

## II. PLAN GOALS, OBJECTIVES AND GUIDELINES

This chapter establishes the overall long-range goals, objectives, and guidelines for the Wildfire Hazard Reduction and Resource Management Plan (Plan). As noted in the previous chapter, the purpose of the Plan is twofold: (1) specify a framework for undertaking ongoing fuel reduction, resource management and maintenance activities that take into account and respond to the unique environmental conditions that exist on the District's East Bay park lands; and (2) identify an effective decision-making process aimed at creating low fire hazard, diverse ecosystems with an emphasis on protecting, enhancing, and restoring native species and their habitats in a cost-effective and environmentally sustainable way, where possible.

The emphasis of vegetation management actions detailed in this Plan centers on balancing three factors: wildfire risk reduction, resource management, and cost-effectiveness of projects over the lifetime of their implementation. Successful long-term wildfire risk reduction and resource management must balance economic factors with the effectiveness of selected treatment methods; it is critical that EBRPD selects cost-effective treatments for the program to be sustainable over the long-term. To achieve the Plan's purpose and promote economical and effective solutions to fire risk reduction and resource management, EBRPD has identified four key goals – broad statements expressing priorities regarding wildfire hazard reduction and vegetation management – as well as a more detailed set of objectives that are attainable through the application of this Plan's guidelines and recommendations.

A number of organizations and groups have identified goals and objectives for reducing fire risks in the East Bay Hills. The Hills Emergency Forum's (HEF's) Vegetation Management Consortium (VMC) identified an overarching goal: *To reduce fire hazard in the East Bay Hills in the urban wildland intermix to an acceptable level of risk*, as well as eight corollary objectives listed in the Fire Hazard Mitigation Program & Fuel Management Plan for the East Bay Hills (May 1995). Since the 1995 Plan, a number of groups sponsored by the District, including the Fire Hazard Reduction EIR/NEPA Advisory Committee and the Environmental Roundtable, have prepared reports and papers that have been provided to inform this planning process including: the East Bay Hills Wildfire Problem Statement, a report on Vegetation Management Study Areas, and suggested Resource Management Guidelines. Additionally in March 2009, the Sierra Club, the East Bay Chapter of the California Native Plant Society, and the Golden Gate Audubon Society provided to EBRPD *An Environmental Green Paper: Managing the East Bay Hills Wildland/Urban Interface to Preserve the Native Habitat and Reduce the Risk of Catastrophic Fire*.

To guide the preparation of the Plan, EBRPD prepared a set of goals and objectives for this Plan which have been provided to the public at each of the public planning meetings. During the public outreach and plan preparation process, the District has reviewed and revised the goals and objectives in an effort to balance the absolute requirement to reduce wildfire threats to life and property with the necessity of complying with federal, State and local laws and regulations aimed at protecting natural resources and the environment, as well as the District's intrinsic public duty to be good land stewards. The following goals, objectives and guidelines of the Plan build upon the goals and objectives that have been previously identified by the District in the 1995 Plan, as well as the following plans and adopted policies, incorporated by reference herein:

- Master Plan, East Bay Regional Park District, as updated in 2007
- East Bay Hills Roadside Vegetation Treatment Standards, approved by the Hills Emergency Forum, April 2003
- Fire Weather Operating Plan for Park Closures, East Bay Regional Park District, February 1998
- The Tunnel Incident – Oakland 1991 Ten Years After, Hills Emergency Forum, October 2001
- Wildland Management Policies and Guidelines, East Bay Regional Park District, June 2001
- Fire Hazard Mitigation Program and Fuel Management Plan for the East Bay Hills, East Bay Regional Park District, May 1995
- Fuel Break Plan, East Bay Regional Park District, July 1989
- Pest Management Policies and Practices for the East Bay Regional Park District (Resolution NO. 1987-11-325), October 1987.
- Report of the Blue Ribbon Fire Prevention Committee for the East Bay Hill Area Urban-Wildland Interface Zone, Blue Ribbon Fire Safety Committee, February 1982

The following sections describe in further detail the goals, objectives and guidelines of the Plan.

## **A. PLAN GOALS**

EBRPD established the four primary goals to guide the preparation of this Plan and all subsequent wildfire hazard reduction and vegetation management actions. These goals serve as the overarching concepts under which the Plan's framework is delineated. The following goals enable EBRPD to plan, budget for, execute, and monitor the results of their actions to implement the Plan in a manner consistent with District's mission and its goal to

manage the natural resources on lands within its jurisdiction as detailed in its 1997 Master Plan.

The goals for the Plan are as follows:

- Reduce fire hazards on District-owned lands in the East Bay's wildland-urban interface (WUI) to an acceptable level.
- Maintain and enhance ecological values for plant and wildlife habitat consistent with fire reduction goals.
- Preserve aesthetic landscape values for park users and neighboring communities.
- Provide a vegetation management plan which is cost-effective and both financially and environmentally sustainable to EBRPD on an on-going basis.

## **B. OBJECTIVES**

The Plan objectives serve to more specifically direct wildfire hazard reduction and vegetation management actions. The following objectives provide a substantive basis for the Plan guidelines, fuel reduction treatment options, vegetation management goals and recommendations; and ultimately, the location-specific action plans. The purpose of the objectives is to enable the District to make a variety of informed, adaptive decisions according to site-specific information and prepare annual fuel reduction action plans that meet its goals over time.

With the establishment of these objectives, the District seeks to maximize the overall potential benefits of vegetation management (such as creating conditions that allow for more varied habitats and diversity of species) on plants and wildlife, their habitats, and neighboring communities. The District also wants to avoid, minimize and mitigate potential adverse environmental impacts and reduce costs. The objectives of the Plan are as follows:

1. Reduce the potential for loss of human life and property and damage to structures and public improvements from wildfire.
2. Reduce the potential for loss of environmental, cultural, aesthetic or recreational resources due to a catastrophic wildfire.
3. Ensure that during the planning for and implementation of all fuel reduction activities that the protection, restoration and enhancement of biologically diverse habitats and environmental resources is given full consideration, and specific resource management objectives and actions are incorporated into all fuel reduction treatment plans.

4. Continue to evaluate the location, adequacy and maintenance of EBRPD's fuel reduction zones.
5. Meet resource management goals and reduce costs, strive to create and maintain over time habitats characterized by low-fire hazard vegetation, optimal ecological functioning, and biodiversity when preparing fuel reduction actions plans and when undertaking treatment activities.
6. Provide a menu of vegetation treatment and maintenance that take into consideration habitat restoration and address topographic situations, vegetation types, and resource management objectives. Treatment methods may include: hand labor techniques; mechanical treatments; chemical applications; prescribed burning; and grazing.
7. Evaluate the environmental and aesthetic effects of vegetation management treatment methods and options; and avoid, minimize and/or mitigate the potential adverse effects of vegetation management options on the environment, and especially on special-status species and other species of concern.
8. Provide a plan that enables EBRPD to make informed, adaptive decisions on an annual basis concerning ongoing vegetation management based on: overall benefits; potential environment effects; and cost.
9. Encourage other agencies, organizations and park neighbors to create "fire safe" areas of at least 100 feet around private homes, structures and facilities to reduce the threat of wildfires moving off of private lands or parklands and increase the ability of emergency responders to successfully fight wildfires once started.
10. Increase the ability of the EBRPD Fire Department, emergency responders, State and local fire departments, and District staff to suppress wildfire in the WUI and protect the public's health, safety and welfare, as well as public and private property.
11. Increase the ability of the EBRPD Fire Department, emergency responders, State and local fire departments, and District staff to evacuate people from parklands and adjoining lands during a wildfire or other emergency incident.
12. Create an economically- and environmentally-sustainable fuels management program.

## **C. PLAN GUIDELINES**

In order for the goals and objectives provided in this Plan to be consistently applied across the Plan parks, a set of guidelines has been prepared to provide more detail concerning

vegetation management activities and actions to be undertaken by the District. In coordination with other applicable and relevant policies and guidelines set forth by EBRPD in the Master Plan and other planning documents, these guidelines serve to shape how, where, and in what manner various treatment actions are implemented to achieve EBRPD's goals and objectives for reducing the threat of wildfire. The following guidelines are subdivided into three main categories: wildfire hazard reduction, resource management, and coordination.

While this Plan focuses on planning for wildfire hazard reduction and resource management actions on EBRPD parklands, it recognizes that coordination with adjacent local City and County jurisdictions, property owners and managers (e.g., UC Berkeley, Lawrence Berkeley National Laboratory, East Bay Municipal Utilities District), neighborhood groups and organizations, private individuals, and other emergency responders is also extremely important as wildfire does not recognize property boundaries and a regional approach to fuel reduction and emergency access is required. In regards to what private landowners can and should do to protect themselves and their property, in January 2005 a new State law became effective (see Public Resources Code 4291 and Government Code 51182) that extended the defensible space around homes and structures from 30 feet to 100 feet. Proper management to 100 feet dramatically increases the chance of a house or structure surviving a wildfire. This defensible space also provides for firefighter safety when protecting homes during a wildland fire (see Appendix B for additional information regarding State regulations, defensible space and landowner responsibilities).

The intent of the Plan is that EBRPD will use the guidelines provided below along with the best management practices identified for each fuel reduction method (see Chapter IV. Fuel Reduction Methods), the Resource Management Program fire hazard reduction and resource management goals and guidelines (see Chapter V. Vegetation Management Program), and site-specific data to determine and implement appropriate treatment methods and courses of action for defined treatment areas. As EBRPD gains experience and assembles a comprehensive database regarding the success, timing and costs of various treatment actions, this information will be used where appropriate to update the guidelines set forth below.

## **1. Wildfire Hazard Reduction**

The following guidelines pertain to wildfire hazard reduction activities to be undertaken on lands within EBRPD's jurisdiction, where appropriate, that fall within the Study Area for this Plan.

- 1.1 Aim to reduce and maintain fuel loads to a level that would produce no greater than an 8 foot flame length within 200 feet of structures during a fire incident, which

- represents a nationally recognized standard over which erratic fire behavior and difficulty in control and suppression is anticipated.
- 1.2 Evaluate and treat, as necessary, trees and shrubs on ridgetops along the WUI for fuel conditions and surrounding topography to reduce the potential for wildfire reaching the crowns of trees (“crowning”) leading to burning materials and embers being carried long distances under high wind conditions and igniting additional fires well ahead of the main flame front.
  - 1.3 Where active management, such as hand labor or mechanical treatments, prescribed burning, or fuel reduction zone construction is necessary to reduce wildfire hazard conditions, such efforts will be consistent with encouraging low fuel hazard, low maintenance, sustainable ecosystems. Pre-project site assessments will be conducted to identify and protect sensitive resources, as needed.
  - 1.4 Continue to maintain and manage EBRPD’s established ridge top fuel reduction zone, as necessary, to meet the goals, objectives and guidelines established in this Plan.
  - 1.5 Annually prioritize treatment areas and give preference to maintenance of previously treated areas. New treatment areas should focus on:
    - Wildland/urban interface areas at risk of spreading wildfire to adjacent urban properties, defined as “District land within 200 feet of a private structure under Diablo Wind conditions” for Hill parks, and “Under a condition in which winds blow uphill” for Measure CC Shoreline parks. This may vary, depending on such conditions as slope of the property and type of vegetation present.
    - Lands within 200 feet of high-value or irreplaceable District facilities and park residences.
    - The location of vegetation types, particularly Eucalyptus and Monterey pine, associated with threats from torching and crown fires that cause ember flight.
    - Areas critical to strategic fire fighting operations in the event of a wildfire.
    - Wildfire evacuation and access routes.
  - 1.6 EBRPD will employ methods that meet resource management objectives, provide environmental benefits, and are economically feasible to reduce and maintain fuel loads at acceptable levels. EBRPD will consider a full range of options for managing wildland vegetation when preparing action plans for specific areas.

- 1.7 Ensure that treated areas aid in containment when high hazard vegetation types are modified so as to create discontinuous units that will aid in confining wildfires to discrete areas and improving firefighting response.
- 1.8 Wildfire hazard reduction treatments may involve: the use of hand labor treatments, mechanical treatments, herbicide and other chemical applications, prescribed burning, and/or grazing techniques; the construction, maintenance, and operation of access roads, trails, and/or fuel reduction zones to manage fuels; improved firefighter response times; and effective fire containment. All appropriate wildfire hazard reduction methods will be used in a manner consistent with existing regulations and policies regarding species diversity and habitat restoration and enhancement.
- 1.9 Establish and maintain a system of Strategic Fire Routes throughout the parks, based on existing roads and trails, to facilitate and support emergency vehicle access, evacuation, and strategic firefighting response; to reduce roadside ignition potential; to support the development of fire management units; and to reduce the fuel load in critical locations adjacent to roads to provide time for successful initial wildfire attack. When accomplishing the following roadside vegetation management standards for the designated Strategic Fire Routes, follow the performance standards for each vegetation type established in this Plan (see Chapter V):
  - Road Width: Maintain a minimum clearance of 10 feet and maximum clearance of 20 feet from the edge of Strategic Fire Routes to allow for varied clearance distances. Varying the clearance distances will preserve aesthetic values along these routes by eliminating the potential for clearance to create a “hedgerow” effect.
  - Vertical Clearance: Maintain a minimum vertical clearance of 13.5 feet for all Strategic Fire Routes to allow fire apparatus access.
- 1.10 Adopt as a regional standard Section 17 of the Uniform Fire Code Division II Environmental Hazards Control of Hazardous Fire (as follows and paraphrased): *The Fire Chief may remove and clear within 10’ on each side of roadway all flammable vegetation or other growth. The Fire Chief may enter upon private property to clear. This does not apply to single specimens of trees, ornamental shrubbery or cultivated groundcovers provided that they do not form a means of readily transmitting fire. “Roadway” applies to portion of highway or private street improved or ordinarily used for vehicular traffic. This section also enables the chief to require reasonable alternative measures.*

- 1.11 Identify and support additional roadside clearance projects for the purpose of reducing wildfire hazards using project specific information based on site conditions, fire behavior and suppression strategies. Consider the following strategies when identifying clearance projects:
- In strategic areas, where highly flammable brush or eucalyptus trees are adjacent to the road, establish 30 feet of sheltered fuel reduction zone on either side of the road (or additional distance as required by adjacent slopes or vegetation height).
    - Remove shrubs to create an open mosaic of grassland and less than 30 percent shrub density.
    - Remove any ladder fuels beneath the eucalyptus trees (loose bark and low hanging branches) to approximately 14 feet.
    - Remove trees to thin dense stands of eucalyptus along roads to achieve a long term goal of phased elimination, where appropriate.
    - Consider treating the understory of native oaks, bays and other trees to reduce their potential for a crown fire, where appropriate.
    - Retain trees, ornamental shrubbery and cultivated ground covers that do not form a means of readily transmitting fire.
  - Modify vegetation to create potential containment areas taking advantage of existing roads and topographic features.
  - Where appropriate, incorporate safety zones for firefighters by modifying additional vegetation to reduce the flame length or other hazards.

## **2. Resource Management**

The following guidelines pertain to resource management activities on EBRPD lands.

- 2.1 Manage existing vegetation types over time to attain low fire hazard conditions. When feasible, convert areas to alternative low-hazard vegetation types (but only where repetitive treatment is infeasible to obtain low fire hazard conditions, or where vegetation type conversion is recommended in conjunction with other resource management goals, such as the reduction of invasive plants or conversion to a more environmentally suitable vegetation type).
- 2.2 Undertake vegetation management and fuel reductions activities to maintain and enhance diverse habitats and attempt to achieve a high representation of native flora. When planning and undertaking treatment activities, recognize the

- physiological and ecological needs and requirements of the native vegetation, and consider a full range of options for managing vegetation in these areas to ensure that preference is given to treatment options which allow for the most environmental benefits with the least fiscal and environmental costs.
- 2.3 Conduct vegetation management to maintain and enhance native vegetation, where feasible; identify and protect special-status species prior to and during any treatment actions and include, monitoring and vegetation enhancement activities as needed in representative treatment plans to ensure the continued protection of such species.
  - 2.4 Consider “keystone” and “indicator species” (as described in Appendix E) when planning and implementing treatment actions and preparing prescriptions for habitat protection and enhancement.
  - 2.5 EBRPD will incorporate integrated pest management (IPM) plans (as described in Appendix G) for noxious invasive plants (such as broom, acacia, yellow starthistle, fennel, and oblong spurge) where feasible when planning for and implementing fuel reduction treatment actions to minimize their widespread encroachment on park lands. Treatment actions undertaken will consider a full range of reasonable options for managing invasive plants in areas with native species.
  - 2.6 Riparian and other wetland environments will be managed to preserve and enhance the natural and beneficial values of these areas and prevent the destruction, loss, or degradation of habitat. Creeks, streams, and other wetlands will be retained in their natural state whenever possible to maintain water quality, biotic diversity, aesthetic values, and recreational opportunities. Vegetation management actions that may potentially impact wetland areas will be reviewed by qualified personnel prior to implementation, and will include protective measures where feasible to prevent destruction, loss, or degradation of these areas. Post-treatment monitoring and follow-up actions will be undertaken to ensure wetland areas are preserved and/or enhanced during and following any vegetation management actions in the surrounding areas.
  - 2.7 EBRPD will protect and maintain the habitats of rare, threatened, endangered, or otherwise sensitive species during and following any vegetation management actions, where possible. Further guidance for determining appropriate management actions for these species and their habitats will be sought from biologists and other qualified personnel, and management actions based on this guidance will be carried out to maintain, increase, or restore population levels and viability. A monitoring program for listed species within treated areas will be conducted to record condition of habitats in order to better inform future vegetation management actions.

- 2.8 EBRPD will consider the visual character and aesthetic resources of the parks when planning for and implementing fuel reduction treatments.

### **3. Coordination**

- 3.1 In response to changing conditions and regulatory agency requirements and in recognition that analysis of fire hazards and vegetation is an ongoing and dynamic process, EBRPD will continue to review and update the Plan, including but not limited to procedures, GIS mapping, description of fuel types, potential treatment areas, and prescribed mitigation measures over time.
- 3.2 EBRPD will prepare an annual Fuels Treatment Plan for review through the District Budget Process.
- 3.3 EBRPD will continue to coordinate with the adjacent cities, counties, special districts, State and federal agencies that own and manage public lands, facilities and infrastructure, including roadways, and those that regulate private lands in the Plan study area to ensure that adjacent vegetation management programs are coordinated, information is shared, roadside vegetation clearance is maintained, and emergency evacuation, egress and ingress can be provided.
- 3.4 EBRPD will continue its outreach and education programs with stakeholders, neighborhood groups, and local organizations in an effort to reduce fire hazards on lands adjacent to parklands; assist private land owners with prioritizing and planning long term fuel reduction and fire safe landscaping strategies; and support State laws regarding the establishment and maintenance of a state-designated defensible space zone around homes, local hazard abatement ordinances, and fire codes.
- 3.5 EBRPD will include cost-effectiveness and cost criteria in decision making and management of the vegetation management program.
- 3.6 EBRPD will consider combining recommended vegetation treatment areas located in close proximity to one another that contain similar vegetation types and require similar fuel treatment and maintenance activities to increase locational efficiencies and reduce program management costs, where appropriate.
- 3.7 Should EBRPD identify new areas not previously mapped and evaluated as part of a recommended treatment area that requires treatment to modify vegetation for the purpose of reducing wildfire hazards the District will assess the area to define the extent of the new treatment, and identify treatment prescriptions for fuel reduction, vegetation management and environmental protection, following the objectives, guidelines and best management practices identified in this Plan.