

Background Report:

THE EAST BAY HILLS WILDFIRE PROBLEM STATEMENT (Prepared in 2001 by the Hills Wildfire Working Group)

Introduction

The District's Fire Hazard Reduction EIR/NEPA Working Group developed this consensus Problem Statement, during its meetings in 2001, as a summary of the complex issues and concerns that the consultant teams responding to the Park District's request for proposals for a Vegetation Management Plan and Environmental Document would need to be aware of.

Background on Wildfire Risks

The East Bay Hills have lost more than 3,542 homes to major wildfires...almost as many as all of the high risk Southern California Counties combined at the turn of this century, three years before the catastrophic fires that occurred in Southern California in 2003. The 1991 Oakland/Berkeley fire ranked first as the state's largest home loss from wildfire, and the 1923 Berkeley fire ranked fourth. Thirty-nine percent (39%) of the residences destroyed in California's 30 major wildfires, taking more than 50 structures were lost in the East Bay Hills. The LA basin was second with 21% and Santa Barbara County was third with 11%. The \$1.7 billion Oakland/Berkeley wildfire was this nation's fifth most costly catastrophe. The 1991 Oakland/Berkeley wildfire disaster was preceded only by hurricanes Andrew, Hugo, the 1993 East Coast floods, and the Northridge earthquake. In terms of direct threat to residences, it is now clear that the East Bay Hills are one of the most severe fire risk areas in the state and nation.

State residential losses changed drastically after the disastrous 2003 Wildfire Siege in Southern California. In a 15-day period in late October, 3,710 homes were destroyed, 750,043 acres were burned, 24 lives were lost, and with a 1.2 billion dollar cost when 14 major fires occurred at the same time. Losses from the State's largest residential wildfires now place San Diego County at 27%, Alameda County at 26%, Los Angeles Area at 14%, and San Bernardino County at 11%.

Equally ominous is the number of homes lost in major wildfires in California during the past thirteen years. For the 80-year period between 1923 and 2003, major fires resulted in the loss of 13,600 homes. For the thirteen-year period between 1990 and 2003, 11,055 homes were destroyed (73% of the homes that were lost in the entire 80 year period). This increasing rate in home losses make it clear that a dramatic change in fire-safe construction for existing and new residences combined with fire-safe clearances should be required and inspected annually in all high-risk wildfire areas throughout the State. It may also mean that the State of California needs a more strategic and powerful fire fighting approach for confronting extreme wind driven wildfires as they approach residential areas.

East Bay communities have made some improvements over the past 7 years in residential and neighborhood safety and fire fighting capability. However, the fire prevention efforts in many of the hill neighborhoods appear to have fallen well short of optimum. Also, in spite of sincere efforts at wildland vegetation management on public lands, fuel loads remain high and the most cost-effective ways for dealing with severe Diablo wind wildfires remains elusive. The reasons why the 1991 fire could not be stopped still exist today in many locations throughout the East Bay Hills.

- Residential developments in the Hills have occurred, over the past 70 years, in areas at risk from major Diablo wind-driven wildfires.

- Major increases in flammable vegetation, over the past 70 years, have significantly increased the wildfire risk. Steep hillsides have been converted from grazed grasslands to brush with hillside and ridge top homes, surrounded with flammable vegetation, often under or adjacent to groves of unmaintained pine or eucalyptus.
- Neighborhoods currently exist with large numbers of homes with wood shingle roofs and excessive levels of flammable vegetation on the lot. Some homes have been placed in locations that are undefendable today, given the wildfire characteristics of unmanaged vegetation on steep hillside slopes.
- Narrow roads, overhead power lines, variable water pressure and volume at Hill fire hydrants all make fire fighting difficult under the best of conditions in the Hills, and impossible under the worst of conditions.
- Unmaintained eucalyptus and pine groves, on both private and public lands, represent a serious crown fire and spotting threat to adjacent residential areas.
- Unmaintained native brush and invasive exotics that cover, without interruption, several canyon areas and slopes above, in, and below many Hill residential neighborhoods.
- Diablo wind fires under the worst conditions of high wind speed, low humidity, and high temperature, move so quickly that positioning fire crews and obtaining air support for rapid containment and control may not be possible given current fuel levels.
- With Redflag, Diablo winds blowing across ridge tops and down steep hillsides, fire fighters, given today's fuels, may not be able to directly control an early morning, wind driven wildfire ... until the late afternoon when our typical weather patterns change in the East Bay Hills and the winds slow.
- Urban fire departments may be called upon to fight a rapidly expanding East Bay Hills Diablo wind fire once every 10, 20 or 40 years, and therefore cannot have the same level of experience, resources, and equipment equivalent to their more traditional structural fire fighting mission.

Fire History

Fire records for the East Bay Hills are sketchy, yet newspaper clips and old fire planning studies document an active and dangerous fire history. During the 75-year period between 1923 and 1998, eleven Diablo wind fires alone burned 9,840 acres, destroyed 3,542 homes, and took 26 lives, with over 2 billion dollars in financial loss. During the same period, three large west wind fires burned 1,230 acres of grass, brush, trees, and 4 homes.

News reports document the major fires that have threatened the East Bay Hills:

1923 Berkeley- A Diablo wind fire that started East of the Main ridge at 12 noon on a Monday in September destroyed 584 homes North of the U.C. Campus. "No conflagration was ever more out of control. None ever demonstrated more vividly its power to defy all defensive resources once it gained headway. It was extinguished only by an act of providence."

1931 Leona- 5 homes were lost and 1,800 acres burned by a Diablo wind fire that started at 7 a.m. on a Monday morning in November. "Splitting of the fire into two huge infernos left the hundreds of fire fighters almost helpless to combat the double conflagration."

1933 Redwood/Joaquin Miller- 1 life and 5 homes were lost with 1,000 acres burned by a Diablo wind fire that started on the ridge at 7 a.m. on a Monday morning in November. "The fire traveled along the tops of the thick groves of trees for great distances, never reaching the ground until after the main blaze had passed."

1937 Broadway Terrace- 4 homes were lost and 1,000 acres burned by a West wind fire that started at 3 p.m. on a hot Saturday afternoon in September. "Lack of water caused by exhaustion of reservoirs in the hills hampered fire fighters. The fire at times crept slowly through the brush and at other times leaped from treetop to treetop."

1946 Buckingham/Norfolk- 1,000 acres were burned by a rekindled ridge top Diablo wind fire at 5 a.m. on a Monday morning in September. "Sheer-walled canyons were quickly raging infernos. Flames raced so fast in the stiff wind they formed a fiery canopy over stands of pine and eucalyptus." In the ten years following this fire, at least 2 other large fires occurred in Claremont Canyon (Claremont above water tank to stonewall) and Panoramic Hill (South of Panoramic to fire road) that did not involve structures because few existed at the time.

1960 Leona- 2 homes were lost and 1200 acres were burned by a Diablo wind fire that started at 11 a.m. on Saturday morning in October. "The 84-degree temperature and low humidity aided the flames which roared with express train speed up steep slopes. Flames roared 50 ft. into the air."

1970 Buckingham/Norfolk- 37 homes lost, 36 damaged, and 204 acres burned in a Diablo wind fire that started near the ridge at 10 a.m. on a Tuesday morning in September. "The wind was swirling in every direction. The heat was so great that some houses were exploding before the fire actually reached them."

1980 Berkeley/Wildcat- 5 ridge top homes were lost in a Diablo wind fire that started at 2 p.m. on a Saturday afternoon in December. "The blaze, fed by thick underbrush and tree (eucalyptus) debris, was so hot and fast that homes literally exploded."

1991 Oakland/Berkeley- The fire was rekindled at 10:45 a.m. below Buckingham/Norfolk roads, on a Sunday morning in October by a ridge top Diablo wind. "The firestorm burned over three square miles...killed 25 people, gutted 2,900 homes and caused \$1.68 billion in damage. It was the most destructive wildfire in California history."

1994 Castro Valley- 3 homes were lost in a windy October afternoon near Lake Chabot Road when fireworks ignited a grass fire in a horse pasture below homes that provided no defensible space behind their residences.

Diablo Wind, the Key Environmental Factor

Under normal conditions, fires that start in the East Bay hills are efficiently controlled by firefighters, with no loss of homes. During most of the year, temperatures are moderate and vegetation is relatively moist and fire-safe. Summers bring overnight and morning fog along the hills until noon, with moist mid-day winds blowing westerly in from the coast. However, there are a few days each year when all of the high fire danger conditions are extreme with low humidity, high temperatures, and hot dry Diablo winds blowing in from the east. These high fire danger

conditions are labeled Red Flag days, and usually occur in the September to November fall months.

Diablo Winds turn everything around. They blow from the east, often in the early morning, when we least expect a major fire. They can fan the flames of the smallest spark into a wildfire that can move down from the ridge in 30 minutes, expand to one square mile in one hour, and consume hundreds of residences in one hot, dry, windy, fall day.

We now know that firefighters may not be able to stop all Diablo Wind fires, and that several areas in the East Bay Hills can produce flame fronts that can't be controlled with water from hydrants, fire truck hoses, helicopter buckets, or with retardant drops from air tankers.....until the wind slows in the late afternoon.

Quotes from two key fire-planning documents describe the wind-weather factor:

March 1936- General Fire Plan for the Proposed East Bay Regional Park by Mr. L.E. Gray, Fire Weather Official of the U.S. Weather Bureau. "The East Bay Hills are in a predominantly transitional marine environment on the average, but which are subject, especially during the fall months, to occasional continental influences which transfer, in effect, the interior climate to the coastal belt. Hence, from a fire viewpoint, the zone represents on the average a region of low to very low climatic hazard, with occasional very serious danger, especially in the fall months of September, October, and sometimes November. "The normal fire business in the zone is small. However, during the prevalence of upper air winds of north to east directions, dynamic heating and drying of air descending from the mountains to the north and east creates exceptionally critical conditions in the zone, especially near the toes of leeward slopes. Such winds are occasionally very strong, reaching velocities as high as 80 miles per hour at two to three thousand feet above sea level. All such air movement is associated with and caused by high pressure over the Northern and Central Great Basin region, and materially lower pressure to the south, southwest and west, over and to westward of California." "It may be pointed out that the largest fires affecting California have all occurred with dangerous winds from north to east, and in the transitional coastal zone. Northeast winds from altitudes of 7000 feet or more in the Sierra and Siskiyou mountains are heated 1 degree F, by compression, for every 183 feet of descent. If the air starts over the Sierra at a temperature of 30 and a humidity of 50%, by the time it reaches the Grizzly Peak region the humidity would become as low as 6% to 8%, with a temperature of over 90 degrees."

October 20, 1991-The Oakland/Berkeley Hills Fire, National Wildland/Urban Interface Fire Protection Initiative Report "Weather contributes as much to the life of a wildfire as the fuels do. Temperature, lack of precipitation, and humidity provide the conditions for a fire to start, and the wind nourishes the blaze. Relative humidity and temperature are interrelated. As the temperature rises, relative humidity drops. If the temperature rises by 20 F, the relative humidity will drop by about 50 percent. Relative humidity controls the moisture content of fuels, and therefore their susceptibility to fire. Fuels with 20 percent moisture can catch fire; light fuels with 2 percent moisture can burn like gasoline." "So-called Diablo winds in the East Bay occur in May and October. These winds occur when an inversion layer builds up in the Bay area and forces air moving west from the San Joaquin Valley to speed up as it moves down the west, or lee, side of the hills. When it can go no farther laterally, it moves up and over the ridges and then down. As it flows downward it increases in temperature. The Diablo winds are foehn winds that force the convection currents down against the natural flow that normally blows up the hills. The phenomenon represents a swirling effect much like a tornado, picking up embers from one place and depositing them in another. Another phenomenon that led to the rapid spread of the

1991 fire was development of a thermal inversion layer. The thermal inversion layer during the Oakland Hills fire was at 3,500 feet. The layer trapped heat from the fire and spread it out, adding to the preheating of vegetation and structures in the area."

Style of Development Significantly Increased Fire Risks

By the 1930s residential development began to replace grazed grasslands by creeping up the slopes of the hills to take advantage of the spectacular views of the Bay. Narrow and winding road systems were laid out for pre-W.W.II residential developments. During the next 60 years, thousands of new homes were placed on the ridges and steep hillsides, with no real access behind homes for fire crews to quickly attack fires moving through the flammable and unmaintained grass, brush lands, pine, and eucalyptus groves. Wood shingle or shake-roofed houses with wood siding were constructed in great numbers throughout the hills, often surrounded by junipers and native brush under dense tree canopies. Wood roofs, siding, decks, stairs, outbuildings, and fences represent some of the most flammable fuels in the hills. Power lines were hung on wooden poles, often under tall trees. Hill water and fire hydrant systems evolved over a 60-year period with numerous areas of low pressure, low water flows, and limited 2-hour reserves of water for fire fighting. Landscapers and homeowners planted the ever-popular juniper in great quantities. Some homes are literally wrapped with junipers and other flammable ornamental plantings, some covering the wood siding and reaching up to the wooden eaves.

Unmaintained, Aging Plantations Significantly Increase Fire Risks

The East Bay's eucalyptus and pine plantations were established in the early 1900s. Eucalyptus was planted for hardwood production, and Monterey pines were planted to forest the barren hills in preparation for coming real estate developments. Many of the older pines are now showing the effects of time. Eighty-year old pine trees are beginning to fail as they become senescent, with beetle damage and pine pitch canker taking increasing numbers of trees. The Tasmanian blue gum eucalyptus has produced unusually dense and flammable woodlands with up to 400 trees per acre 12 inches or larger in diameter far exceeding the 30 to 50 trees per acre found in maintained fire-safe groves in a few locations in the hills. Large unmaintained groves of blue gum eucalyptus are recognized worldwide as high fire risk trees with their habit of producing large quantities of flammable bark, branches and oily leaves that can provide fuel ladders to the crown, potentially carrying burning embers miles ahead of a fire front. Litter under dense Eucalyptus groves often exceeds 50 tons of combustible material per acre, far above a fire safe standard of 5 tons per acre. Excessive fuel loads on the forest floor and fuel ladders to their high crown mean that these groves would be extremely flammable under any summer or fall high wind condition with control of a moving flame front in the groves almost impossible and with serious ember spotting into adjacent neighborhoods.

The 1995 Fire Hazard Mitigation Program and Fuel Management Plan

Following the disastrous Oakland/Berkeley fire of 1991, the East Bay Hills Emergency Forum was formed to coordinate emergency planning and to develop a new fire hazard mitigation program and plan for the Hills. The Hills Emergency Forum's members currently include Oakland, Berkeley, East Bay Regional Park District, East Bay Municipal Utility District, Lawrence Berkeley Laboratory, and University of California at Berkeley. The Hills Forum created a Vegetation Management Consortium (VMC) that was commissioned to develop a new fire hazard mitigation program and plan for the hills. A draft of the new VMC Plan was completed in the summer of 1995 and was reviewed and approved by the East Bay Hills Emergency Forum at their October 19, 1995 meeting. After a full review and considerable public debate, the East Bay Regional Park District Board accepted the principles described in the VMC Plan at their October 15, 1996 meeting.

The new VMC Plan uses up-to-date fire science concepts and recommends a unified approach for public agencies and homeowners to follow in reducing the considerable fire risks present in hill residential areas, and wildlands that threaten "values at risk."

Summary of Residential Area Hazards and Mitigation Proposals

Approximately 50% of the planning area is classified as residential for which four different products were developed to address mitigating fire hazards on private property. A geographic information system (GIS) was used to rate residential areas by structural roofing and siding, vegetation fuels, defensible space, wildland threat, and road condition.

These ratings classified residential areas of similar characteristics in the following manner:

- 4,747 acres (33%) as having extreme fire hazard potential,
- 6,158 acres (43%) as having high hazard potential,
- 3,024 acres (21%) as having moderate hazard potential, and
- 359 acres (3%) as having low hazard potential.

Summary of GIS Products and Derivatives

The Fire Study Area GIS is an interactive computer program that includes a number of factors used in fire hazard assessment for both wildlands and residential areas. The Study Area GIS is composed of layers of digital information displayable in map form with relevant data attributes spatially connected. The GIS data set is available in CD format, making extensive inventory and research data available to public agencies, homeowners, and others interested in mitigating wildfire risks. The GIS was used to produce a technical chart that identifies all of the Vegetation polygons, charting attributes for vegetation type, acres, fuel model, development stage, crowning potential, slope class, flame lengths, rate of spread, heat per area and ignition potential rating.

Summary of Wildland Hazards and Mitigation Proposals

The Eastern 50% of the 15 mile long and 3 mile wide planning area is classified as wildlands for which a number of products were prepared to identify wildland fire hazards. The VMC Plan recommend tools for managing vegetation, and proposes strategies for creating defensible zones at the residential/wildland interface to mitigate the risks of wildfires moving from wildland areas into residential communities. Wildland vegetation was modeled for fire conditions set at a 90% worst-case condition under a Diablo Wind. Flame lengths greater than 8' are considered "out of control" and are possible on 10,500 acres of wildland areas within the study area with 8,000 acres having less than 8' flame lengths. The VMC Plan recommends that fuelbreaks should be created at the residential/urban interface and along evacuation routes and maintained to keep flame lengths below 8' in the areas where firefighters are most likely to attempt to protect residences and other "values at risk."

There is ongoing debate about how to achieve the 8' flame standard. Some believe that the full 500' wide and 3,200-acre planning zone must be managed, and some believe that it is possible and preferable to manage a smaller 125' zone that achieves the 8' flame length with fewer environmental impacts and long-term maintenance costs.

Also, the findings of the VMC Plan have not met with full acceptance by all those involved with the report, nor all who have reviewed it. Valuable information is acknowledged to be contained within the Plan and its technical appendix. However, there is concern among some in the environmental community that the VMC Plan was formulated mainly along wildfire control lines, did not use a 100% Diablo Wind fire weather condition in its computer modeling, and

inadequately reflected environmental and aesthetic concerns. Given these and other circumstances, some suggest that the Plan's recommendations need reevaluation during this EIR review process to determine their relative usefulness.

The Role of the East Bay Regional Park District

The District, since its creation in 1934, has been a major property owner in the East Bay Hills, and has long been concerned with the risks of uncontrolled wildfire. Under current State Law, the State Department of Forestry (CDF) is the primary fire fighting agency in the unincorporated wildland, watershed areas of the East Bay Hills, and the Cities of Oakland, Berkeley, El Cerrito, and Kensington Fire District have primary responsibilities within their boundaries. The District has secondary fire fighting responsibilities within its parklands and has its own Fire Department that cooperates and coordinates with both State and Local Departments.

Park District Resource Management and Fire Mitigation Policies

The Park District has conducted numerous vegetation management programs to reduce wildfire risks, and has created and maintains 20 miles of fuelbreak as a mosaic of grassland, thinned brush, and well spaced trees along the western boundary of its East Bay Hill parks. The original fuelbreak was a joint agency project and was created in 1974 as a 300' wide clearance of freeze damaged eucalyptus trees on Park District, City of Oakland, Water District and UC property. Renewed interest in fire safety and fuelbreak maintenance resurfaced in 1980 following the Berkeley fire that destroyed 5 ridge top homes. At the request of the mayor of El Cerrito and the mayors of several East Bay cities, the District formed a multi-agency Blue Ribbon Fire Safety Committee to prepare an updated fire safety plan for the East Bay Hills. The Blue Ribbon Report recommended that cities take steps to make hill residential areas fire-safe, and also recommended continued maintenance of the original fuelbreak with additions in several locations to provide defensible space for ridge top residences that were not protected by the 1974 fuelbreak. The new fuelbreaks generally involved vegetation other than eucalyptus and are defined as a 125' vegetation management zone below homes along the ridge. Homeowners were responsible for removing flammable vegetation to their property line with the District and other public agency landowners to maintain vegetation on public lands to achieve the 125-foot defensible zone. The 1982 Blue Ribbon Fire Hazard Reduction Report was completed and adopted by all of the participating agencies.

The District's Board of Directors also has adopted a number of policies that guide the District in responding to the risk of wildfire. Two of the most recent and relevant policies are the "Fire Weather Operating Plan for Park Closures" and the "Fire Hazard Mitigation Program and Fuel Management Plan for the East Bay Hills." The District's Master Plan, the Wildlands Manual, and the Integrated Pest Management (IPM) Manual also provide direction for staff in protecting wildlife, special features, important habitat, and the use of IPM strategy (including minimizing and careful use of chemicals) for managing pest species. The District's Board of Directors, in adopted Park Plans and Environmental Impact Reports, has authorized fuelbreaks and wildland fire hazard reduction efforts at Anthony Chabot, Redwood, Huckleberry, Sibley, Claremont Canyon, Tilden, Temescal, and Wildcat Parks. Board-adopted park plans also include a number of specific policies for managing eucalyptus, pine, brush lands, grasslands, and other resources to maintain desired native plant ecosystems, and to meet other park objectives. There is ongoing concern and disagreement within the environmental community about specific aspects of vegetation management expressed in the adopted park LUPD/EIR's which need to be addressed in the proposed new EIR.

Management of "natural" park resources may seem an inappropriate concept. However, vegetation in the East Bay Hills has always been managed. Native plant communities adapted

to the use of fire by Ohlones and animal grazing, until native people, fire, and native herds were removed from the land or eliminated in the early 1800s. Introductions of European grasses, logging of redwood forests, and plantings of extensive eucalyptus and pine plantations had significantly impacted future park plant communities by the early 1900s. These impacts, along with large scale tree plantings, invasion of broom, thistle, and densely overgrown brush lands have contributed to making some plant communities less native, more dense and unnatural, and more flammable.

Fortunately, some East Bay Hill park plant communities have resisted many of the impacts of human introductions and are rebounding to become healthy and relatively fire safe ecosystems that are sustainable into the future. Second growth redwoods, bay-oak woodlands, riparian woodlands, and many native brush land and grassland areas, with a reasonable level of care and attention can form excellent natural environments in hill park wildlands.

The District has formulated vegetation management policies in adopted LUDP/EIR's for the East Bay Hill parks using the following principles:

- Oak/Bay woodlands, riparian, and redwood plant communities are natural, relatively fire safe, and should not generally be managed except that substitutes for naturally occurring process, i.e. cool fires, and light hand crew thinning, may be carefully used to recreate a more open and natural-like plant ecosystem.
- North/East facing slopes should be allowed to progress naturally from grassland to brush land to Oak/Bay woodland.
- Interior park vegetation should not generally be managed except for the purpose of encouraging more native and natural plant communities.
- Grassland areas should be preserved and in some cases re-established to retain this important plant community in East Bay Hill parks. Ridge tops and south/west slopes are appropriate as grasslands, and in most cases will require ongoing grazing, mechanical, or other IPM strategy to control brush invasion.
- Eucalyptus and pine conversion to native species is a long-term goal with economics and public acceptance being the main factors in determining the pace of this transition. Management of eucalyptus and pine plantations to reduce fire risks is necessary and appropriate. Conversion from eucalyptus or pine will not be accomplished easily, with transition to a grassland/brush mix, oak/bay woodland, or other appropriate native, plant community a long-term goal.
- Management of natural park vegetation is currently limited to designated fuelbreaks along the ridge top or residential boundary, and to the management of eucalyptus and pine plantations by thinning, removal, or use of prescribed fire to reduce fuel volume and the threat of crown fire.

Property Owner Responsibilities

Property owners who choose to live next to wildland areas or in especially high-risk environments must assume primary responsibility for ensuring that their homes are sufficiently fire hardened to survive the heat and embers that can be expected in a Diablo Wind wildfire. In hill areas of the East Bay, it is prudent to maintain a minimum 100-foot defensible zone around residences with all structures having a class A roof and fire resistant siding. In many areas urban developments have encroached into wildland settings without adequate consideration given to fire risks and fire protection. Property owners who have placed themselves in this situation will need to maintain expanded defensible clearings around their structures and possibly add additional protective measures like automatic or manual foam systems to protect their structures. The spread of wildfire across property boundaries will occur given the steep slopes and vegetation found in most Hill wildland areas. However, the fire risk can be minimized

through cooperative fire hazard reduction planning and implementation involving all landowners and fire fighting agencies. Protecting life and property at the residential interface requires coordinated resource management, careful site planning, public education, strategic fuel management, and aggressive fire fighting capabilities.

The Controversy About Fire Hazard Reduction

It is surprising that hill residents and officials have yet to develop a real consensus about the actions required of them for improved Diablo Wind wildfire safety ...especially after the October '91 firestorm. The multitude of divergent opinions by hill residents, environmental groups, public officials, and the general public will need to be focused before it will be possible to implementing more forceful and effective programs of fire hazard reduction and to achieve funding for required programs.

Also, the controversy among some scientists, environmentalists, and concerned citizens about how to achieve a reasonable level of fire safety in the wildland areas of the hills must be addressed and hopefully resolved. All of the ramifications of that controversy cannot be briefly summarized in this short Problem Statement. Fortunately, complete and chronologically organized records of all communications and position papers that were offered by a wide range of individuals during the development of the VMC Plan and its acceptance by the District. It is believed that these records contain many ideas and views important to understanding the details and depth of this controversy, and they will be made available for review by the EIR consultant.

All of the individuals that have participated in the debate about wildland fire safety and environmental protection have unique knowledge, expertise and opinions about the region's plants, animals, geology, fire behavior, and a wide range of other disciplines. Their views must be considered during the process of sorting out the elements of this very complex problem. The Park District and its selected consultant will obviously need to develop a clear process for enlisting this talent during the preparation of the final Plan and EIR.

Public Officials and Residents Must Work Together

The magnitude of the East Bay Hills fire hazard problem calls out for a new public consensus about what must be done to be reasonably safe. While public and media interest during each fire is high, real progress in creating and maintaining a fire safe condition in the hills is lagging seriously.

The 1991 Oakland/Berkeley fire aptly demonstrated that blame can't successfully be placed at the feet of a single "culprit," a single property owner, unsafe neighborhoods, unsafe wildlands, or unsuccessfully executed emergency actions. The 1991 wildfire was an unfortunate, but predictable, chain-like combination of all of the above. The chain is still weak and strengthening one or two links will not be sufficient. Solutions must address each of the multiple elements of the problem. To be effective, long term commitments of resources by the 28,000 landowners, and 6 Hills Emergency Forum member agencies who own property and provide fire fighting services will be essential if we are to reduce the significant residential and wildland wildfire risks that exist today in the East Bay Hills.