

APPENDIX **E**

**1995 Significant Natural Resource Areas  
Management Plan**



RECREATION AND PARK DEPARTMENT

STAFF REPORT ON THE

SIGNIFICANT NATURAL RESOURCE AREAS  
MANAGEMENT PLAN

Adopted by the San Francisco  
Recreation and Park Commission

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### Introduction

Significant natural areas in San Francisco are generally remnants of an original landscape region that stretched from San Bruno Mountain to the Golden Gate Headlands. This original landscape, sometimes known as the Franciscan biological region, was marked by the greatest inland penetration of ocean sand anywhere on the Pacific Coast and supported a rich sand dune ecosystem.

Rising above this belt of wind-blown sand, a ridge of Franciscan radiolarian chert extended in a southeast-northwest direction. Predominantly treeless except for small groves of coast live oak and toyon in more sheltered areas with sufficient soil, these grassy hilltops flourished with wildflowers in the spring.

Freshwater and saltwater wetlands teeming with wildlife lined the shoreline of the Bay. Small seasonal pools dotted the shifting sand dunes near the ocean and extensive stream systems fed vast marshes. A rising ocean deposited sand that effectively blocked the free-flow of a creek system resulting in the creation of Lake Merced.

The unique characteristics of this biological region made it different from any other ecosystem. Today, only very small examples of this rare environment remain as footnotes to the ecological history of San Francisco.

Many of these natural vestiges face degradation and destabilization from increasing urbanization. In order to effectively preserve and protect these valuable natural resources, the Recreation and Park Department proposes to develop a Significant Natural Resource Areas Management Plan.

### Program Background


As public awareness of the value of San Francisco's biological diversity has grown, so has the appreciation of notable natural resources within the City's park system.

To further the protection and enhancement of significant natural resources on property under the jurisdiction of the Recreation and Park Department, a total of \$400,000 has been earmarked to fund a Significant Natural Resource Areas Management Plan (SNRAMP) through the San Francisco Park and Open Space Program. The purpose of this management plan is to establish a maintenance and preservation program related to the protection and enhancement of natural resource values.

It is envisioned that a significant portion of the funds would be used to address immediate threats to natural resources on park property, such as invasive weeds and erosion (see Attachment D). The remainder of the funds would be reserved for the development of the specific management programs of the natural resources management plan.

The Recreation and Park Department staff has drafted plan objectives, policies and guidelines for identifying significant natural areas and developing a standardized procedure for inventorying these areas and establishing management programs for their protection. The attached report provides the background and initial process contemplated by staff for the Significant Natural Resource Areas Management Plan.

An environmental consultant would be selected in the second part of the plan's development to further refine the plan, inventory natural resources within selected park properties, and make the site specific management program recommendations.

 A stated objective of the proposed program is to "[i]ncrease City-wide level of awareness of the location and value of significant natural resource areas...." and to "[e]ncourage local participation in the protection or improvement of natural resources." Therefore, interested members of the public have been invited to participate in a series of community workshops to review and comment on the draft SNRAMP. Members of the public, community organizations, and agencies with natural resources expertise will be invited to participate with Recreation and Park Department staff on a task force to implement SNRAMP. The task force would also monitor the progress of the consultant and review and comment on further refinements of the plan by the consultant.

Following this process, the general public will be invited to attend a workshop to review and comment on the consultant-prepared plan. Upon completion of the environmental review for compliance with the California Environmental Quality Act (CEQA), the consultant-prepared SNRAMP would be reviewed and considered for approval by the Recreation and Park Commission at a public hearing.

### Program Overview

The protection and enhancement of natural areas has become a priority goal for public agencies at both the state and federal levels. The Environmental Protection Agency, and Department of the Interior in particular, have initiated numerous programs to inventory natural resources on public lands, and have developed guidelines and standards for the preservation and enhancement of

resources such as threatened and endangered plants and animals, and habitat areas such as wetlands, vernal pools, desert communities and coastal zones.

Similarly, the State of California has a long history of priority policies and actions directed to the protection of statewide natural resources. In particular, the California Department of Fish and Game, Lands and Natural Areas Project has initiated a computerized inventory of natural areas, and a program designed to raise the awareness among developers, planners, conservationists and the general public about the presence of natural areas in local communities.

Many environmental organizations, such as The Nature Conservancy, also provide assistance in the preservation of unique natural resources. Groups with special expertise, such as the California Native Plant Society, the Sierra Club, the Audubon Society and others have played an active role in forwarding these programs.

Locally, there are a number of individual efforts under the auspices of the Golden Gate National Recreation Area and within the Recreation and Park Department (particularly through the Park and Open Space Program) that focus on the preservation and enhancement of natural areas and resources within the City and County of San Francisco.

The Recreation and Park Department would like to further these efforts by: 1) Developing guidelines and policies to protect or enhance valuable natural resources; 2) Setting standards for identifying these resources on property under the jurisdiction of the Recreation and Park Department; and 3) Following an approach and site-specific methodology for managing these areas. The result will be a Significant Natural Resource Areas Management Plan.

The following report produced by the staff of the Recreation and Park Department provides the background and initial process envisioned by staff for the Significant Natural Resource Areas Management Plan. This report is a summary of a program to identify significant natural resource areas, develop a standardized procedure for inventorying these areas, and establish management policies and actions for their protection.

### *Relationship to Other Plans*

Other City departments and governmental agencies would comment on the consultant-prepared SNRAMP for consistency with other applicable plans and policies, including the following:

- *City Master Plan: Recreation and Open Space Element - Policy 13:* "Natural area management plans should be developed for publicly owned land throughout the City which would identify potentially significant natural areas,

inventory them, and identify the presence of natural resources. The plan should establish a consistent set of management policies and practices to protect and enhance the resources."

- Adopted master plans for individual parks
- Adopted forestry management plans for individual parks
- GGNRA: *General Management Plan and Resources Management Plan*
- Local Coastal Plan.

**Action Items for Adoption by the Recreation and Park Commission**

I. PROGRAM OBJECTIVES

- Increase City-wide level of awareness of the location and value of significant natural resource areas under the jurisdiction of the Recreation and Park Department.
- Encourage community participation in the protection or improvement of natural resources.
- Provide educational and recreational opportunities related to natural resources where appropriate; where feasible, restrict recreational uses and activity in sensitive habitat areas.
- Determine management needs and priorities for natural resources, particularly those identified by other agencies as rare, threatened or endangered species or habitat, or a species or habitat of special concern.
- Consult and coordinate with other city departments, agencies and groups with special expertise for inventory information and implementation.
- Implement measures designed to address immediate problems, such as invasive weed control.

## II. IDENTIFICATION OF SIGNIFICANT NATURAL RESOURCE AREAS

In order to identify the significant natural resource areas under the jurisdiction of the Recreation and Park Department, staff established a general set of criteria. These criteria are:

- A. Park property contains naturally occurring biotic and/or geomorphic remnants of the indigenous landscape.
- B. Conforms to State of California, Department of Fish and Game criteria:
  1. Presence of rare type of species or habitat;
  2. Presence of ensemble type of species or habitat (3 or more elements occurring together);
  3. Presence of the best example of a type of species or habitat; and
  4. Presence of high diversity type of species or habitat.
- C. Special values: geology, riparian zones, wildlife habitat.
- D. Corridor or connector between natural areas.
- E. Natural resource area is vulnerable to degradation from an imminent ecological crisis, such as inundation by exotic plant species.

Many properties under the jurisdiction of the Recreation and Park Department are remnants (or include remnants) of the original natural landscape found in San Francisco prior to urbanization and therefore have significant natural values or features. Some examples of significant natural resource areas include:

- Native grasslands that thrive on the shallow soils of the windswept, foggy western slopes of San Francisco hilltops such as Bernal Hill, Twin Peaks, Bayview Park and the eastern side of Mt. Davidson. These grasslands are noteworthy for their ability to provide conditions of shade and water retention between bunches of grass that are ideal for native wildflowers. Many of these native wildflowers support a biologically diverse insect community, including rare species of butterflies.
- The most important avian habitat in San Francisco at Lake Merced. The Lake's proximity to the ocean, coastal cliffs and remnant dunes make it critical to the breeding ecology of as many as 50 bird species. It is a valuable habitat for thousands of migrating birds during spring and fall. Winter birds range from 60 to 100 species and number in the thousands of

individual birds. Lake Merced also provides habitat for remnant mammal, reptile and insect populations.

- Rare and diverse habitat areas in Glen Canyon Park, including a riparian habitat and a hillside native plant community.
- Rare and unusual geological formations found at Twin Peaks, the Rock Outcrop and Corona Heights.
- Important connectors between natural areas such as the many hilltop parks in San Francisco that serve as important links for certain species of birds and butterflies that require a range of suitable habitat.
- Rare, threatened or endangered species of animals and plants, such as the Mission Blue Butterfly found on Twin Peaks.

It is not the function of the SNRAMP to identify, inventory and maintain elements of park property which are not remnants of the original natural landscape, such as playgrounds, golf courses and ballfields. It is recognized, however, that certain parks that are characterized by a nonindigenous landscape are naturalistic, and as such, contribute to the biodiversity of the region by providing wildlife habitat. An example of such a park includes the vegetation of Stern Grove which supports many species of birds. These "naturalistic" parks are generally prioritized in Rank C in recognition of the fact that the park does not meet all of the criteria listed above (particularly criterion A).

Staff developed an evaluation matrix using the above criteria and suggested the following initial priority ranking of properties for "significant natural resource area" designation.

Following supplemental field inventories, this ranking may be revised based on site specific programs. Field work may also show that a particular park should be a higher priority because it is threatened by an immediate ecological crisis, pursuant to criterion E.



All or PART of the following parks would be considered candidates for significant natural areas.

Rank A	Rank B	Rank C
Bayview Park Glen Canyon Park Lake Merced Mt. Davidson Twin Peaks	Bernal Hill Billy Goat Hill Buena Vista Park Corona Heights Golden Gate Heights -- (western edge) Golden Gate Park— Oak Woodland Strawberry Hill Grandview Park — Kite Hill McLaren Park— southern grasslands McNab Lake/Marsh Rock Outcrop Sharp Park Tank Hill	Brooks Property Dorothy Erskine Park Edgehill Mtn. Open Space Fairmont Park Golden Gate Park— Selected Lakes Park Presidio Interior Greenbelt Lincoln Park Mountain Lake Park Rolph Nicol (southern edge) Stern Grove/Pine Lake Zoo

**COMMENTS:**

The program would focus on San Francisco park property and Sharp Park, however, Camp Mather may receive some review. Although the Zoo and Palace of Fine Arts (Lagoon) are included (Rank C), these sites may be questionable as natural areas.

**III. GENERAL POLICIES AND MANAGEMENT ACTIONS**

**A. Vegetation**

- Maintain/promote indigenous plant species; propagate native plants using seed collected from the specific site to avoid alteration of unique genetic strains of native plant species. This propagation policy should apply to the policies and management actions listed below to the extent possible.
- Control/remove invasive species.
- Provide fire breaks where appropriate and maximize indigenous vegetation with low flammability or low fuel volume in areas of high fire hazard.

- Utilize indigenous vegetation as ground cover to control erosion on steep slopes.
- Protect species listed as rare, threatened, endangered or of special concern.
- Remove exotic plants which adversely affect indigenous plant growth.
- Enhance riparian areas.
- Reforest and/or replant areas where appropriate to maintain diversity of indigenous plant communities.
- Preserve habitat which supports wildlife.

#### B. Wildlife

- Monitor wildlife population which is an indicator of a diverse ecosystem.
- Consult with agencies such as the State of California, Department of Fish and Game and The Nature Conservancy on habitat enhancement.
- Cooperate with other agencies (SPCA, Mayor's Office of Animal Care and Control) using established and humane procedures to remove or control free-roaming domestic dogs, feral cats and feral ducks or geese when their presence conflicts with natural wildlife.
- Develop educational programs with other agencies for wildlife protection.

#### C. Water Resources

- Maintain/improve water quality of streams and ponds.
- Protect riparian zones from erosion and sedimentation.
- Maintain drainage and erosion prevention devices along roads and service trails.

- Control drainage/runoff from roads.
- Establish and maintain tule encroachment zone around lakes.
- Use proper controls when applying aquatic herbicide.

#### D. Geotechnical/Soils

- Minimize erosion along roads and trails.
- Seed/plant bare soils with indigenous vegetation.
- Stabilize embankments when not in conflict with habitat.
- Minimize public access to and use of landslide areas and unstable slopes.
- Seek agreements with adjacent property owners to avoid development which contributes to erosion/runoff, or is subject to landslides.
- Clear landslide debris on park property.
- Install retaining devices where necessary to stabilize slopes.

#### E. Education

- Promote professional development of Recreation and Park Department staff in natural resources management.
- Develop nature programs to promote educational and recreational value of resources (for example, through the Randall Museum).
- Develop education programs aimed at private property owners adjacent to significant natural resource areas regarding the degradation of the resource resulting from such practices as dumping garden clippings or planting exotic species on park property.
- Develop education programs through the San Francisco Unified School District regarding significant natural resource areas. For example, work with staff at McAtteer High School to develop an ecology program using Glen Canyon Park as an outdoor

classroom. Various aspects of the canyon ecology and history could be incorporated into the school curriculum in the form of class projects.

F. Public Use

- Develop guidelines for pathways and interpretative trails/signs.
- Control dirt bikes and off-road vehicle use.
- Encourage community participation in a public stewardship program.

# SIGNIFICANT NATURAL RESOURCES AREA MANAGEMENT PLAN

## ATTACHMENT A SIGNIFICANT NATURAL AREA INVENTORY

(Name of Park) \_\_\_\_\_

(Area Surveyed) \_\_\_\_\_

(Date of Survey) \_\_\_\_\_

Natural Resources	Applicable?	
	Yes	No
Notes		
<p>A.     <b>VEGETATION</b>  Ground cover  Shrubs/vines  Perennials  Annuals  Grasses  Trees</p>		<p>Describe proportion of natural, exotics; any species on threatened or endangered plant list; sensitive plant endangered list; balance of flowering vs. non-flowering; habitat for animals; proportion of evergreen vs. deciduous self-seeding characteristics; pest and disease resistance; drought tolerant; irrigation; potential fire hazard.<sup>1</sup></p>
<p>B.     <b>WILDLIFE</b></p>		<p>Describe all types; any species on T &amp; E list; diversity; need for protection/enhancement.<sup>1</sup></p>
<p>C.     <b>WATER</b></p>		<p>Natural water (ponds, creeks, streams, lakes); drainages; water quality; encroachment (tules, sedimentation).<sup>1</sup></p>
<p>D.     <b>GEOLOGY/SOILS</b></p>		<p>Any rock outcropping; exposed soils/erosion; landslide areas; wetlands.<sup>1</sup></p>
<p>E.     <b>PUBLIC USE</b></p>		<p>Active play area; viewing area; developed pathways; seating area; handicapped access; signage; lighting.<sup>1</sup></p>

Show on map.

# SIGNIFICANT NATURAL RESOURCES AREA MANAGEMENT PLAN

## ATTACHMENT B MOBILE CREW WORK PLAN

A component of the proposed Significant Natural Resource Areas Management Plan is to address immediate problems in selected parks that contain significant natural resources. An initial program to hire 3 to 4 gardeners from a temporary Civil Service list and/or retain the services of the San Francisco Conservation Corps on an as-needed basis is being considered.

The types of projects that would be assigned to the mobile crew would include:

- Invasive Weed Control
- Erosion Control/Shoreline Restoration (small scale)
- Ivy Removal/Control
- Revegetation Projects related to Invasive Weed and Erosion Control
- Fire Hazard Control
- Weedy Tree Control

<u>RANK A PARKS</u>	<u>DURATION<sup>1</sup></u>
Bayview Park	1 month
Glen Canyon Park	2 months
Mt. Davidson (west side)	1 month
Twin Peaks	2 months
Lake Merced	1 month
<u>RANK B PARKS</u>	<u>DURATION<sup>1</sup></u>
Bernal Hill	2 weeks
Corona Heights	1 month
Golden Gate Park: Oak Woodland	2 weeks
Golden Gate Park: Strawberry Hill	1 week
McLaren Park (South)	2 weeks
Billy Goat Hill	2 weeks
Grandview Park	1
month	
Tank Hill	2 weeks
Golden Gate Heights (west side)	1 week
Rock Outcrop	1 week
Buena Vista Park	2 weeks
Sharp Park (Selected Natural Areas)	1 month
Kite Hill	2 weeks
<u>RANK C PARKS</u>	<u>DURATION<sup>1</sup></u>
Stern Grove/Pine Lake	1 month
Brooks Property	1 week
Golden Gate Park (Selected Lakes)	2 weeks
Mountain Lake Park	2 weeks
Interior Greenbelt	2 weeks

<sup>1</sup>Weed Control: Duration noted is for first pass only. Repeated weed control will be needed.