for fire safety codes, inspection and enforcement</p> <p>4. Fuel Reduction</p>	<p>a. Share Geographical Information System (GIS) data with other agencies (upon request).</p> <p>a. Provide public education about code requirements.</p> <p>b. Conduct and track inspections on public &amp; private properties.</p> <p>c. Issue notices of violations, monitor corrective action.</p> <p>d. Report on inspection and compliance programs.</p> <p>a. Continue annual maintenance of existing fuelbreaks</p> <ul style="list-style-type: none"> <li>❖ EBRPD: Maintain 15 miles of existing fuelbreak. Control suckers from cut eucalyptus stumps.</li> <li>❖ EBMUD: Maintain 1.5 miles of multi-agency fuelbreaks within District lands. Remove suckers from 19 acres of eucalyptus stumps in Oakland urban wildland interface. Manage ridgetop annual grasslands.</li> <li>❖ UCB: Maintain 8 miles of defensible space, including roadside and fire trail maintenance.</li> <li>❖ Oakland: Maintain 4 miles of existing fuelbreak.</li> </ul> <p>b. Continue fuel reduction (including removing hazardous trees on public property).</p> <ul style="list-style-type: none"> <li>❖ EBRPD: Thin stands of eucalyptus trees in Anthony Chabot Park.</li> </ul>	<p>October 2019</p> <p>Ongoing</p> <p>Annual</p> <p>Annual</p> <p>Annual</p> <p>Annual</p>	<p>VMC</p> <p>Berkeley El Cerrito Oakland Berkeley El Cerrito Oakland Berkeley El Cerrito Oakland Berkeley El Cerrito Oakland</p> <p>EBRPD</p> <p>EBMUD</p> <p>UCB</p> <p>Oakland SLC</p> <p>EBRPD</p>

# Hills Emergency Forum 2019 Workplan

3

Projects	Objectives	Milestones	Lead
<p><b>B. Mitigation (continued)</b>                      4. Fuel Reduction (cont.)</p>	<ul style="list-style-type: none"> <li>❖ EBMUD: Maintain 15 acres using goat grazing. Maintain 10 acres by hand labor. Continue selective removal in ridgetop Eucalyptus groves, culling 1,000 stems per year. Maintain 1.2 mile grassland fuel break along ridge at Grizzly Peak Blvd and Fish Ranch Road.</li> <li>❖ UCB: Maintain 37 acres using goat grazing. Maintain an additional 18 acres using hand crews. Manage 15 acres to develop and maintain ground force fire suppression zone at ridgetop interface with Panoramic Hill residential area.</li> <li>Manage 25 acres at Claremont Canyon Headslope for eucalyptus resprouts ( Phase 1 - 3 removal projects) . Continue Phase 4 selective culling of eucalyptus and pine.</li> <li>❖ Berkeley: Continue use of hand crews to reduce fuels on public lands.</li> <li>❖ El Cerrito Continue use of hand crews, machinery and prescribed fire to reduce fuels on public lands and at buffer between City and EBRPD park lands.</li> <li>❖ Oakland: Continue use of goat grazing and hand crews to reduce fuels on 320 acres of public lands.</li> <li>❖ LBNL: Maintain 170 acres to reduce potential wildland fire effects. Manage 30 acres to maintain a Strike team Fire Suppression Line at midcanyon wildland interface. Manage 20 acres to intermix zone standards to minimize effect of firebrand, and to minimize other ignitions on developed side of interface. Manage 20 acres to permit ground force suppression at border of natural areas within lower canyon intermix zone.</li> </ul>		<p>EBMUD</p> <p>UCB</p> <p>Berkeley</p> <p>El Cerrito</p> <p>Oakland</p> <p>LBNL</p>

# Hills Emergency Forum 2019 Workplan

4

Projects	Objectives	Milestones	Lead
<b>B. Mitigation (continued)</b> 4. Fuel Reduction (cont.)	c. Continue Berkeley's and Oakland's curbside vegetation recycling programs for private lands in hills (June - October). d. Evaluate the potential for sharing specialized equipment (for brush-clearing and chipping) with HEF agencies. e. Foster inter-jurisdictional cooperation in the buffer zone identified in the Fuel Management Plan.	Annual October 2019 October 2019	Berkeley El Cerrito Oakland SLC
<b>C. Preparedness</b> 1. Promote coordinated safety planning in Agency and City plans	a. Ensure that General Plans contain updated state-mandated Safety Elements that are compatible between jurisdictions.	October 2019	SLC
2. Maintain citizen training	a. Maintain citizen emergency programs, such as CERT	October 2019	Berkeley El Cerrito Oakland MOFD
3. Continue interagency preparedness coordination and training	a. Continue to evaluate performance of the Remote Automated Weather Stations (RAWS) equipment. b. Conduct interagency training in systems operations and develop user protocols.	October 2019 October 2019	EBFCC EBFCC

# Hills Emergency Forum 2019 Workplan

5

Projects	Objectives	Milestones	Lead
<p><b>C. Preparedness (continued)</b></p> <p>3. Continue interagency preparedness coordination and training (cont.)</p>	<p>c. Expand interagency prescribed burns for training and fuel management purposes.</p>	<p>October 2019</p>	<p>EBFCC</p>
<p>4. Improve Public Awareness</p>	<p>a. Issue information on fire safety to newspapers and other media outlets.</p>	<p>Annual</p>	<p>SLC/ EBFCC</p>
	<p>b. Expand public education programs during Wildland Fire Prevention Month (June).</p>	<p>Ongoing</p>	<p>EBFCC</p>
	<p>c. Conduct Public Safety Programs during fire season.</p>	<p>Ongoing</p>	<p>SLC</p>
	<p>d. Maintain and update a HEF website. <a href="http://www.hillsemergencyforum.org">http://www.hillsemergencyforum.org</a> and e-mail <a href="mailto:hef@value.net">hef@value.net</a></p>	<p>October 2019</p>	<p>SLC</p>
<p>5. Media Support</p>	<p>a. Provide information briefing materials and sessions as required to cover local issues.</p>	<p>Ongoing</p>	<p>SLC</p>
	<p>b. Support the HEF joint information system, including the prescribed burn notification protocol.</p>	<p>October 2019</p>	<p>SLC</p>
<p>6. Maintain Fire Roads within the study area</p>	<p>a. Evaluate storm damage from winter rains and refurbish fire roads as needed.</p>	<p>Annual</p>	<p>EBFCC</p>

# Hills Emergency Forum 2019 Workplan

6

Projects	Objectives	Milestones	Lead
<p><b>C. Preparedness (continued)</b>                      6. Maintain Fire Roads within the study area (cont.)</p> <p><b>D. Response</b>                      1. Mutual Response Agreements (MRAs)                      2. Support Standardization Emergency Management System (SEMS)</p>	<p>b. Maintain 155 miles of existing fire roads.                      Continue to maintain 6 miles of existing fire roads.                      Maintain 25 miles of existing fire roads.                      Maintain 8 miles of existing fire roads.</p> <p>a. Refine MRAs among EBFCC members.</p> <p>a. Monitor implementation of Gov. Code 8607 (SEMS) requirements.</p> <p>b. Expand mutual aid agreements with water utilities. Work with statewide program to increase signators.</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	<p>EBRPD                      EBMUD                      Oakland                      UCB</p> <p>EBFCC</p> <p>EBFCC</p> <p>EBMUD</p>

## **5.0 Appendices**

2018 Hills Emergency Forum Goals

2018 Hills Emergency Forum Workplan

Staff Liaison Committee Members

# 2018 Hills Emergency Forum Goals

## Annual Focus

- Collaboration with Other Agencies
- Legislative Outreach
- Public Education
- Special Projects

*Primary  
Responsibility*

## Assessment

- Assess critical infrastructure support systems, operation plans, and public concerns. (SLC)
- Support continued funding for fuel hazard assessment and mitigation programs. (SLC)

## Prevention/ Mitigation

- Incorporate recommendations from the Fuel Management Plan and support AB 337 information-sharing requirements. (SLC)
- Promote implementation of fire code compliance programs. (SLC)
- Continue annual fuel reduction actions. (SLC)

## Preparedness

- Provide continued support for coordinated safety planning in Agency and City plans. (SLC)
- Continue Citizen emergency training programs. (SLC)
- Continue interagency preparedness coordination and training. (EBFCC)
- Plan and conduct public safety and outreach programs to improve public awareness during the 2018 fire season. (SLC)
- Strengthen media coordination among Agency Representatives. (SLC)
- Inspect and maintain readiness level of infrastructure, such as fire roads. (EBFCC)

## Response

- Maintain and refine formal Mutual Response Agreements. (EBFCC)
- Monitor and support the implementation of SEMS by EBFCC/ HEF agencies. (EBFCC)

# Hills Emergency Forum 2018 Workplan

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