

6.10 BUENA VISTA PARK

GENERAL DESCRIPTION AND LOCATION

Buena Vista Park is an approximately 36-acre park located in the central portion of San Francisco, just north of Corona Heights (Figure 1-1). Buena Vista Park is bounded in part by Haight Street on the north. Buena Vista Avenue East and Buena Vista Avenue West loop around the park and form the eastern, southern, and western boundaries. The Natural Area at Buena Vista Park is approximately 6.1 acres and is located on the northern side of the park (Figure 6.10-1). The Natural Area supports one of the most extensive coast live oak forests within the City. The remainder of the park is covered almost exclusively by mixed exotic forest. A designated Dog Play Area (DPA) exists in the north west corner of Buena Vista Park in the oak woodland.

Buena Vista Park has high natural resource, as well as recreational, values to San Francisco residents including: one of the last remaining coast live oak woodlands in the City; high levels of recreational trail use; and habitat for a wide variety of resident and migratory bird species.

GEOLOGY, HYDROLOGY, AND TRAILS

Buena Vista Park is a moderately steep sandy hill, comprised entirely of Sirdrak (dune) sand with elevations ranging from 275 to 575 feet above sea level (Figure 6.10-2). A complex network of paved trails (2,990 feet) and sandy paths (520 feet) covers the park, exposing the friable soils to erosive forces. The hazard of water- and wind-generated erosion in Sirdrak sand is moderate to high (USDA 1991). The park as a whole has been previously divided into 14 specific areas needing erosion control (SFRPD 1989). Only two of these areas are entirely or partially within the Natural Area (Figure 6.10-2).

VEGETATION

Based on aerial photo interpretation and ground-truthing, the vegetation of the Buena Vista Park Natural Area was classified into seven series (Table 6.10-1; Figure 6.10-3). These series are within four sub-formations: approximately 97 percent is forest; less than 1 percent is scrub and grassland; and more than 2 percent is classified as “other” (developed). Only one of these series (coast live oak forest) is dominated by native species.

Forest

Four forest series were mapped within Buena Vista Park’s Natural Area. Coast live oak forest covers 3.3 acres. Mixed exotic and cypress forest combine to cover another approximately 2.5 acres. A small patch of coast redwood forest (0.15 acre) has been planted in the center of the Natural Area. Mixed exotic forests dominate the landscape outside of and at the periphery of the Natural Area.

Sensitive Plant Species

The California Natural Diversity Data Base (CNDDDB) does not report the occurrence of any sensitive plant species in Buena Vista Park (CNDDDB 2005); however, two species designated as sensitive for this management plan occur at Buena Vista Park in the eastern portion of the Natural Area (see Figure 6.10-4). Populations of San Francisco gumplant (*Grindelia hirsutula* var *maritima*) and thimbleberry (*Rubus parviflorus*) occur at Buena Vista Park. The coast live oak forest within the Natural Area at Buena Vista Park is one of few remnant populations of this species within the City and is second in size only to the much more expansive oak woodlands within Golden Gate Park (Section 6.15).

Invasive Plant Species

Invasive species within the Natural Area at Buena Vista Park are represented primarily by the mixed exotic (1.66 acres) and cypress forest (0.84 acres). Additionally, there are significant portions of the understory that are covered in Algerian ivy (*Hedera canariensis*), Cape ivy (*Delairea odorata*), and Himalayan blackberry (*Rubus discolor*).

WILDLIFE

Birds

The multi-storied complex habitat of the park provides suitable foraging, nesting, and roosting habitat for a wide variety of species. Oak woodlands are generally highly productive in terms of the variety of bird species they support, and even oak forests in a highly used urban park such as Buena Vista Park support a variety of birds. The grasslands and scrub habitats of nearby Corona Heights and Twin Peaks provide foraging habitat for raptors while the forests of Buena Vista Park provide potential nesting habitat for these species. Habitat for smaller birds (passerines) is limited by the availability of scrub and mosaic habitats throughout the park. Additionally, the understory of the forests within the Natural Area is generally sparsely vegetated, limiting forage, refuge, and nesting habitat for smaller birds.

Sensitive Bird Species and Important Bird Habitat

Eleven species of birds that are considered locally sensitive have been documented using Buena Vista Park (Table 6.10-2) (Appendix Table C-1). Of these, five species, including red-shouldered hawks (*Buteo lineatus*), red-tailed hawks (*Buteo jamaicensis*), and dark-eyed junco (*Junco hyemalis*) are known to breed within the Natural Area. The entire Natural Area has been delineated as important bird habitat because oak woodlands are very productive bird habitat providing food, shelter, and breeding habitat for a variety of species, including the five known to nest and numerous migrant and resident birds (Figure 6.10-4). Wintering species at Buena Vista Park include acorn woodpecker (*Melanerpes formicivorus*) and varied thrush (*Ixoreus naevius*).

The CNDDDB does not report the occurrence of any special-status species of birds from Buena Vista Park (CNDDDB 2005).

Mammals, Reptiles, and Amphibians

Habitat for common terrestrial mammals and reptiles occurs in the Buena Vista Natural Area. To date, no surveys have been conducted in Buena Vista Park for mammals or reptiles. The lack of water and sandy substrate likely precludes the presence of aquatic-dependent amphibians. However, California slender salamanders (*Batrachoseps attenuatus*), which are active during wet weather and relatively common throughout the City of San Francisco, may occur at Buena Vista Park as well as garter snakes and lizards. Various small mammals such as the pocket gopher (*Thomomys bottae*) and eastern gray squirrel (*Sciurus carolinensis*) are also likely to occur at Buena Vista Park. Larger mammals such as raccoons (*Procyon lotor*), striped skunks (*Mephitis mephitis*) and Virginia opossum (*Didelphis virginiana*) are typical of urbanized parks in general and are expected to occur within Buena Vista Park. The CNDDDB does not report the occurrence of any sensitive species within the area (CNDDDB 2005).

MANAGEMENT AREAS

A single Management Area (MA-2a) has been designated at Buena Vista Park that includes the coast live oak woodlands in the northern portion of the park (Figure 6.10-5).

ISSUES AND RECOMMENDATIONS

Several conservation, bird habitat improvement and recreation issues have been identified for Buena Vista Park. Recommendations developed for each of these issues will guide restoration, enhancement, and maintenance work. In the following discussion, system-wide issues and recommendations (GR-1 for example; see Chapter 5) that apply to the entire Natural Area at Buena Vista Park are presented first within each topical area, followed by site-specific issues and recommendations.

Site Improvements – Implementation of management recommendations at Buena Vista Park would not change significantly the overall look of the park and would result in:

- improved habitat for resident and migratory birds and other wildlife by creating a multi-aged oak forest;
- enhanced health of oak woodlands;
- increased understory diversity within the oak forest and associated improvement to bird breeding habitat;
- installation of a permanent water source for wildlife;
- enhanced public safety and enjoyment by increasing and establishing view corridors;
- improved educational opportunities;
- reduction and control of soil erosion; and

- no change to existing DPA, unless use patterns and impacts change.

Restoration and improvements in the stand of oaks at Buena Vista Park will create a multi-aged stand of healthy oak trees. The understory will support sensitive plants and an abundance of birds. This area may someday be comparable to that of the oak woodlands of western Marin County.

Vegetation

The biodiversity and ecological function of the Natural Area at Buena Vista Park is threatened, especially by invasive weeds. In addition to the following specific recommendations, control of invasive plants (GR-1) and reintroduction of sensitive plant species (GR-2) will help preserve and enhance the biodiversity of the Buena Vista Park Natural Area. Issues relating to the general safety of visitors and surrounding homes, fire hazards posed by vegetation and trees, and illicit activities must be considered during management of the Natural Areas (GR-13). In addition to these general recommendations, the following site-specific issues should be addressed.

Issue BV-1: Although the Buena Vista Natural Area supports substantial oak woodland, the understory of this forest is largely comprised of invasive shrubs, grasses, and herbs, which compromise the woodland's biodiversity and health. When the understory of the forest is densely populated with invasive species, it becomes almost impossible for young oak trees to successfully germinate, become established and reach maturity. Also, ivy that is allowed to grow up oak trees can deprive mature trees of light and eventually kill them.

Recommendation BV-1a: To help protect the long-term viability of the oak woodland and increase biodiversity, reduce herbaceous and woody invasive species such as sweet fennel, (*Foeniculum vulgare*), Bermuda buttercup (*Oxalis pes-caprae*), English ivy (*Hedera helix*), ehrharta grass (*Ehrharta erecta*), Himalayan blackberry, etc. throughout MA-2a. To help protect the integrity of the oak woodland, invasive tree species shall be prevented from becoming established within MA-2a.

Recommendation BV-1b: In order to enhance the existing oak woodland, provide opportunities for enhanced wildlife habitat, and promote a multi-aged oak forest, remove approximately 10 eucalyptus and acacia trees. Approximately 130 pine and cypress trees will remain in the Natural Area. Revegetate areas where invasive species were removed with appropriate dune scrub and oak trees. Young oak trees shall be allowed to naturally recruit within these areas, thereby promoting creation of a multi-aged stand. Other species that will enhance wildlife habitat and promote diversity include species such as toyon (*Heteromeles arbutifolia*), California coffeeberry (*Rhamnus californica*), oceanspray (*Holodiscus discolor*), snowberry (*Symphoricarpos albus* var. *laevigatus*), and native grasses (Appendix B). Diversity, cover, and density targets generated from reference sites within and around San Francisco will be applied in the development of the planting plans.

Recommendation BV-1c: In order to prevent extinction of existing rare or uncommon plant species within the Natural Areas citywide, consider the reintroduction of species such as fairy bells (*Disporum hookeri*).

Wildlife

Wildlife issues at Buena Vista Park focus on improving habitat for birds, particularly for the resident and migrant songbirds. Vegetation management during the breeding season can impact nesting birds (GR-4), however, this action can also provide materials to create artificial habitat for ground-dwelling birds, small mammals, and reptiles (GR-9). Artificial nesting structures may benefit some species, especially cavity nesters such as oak titmice (*Baeolophus inornatus*), chestnut-backed chickadees (*Poecile rufescens*), and woodpeckers (GR-6). Finally, reduction in predation pressures will benefit all animals within the Natural Areas (GR-7). In addition to these general recommendations, the following site-specific issues should be addressed.

Birds

Issue BV-2: The sparse understory of the oak woodlands appears to be the limiting factor for populations of smaller songbirds. Complex scrub habitat provides nesting and foraging habitat for a variety of birds, several of which are considered sensitive. Water sources are essentially nonexistent within the Buena Vista Park Natural Area, which means that birds are forced into nearby nonsuitable habitat in search of water.

Recommendation BV-2a: Create complex, multi-storied habitat that would provide food sources, nesting, roosting, and escape habitat for a variety of species. Within MA-2a, remove invasive species in the understory (BV-1a and BV-1b) and install species such as toyon, coffeeberry, oceanspray, snowberry, California figwort (*Scrophularia californica*), and California huckleberry (*Vaccinium ovatum*) that create more food and nesting resources and increase structural diversity by providing native plants that are different in height at maturity from the existing habitats.

Recommendation BV-2b: San Francisco Recreation and Park Department (SFRPD) shall consider installing a permanent water source within or adjacent to the Natural Area at Buena Vista Park. A small pool in a secluded location would be relatively simple to install and maintain, yet provide a resource that is currently lacking within Buena Vista Park. Prior to the installation of small artificial water sources, it should be ensured that they will not be located in areas, such as near trails or within off-leash DPAs, that would be easily accessible to off-leash dogs or undesirable human use. These activities could potentially render the artificial water sources unusable to birds, amphibians, and other wildlife, thus defeating their purpose. Artificial water sources should be able to be drained periodically in order to remove bullfrogs that would prey on smaller animals using the water sources.

Issue BV-3: Winter forage for resident and migrant passerines are limited at Buena Vista Park. While areas of blackberry (native and invasive) exist within Buena Vista Park, winter fruiting plants are limited in distribution.

Recommendation BV-3a: Planting plans developed as part of restoration activities within MA-2a shall focus on augmenting winter and late-fall fruiting shrubs such as toyon and California coffeeberry.

Soils, Erosion, and Public Use

As discussed above, Buena Vista Park is a moderately steep sandy hill with a complex network of paved and social trails throughout the Management Area (Figure 6.10-5). This plan proposes to maintain 3,221 feet of paved trails and retain 520 feet of unimproved earthen trails. No trails are proposed for closure. The issue of erosion and habitat impacts related to social trails is addressed through implementation of GR-11. Interpretive signs regarding the ecosystem of Buena Vista Park should also be considered (GR-14).

Issue BV-4: The existing DPA on the north side of Buena Vista Park is located adjacent to the oak woodlands. Dark-eyed juncos have been observed nesting in this stand. Also, these oak woodlands provide nesting habitat for Hutton's vireo (*Vireo huttoni*) and Olive-sided flycatcher (*Contopus cooperi*), two species of concern in San Francisco. At present, most of the off-leash dog use in the area does not encroach into bird breeding habitat. Dogs typically run in the open un-vegetated area next to and north of the oak stand. Nests of these species are either located in trees or covered by vegetation. Therefore, at present, there is some separation between the breeding bird habitat and dog use in the area. It is possible however, that increased use of this DPA could result in dogs running into, and directly disturbing, breeding bird habitat, which could negatively effect their reproduction.

Recommendation BV-4a: Use of the DPA at Buena Vista Park should be monitored. If use levels increase such that impacts to breeding bird habitat are detected, SFRPD and the Dog Advisory Committee should consider implementing other protective measures or relocating the DPA outside of oak woodlands.

Table 6.10-1. Vegetation series mapped at Buena Vista Park.

	Vegetation Series	Total Acreage
Forest	coast live oak forest*	3.30
	cypress forest	0.84
	mixed exotic forest	1.66
	coast redwood forest	0.15
	Subtotal	5.95
Scrub	Himalayan blackberry scrub	0.01
Other Herbaceous	wild radish	0.00
Other	developed	0.17
Grand Total		6.13

* Indicates vegetation type is dominated by native species.
 Shaded entries indicate coverage of less than 0.005 acres.

Table 6.10-2. Sensitive species presently and historically known to occur at Buena Vista Park.

Species	Common Name	Status Federal, State, CNPS	Occurrence Status
ANIMALS			
<i>Hirundo rustica</i>	Barn Swallow	SLC	Presently breeds
<i>Vireo huttoni</i>	Hutton's Vireo	SLC	Presently occurs and likely breeds
<i>Vermivora celata</i>	Orange-crowned Warbler	SLC	Presently occurs
<i>Contopus borealis</i>	Olive-sided Flycatcher	SLC	Presently breeds
<i>Carpodacus purpureus</i>	Purple Finch	SLC	Presently occurs
<i>Loxia curvirostra</i>	Red Crossbill	SLC	Winter resident
<i>Buteo lineatus</i>	Red-shouldered Hawk	SLC	Presently breeds
<i>Buteo jamaicensis</i>	Red-tailed Hawk	SLC	Presently breeds
<i>Cyanocitta stelleri</i>	Steller's Jay	SLC	Presently occurs
<i>Catharus ustulatus</i>	Swainson's Thrush	SLC	Presently occurs
<i>Wilsonia pusilla</i>	Wilson's Warbler	SLC	Presently occurs
PLANTS			
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	LS	Presently occurs
<i>Rubus parviflorus</i>	Thimbleberry	LS	Presently occurs

Status Key:

Federal Status

- FE* Endangered. Species in danger of extinction throughout all or significant portion of its range.
- FT* Threatened. Species likely to become endangered within foreseeable future throughout all or a significant portion of its range.
- FPE* Proposed for listing as endangered.
- FC* Candidate for listing as endangered. Candidate information now available indicates that listing may be appropriate with supporting data currently on file.
- FSC* Species of Concern. Former Category 2 Candidate for listing as endangered.
- FPD* Proposed de-listing.

California State Status

- SE* Endangered. Species whose continued existence in California is jeopardized.
- ST* Threatened. Species, although not presently threatened with extinction, that is likely to become endangered in the foreseeable future.
- SSC* Species of Concern.
- SFP* State Fully Protected under Sections 3511 and 4700 of the Fish and Game Code.
- Sens* Considered a sensitive species by the California Department of Forestry.

California Native Plant Society

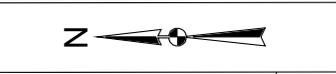
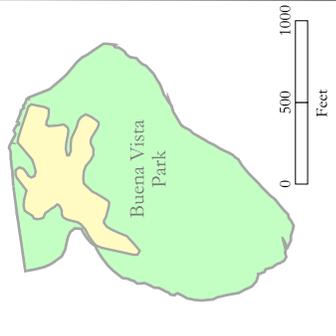
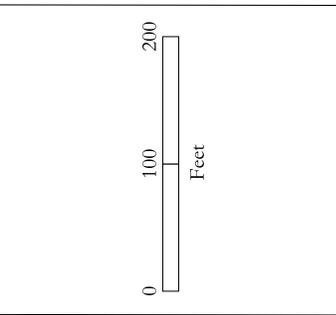
- 1A Plants presumed extinct in California
- 1B Plants that are rare or endangered in California and elsewhere.
- 2 Plants that are endangered in California, but more common elsewhere.
- 3 Plants about which more information is needed.
- 4 Plants of limited distribution (a watch list).
- LS Locally Significant.

Golden Gate Audubon Society

- SLC Species of Local Concern

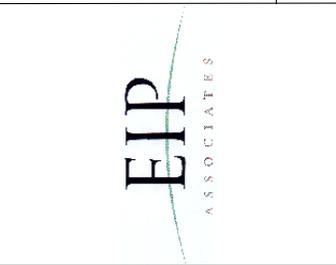


FIGURE 6.10 - 1
AERIAL PHOTOGRAPH, PROPERTY BOUNDARIES, AND NATURAL AREAS
 Buena Vista Park
 Significant Natural Resource Areas Management Plan
 San Francisco, California



Source: Aerial photography: San Francisco Department of Public Works, 2002; Orthophoto - San Francisco - 1-foot resolution, 2001; property boundary data derived by San Francisco Recreation and Park Department (RPD) 2005 from data provided by San Francisco Department of Telecommunications and Information Services, 2002; natural area boundary data created by San Francisco State University, Institute for GISc from information provided by RPD's Natural Areas Program (NAP), 2005; contour lines provided by San Francisco Department of Conservation; all data are California State Plane Zone III, NAD 83.

Created by Debra Dwyer, San Francisco State University Institute for GISc, May 4, 2002, revised June 7, 2005.



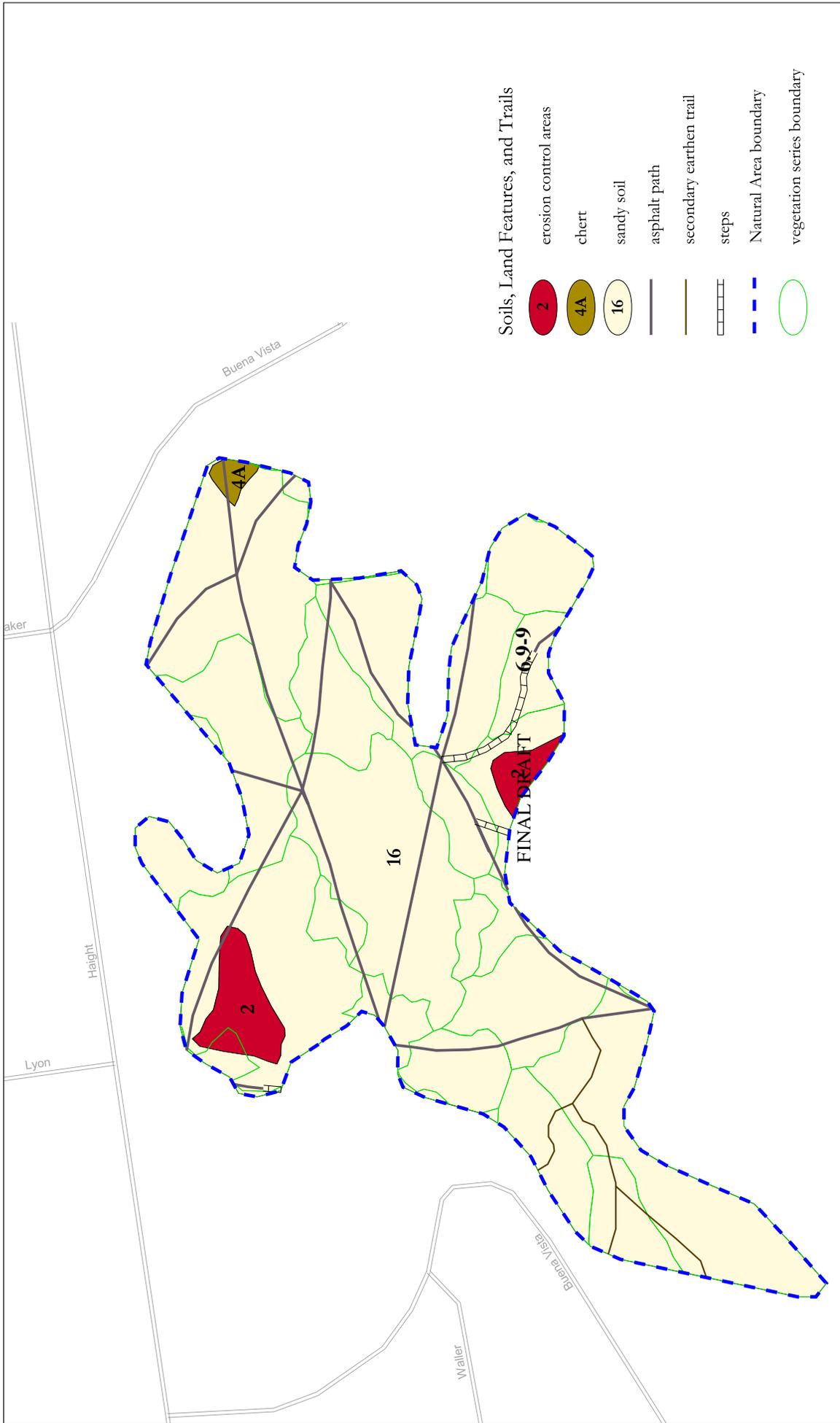
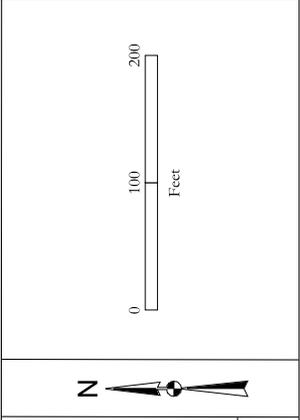


FIGURE 6.10 - 2
SOILS, LAND FEATURES, AND TRAILS
Buena Vista Park
 Significant Natural Resource Areas
 Management Plan
 San Francisco, California



Source: Vegetation data collected by San Francisco Department of Recreation and Parks Significant Natural Areas Program (NAP), San Francisco State University Biology Department, and EIP Associates, 1999-2000; soil and land features data collected by EIP Associates, 1999 - 2002; trails data collected by NAP, 2005; data layers digitized by Geotopo, Inc., 1999 - 2000; edited and corrected by San Francisco State University Institute for GISc (SFSUGIS), 2000, 2005; trails data digitized by SFSUGIS, 2005; natural area boundary created by SFSUGIS from data determined by NAP, 2005; streets data excerpted from ArcView StreetMap 2000 Data, copyright 1998-2000, Environmental Systems Research Institute, Inc. (ESRI).

Created by D. Dwyer, San Francisco State University Institute for GISc on August 23, 2001, revised December 10, 2005.

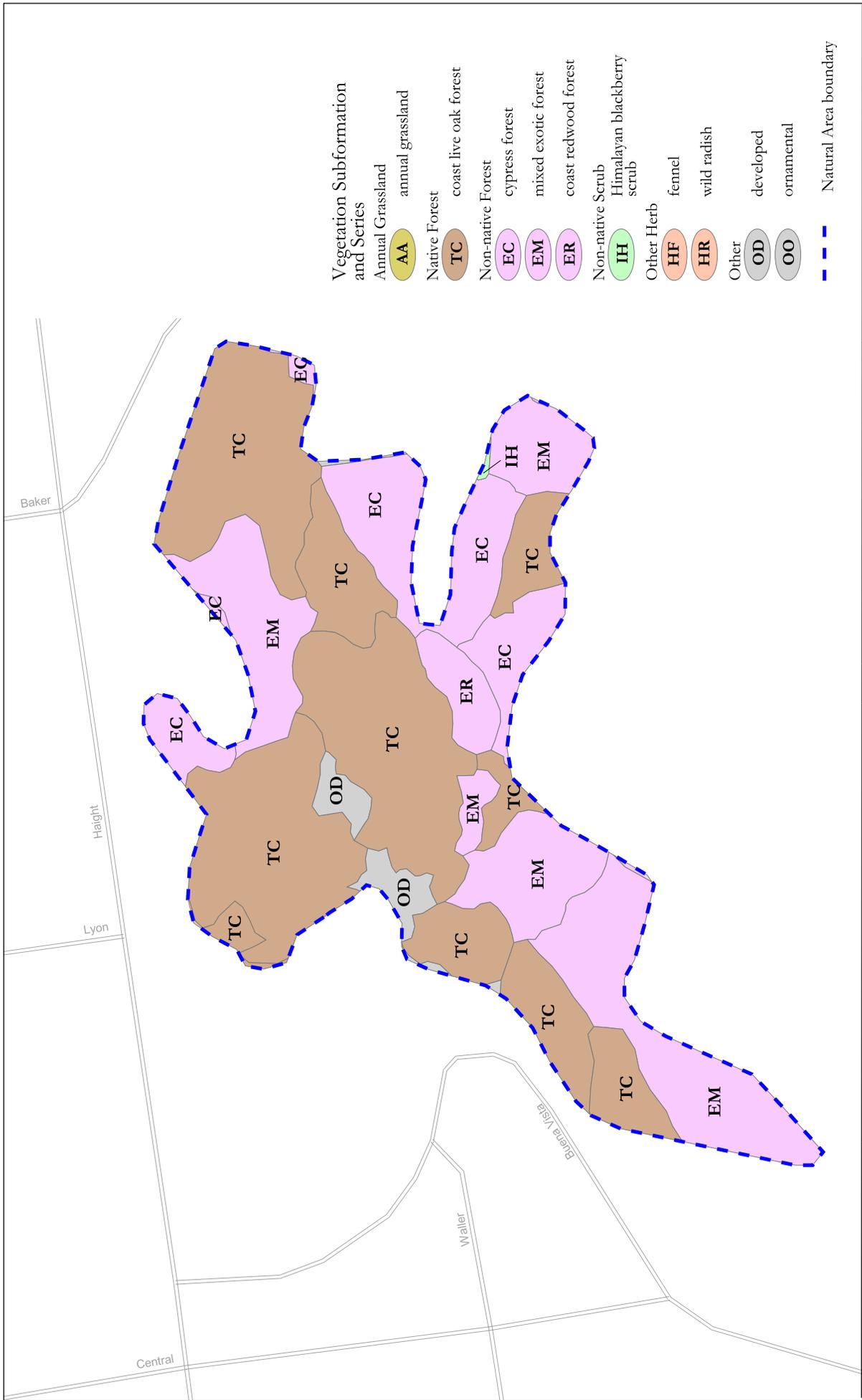
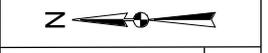
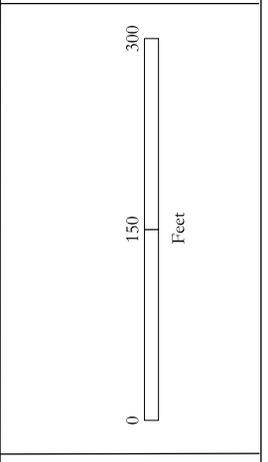
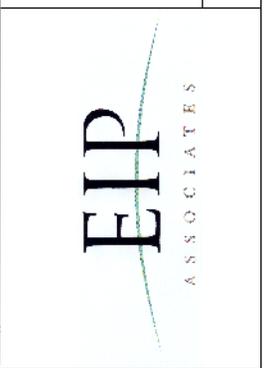


FIGURE 6.10 - 3
VEGETATION
Buena Vista Park
 Significant Natural Resource Areas
 Management Plan
 San Francisco, California



Source: Vegetation data collected by San Francisco Recreation and Park Department Natural Areas Program (NAP), San Francisco State University, Biology Department and EIP Associates, 1999-2000; data layers digitized by Geotopo, Inc., 2000; edited and corrected by San Francisco State University for GIS (SFSUGIS), 2000 - 2002; natural area boundary created by SFSUGIS from data provided by NAP, 2005; streets data excerpted from ArcView StreetMap 2000 data from Environmental Systems Research Institute, Inc., copyright 1998-2001.

Created by D. Dwyer, San Francisco State University Institute for GIS August 23, 2001, revised June 6, 2005.



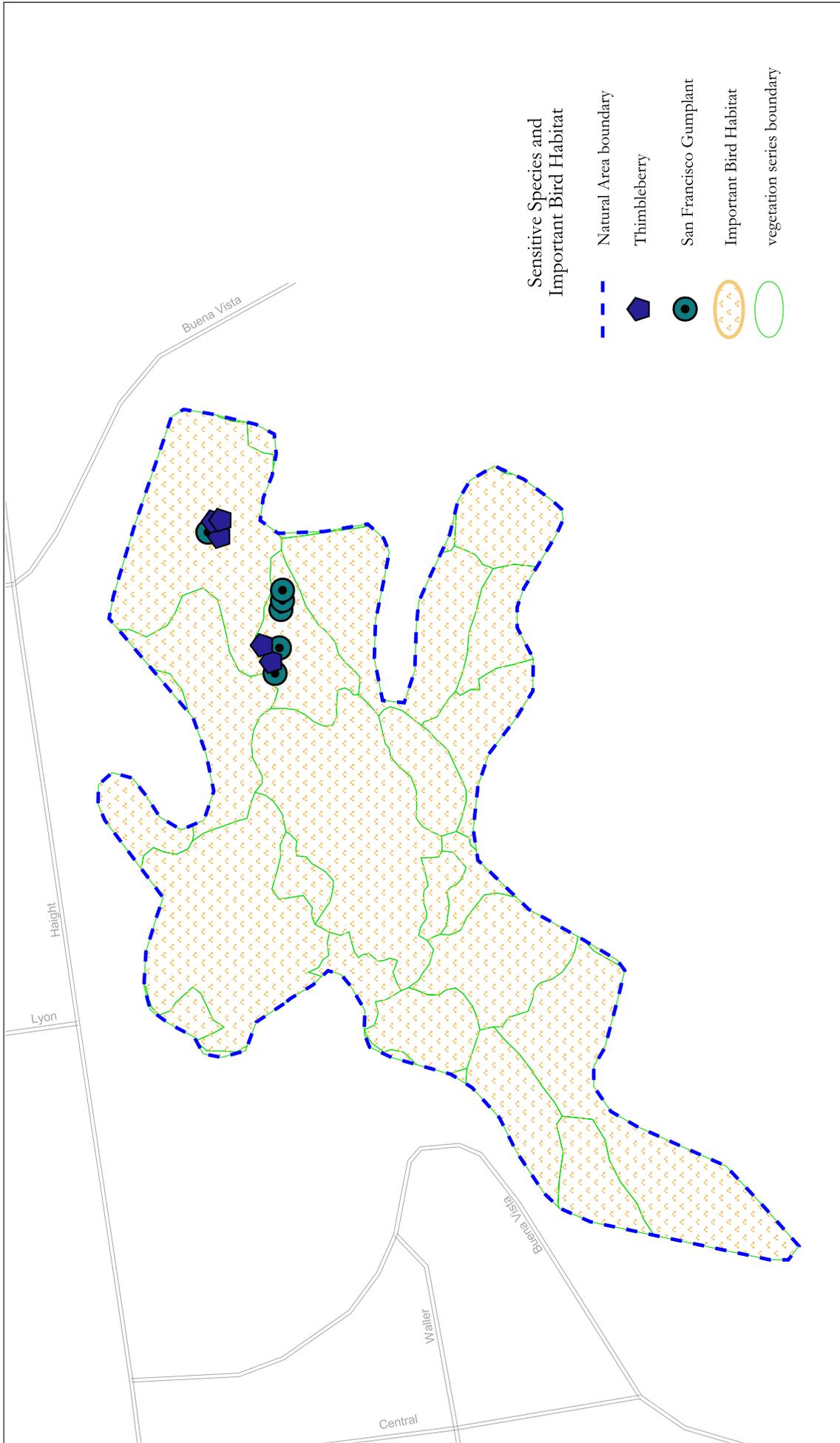
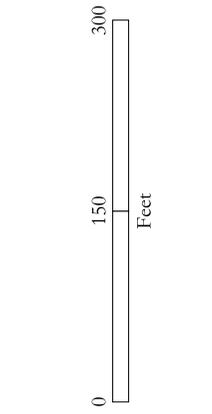


FIGURE 6.10 - 4
SENSITIVE SPECIES AND
IMPORTANT BIRD HABITAT

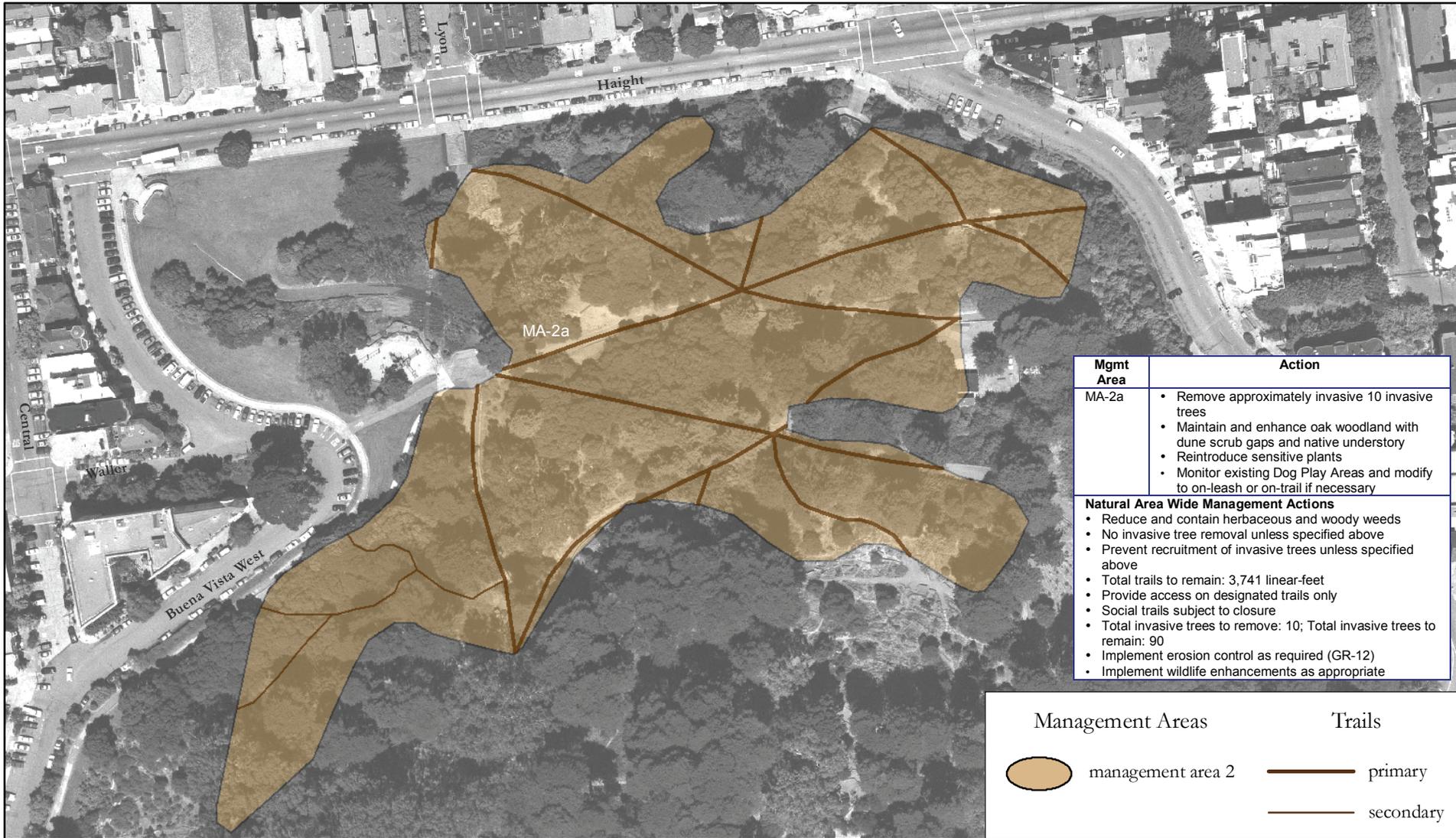
Buena Vista Park
 Significant Natural Resource Areas
 Management Plan
 San Francisco, California



Source: Vegetation data collected by San Francisco Recreation and Park Department Natural Areas Program (NAP), San Francisco State University Biology Department and EIP Associates, 1999-2000; data layers digitized by Geotopo, Inc., 2000; edited and corrected by San Francisco State Institute for GISc (SFSU IGIS), 2000 - 2002; natural area boundary created by SFSU IGIS from data provided by NAP, 2002; streets data excerpted from ArcView StreetMap 2000 data, copyright by Environmental Systems Research Institute, Inc. (ESRI), 1998-2000.

Created by D. Dwyer, San Francisco State University
 Institute for GISc, August 23, 2001, revised October 13, 2005.





Source: Management areas and trails data collected by San Francisco Department of Recreation and Park Natural Areas Program (NAP), 2005; trails data digitized by San Francisco State University Institute for GISc (SFSUGIS), 2005; streets data excerpted from Environmental Systems Research Institute (ESRI), Inc.'s StreetMap 2000 data copyright ESRI 1998-2001; aerial photography San Francisco Department of Public Works, 2002, Orthophoto - San Francisco - 1 Foot Resolution - 2001; all data are in California State Plane Zone III projection, NAD 1983; map produced using ArcGIS 9.0 software by ESRI.

Map created May 28, 2005 by Debra Dwyer, San Francisco State University, Institute for Geographic Information Science; revised August 23, 2005.

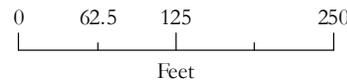


FIGURE 6.10 - 5
MANAGEMENT AREAS
AND TRAIL PLAN

Buena Vista Park
 Significant Natural Resource Areas
 Management Plan
 San Francisco, California

