

# Presidio Open Space Update for 2004



## Open Spaces – A Public Treasure

The open spaces of the Presidio are widely used and beloved by park visitors. In few other parks can visitors enjoy such a range of natural environments, including a salt water marsh, lush riparian corridors, wild coastal bluffs, green meadows, and coastal dunes. In addition, the Presidio features a stately 300-acre historic forest and an array of historic gardens and other designed landscapes that add to its distinctive character.

The Presidio 2004 Open Space Update provides an overview of projects that are underway to preserve and restore the Presidio's historic forest, natural areas, designed landscapes and trail system. This update highlights a number of opportunities for interested members of the public to support the ongoing efforts of the Presidio Trust, the National Park Service, and the Golden Gate National Parks Conservancy to enhance and protect the Presidio's open spaces for all to enjoy.

## The Historic Forest

The Army's transformation of the Presidio from an open, windblown tract into forested parkland was one of its most impressive accomplishments in landscape architecture. No other military installation in the nation has undergone such a dramatic landscape transformation. Because it was planted over a relatively short period of time beginning in the 1880s, trees throughout the Presidio's forest are beginning to decline at the same time. Storm damage and tree mortality could substantially reduce the size of the forest over the next 20 years. To preserve its beauty and historic qualities, the Trust has begun an ambitious reforestation program to transform the even-aged forest into an uneven-aged system, one better equipped to sustain itself through the next century.



### West Pacific Grove Reforestation

After years of poor maintenance and "topping," the trees in West Pacific Grove near Julius Kahn Playground are misshapen and diseased. A project

to revitalize the eight-acre grove began in 2002. Some diseased trees were replaced with 150 Monterey and Gowan cypress trees.

The new trees have grown between 18 and 24 inches since their planting, and are thriving in the grove. In 2004, diseased trees will be removed from an additional 1.8 acres to the east, and the area will be reforested with 250 cypress trees.

### Pine Experimental Site



The Pine Experimental Site is located on the west side of Highway 1, just north of Kobbe Avenue. In 2003, nearly an acre of unhealthy forest was removed, and the site cleared of debris. An irrigation system was installed to support new trees. Working with foresters from UC Davis, pines that showed resistance to pine pitch canker were cloned from root cuttings. The young trees were nurtured until ready for planting at the site.

This year, more than 140 of the experimental disease-resistant pines were planted at the site. Over the past five months, they have added two feet in height, and appear to be thriving.

### Oak Reforestation Site

Aging cypress trees located south of the Infantry Terrace neighborhood were removed, and the site prepared for replanting. The cypress trees were replaced by 74 coast live oak trees. Oaks were selected for the site due to its rich soil and ample moisture. The oak typically grows slowly, but the new trees are healthy and growing well.



## Rob Hill Reforestation

The blue gum eucalyptus in the historic forest near Rob Hill were declining, posing a risk to those visiting the nearby trails and campground. In 2003, nearly an acre of unhealthy trees was removed, and the site prepared for replanting.

More than 150 spotted gum, mountain gum and Sydney blue gum eucalyptus were planted in the historic grove. These new trees replaced the messy and invasive blue gum eucalyptus without compromising the historic character of the grove.

## Kobbe Historic Stand

Located near the World War II Memorial in a triangle of land surrounded by Kobbe, Harrison and Washington streets, the Kobbe Historic Stand was declared one of the Presidio's four key historic stands in the *2001 Vegetation Management Plan*. The one-acre grove of 150 Monterey pine and cypress trees requires reforestation.

Irrigation lines have been installed in the grove. This fall, approximately 30 unhealthy trees will be removed, and 100 Monterey pine and cypress will be planted. The remaining tree removal and replanting will be phased over the next five years.

## Designed Landscapes

The Presidio's designed landscapes, many of which have existed for more than a century, enhance the historic character of the former army post. Ornamental plantings were used to beautify developed areas such as the Main Post, Fort Scott, and many residential neighborhoods. Plantings were also used to screen the Golf Course, playing fields, and road corridors.

The Trust and the National Park Service are working to preserve the historic plantings that contribute to the Presidio's National Historic Landmark District status through careful planning, maintenance, and restoration. Historic photos, plans, and remaining vegetation are analyzed before any work begins on a historic landscape. The goal of each project is to revitalize the landscape for new uses while preserving its historic character.

## The Main Parade

The 2002 *Presidio Trust Management Plan* described a vision for the future of the Presidio Main Parade Ground that preserves its historic character while creating a vibrant new public open space for the community.



In 2003, the Philadelphia-based Olin Partnership was selected to develop design concepts for the future of the Main Parade.

After five months of work, the Olin Partnership presented its initial recommendations for the greening of the Main Parade. The group proposed that the existing parking be relocated, and the area be re-landscaped to create a green open space. The edges of the historic parade ground would be defined, and the space activated with a new esplanade and two new structures housing public uses.

Olin's initial recommendations were presented in a series of public workshops held in spring of 2004. Feedback from those workshops and ongoing discussions with members of the public will be incorporated into a refined set of design concepts this fall. These concepts will narrow in on the landscape design of the area bounded by Graham, Montgomery, Lincoln, and Moraga streets, and will form the basis for an environmental and historical compliance process.

## El Presidio

El Presidio de San Francisco, the site of the original 1776 Spanish settlement, is certainly one of the most important archaeological sites at the Presidio. Over the past several years, Trust and NPS archaeologists and planners have been studying the El Presidio site, trying to determine the extent and character of what remains of the original structure. They have also been working on a strategy for how to manage the archaeological site while increasing public use and understanding of the area.

A draft Archaeological Management Strategy has been created for the El Presidio Site, including measures for site preservation and priorities for future work. The plan suggests that El Presidio's archaeological resources be a focal point for visitor orientation, educational programs, and commemoration of the Presidio's diverse cultural heritage. This might be accomplished with interpretive wayside displays, and exhibits of artifacts found at the site. Landscape design can help illustrate El Presidio's evolution over time.

## Fort Scott Historical Gardens

Behind Kobbe Avenue lies an ornamental garden built by the Army, which includes a fountain reached by stone steps and pathways, and surrounded by formal plantings. Overgrown for many decades, these formal gardens are now being studied for potential rehabilitation. The project will involve removal of overgrowth, improvements to stonework and plumbing, and replanting of the historic gardens.

## Residential Landscape Improvements

An important aspect of the Presidio's charm is the distinct and beautiful neighborhoods created by the Army for its personnel and their families. The neighborhoods feature distinctive architecture reflecting the changing style of American homes, and landscaping that draws the homes together to form a cohesive district. As historic housing throughout the Presidio is rehabilitated and leased, the historic landscape of each neighborhood is researched and rehabilitated to reflect its original style and beauty.

## Upper Storey Avenue

In October 2003, the Trust began planning the rehabilitation of the eight duplexes and their grounds located on Upper Storey Avenue near the Log Cabin. The homes were built in 1933 as housing for non-commissioned officers. The neighborhood is unique for the Presidio in that the front of each duplex faces the bay but has no street access. Residents and visitors enter the homes from the back.

As neighborhood improvements began, all utility lines were run underground to enhance the area's open feeling. Traditional military landscaping, including foundation plantings, was installed around the homes. This neighborhood will be the first rehabilitated neighborhood in the Presidio to be graced with period-style street lamps.

## Kobbe Avenue

Rehabilitation of the majestic residences that line Kobbe Avenue was begun in 2003, including seismic retrofitting, plumbing and electrical upgrading, and cosmetic improvements. Wherever possible, the original hardware, hardwood, and other fixtures were restored to their original beauty and reused in the homes.

The Trust's landscape architects researched the landscaping that existed on Kobbe Avenue during the 1940s, when the landscape was thought to be most historically significant. The historic landscape of the neighborhood is now being restored based on what existed at that time.

The original palm trees that have survived along the street will be retained, and new palms will replace those that have died or been removed. Large lush front lawns again flow from house to street, dotted with circular "rosettes" of plants that resemble islands floating on a green sea.



## Natural Areas

Many of the Presidio's open spaces are remnants of natural habitats that once existed throughout San Francisco. Protection and restoration of the Presidio's diverse ecological heritage is an ongoing priority of the Trust, National Park Service, Golden Gate National Parks Conservancy, and hundreds of volunteers.

### Crissy Field Marsh Expansion

In 2003, the three agencies initiated the Crissy Field Marsh Expansion Study.



The study began with a technical review of the relationship between the tidal prism, or volume of water flowing into and out of the marsh with the changing tides, and ongoing function of the marsh. During the study, a model was developed to assess a range of possible tidal prisms and mechanical interventions required to keep the marsh inlet open.

The technical review of the relationship between tidal prism and marsh function is complete. This summer, the agencies will initiate studies focusing on the biological and ecological values of the marsh. The potential to create wildlife habitat, the opportunity created by connecting the marsh with Tennessee Hollow, and the expanded marsh's relationship to adjacent recreation and land uses will be considered.

### Sunset Scrub (Fill Site 5)

Located near the World War II Memorial, Sunset Scrub was used as a landfill by the Army between 1946 and 1981. The Trust excavated the site in early 2003 as part of its \$100 million environmental cleanup program, removing 20,000 tons of fill. The site was covered with erosion controls, and planted with approximately 7000 plants including more than 100 species.



This year, the remainder of the 2.7-acre site was planted with more than 23,000 plants, many of which were grown at the Presidio Native Plant Nursery. The site is now the subject of a detailed study to examine the process of natural restoration after excavation, and the nature of the Colma soils that were exposed. Planting will continue on a smaller scale over the next few years as the site matures, providing conditions that will support additional new species.

### Fill Site 6A

Fill Site 6A is located just northeast of the Main Post. Remediation of the site will begin this summer with the removal of 40,000 tons of fill. Historic topographic information indicates that a portion of the creek system from Tennessee Hollow watershed flowed through this site. Today, the creek is contained in a storm drain buried under the fill materials. A portion of the pipeline will be removed during excavation, and replaced with a surface channel. Beginning in the rainy season and continuing over the next several years, more than 30,000 native plants will be planted to help stabilize the site and improve its appearance. The site straddles native plant and designed landscape zones, allowing the Trust's planners to integrate landscape types.

### Baker Beach Three and Four Landfills (Coastal Bluffs)

Baker Beach Three and Four Landfills are former Army landfills located below Battery Crosby along the Presidio's west coast. Given their location on a steep hillside with limited access, remediation of the landfill poses unique challenges. This summer, the Trust's remediation staff will remove tons of contaminated soil from Landfills 3 and 4. The Trust is developing methods to move the waste up the bluff slope with minimal disturbance to adjacent natural areas. Beginning this fall, the areas will be seeded and planted with many species of native vegetation.

## Tennessee Hollow



Tennessee Hollow, the Presidio's largest watershed, has been dramatically modified over the past two centuries, and more than half of the stream is contained in underground storm drains or paved channels. In the *Presidio Trust Management Plan*, the Trust presented a vision to restore the watershed's three tributaries and the riparian habitat that naturally accompanies open water systems.

For the second consecutive summer, archaeologists from Stanford University are working in Tennessee Hollow to help shed light on the area's early settlers, and the natural processes that led to the development of this micro-ecosystem.

Trust staff and consultants are continuing work on the Environmental Assessment (EA) for the Tennessee Hollow Watershed Project. The EA will evaluate a range of alternatives for future changes at Tennessee Hollow, including opportunities to daylight the creek system, improve habitat and water quality, and provide opportunities for the public to learn about and enjoy the watershed's rich history. Alternatives also include recreational uses in the watershed. The EA will be available in late summer 2004 for public review and comment. If you would like to receive direct notification when the EA becomes available, please email your request to [thproject@presidiotrust.gov](mailto:thproject@presidiotrust.gov), or call us at (415) 561-5414.

### Mountain Lake Enhancement Project

The Mountain Lake Enhancement Project was initiated to improve water quality, increase wildlife habitat, and enhance visitor enjoyment of the site. Since the Parks Conservancy began work at the site in 2001, weeds around the lake have been removed, and native species planted and maintained.

In 2004, improvement of habitat along the shores of the lake continued with the removal of 1/3 acre of non-native vegetation and over 300 cubic yards of material along the south shore. The area has been replanted with more than 2000 plants from riparian, oak woodland, and coastal scrub plant communities. Drip irrigation was installed to maintain woody plants, and wood chips were spread to combat weeds. On the east shore of the lake, more than 1000 cubic yards of weeds were removed, and approximately 1000 plants were installed. Volunteers have given more than 2500 hours to the project.

### Inspiration Point Grassland Restoration

The Inspiration Point Viewshed Enhancement Project, initiated in 2001, included the removal of trees that blocked the famous bay view, creation of a stone overlook funded by the Parks Conservancy, and replanting of serpentine grassland habitat on the slopes below the point.

In 2004, an additional 16,000 native grasses and wildflowers were added to the slope at Inspiration Point, and invasive species were removed. Several Presidio clarkia plants, an endangered species, were found at the site. In fall, a new project funded by the Trust and the NPS to promote the clarkia will begin with the removal of one dozen trees in the area in order to decrease fog drip, shade, and leaf litter, and further promote recovery of this rare species.



## Presidio Native Plant Nursery

Staffed by Parks Conservancy horticulturalists and dedicated volunteers, and funded by the Presidio Trust, the Presidio Native Plant Nursery delivers up to 60,000 plants to restoration projects around the park each year. In 2004, more than 150 plant species were grown from seeds, bulbs, and other plant material gathered by hand from remnant natural areas of the Presidio. The nursery continues to play a crucial role in habitat restoration activities throughout the park.



## Presidio Park Stewards Habitat Restoration

For 10 years, the Presidio Park Stewards Program has encouraged wide public involvement in restoring natural areas and native plant communities in the Presidio. The Presidio stewardship team manages invasive species, monitors rare and endangered plants and wildlife, and revegetates stewardship sites with native plants.

Since last summer, the Presidio Stewards have enhanced the foredune habitat at Baker Beach, cared for the maturing coastal scrub planting at Battery East, expanded habitat for the California quail, helped prepare the natural areas surrounding remediation sites, installed more than a dozen experimental plantings of Presidio rare plants grown in the nursery including the Raven's manzanita and the San Francisco lessingia, revegetated a disturbed dune site, and enhanced the Lobos Creek oak woodland with diverse understory plantings.



This year, the Presidio Stewards Guild was established to encourage long-term volunteer commitment to particular projects or areas. Stewardship Guild projects in 2004 include: protecting the endangered Presidio Clarkia at Inspiration Point; removing invasive ivies in the oak woodland along Lobos Creek; controlling weeds at Crissy foredune; removing French broom around El Polin Spring; and enhancing habitat for the threatened California quail near the site of the former Public Health Service Hospital.

## Wildlife Projects

### Quail Recovery Project

Public programs to help restore habitat for the Presidio's quail population have been ongoing since 2002. A quail monitoring program has helped park staff and Audubon Society members monitor the quail population in the Presidio and throughout the Golden Gate National Recreation Area.



The California state bird remains at the threshold of extinction in San Francisco. Habitat enhancement projects in the area near Battery Caulfield continue, and their success can be noted by a new family of quail chicks spotted in the area this Spring.

### Meso-Carnivore Research

A study of the habits of medium-sized mammals on the Presidio and in the Golden Gate National Recreation Area was undertaken in 2003 as a partnership of the Trust and the U.S. Geological Survey. Meso-carnivores known to inhabit the park include raccoons, skunks, coyotes, red and grey foxes, and feral cats.

Researchers radio-collared and tracked more than 20 animals to determine their home range and activity patterns, and to gain new perspective on habitat connectivity in the Presidio. The study, which should be concluded this year, will help the Trust create open space policies and practices that benefit all wildlife in the park.

## Presidio Trails

The Presidio has approximately 19 miles of designated pedestrian and multi-use trails and bike lanes that vary widely in their connectivity, ease of use, and amenities. In 2003, the Trust and National Park Service adopted the *Presidio Trails and Bikeways Master Plan*. The plan outlines an ambitious system of trails, bikeways, and scenic overlooks for the Presidio that, when completed, will create a coherent, comprehensive, and user-friendly network of trail experiences, providing access and challenge for users of all fitness levels, and encouraging enjoyment of the Presidio's cultural and natural resources.

The Trust, Golden Gate National Parks Conservancy, and National Park Service launched an initiative called "Trails Forever," dedicated to improving trails throughout the Presidio and the Golden Gate National Recreation Area by providing a vehicle for private individuals to support and sustain trails "forever." Current plans call for implementing a first phase of the *Trails and Bikeways Master Plan* over the next three to five years, including several trail improvement projects are now underway at the Presidio:



**Washington Overlook** – Plans call for a new scenic overlook on Washington Boulevard west of the Rob Hill Campground. The new overlook will include a stone terrace with benches and interpretative information, surrounded by massed planting of native coastal shrubs and wildflowers. Construction is scheduled to begin in fall, with a dedication in spring of 2005.

**Bay Area Ridge Trail** – As it loops through the Presidio on its 400-mile route around the Bay Area, the Ridge Trail is currently routed along sidewalks in the Presidio's East and West Washington neighborhoods. Plans have been developed to re-route the trail out of the residential neighborhoods and through the historic forest along the upper edge of the National Cemetery. Here designs are being developed for a new scenic overlook offering panoramic views over the cemetery towards the Golden Gate.

**Presidio Promenade** – Plans are now underway for a new multi-use trail that will stretch from the Lombard Gate to the Golden Gate Bridge, linking several of the Presidio's historic districts – the Main Post, Cavalry Stables, and Fort Scott. Construction is scheduled to begin on the first phase of the trail from the gate to the Main Post this year. Designs are currently being completed for the second phase, from the Main Post to the Bridge, and will include a grand new overlook along Lincoln Boulevard above Crissy Field.

**Coastal Trail** – The Coastal Trail runs the length of California, connecting the Golden Gate Bridge with the 25th Avenue gate as it traverses the Presidio. Work is currently underway to develop designs for a trail that will allow hikers and bikers to safely and comfortably enjoy the beauty of the coastal bluffs and historic batteries that the trail passes, as well as its adjacent native plant communities and breathtaking ocean views.

**Commemorative Bench Program** – Benches located at scenic points along a trail can enhance the experience of visitors, giving them a reason to pause and appreciate their surroundings. Private support is needed to construct and maintain benches at scenic spots along the Presidio's trail network. To respond to this need, the Parks Conservancy, in partnership with the National Park Service and Presidio Trust, has developed a Commemorative Bench Program. Individuals can dedicate a bench in memory of a loved one for 10 years with a one-time donation. For information on the program, call (415) 561-3000.

### Get Involved!

There are many ways to become involved in revitalizing the Presidio's diverse open spaces. For information about upcoming volunteer days, please call the Presidio Park Stewards hotline at (415) 561-3034, x3445. For all who treasure this urban haven of incomparable natural beauty, this is a great opportunity to improve your park.