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Purpose of the Foundation Document

Each unit of the National Park Service needs a formal statement of the park's core purpose and its significance to provide guidance for all the decisions to be made about the park. The *Foundation Document* records the shared understanding of the park's purpose, significance, fundamental resources and values, primary interpretive themes, special mandates, and legal and policy requirements. The *Foundation Document* can be used in all aspects of park management to ensure that the most important objectives are accomplished before turning to items that are also important but not critical to achieving the park purpose and maintaining its significance.

Location

Does Golden Gate NRA have any maps and materials that can be added to this page which would -

a. provide a description of the three parks (GGNRA, MUWO, FOPO)

b. provide a regional orientation map

c. provide map showing the park

The Purpose of the Parks

Introduction

Park purpose is a clear statement(s) of why Congress and the president established Golden Gate National Recreation Area, Muir Woods National Monument, and Fort Point National Historic Site. The park purpose is the reason or reasons for which the park was set aside as part of the national park system. It is the most fundamental criteria against which the appropriateness of all plan recommendations, operational decisions, and actions are tested. The purpose is derived from law and policy. However, the park purpose often requires some interpretation of the specific language in the park's establishing legislation or presidential proclamation.

Park Purpose

The purpose of Golden Gate National Recreation Area is to offer national park experiences to a large urban population while preserving and interpreting its outstanding natural, historic, scenic, and recreational values.

The purpose of Muir Woods National Monument is to preserve the primeval character and ecological integrity of the old-growth redwood forest for scientific values and inspiration.

The purpose of Fort Point National Historic Site is to preserve and interpret the Civil War-Era fortifications at the Golden Gate.

Golden Gate National Recreation Area Background

The National Park Service Organic Act of 1916 states that units of the national park system are established "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for enjoyment of the same in such manner as to leave them unimpaired for the enjoyment of future generations." This statement represents the most basic purpose of Golden Gate National Recreation Area.

Golden Gate National Recreation Area was created during an era of growing environmental awareness and rapid disappearance of open

lands and historic sites. In the late 1960s a remarkable convergence of events highlighted the vulnerability of widely beloved landscapes and landmarks surrounding the Golden Gate, spurring the government to respond with a study and citizens to organize a political vehicle to save them. Based on the study and the urgings of the organized public, the administration supported a new national park here, focused on the adopted slogan "parks to the people." Congress and the administration were motivated by the fact that most voters resided in urban areas—ordinary people who seldom, if ever, went to national parks. Golden Gate NRA offered an exceptional opportunity to bring national park experiences to a massive constituency.

Therefore, the special purpose of Golden Gate National Recreation Area is *to offer national park experiences to a large urban population*. This concept is clearly reflected in the legislative history of the park, congressional records and the memories of the people who were involved.

The enabling legislation establishing the National Recreation Area, recognizing that heavy use could impair its *"outstanding natural, historic, scenic and recreational values,"* reconfirmed the mandate of the Organic Act:

"In the management of the recreation area, the Secretary of the Interior shall utilize the resources in a manner which will provide for recreation and educational opportunities consistent with sound principles of land use planning and management. ...the Secretary shall preserve the recreation area, as far as possible, in its natural setting, and protect it from development and uses which would destroy the scenic beauty and natural character of the area."

Muir Woods National Monument Background

The great San Francisco earthquake of April 1906 became the catalyst for a gift of land that led to the Bay Area's first national park area. Water was in short supply, and a number of companies scurried to supply water sources to the city by creating new reservoirs.

James Newlands, president of the North Coast Water Company, saw the city's need as an opportunity for personal profit. Assessing potential reservoir sites, James Newlands came across a grove of redwoods in Marin County, owned by William Kent. Kent was a wealthy Bay Area native who hailed from a family with a long tradition of progressive reform. Recognizing San Francisco's desperate situation and the potential of harvesting the redwood grove to create a reservoir, Newlands approached Kent to purchase the 47-acre tract land for a reservoir. William Kent declined the

offer in order to retain the property for its beauty - especially since it was the last intact stand of redwoods in the Bay Area.

After Newlands filed a condemnation suit in state court, arguing that the public good of the reservoir exceeded Kent's right to keep the property, Kent devised a means to thwart the lawsuit. On December 26, 1907, he mailed the deed to 295 acres of his land, including the 47-acre tract targeted by the lawsuit, to Secretary of the Interior James R. Garfield, requesting that the government accept the gift for establishment of a national monument in honor of John Muir under the provisions of the recently enacted Antiquities Act of 1906. Kent urged quick federal action on his gift, and 12 days later on January 9, 1908, President Theodore Roosevelt signed a proclamation establishing Muir Woods National Monument. The proclamation stated that the tract contained "an extensive growth of redwood trees (*Sequoia sempervirens*)" that was "of extraordinary scientific interest and importance because of the primeval character of the forest in which it is located, and of the character, age and size of the trees."

Fort Point National Historic Site Background

Built on the location of a tiny Spanish gun battery, called Castillo de San Joaquin, Fort Point was one of the first major U.S. Army installations in the Bay Area. Constructed during the 1850s, the fort became the front line of American defense on the Pacific Ocean. Long regarded as an outstanding example of masonry fort construction, Fort Point, a classic brick and granite fortification that is the only one of its style on the west coast of the United States, had been the subject of preservation interest since the 1920s. In 1926 the barracks closed and the fort was abandoned.

During construction of the Golden Gate Bridge in the 1930s, serious discussion about Fort Point's demolition began. Only the intervention of Joseph Strauss, the powerful and authoritarian chief engineer of the Golden Gate Bridge project, prevented its destruction. Strauss initially thought that the site offered the best location for the caisson that would anchor the San Francisco end of the bridge, but a tour of the fort persuaded him that it was worth preserving. He redesigned the bridge and moved the caisson several hundred feet. During World War II, soldiers were stationed at Fort Point, but after the end of the war the fort was abandoned again and stood vacant in the shadow of the bridge.

In 1959 a group of military retirees and civilian engineers—impressed with the structure—formed the Fort Point Museum Association. The association raised funds for preservation and lobbied for establishment of the fort as a national historic site. A decade-long grassroots movement to save the fort from decay took shape with the moral and financial support of the Sixth Army and

the local business community. In 1968 local congressional representatives introduced bills to establish the national historic site, and on October 16, 1970, President Richard M. Nixon signed the bill that authorized Fort Point National Historic Site "to preserve and interpret for future generations the historical significance of Fort Point in the Presidio of San Francisco, California."

The Significance of the Parks

Introduction

Statements of significance clearly define what is most important about park resources and values and are based on the park purpose(s). Parks contain many significant resources, but not all the resources contribute to the park's significance. Park significance statement(s) capture what attributes make the park resources and values important enough for Congress and the president to establish the Golden Gate National Recreation Area, Muir Woods National Monument, and Fort Point National Historic Site. The significance statements are used to guide management decisions, planning alternatives, interpretive themes, desired conditions, and priority setting.

Golden Gate National Recreation Area

The significance of Golden Gate National Recreation Area relates directly to its purpose. The founders of the park intended to bring national park experiences to urban populations. The park's diverse and extensive collections of "outstanding natural, historic, scenic, and recreation values" not only fulfill this purpose, but represent an exceptional range of national park quality resources and interpretive themes. Each resource is significant in its own right, but collectively their value is enhanced from their proximity to the metropolitan Bay Area.

Few geological landmarks have exerted more widespread influence on natural and cultural processes than the Golden Gate—the landform that marks the entrance to San Francisco Bay. The area's unique geographical configuration has shaped ecosystems and defined thousands of years of history and prehistory. Virtually all of the park's resources derive their character and very existence from this iconic feature, now overshadowed by a legendary bridge. Maintaining the park's significance means that the National Park Service protects and interprets -

...the convergence of the San Andreas Fault, San Francisco Bay at the Golden Gate, and the California coastline that creates a dynamic landscape and environment of exceptional scientific value.

...an undeveloped remnant coastal corridor of marine, estuarine, and terrestrial ecosystems that support exceptional native biodiversity and provide a refuge for one of the largest concentrations of rare, threatened, and endangered species in the national park system.

...the largest and most complete collection of military installations and fortifications in the country, dating from Spanish settlement in 1776 through the 20th century, and served as command post for the Army in the Western United States and the Pacific. This long period of military presence has yielded one of the most extensive collections of historic architecture in the national park system.

...Alcatraz Island, constructed as a Civil War fortification, was the nation's first military prison, later becoming the most infamous maximum security penitentiary in the United States and the site of the occupation that ignited the American Indian self-determination movement.

...the natural scenic landscapes, vistas, and coastal environment of the Golden Gate area is an internationally recognized panoramic backdrop to the metropolitan San Francisco Bay area that contributes to the quality of life of the residents.

...historic structures and pastoral landscapes, some of which have been in continuous use more than 200 years beginning with Spanish land grants.

...the continuum of lands and resources at the doorstep of the San Francisco Bay area provides an abundant range of recreational and educational opportunities.

...a substantial portion of the only United Nations-designated International Biosphere Reserve in the world that spans marine, coastal, and upland resources, and where Golden Gate National Recreation Area connects other designated international, national, state, and local environments of importance.

Muir Woods National Monument

The last remnant old-growth forest close to an urban center that retains its primeval character and supports a relatively intact ecosystem, and Muir Woods is an

important manifestation of early 20th century conservation history.

Fort Point National Historic Site

Fort Point, one of only two remaining intact third system forts in the United States, represents the culmination of American military technology, architecture, and construction during the first half of the 19th century—the most fundamental of which was the arrangement of guns in multiple tiers.

Fundamental Resources and Values

The National Park Service must ensure the conservation and public enjoyment of those fundamental resources and values that are critical to achieving the parks' purpose and maintaining its significance. These fundamental resources and values may include features, systems, processes, experiences, stories, and scenes. Identifying these fundamental resources and values helps ensure that future planning and management is focused on what is truly most important about the park. This section explores the associated resources and values that support the park purpose and significance and are what is fundamental to the park.

If the fundamental resources and values are degraded, the purpose of the park and its significance is jeopardized. Understanding these fundamental resources and values helps to guide decision making when addressing conflicts between preservation and visitor use and/or between different resources and different values.

Documenting and discussing the fundamental resources and values ensures that the planning team and public understand the key elements that sustain the park purpose and significance. The *Foundation Document* provides a logical tool to help decision makers test different alternative management and planning actions. The fundamental resources and values become the building blocks in creating management strategies and a future vision for the Golden Gate national park areas.

Analysis of Fundamental Resources and Values

A basic level of analysis is needed to understand the fundamental resources and values of the three Golden Gate national park areas. At a minimum analysis includes an understanding of the following:

1. **Importance** - Why is this fundamental resource or value important?
2. **Current Conditions and Trends** - What are the current conditions and related trends of this fundamental resource or value?
3. **Potential Threats** - What are the potential threats to this fundamental resource or value that are occurring or could evolve over the next 20 years?
4. **Stakeholder's Interests** - What is the level of stakeholders' interests related to this fundamental resource or value? Who are the individuals or organizations who have an interest?
5. **Law and Policy Guidance** - What are the relevant laws and policies that guide the management of this fundamental resource or value?

The intention of the analysis is not to be lengthy and exhaustive, but rather to summarize the basic knowledge and information related

to each resource and value needed to guide subsequent management and planning decisions.

The purpose and significance of national park service units rarely if ever change. What will evolve is our knowledge of the fundamental resources and values for each park. It is this section of the *Foundation Document* that must be reviewed and revised periodically as conditions change and new knowledge is acquired.

Park Significance-

1. The convergence of the San Andreas Fault, San Francisco Bay at the Golden Gate, and the California coastline that creates a dynamic landscape and environment of exceptional scientific value.

Fundamental Resources and Values

1.1 Geologic Resources - The national recreation area's geologic resources consist of faults, plates, littoral transport, stream processes, and wind-blown dunes.

Analysis of Fundamental Resources and Values

1.1 Geologic Resources - The national recreation area's geologic resources consist of faults, plates, littoral

Importance of the Resources and Values

It is the geologic resources and related processes that create the unique landscape that is highly valued scientifically and is the foundation for the ecosystem diversity of the region.

The San Andreas Fault, epicenter of the great 1906 earthquake and numerous other earthquakes, is one of the few major active faults in the world that is clearly visible within the park and accessible for scientific study.

Current Conditions and Trends

The topographical relief of the park ranges from sea level to 2,300 feet above mean sea level at the top of Mt. Tamalpais. Slopes range from almost flat marine terraces and alluvial deposits to steep canyons along some creeks, and near vertical bluffs above numerous beaches.

The San Andreas Fault extends northwest from near Fort Funston, and runs through Bolinas Lagoon and Tomales Bay. Although the park contains many faults, the San Andreas Fault is the most evident in size and influence. San Andreas is one of the most studied faults in the world and is monitored by the San Andreas Fault Observatory at Depth (SAFOD), a deep borehole observatory that began development in 2004 by National Science Foundation (NSF) and the United States Geologic Survey (USGS). This project is attempting to reveal the physical and chemical processes controlling earthquake generation within a seismically active fault. Through

ongoing observations of the fault, scientists have determined that the fault migrates at an average of 34mm per year.

Bedrock parent materials within the park are jumbled, partly as a result of grinding movement along the San Andreas Fault. The Marin Headlands contains more resistant rocks than the more erodible melange found to the north of Pirates Cove. Groundwater is close to the surface and frequently emerges as seeps or springs in the melange area. The sea cliffs at Fort Funston were formed from the oldest of these tilted fossil-rich beds of sand and clay (the Merced Formation), and are easily eroded by wave action. In the last few hundred thousand years, sand and clay have accumulated as beaches, dunes, and near shore deposits and are now exposed at Sutro Heights, Baker Beach, Angel Island and Rodeo Cove.

Many abandoned quarries are found within GGNRA. Dogtown Copper Mine, located just off Bolinas Ridge, is the only known mineral development in the park. It was developed in 1863 and re-worked around the turn of the century and its two shafts are now abandoned.

Potential Threats and Issues

The greatest threat to the geologic features within Golden Gate National Recreation Area is erosion. Coastal waves rhythmically crash against the shoreline. The deep, long gullies of old roads continue to erode. Vegetation is impacted and non-designated "social trails" are found in heavily used natural areas.

Landslides or slumps exist in most of the small valleys throughout Golden Gate National Recreation Area. Large gully networks range in character from persistently de-vegetated slopes, to large individual channels up to 15 feet deep and wide. These gullies have been caused by a combination of locally intense rainfall, human disturbance, and the presence of highly erodible soils. Past and current land use practices have altered vegetative composition, aggravated and encouraged soil erosion, and precipitated landslide activity and recurrent gully formation. The erosion has contributed to increasing sediment loads to streams, bays and shorelines. They have also accelerated the loss of large quantities of top soil and have resulted in prominent visual scars and contribute to recurrent maintenance costs.

Rare species, like the state-listed bank swallow, are affected by erosion from current land uses. At Fort Funston, visitors climb the cliffs and aggravate erosion in the sensitive cliff nesting area. Cultural resources are also threatened in locally active areas such as Alcatraz, where the Warden's House has been undermined by cliff erosion, and Fort Funston, where bluff erosion has claimed coastal batteries. Some of the worst and most obvious problem areas are in

grasslands. Almost without exception, major erosional features have been caused by the diversion of streams or the concentration of seasonal storm runoff by roads and trails. Many roads developed prior to park establishment were improperly aligned and constructed. These factors have resulted in inadequate drainage, which has led to concentrations of water. These concentrations have created gullies and carried increased sediment yields into creeks, which in turn impairs water quality. In addition, water diversions and the concentration of runoff may initiate or accelerate landslides in sensitive areas.

Grazing has increased erosion by decreasing the amount of vegetation available to capture water. It also has caused soil to become compacted and thereby deterring infiltration. This then increases runoff, which carries topsoil and sediments into the creeks. Off-road vehicles, hang gliders, bicyclists, horses, dogs, hikers, and other visitors have created denuded areas with compacted soil. Compaction also inhibits infiltration, increasing runoff and erosion. The trend of increasing trail use portends a long term and potentially increasing threat.

The eroding shoreline at the coast of Golden Gate National Recreation Area threatens beaches and bluffs. The potential exists for the destruction of structures located both within and outside the park. Erosion from wave attack and wind-blown sand occurs on all shorelines. Global warming and associated sea level rise will exacerbate coastal erosion.

Damage from earthquakes mostly depends on the type of underlying subsurface material. Upland areas on bedrock generally have a low seismic hazard, whereas bay lands, unconsolidated sand, and artificial fill areas (such as Crissy Field, Aquatic Park, Fort Mason docks, the mouth of Lobos Creek and along Ocean Beach) may experience intense shaking, subsidence, differential settling and liquefaction.

Serpentine outcrops provide a substrate that supports many rare plants. The serpentine sites within the Golden Gate National Recreation Area are small and are threatened by a lack of protection. These outcrops are generally unstable and very erodible. Human activities such as trampling and grading in or near the outcrops exacerbate the erosion.

Interest of Various Stakeholders

Local and Regional Organizations:

???

National Organizations:

???

Government Agencies and Tribes:

California Coastal Commission (*primary interest or mission?*)

California Department of Water Resources (*primary interest or mission?*)

California Division of Geology(*primary interest or mission?*)

National Oceanic and Atmospheric Administration (*primary interest or mission?*)

Natural Resource Conservation Service (*primary interest or mission?*)

San Francisco Bay Conservation and Development Commission (BCDC) (*primary interest or mission?*)

U.S. Geologic Survey(*primary interest or mission?*)

Others?

Educational and Cultural Institutions:

???

Law and Policies

Geologic Resources

Source:

NPS Management Policies 2001; NPS-77, "Natural Resources Management Guidelines"

Policy Direction:

The park's geologic resources are preserved and protected as integral components of the park's natural systems.

Management Direction:

The National Park Service will take the following kinds of actions to meet legal and policy requirements related to geologic resources:

- Assess the impacts of natural processes and human-related events on geologic resources.
- Maintain and restore the integrity of existing geologic resources.
- Integrate geologic resource management into NPS operations and planning.
- Interpret geologic resources for visitors.
- Partner with the U.S. Geological Survey and others to identify, address, and monitor geologic hazards.
- Develop programs to educate visitors about geologic resources.
- Collect baseline information on surficial geology.
- Develop a plan to address geologic research, inventory, and monitoring.

- Update geologic map of the park in digital format that can be used in the park's geographic information system (GIS).
- Update geologic history of the park, using modern theory and techniques.
- Update geologic interpretations of localities that are the subject of interpretive stops or displays.
- Prepare a geologic inventory, including the identification of the significant geologic processes that shape park ecosystems and the identification of the human influences on those geologic processes (i.e., "geoindicators"); identification of geologic hazards; inventory of type sections or type localities within the park; inventory of "textbook" localities that provide particularly good or well-exposed examples of geologic features or events, and that may warrant special protection or interpretive efforts; and, identification of interpretive themes or other opportunities for interpreting the significant geologic events or processes that are preserved, exposed, or occur in the park.

Issues

(Add issues once they have been explored with park staff and the public)

Park Significance-

2. The undeveloped remnant coastal corridor of marine, estuarine, and terrestrial ecosystems that support exceptional native biodiversity and provide a refuge for one of the largest concentrations of rare, threatened, and endangered species in the national park system.

Fundamental Resources and Values

2.1 Coastal Ecosystems -A rich assemblage of coastal native plant and animal habitat that include forests, coastal scrub, aquatic habitats, barren coastal cliffs and islands.

2.2 Water Resources - The water resources of the park includes groundwater (aquifer and springs), freshwater (streams and ponds), coastal and marine water resources (the Pacific Ocean and San Francisco Bay), and wetlands.

Analysis of Fundamental Resources and Values

2.1 Coastal Ecosystems -A rich assemblage of coastal native plant and animal habitat that include forests, coastal scrub, aquatic habitats, barren coastal cliffs and islands.

Importance of Resources and Values

The Golden Gate National includes some plant and animal species that reach their northern distributional limit as well as others that are at their southern limit. Native plant and wildlife habitat within the recreation area is situated in the great mixing zone of the central California Coast Range, and is located within one of only five regions in the world with a Mediterranean climate. This climate fosters an ideal habitat for more than 886 plant species and subspecies exist in the park. At least 387 vertebrate species are known to occur within the park boundaries. Species lists compiled from a variety of sources and incomplete inventories include 11 amphibians, 20 reptiles, 53 fish, 53 mammals, and 250 birds (ICE 1999). Terrestrial invertebrates in the park are less well known, with the exception of butterflies at two areas of the park, Marin Headlands and Milagra Ridge, that support diverse butterfly populations.

Does this adequately answer the question what is important about the park's coastal ecosystem?

Current Conditions and Trends

While the park supports an extremely diverse array of plant and wildlife species and their habitats, a broad range of forces threaten the viability of these plant and animal populations and the habitats they depend upon. Visitor use occurs throughout the park with more than 20 million people annually. Domestic grazing has been a historic use that has significantly influenced native plant communities. Grazing is still permitted on 30 percent of park lands.

Suppression or complete exclusion of fire during recent decades eliminated the many beneficial effects of fire on native plants. Habitat fragmentation, degradation and isolation are inherent features of Golden Gate National Recreation Area's situated along the urban interface. Fragmentation and isolation of wildlife habitat is increasing with further development on lands that surround the park. Therefore, Golden Gate National Recreation Area becomes even more important as a plant refuge and corridor for wildlife populations.

Potential Threats

Threats to wildlife and their habitats throughout Golden Gate National Recreation Area includes a number of broad categories - habitat fragmentation, non-native animals, human disturbance, domestic and feral animals, non-native plant invasion, environmental contaminants, and wildland fire.

The spread of non-native plants represents the most significant threat to the biodiversity of native plant species in the recreation area. Non-native species thrive in the park and in areas subject to intensive historic land use (grazing, military occupation) or adjacent to urbanized areas that are a constant source of weed invasion.

Stakeholders

Local and Regional Organizations:

Adjacent land management agencies, local universities, colleges, and school districts, non-profit community organizations, park partners, local and national conservation and community corps, and state and national environmental organizations.

Who are they and what role or interest do they have?

National Organizations:

???

Government Agencies and Tribes:

Foundation Document - Golden Gate National Recreation Area, Muir Woods National Monument, and Fort Point National Historic Site, California

(primary interest or mission?)
Others?

Educational and Cultural Institutions:
???

Law and Policies

A. Natural Resources

Source:

NPS *Management Policies 2001*; NPS-77 "Natural Resources Management Guideline"

Policy Direction:

The National Park Service will maintain as parts of the natural ecosystem, all native plants and animals in the park.

Management Direction:

The National Park Service will take the following kinds of actions to meet legal and policy requirements related to native wildlife and vegetation:

- Complete a base-line inventory of the plants and animals in the park and regularly monitor the distribution and condition of selected species that are indicators of ecosystem condition and diversity.
- Develop methods to restore native biological communities.
- Minimize human impacts on native plants, animals, populations, communities and ecosystems and the processes that sustain them.
- Restore native plant and animals populations in the park that have been extirpated by past human-caused action, where feasible.
- Whenever possible, natural processes will be relied upon to maintain native plant and animal species, and to influence natural fluctuations in populations of these species.
- Protect a full range of genetic types (genotypes) of native plant and animals populations in the park by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity.

Issues

(Add issues once they have been explored with park staff and the public)

2.2 Water Resources - The water resources of the park includes groundwater (aquifer and springs), freshwater (streams and ponds), coastal and marine water resources (the Pacific Ocean and San Francisco Bay), and wetlands.

Importance of the Resources

The importance of water resources at Golden Gate National Recreation Area (including Muir Woods National Monument) that are fundamental to the remnant coastal corridor of marine, estuarine, and terrestrial ecosystems includes:

The freshwater flows and water quality needed to supports numerous rare and endangered species. Freshwater flows are important for fish migration and spawning, municipal water supply, and recreational use.

Groundwater is important for recharge of surface water systems, including wetlands, supporting rare and endangered species habitat and as a source for municipal and agricultural water supplies.

Wetlands provide for water quality protection, flood and drought mitigation, erosion control, and groundwater recharge function. The wetlands support complex food webs, housing a rich biodiversity of wetland-endemic species, and providing habitat functions for many aquatic and terrestrial species.

The intertidal and subtidal zones of Golden Gate National Recreation Area littoral environments are one of the most diverse and productive ecosystems in the world. Coastal habitats are important for the preservation of several rare and endangered species.

Current Conditions and Trends

Golden Gate National Recreation Area contains three streams listed as impaired by the State (303(d)) listed streams: Lagunitas Creek with elevated concentrations of nutrients, pathogens and sedimentation/siltation from agriculture, urban runoff/sewers; Rodeo Creek with elevated concentrations of diazinon from urban runoff/sewers; and San Francisco Creek from urban runoff/sewers and sedimentation from non-point sources.

Nitrogen concentrations in groundwater samples exceeded EPA recommendations in 41% of the samples collected. The likely sources are from wastewater disposal and irrigation return flow.

Historic and current alterations to wetlands and other aquatic environments have led to a decrease in functions and species abundance and diversity within.

San Francisco Bay-Estuary receives less than 50 percent of its historical freshwater inflows, altering the biological communities.

Potential Future Threats

Water quality degradation will continue to be affected by past, current, and future activities such as: bacteria and nutrient loading from wastewater disposal (septic systems); pollutants from landfills and dredging operations; chemicals from agricultural practices; non-point runoff pollution, including heavy metals from roads, parking lots and stormwater outfalls; radioactive wastes dumped in the Gulf of the Farallones National Sanctuary; sedimentation and bacteria impacts from cattle grazing and equestrian services; saltwater intrusion from overpumping of some shallow aquifers.

Water quantity alteration, including seasonal timing of flows, will continue to be affected by past, current, and future activities such as: streams dammed to impound surface water, roads and trails concentrating surface runoff, alteration of stream channels from channelization and bank stabilization efforts.

Interest of Various Stakeholders

Local and Regional Organizations:

Golden Gate National Parks Conservancy
Green Gulch Farm
Marin County Municipal Water District
Muir Beach Community Services District
San Francisco Bay Conservation and Development Commission
San Francisco Bay Regional Water Quality Control Board
Stinson Beach County Water District
The Presidio Trust
Tomales Bay Watershed Council

What are the roles or interests of these organizations in relation to this resource?

National Organizations:

Government Agencies and Tribes:

California Department of Fish and Game
California Department of Parks and Recreation
California Department of Water Resources
California State Water Resources Control Board
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Geological Survey

What are the roles or interests of these organizations in relation to this resource?

Educational and Cultural Institutions:

What are the roles or interests of these organizations in relation to this resource?

Law and Policies

A. Natural Resources

Source:

Clean Water Act; Executive Order (EO) 11514 "Protection and Enhancement of Environmental Quality"; NPS *Management Policies 2001*; NPS-77, "Natural Resources Management Guidelines". Clean Water Act; EO 12088, "Federal Compliance with Pollution Control Standards"; Rivers and Harbors Act; NPS *Management Policies 2001*; NPS-77, "Natural Resources Management Guidelines".

Policy Direction:

Surface water and groundwater are protected and water quality meets or exceeds all applicable water quality standards. NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface water and groundwater.

Management Direction:

- Work with appropriate governmental bodies to obtain the highest possible water quality standards available under the Clean Water Act.
- Cooperate with other government agencies to maintain and/or restore quality of park water resources.
- Take all necessary actions to maintain or restore the quality of surface and ground waters in the park consistent with the Clean Water Act.
- Determine which methods can be used to ensure minimum flows under state and federal law and/or international efforts.
- Determine minimum flow needs to sustain aquatic life, particularly for T/E species.
- Investigate and monitor water quality including salinity and trace elements. Study the effects of the water quality on aquatic life.
- Promote water conservation by the National Park Service, concessioners, visitors, and park neighbors.
- Apply best management practices to all pollution-generating activities and facilities in the park, such as NPS maintenance and storage facilities and parking areas.
- Minimize the use of pesticides, fertilizers, and other chemicals and manage them in keeping with NPS policy and federal regulations.

- Press for continued and expanded monitoring to fulfill the database requirement and thus reveal any unknown water quality problems.
- Continue to monitor the effects of visitor use.
- Continue to assess stormwater runoff.

Other laws and policies that need to be determine how they are considered:

- Federal

National Park Service Organic Act (1916)

Code of Federal Regulations (Title 36)

Federal Water Pollution Control Act (1972, Clean Water Act)

Safe Drinking Water Act (1974)

National Park Service Management Policies (2001)

Executive Order 11990: Wetlands Protection

Executive Order 1988: Floodplain Management

Coastal Zone Management Act (1972)

Endangered Species Act (1973)

- State

Porter-Cologne Water Quality Control Act

State Policy for Water Quality Control

California Water Code

California Wetlands Conservation Policy

Water Quality Control Policy for the Enclosed Bays and Estuaries of California

Water Quality Control Plan for Ocean Waters of California

Issues

(Add issues once they have been explored with park staff and the public)

Park Significance-

3. The largest and most complete collection of military installations and fortifications in the country, dating from Spanish settlement in 1776 through the 20th century, and served as command post for the Army in the Western United States and the Pacific. This long period of military presence has yielded one of the most extensive collections of

Fundamental Resources and Values

3.1 Fortifications & Military Installations -The parks collection of cultural landscapes, structures, and features related to historic fortifications and military installations.

3.2 Museum Collection -Documents and artifacts that support the stories, events, architecture, and use of the historic fortifications and military installations.

Analysis of Fundamental Resources and Values

3.1 Fortifications & Military Installations -The parks collection of cultural landscapes, structures, and features related to historic fortifications and military installations.

Importance of Resources and Values

The significance of the seacoast fortifications of San Francisco Bay structures as a group is of the highest order. These seacoast fortifications are believed to possess exceptional value in illustrating the heritage of the United States. Their association with events that have made a significant contribution to, are identified with, and outstandingly represent, broad national patterns of United States history.

The seacoast fortifications embody the distinguishing characteristics of military fortification architecture and engineering that are exceptionally valuable for the study of an extraordinary range of periods, styles, and methods of construction, even when some individual components may lack

distinction; because they collectively compose an entity of exceptional historical significance and outstandingly illustrate military culture and technique; and because areas within the fortification system have demonstrated their ability to yield information that sheds light upon the military period of occupation of these lands.

Appendix 2 provides a description of Golden Gate National Recreation Area and Fort Point National Historic Site's fortifications and military installations.

Current Conditions and Trends

According to the Golden Gate List of Classified Structures (LCS), there are 510 military structures of all types within the park and managed in some way by the National Park Service. The current conditions (2004) are: 3.7% unknown condition; 31.2% poor condition; 40.6% fair condition; and 24.5% good condition.

In addition, there are 519 structures in the Presidio of San Francisco managed by the Presidio Trust (2.3% poor condition; 13.7% fair condition; 84% good condition).

For those structures for which a use has been found, either through a partner or park use, the structures are being maintained or improved to some extent. Many of the military structures, however, are seacoast fortifications and adaptive reuse is a more complex issue. Some have been adapted for use by the park as museums, collections storage, and maintenance facilities; however, the vast majority are closed off and continue to deteriorate. There are only so many interpretive uses that the park has the funds or staff to manage and other uses of concrete bunkers are difficult due to their construction, location, and condition.

Potential Threats

The biggest threats to these resources are the conditions in which they are located: a coastal marine climate and the fact that a great many of them are unoccupied. The specific threats are moisture, salt laden air, drainage and ventilation problems, and erosion. These combine to make a harsh environment that requires a great deal of maintenance that is currently beyond the ability of the park to maintain. Many of the structures are also located in remote locations and are be subject to vandalism and just plain neglect - "out of sight, out of mind." The nature of the park, with essentially open access to the public at multiple points at all hours contributes to the deterioration and vandalism.

Absent vigorous management by National Park Service representatives and its partners the structures will most likely not receive investment. Many non-profit, program-driven partners are not

intrinsically motivated to maintain historic structures. Therefore, the fundamental business relationship creates a strain for the park. The long-term non-profit partners are not structured business wise to generate the cash needed to maintain the buildings and sites they use.

Stakeholders

Many of the military structures have been adaptively reused by the park and a variety of park partners. These uses include administration, educational centers, artists studios, and overnight accommodations.

Local and Regional Organizations:

What are the roles or interests of these organizations in relation to this resource?

A Home Away from Homelessness
American Youth Hostel (Fort Mason and Fort Barry)
Antenna Theater
Bay Area Discovery Museum
California Heritage Council
Coast Defense Study Group
Fort Baker Retreat Group
Fort Point and Presidio Historical Association
Golden Gate National Parks Conservancy
Headlands Center for the Arts
Headlands Institute
Heritage - Foundation for San Francisco's Architectural Heritage
Marin Conservation Corps
Presidio Trust
San Francisco Conservation Corps
Presidio Riding Club

National Organizations:

Council on America's Military Past

???

Government Agencies and Tribes:

California State Parks (owns and manages Angel Island where Fort McDowell is located. Golden Gate National Recreation Area and Angel Island State Park have agreements in place assist in the preservation of these resources.)

California Office of Historic Preservation

Others?

Educational and Cultural Institutions:

???

Laws and Policies

A. Archeological Resources

Source:

National Historic Preservation Act; Archeological Resources Protection Act; the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*; Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (1995); *NPS Management Policies 2001*, DO 28 "Cultural Resource Management Guideline".

Policy Direction:

Archeological sites are identified and inventoried and their significance is determined and documented. Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable. When disturbance or deterioration is unavoidable, the site is professionally documented and excavated and the resulting artifacts, materials, and records are curated and conserved in consultation with the California state historic preservation office (and American Indian tribes if applicable). Some archeological sites that can be adequately protected may be interpreted to the visitor.

Management Direction:

The National Park Service will take the following kinds of actions to meet legal and policy requirements related to archeological sites:

- Conduct a parkwide cultural resource inventory.
- Survey and inventory archeological sites park wide, determine and document their significance. The most critical area for study is park land where development or visitor activity is planned.
- Determine which archeological sites should be added to the Archeological Sites Management Information System (ASMIS) and the National Register of Historic Places.
- Educate visitors on regulations governing archeological resources and their removal and transport.
- Monitor archeological sites.
- Treat all archeological resources as eligible for listing on the National Register of Historic Places pending a formal determination by the National Park Service, the state historic preservation office, and associated Indian tribes as to their significance.
- Protect all archeological resources eligible for listing or listed on the national register; if disturbance to such resources is unavoidable, conduct formal consultation with the Advisory Council on Historic Preservation, as appropriate, and the California state historic preservation office and Indian tribes

in accordance with the National Historic Preservation Act and implementing regulations.

B. Historic Structures

Source:

National Historic Preservation Act; Archeological and Historic Preservation Act; the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; Secretary of the Interior's Standards for the Treatment of Historic Properties; Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (1995); NPS Management Policies 2001, DO 28 "Cultural Resource Management Guideline."

Policy Direction:

Historic structures are inventoried and their significance and integrity are evaluated under National Register of Historic Places criteria. The qualities that contribute to the listing or eligibility for listing of historic structures on the national register are protected in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (unless it is determined through a formal process that disturbance or natural deterioration is unavoidable).

Management Direction:

The National Park Service will take the following kinds of actions to meet legal and policy requirements related to archeological sites:

- Update and certify the list of classified structures (LCS).
- Determine the appropriate level of preservation for each historic structure formally determined to be eligible for listing or listed on the National Register of Historic Places (subject to the *Secretary of the Interior's Standards*).
- Implement and maintain the appropriate level of preservation for such properties.
- Analyze the design elements (e.g., materials, colors, shape, massing, scale, architectural details, and site details) of historic structures in the park (e.g., intersections, curbing, signs, and roads and trails) to guide the rehabilitation and maintenance of sites and structures.
- Prepare historic preservation plans to guide maintenance.
- Document history through oral histories of individuals, groups, and others who have ties to the park.
- Before modifying any historic structure on the National Register of Historic Places, the Park Service will consult with the state historic preservation officer and the Advisory Council for Historic Preservation, as appropriate.

- Complete a survey, inventory, and evaluation of historic properties.
- Submit the inventory and evaluation results to the state historic preservation officer for review and comment. Forward the final nomination to the Keeper of the national register with recommendations for eligibility to the national register.
- Implement and maintain the appropriate level of preservation for such structures.

C. Cultural Landscapes

According to the National Park Service's *Cultural Resource Management Guideline* (DO-28), a cultural landscape is a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.

Source:

National Historic Preservation Act of 1966, as amended (16 USC 470); Advisory Council on Historic Preservation's implementing regulations regarding the "Protection of Historic Properties" (36 CFR 800); *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (1996); National Park Service's *Management Policies* (2001); National Park Service's *Cultural Resources Management Guideline* (DO-28, 1996)

Policy Direction:

Cultural landscape inventories are conducted to identify landscapes potentially eligible for listing in the national register and to assist in future management decisions for landscapes and associated resources, both cultural and natural.

The management of cultural landscapes focuses on preserving the landscape's physical attributes, biotic systems, and use when that use contributes to its historical significance.

The preservation, rehabilitation, restoration, or reconstruction of cultural landscapes is undertaken in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guideline's for the Treatment of Cultural Landscapes*.

Management Direction:

- Complete a survey, inventory, and evaluation of landscapes under national register criteria.

- Complete a survey, inventory, and evaluation of cultural landscapes.
- Submit the inventory and evaluation results to the state or tribal historic preservation officer for review and comment; forward final nomination form to the Keeper of the national register with recommendations for eligibility to the national register.
- Determine the appropriate level of preservation for each landscape formally determined to be eligible for listing or actually listed on the national register, subject to the *Secretary of the Interior's Standards*.
- Implement and maintain the appropriate level of preservation for such resources.
- Prepare cultural landscape reports for cultural landscapes to determine historical significance, to support preservation needs and guide the rehabilitation and maintenance of cultural landscapes.

Issues

(Add issues once they have been explored with park staff and the public)

3.2 Museum Collection -Documents and artifacts that support the stories, events, architecture, and use of the historic fortifications and military installations.

Importance of Resource & Values

The museum collections are strongly associated with the same themes, time periods, people and events that make up the cultural resources of the park. The many historic structures have generated furnishings, archives, and related artifacts in the collection. The park's archeology has resulted in systematic excavations of materials in the collection. The military history of the park is well represented by uniforms, weapons, artillery, photographs and archives.

Current Conditions and Trends

At the present time the park houses its collections in ten separate facilities including the San Francisco Maritime National Historical Park museum collections facility in lower Fort Mason. Many of these locations are substandard and none of them meet NPS museum standards. Although planning has been underway for about fifteen years, a suitable location for the collection has yet to be determined although the park is currently in negotiation with the Presidio Trust for an additional stables building adjacent to the one where the park archives are currently located.

Potential Threats

Unless a suitable facility is located, the collection will continue to deteriorate. Currently, one of the locations with collections is a Presidio Trust building and they would like to be able to lease it out. In addition, staffing for this function has never been stable which precludes realistic access for the public and staff.

Stakeholders

Local and Regional Organizations:

What are the roles or interests of these organizations in relation to this resource?

National Organizations:

What are the roles or interests of these organizations in relation to this resource?

Government Agencies and Tribes:

What are the roles or interests of these organizations in relation to this resource?

Educational and Cultural Institutions:

What are the roles or interests of these organizations in relation to this resource?

Law and Policies

A. Museum Collection

Source:

National Historic Preservation Act; Archeological and Historic Preservation Act; Archeological Resources Protection Act; Native American Graves Protection and Repatriation Act; *NPS Management Policies 2001*, DO 28 "Cultural Resource Management Guideline," *NPS Museum Handbook*

Policy Direction:

All museum collections (objects, specimens, and manuscript collections) are identified and inventoried, catalogued, documented, preserved, and protected, and provision is made for their access to and use for exhibits, research, and interpretation.

The qualities that contribute to the significance of collections are protected in accordance with established standards.

Management Direction:

- Inventory and catalog the museum collections in accordance with standards in the *NPS Museum Handbook*.

- Develop and implement a collection management program according to NPS standards to guide the protection, conservation, and use of museum objects.

Issues

(Add issues once they have been explored with park staff and the public)

Park Significance-

4. Alcatraz Island, constructed as a Civil War fortification, was the nation's first military prison, later becoming the most infamous maximum security penitentiary in the United States and the site of the occupation that ignited the American Indian self-determination movement.

Fundamental Resources and Values

4.1 Alcatraz Island - The Island's cultural landscape, historic structures, artifacts, and stories associated with its use as a Civil War fort, military prison, federal penitentiary, and the Indian Occupation of 1969 to 1971.

4.2 View of Alcatraz Island -The view of Alcatraz Island from the city of San Francisco.

Analysis of Fundamental Resources and Values

4.1 Alcatraz Island - The Island's cultural landscape, historic structures, artifacts, and stories associated with its use as a Civil War fort, military prison, federal penitentiary, and the Indian Occupation of 1969 to 1971.

Importance of Resources & Values

Alcatraz Island has, for over a hundred years, been reworked and altered by human activity, first as a Civil War fort, then as a military prison and federal penitentiary. This 26-acre island, located in the middle of San Francisco Bay, is best known for its sinister reputation as the maximum security, minimum-privilege federal penitentiary that housed some of America's most notorious criminals. The remaining resources include military-era fortifications; a lighthouse and fog signal building; and remnants of the Indian Occupation of 1969 to 1971.

Alcatraz Island has been the site of events that have had an important impact on the nation as a whole from before the Civil War through an Indian Occupation of the 1970s. Its significance in the areas of military history, social history (penology), and maritime commerce is enhanced by the integrity of the resource which follows from the fact that access to the island has been strictly limited by the U.S. Government throughout its history.

In the areas of military and social history, Alcatraz was the first official army prison in the nation. When it became a civilian penitentiary in 1934, it quickly gained nationwide attention due to its association with many of the most infamous criminals of the gangster era and the bloody escape attempts made from there. It is representative of the far end of the penology spectrum, since it was a prison designed for punishment and incarceration only, rather than rehabilitation. It is of national importance in this regard because of its use as the repository of incorrigibles throughout the Federal prison system. It is certainly the best known prison in American history and, arguably, along with France's "Devils Island," may be the most infamous prison in the world. [*Alcatraz Island National Register of Historic Landmark Registration Forms, 1985*]

The "Indians of All Tribes" occupied the island from November 1969 to June 1971 to gain attention for the needs of their people. This event increased awareness of the American Indian's social concerns, and the establishment of D-Q University at Davis, California, as well as other such institutions throughout the country.

Current Conditions and Trends

According to the Golden Gate List of Classified Structures (LCS), there are 47 structures on Alcatraz that are designated historic and must be preserved and maintained. In addition, the island is considered a cultural landscape. Of these, 6% are in unknown condition as they are buried military-era fortifications; 17% are in poor condition; 53% are in fair condition; and 23% are in good condition.

AL-68, the Main Prison Building, has had much attention focused on it due to its use as the prime interpretive point on the island. Assessed as poor condition in 2001, a great deal of funding has been expended in seismic upgrade in the last five years. Additional work is needed there, however, to continue to seismically upgrade and rehabilitate windows and other failing systems.

Defensive Barracks (casemates and apartments), AL-64, is the other primary structure that used by the park for interpretive purposes. This structure includes the theatre where the Alcatraz video, "Secrets of Alcatraz," is shown as well as the main bookstore, park offices, library, museum exhibit space, and other support functions. This building was also assessed in 2001 in poor condition although it does have a new roof and preservation work has been completed on the balconies and some of the windows of the apartments.

Additional buildings used by the park at the present time include AL-79, Quartermaster and Commissary Warehouse; AL-67, Power Plant; AL-82, Model Industries Building; AL-84, New Industries Building; AL-89, Electric Shop; and AL-212 and -213, Offices. To some extent these uses are ensuring better preservation of these buildings, however, they may also negatively affect historic fabric if not managed in an appropriate manner.

The increase in the number of birds using the island as a refuge has adversely impacted the park's ability to perform maintenance and necessary construction projects to preserve the historic structures. The nesting birds can also cause damage to structures, especially roofs.

Potential Threats

The major threat to protecting the cultural resources is the harsh marine environment that surrounds Alcatraz Island. The constant moist and salt laden air continues to erode the structural materials of the historic structures. In addition, not all the structures are occupied and have not been properly mothballed. The current level of funding for preservation activities and annual maintenance is inadequate to combat the effects of being surrounded by a marine environment.

Stakeholders

Local and Regional Organizations:

California Heritage Council,
Coast Defense Study Group,

What are the roles or interests of these organizations in relation to this resource?

Concessionaire- provides visitor ferry service to the island. Also the concessionaire is responsible for fire protection, operation and maintenance of the island's infrastructure of water, sewage, electrical services and the accessible tram.

Golden Gate National Parks Conservancy- is a cooperating association which manages the island's three bookstores, audio tour, and host evening interpretive programs.

Fort Point and Presidio Historical Association -

Heritage-Foundation for San Francisco's Architectural Heritage -

National Organizations:

Council on America's Military Past

What are the roles or interests of these organizations in relation to this resource?

Government Agencies and Tribes:

California Office of Historic Preservation

What are the roles or interests of these organizations in relation to this resource?

U.S. Bureau of Prisons - partners with the National Park Service in developing exhibit that tells the story of its federal prison era. In addition, the bureau maintains an active interest in the preservation and visitor use of Alcatraz.

Educational and Cultural Institutions:

What are the roles or interests of these organizations in relation to this resource?

Laws and Policies

A. Archeological Resources

(Refer to the source, policy direction, and management direction for Archeological Resources as described under **3.1 Fortifications & Military Installations** on page __.)

B. Historic Structures

(Refer to the source, policy direction, and management direction for Historic Structures as described under **3.1 Fortifications & Military Installations** on page __.)

C. Cultural Landscapes

(Refer to the source, policy direction, and management direction for Cultural Landscapes as described under **3.1 Fortifications & Military Installations** on page __.)

D. Museum Collection

(Refer to the source, policy direction, and management direction for Cultural Landscapes as described under **3.2 Museum Collection** on page __.)

Issues

(Add issues once they have been explored with park staff and the public)

4.2 Views of Alcatraz Island -The view of Alcatraz Island from the city of San Francisco.

This topic needs planning team discussion and analysis.

Park Significance-

5. The natural scenic landscapes, vistas, and coastal environment of the Golden Gate area is an internationally recognized panoramic backdrop to the metropolitan San Francisco Bay area that contributes to the quality of life of the residents.

Fundamental Resources and Values-

- 5.1 Scenic Views-Dramatic views of contrasting undeveloped and urban coastal environments.
- 5.2 Air Quality -The clean air and night skies support the quality of visitor experience from park viewsheds.
- 5.3 Open Spaces -Undeveloped open spaces and associated ecosystems ranging from beaches to promontories and open water.

Analysis of Fundamental Resources and Values

5.1 Scenic Views-Dramatic views of contrasting undeveloped and urban coastal environments.

Importance of the Resources and Values

The geography of Golden Gate National Recreation Area is an internationally recognized panoramic backdrop to the metropolitan San Francisco Bay area.

Current Conditions and Trends

Viewsheds are being lost due to growth of non-native forests and vegetation and development. The continued evolution of programs operated by our park partners has led to a desire for expansion of their facilities such as the headlands Inst., BADM, Slide Ranch. The transportation needs of the growing population increases the demand for parking, access and alternative modes of transportation.

Staff has minimal capacity to monitor outside development and proactively engage in other planning outside the park boundaries.

Potential Threats

Increased development density outside park and pressure for development in the park (ie. ballfields, wastewater treatment, water supply storage). Private lands within park boundary are

being purchased by others for development before federal funding is available and may be forever lost as potential park lands. Loosing open space buffer outside park boundary. Private landowners encroaching on park with gardens, play structures, parking, etc.

Stakeholder Interests

Local and Regional Organizations:

What are the roles or interests of these organizations in relation to this resource?

National Organizations:

What are the roles or interests of these organizations in relation to this resource?

Government Agencies and Tribes:

What are the roles or interests of these organizations in relation to this resource?

Educational and Cultural Institutions:

What are the roles or interests of these organizations in relation to this resource?

Laws and Policies

A. What are they?

Source:

NPS Management Policies 2001;

Policy Direction:

.

Management Direction:

The National Park Service will take the following kinds of actions to comply with the policies mentioned above. Prepare a land protection plan for the park.

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public)

5.2 Air Quality -The clean air and night skies support the quality of visitor experience from park viewsheds.

Importance of the Resources and Values

Sweeping views of the Bay Area and coastline are a trademark of the park. The quality of the air is important for unobstructed views from park vistas. Artificial lights are excluded in major areas of the park and thereby provide visitors with opportunities to fully view the night sky.

to the health of the park's ecosystems. Darkness is a valuable resource for visitors and critical to the welfare of the park's wildlife. High points in open areas within the park provide excellent opportunities to view the night sky. Wildlife habitat is more valuable when unimpaired by artificial light.

Current Conditions and Trends

Visitors to the park enjoy good air quality within the park despite its proximity to an urban area. Incoming offshore winds generally keep the air in good condition. According to the Bay Area Air Quality Management District (BAAQMD), the condition of the air in the park is "good" and no known acid deposition is occurring due to the local climatic factors. The BAAQMD meets all federal air quality standards except 1-hour ozone, and annual and 24-hour particulate matter 10 microns in diameter (PM₁₀). In an effort to improve air quality, the National Park Service has helped introduce more low-emission buses into the recreation area.

In general there are very few dark night skies remaining within the recreation area. Wildlife habitat is impaired by artificial lighting. Park lighting, lights from adjacent property, and the overall sky glow from the Bay Area contribute to the nighttime degradation of habitat.

Potential Future Threats

Poor air quality days in the Bay Area can create severely impaired visibility. The views of smog blanketing the recreation area detract from the visitor's experience and some individuals may need to avoid outdoor activity or take special health precautions when air quality is poor. Negative impacts to the park's ecosystems may occur due to periods of poor air quality.

Continued urban growth in the San Francisco Bay area outside the recreation area is the greatest threat to air quality dark night skies in the recreation area. In addition, the increased use of power equipment, vehicles and buses within the recreation continues to threaten air quality within the park.

Stakeholders

The EPA is the primary Federal stakeholder in these issues outside the NPS boundaries. The State of California, Bay Area county and

city health departments also particular interest in the air quality issues.

Law and Policies That Apply to These Resources and Values

A. Air Quality

Source:

Clean Air Act, NPS Management Policies 2001; NPS 77, "Natural Resources Management Guidelines"

Policy Direction:

Air quality in the park meets national ambient air quality standards for specified pollutants. The park's air quality is maintained or enhanced with no significant deterioration. Scenic views are substantially unimpaired.

Management Direction:

The National Park Service will take the following kinds of actions to comply with the policy requirements related to air quality:

The National Park Service will cooperate with park visitors, neighbors, and local government agencies to find ways to prevent or minimize the intrusion of artificial light into the night scene in the park.

- Although the National Park Service has very little direct control over air quality in the air shed encompassing Golden Gate National Recreation Area, park managers will continue to cooperate with the *what are the agencies with air quality jurisdiction* and the U.S. Environmental Protection Agency to monitor air quality and ensure that air quality is not impaired.
- Inventory the air quality-related values associated with the park.
- Monitor and document the conditions of air quality and related values.
- Evaluate air pollution impacts and identify causes.
- Minimize air quality pollution emissions associated with park operations; including the use of prescribed fire *does GGNRA do prescribed fires* and visitor use activities.
- Conduct air quality monitoring in conjunction with other government agencies.
- Conduct park operations in compliance with federal, state, and local air quality regulations.
- Ensure healthful indoor air quality at NPS facilities.
- Participate in federal, regional, and local air pollution control plans and drafting of regulations and review permit applications for major new air pollution sources.

- Develop educational programs to inform visitors and regional residents about the threats of air pollution.
- Form regional partnerships to develop alternative transportation systems and promote clean fuels.
- Research effects of atmospheric deposition on plants, soils, and wetlands in Golden Gate National Recreation Area.

B. Lightscape Management/Night Sky

Source:

NPS Management Policies 2001

Policy Direction:

Excellent opportunities to see the night sky are available. Artificial light sources both within and outside the park does not unacceptably adversely affect opportunities to see the night sky.

Management Direction:

The National Park Service will take the following kinds of actions to comply with the policy requirements related to Lightscape Management/Night Sky:

- The National Park Service will cooperate with park visitors, neighbors, and local government agencies to find ways to prevent or minimize the intrusion of artificial light into the night scene in the park.
- In natural areas, artificial outdoor lighting will be limited to basic safety requirements and will be shielded when possible.
- The park staff will evaluate the impacts on the night sky caused by park facilities. If light sources in the park are affecting night skies, the staff will study alternatives such as shielding lights, changing lamp types, or eliminating unnecessary sources.

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public)

5.3 Open Spaces -Undeveloped open spaces and associated ecosystems ranging from beaches to promontories and open water.

This topic needs planning team discussion and analysis.

Park Significance-

6. The historic structures and pastoral landscapes, some of which have been in continuous use more than 200 years beginning with Spanish land grants.

This topic needs planning team discussion and analysis.

Park Significance-

7. The continuum of lands and resources at the doorstep of the San Francisco Bay area provides an abundant range of recreational and educational opportunities

Fundamental Resources and Values

7.1 Diverse Park Setting - The diversity of park settings from remote to urban provides visitors with active and passive recreational and educational opportunities.

7.2 Trail System - A system of designated trails provides access to park settings that provide visitors with a broad range of activities and varied experiences.

7.1 Diverse Park Setting - The diversity of park settings from remote to urban provides visitors with active and passive recreational and educational opportunities.

Importance of the Resources and Values

The diversity of park settings from remote to urban provides visitors with recreational opportunities that range from active pursuits such as windsurfing and mountain biking to passive pursuits such as picnicking and bird watching. A range of recreation options meets the desires and needs of a diverse urban population. Without the options provided within the National Recreation Area, recreation choices would be limited for residents of the San Francisco Bay Area.

Current Conditions and Trends

The needs and interests of the population using the recreation area continue to evolve and grow. New recreation activities such as parasurfing have developed over the past decade and needs of the baby-boomer generation have become increasingly important. Recreation for the purpose of maintaining good health has become a focus of many residents in the San Francisco Bay Area.

_____s and user groups have a sense of entitlement (b) (5) _____ regarding recreation and a number of user groups are well organized. Use levels are high (what kinds of settings are experiencing high levels of use? (b) (5) _____

_____ in many areas

of the recreation area and crowding have become issues in recent years.

Information technology has become available to help guide visitors, provide information and allow visitors to register their complaints or desires about the recreation area.

(What is the trend for the kinds of concessionaires and IPB that provide recreational opportunities?) Boat tours and other commercial choices have become available to recreation users as well as quick and efficient services for such things as reservations for commercial tours. *(Does GGNRA plan to use park properties for more developed kinds of recreation? Horse barns, conference centers?)*

(Need to describe current trends in educational opportunities e.g. outdoor school? tour guides? interpretive programs that has waysides, ranger guided walk, talks, hikes. outreach ed programs, env ed centers? special events?)

The current trail network varies from very developed trails in good condition to trails in poor condition that have been inherited from the military or landuse prior to the park. There are significant gaps in the trail system that must be linked together for the recreation area to be fully connected.

As with most heavily used trail systems, user group conflicts exist. *(What are some examples of user group conflicts? Do we not have horse only trails? What about bikes? What are the current kinds of group conflicts?)* That trend is likely to continue as shared use of trails is increasing. Other trends include accessing trails via alternative modes of transportation, and opening more trails up to users with disabilities. *(Need a little more specifics about what this last sentence means?)*

Potential Future Threats

New recreational trends could impact the desired conditions of the recreational, natural and cultural resources that the National Recreation Area is attempting to achieve.

The parks ability to adequately staff operations (education, enforcement, and maintenance) to meet the visitor demands for a diversity of recreational and educational opportunities continues to be a constraint.

choices

(b) (5)

sions

but (b) (5)

(b) (5) (This needs to be reworded, I am uncertain what its trying .)

The financial and human resources could be inadequate for continuous maintenance of trails.

Impacts to trails from inappropriate kinds of recreational activities that the trails were not designed to accommodate.

Interest of Various Stakeholders

(What organizations, local leaders have stake in GGNRA trails - the workshop listed the following that needs to be spelled out:

(b) (5)

Law and Policies That Apply to These Resources and Values

National Park Service Management Policies (2001)

National Park Service Director's Order-_____

(Identify appropriate laws and policies and describe how these laws guide the management and preservation of the fundamental resources?)

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public.)

7.2 Trail System - A system of designated trails provides access to park settings that provide visitors with a broad range of activities and varied experiences.

Importance of the Resources and Values

A system of designated trails provides access to park settings that provide visitors with a broad range of activities and varied experiences. The National Recreation Area's network of trails provides visitors with access to the scenic, natural, and cultural resources, and park settings. The diversity of trails, their locations and difficulty provides visitors with a choice that results in a range of experiences. The trail network helps to protect park resources by directing visitor use to the most appropriate and interesting places. The trails also become a means to connect communities to the National Recreation Area.

Current Conditions and Trends

The current trail network varies from very developed trails in good condition to trails in poor condition that have been inherited from the military or landuse prior to the park. There are significant

gaps in the trail system that must be linked together for the recreation area to be fully connected.

As with most heavily used trail systems, user group conflicts exist. *(What are some examples of user group conflicts? Do we not have horse only trails? What about bikes? What are the current kinds of group conflicts?)* That trend is likely to continue as shared use of trails is increasing. Other trends include accessing trails via alternative modes of transportation, and opening more trails up to users with disabilities. *(Need a little more specifics about what this last sentence means?)*

Potential Future Threats

The financial and human resources could be inadequate for continuous maintenance of trails.

Impacts to trails from inappropriate kinds of recreational activities that the trails were not designed to accommodate.

Interest of Various Stakeholders

(What organizations, local leaders have stake in GGNRA trails - the workshop listed the following that needs to be spelled out:

(b) (5)

Law and Policies That Apply to These Resources and Values

National Park Service Management Policies (2001)

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public.)

Park Significance-Muir Woods National Monument

The last remnant old-growth forest close to an urban center that retains its primeval character and supports a relatively intact ecosystem, and Muir Woods is an important manifestation of early 20th

Fundamental Resources and Values

8.1 Old Growth - The old growth forest of coastal redwoods

8.2 Redwood Creek - **This topic needs planning team discussion and analysis.**

8.1 The old growth forest of coastal redwoods

**Importance
of Resource**

and Values

Muir Woods National Monument preserves an old growth forest of coastal redwoods situated on the southwest flank of Mt. Tamalpais just 10 miles northwest of San Francisco and the Golden Gate Bridge. It was designated a National Monument by President Theodore Roosevelt in 1908 and became the nation's first piece of historic preservation legislation which at the time had recently been enacted.

Needs a narrative of the importance of the natural resources. The value of exploring a primeveil forest. The last remnants near an urban population.

Muir Woods is home to the last remaining contiguous stand of old growth coast redwoods (*Sequoia sempervirens*) in Marin County and represents a fragmented island of the redwood forest that existed 150 years ago.

(b) (5)

(b) (5)

an

, Muir Woods National Monument has evolved over

Foundation Document - Golden Gate National Recreation Area, Muir Woods National Monument, and Fort Point National Historic Site, California

the past 100 years into a cultural landscape steeped in the nation's traditions of rustic design and nature appreciation.

(b) (5)

The monument's forest of giant trees is complemented by a system of heritage trails and built features including rustic timber and stone buildings, bridges and site furnishings. Commemorative markers recalling the likes of Gifford Pinched and William Kent truly make Muir Woods a shrine to the American conservation movement.

Role in the conservation movement might be a fundamental resource for Muir Woods.

Muir Woods is significant for the place that it holds in the history of American Conservation. It was among the first National Monuments designated under the Antiquities Act, and the very first made up of privately-donated lands. In this, it set the precedent for the designation of other national monuments and parks through private donation, most notably Acadia, which has now been designated a national park.

Muir Woods was an early achievement in the movement to preserve California redwoods, and became the flagship redwood park, serving as the rallying point around which the Save the Redwoods League organized its broad movement for the preservation of these national natural treasures. Muir Woods was also the first urban national park. William Kent, the benefactor of the National Monument, was both a regionally and nationally significant figure in American Conservation. His sponsorship of the congressional legislation establishing the National Park Service brings Muir Woods into the orbit of the founding of the agency.

Current Conditions and Trends

There are 21 structures on the 2003 update to the List of Classified Structures. 9.5% are in poor condition; 33.4% in fair condition; and 57.1% in good condition. At times, Muir Woods is overburdened by visitation. The park is currently considering measures to address and improve visitor experience. Such planning must recognize the cultural values of Muir Woods and treat cultural resources appropriately

Potential Threats

Increasing visitation continues impact the park. That visitation particularly has impacts from a transportation perspective. Lack of parking and alternative transportation choices creates overflow parking conditions and traffic jams. Those situations in-turn have negative impacts on air quality the park's soundscape and the overall visitor experience. All these current threats to the park

have the potential to become worse in the future if transportation and visitor management solutions are not implemented.

Muir Woods has been thought of and treated in the past, a

(b) (5)

Increasing visitation may cause additional social trailing within the park.

Stakeholders

Golden Gate National Parks Conservancy, concessionair (Aramark), California Office of Historic Preservation. In addition, preservation and historical associations have interest in the preservation, protection, and use of these resources:

Laws and Policies

Source:

National Historic Preservation Act of 1966 as Amended, Antiquities Act of 1906 (16 USC 431-433), Organic Act of 1916 (16 USC 1 et. seq.), Historic Sites Act of 1935 (16 USC 461-467), Archeological Resources Protection Act of 1979 (16 USC 470aa-mm), National Parks Omnibus Management Act of 1998, *Statement for Management, DO-28.*

Desired Conditions:

ADD

Actions:

ADD

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public)

8.2 The old growth forest of coastal redwoods

Importance of the Resource

Redwood Creek is home to some of the west coast's most imperiled species, such as coho salmon (*Oncorhynchus kisutch*), steelhead (*O. mykiss*), northern spotted owl (*Strix occidentalis caurina*), California red-legged frog (*Rana aurora draytonii*), and rare plants.

Current Conditions and Trends

Three private communities also reside in the watershed - the communities of Muir Beach, Muir Woods Park, and Green Gulch Farm (a part of the San Francisco Zen Center). These communities contribute to the watershed and rely on it for clean water and the quality of life that it offers.

Potential Threats

More than a million people visit the watershed each year to hike the extensive trail system and enjoy its natural beauty and cultural resources. This extensive number of visitors will continue to have a potential negative impact on water resources. Diversion of water from Redwood Creek and its tributaries for residential and agricultural uses threatens the creek's health and the health of the flora and fauna that depend on the creek.

Stakeholders

The California Department of Fish and Game, California Department of Parks and Recreation, Marin Municipal Water District, Marin County and Muir Beach Community Services District.

Laws and Policies

Water Resources

Source:

Clean Water Act; Executive Order (EO) 11514 "Protection and Enhancement of Environmental Quality"; NPS *Management Policies 2001*; NPS-77, "Natural Resources Management Guidelines". Clean Water Act; EO 12088, "Federal Compliance with Pollution Control Standards"; Rivers and Harbors Act; NPS *Management Policies 2001*; NPS-77, "Natural Resources Management Guidelines".

Desired Condition:

Surface water and groundwater are protected and water quality meets or exceeds all applicable water quality standards. NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface water and groundwater.

Actions:

- Work with appropriate governmental bodies to obtain the highest possible water quality standards available under the Clean Water Act.
- Cooperate with other government agencies to maintain and/or restore quality of park water resources.
- Take all necessary actions to maintain or restore the quality of surface and ground waters in the park consistent with the Clean Water Act.

- Determine which methods can be used to ensure minimum flows under state and federal law and/or international efforts.
- Determine minimum flow needs to sustain aquatic life, particularly for T/E species.
- Investigate and monitor water quality including salinity and trace elements. Study the effects of the water quality on aquatic life.
- Promote water conservation by the National Park Service, concessioners, visitors, and park neighbors.
- Apply best management practices to all pollution-generating activities and facilities in the park, such as NPS maintenance and storage facilities and parking areas.
- Minimize the use of pesticides, fertilizers, and other chemicals and manage them in keeping with NPS policy and federal regulations.
- Press for continued and expanded monitoring to fulfill the database requirement and thus reveal any unknown water quality problems.
- Continue to monitor the effects of visitor use.
- Continue to assess stormwater runoff within Muir Woods.

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public)

Park Significance-Fort Point National Historic Site

Fort Point, one of only two remaining intact third system forts in the United States, represents the culmination of American military technology, architecture, and construction during the first half of the 19th century - the most fundamental of which

Fundamental Resources and Values

9.1 Fort Point - The historic fort at Fort Point includes the masonry third system fortification, the Fort Point Light mounted on the barbette tier, Batteries East and West, and associated structures and buildings within the legislated boundaries

Importance of Resource and Values

Fort Point was established as a National Historic Site on October 16, 1970. It is the West Coast's only example of a multi-tiered casemated Third System fort and **is one of two remaining in the United States**. Its location at the base of the south pier of the Golden Gate Bridge makes it one of the most visible properties within the park.

Current Conditions and Trends

According to the Golden Gate and Fort Point List of Classified Structures (LCS), there are 21 structures associated with Fort Point National Historic Site that is being preserved and maintained. Of these, 10% are in poor condition, 28% are in fair condition, and 62% are in good condition.

The fort is currently open to the public for interpretive purposes Friday through Sunday. It is closed Monday through Thursday because of seismic retrofit work happening directly above the fort on the Golden Gate Bridge. The fort is in good condition; however, the marine climate is extremely harsh on it. In 2000 a project was implemented that addressed seismic deficiencies. Smaller projects have been undertaken over the years to restore and paint the metalwork, and to replace and repoint the brickwork, although the

climate is generally deteriorating these elements faster than they are being maintained.

Potential Threats

The biggest threat to this resource is the lack of continuous maintenance in the face of the harsh weather conditions. Metalwork in a marine environment needs to be painted almost continuously, absent regular painting; any metalwork that is repaired or replaced will rust prematurely.

There are also pest management issues at the fort. There are many locations for pigeons to roost and their guano has caused a potential health threat. If this problem is not addressed more areas of the fort are likely to be closed off as the bird population multiplies.

Threats associated with seismic retrofit of the Golden Gate Bridge have already caused minor damage to the believed long-lost Counterscarp Gallery and require constant vigilance on the part of the park.

Potential threats associated with modifications in the area to increase homeland security will raise preservation issues that will be a challenge to deal with successfully.

Stakeholders

Golden Gate National Parks Conservancy is the park's cooperating association and manages the bookstore at Fort Point.

Golden Gate Bridge District has jurisdiction for the Golden Gate Bridge which is in the airspace directly above Fort Point.

Various law enforcement agencies, including California Highway Patrol, U.S. Park Police, and U.S. Coast Guard, have Homeland Security responsibilities in the immediate vicinity of the fort.

In addition, preservation and historical associations have interest in the preservation, protection, and use of these resources:

California Heritage Council

California Office of Historic Preservation

Coast Defense Study Group

Council on America's Military Past

Fort Point and Presidio Historical Association

Heritage - Foundation for San Francisco's Architectural Heritage

Laws and Policies

National Historic Preservation Act of 1966 as Amended
Antiquities Act of 1906 (16 USC 431-433)

Organic Act of 1916 (16 USC 1 et. seq.)
Historic Sites Act of 1935 (16 USC 461-467)
Archeological Resources Protection Act of 1979 (16 USC 470aa-mm)
National Parks Omnibus Management Act of 1998
Statement for Management
DO-28

Issues That Need To Be Addressed

(Add issues once they have been explored with park staff and the public)

Primary Interpretive Themes

Interpretive themes are ideas, concepts, or stories that are central to Golden Gate National Recreation Area's purpose, significance, identity, and visitor experience. The primary interpretive themes define concepts that every visitor should have the opportunity to learn. Primary themes also provide the framework for the national monument's interpretation and educational programs. The themes guide the strategies to influence visitor experience, develop monument programming, exhibits, and other interpretive tools. Subsequent interpretive planning may elaborate on these primary themes. Below are the primary interpretive themes that related to each of the monument's significance statements -

Themes to be added.

Special Mandates and Constraints

Often there are special mandates or constraints that direct park management and planning decisions. These could include direction that is found in the park's legislation—such as mandating grazing or hunting within a park. The special mandates are specific directions or agreements that relate directly to the park. Mandates might be a legislative requirement or signed agreements. They add another dimension to a parks purpose and significance, such as the designation of wilderness. Mandates could also be long-term agreements that commit park managers to specific actions and limit their ability to modify land use in specific areas of the park.

Mandates and Constraints to be added.

Planning Participants

| | |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GOGA Staff | Mai-Liis Bartling, Deputy Superintendent Paul Batlan, Business Management Ric Borjes, Cultural Resources Kim Coast, Law Enforcement Darren Fong, Natural Resources Amy Ford, Transportation Scholar Sue Fritzke, Natural Resources Theresa Griggs, Park Ranger Daphne Hatch, Natural Resources Nancy Hornor, Planning Susan Hurst, Admin. Officer Joe Llewellyn, Business Mgmt. Don Mannel, Natural Resources Bill Merkle, Natural Resources Melinda Moses, Public Affairs Diane Nicholson, Cultural Resources Brian O'Neill, Superintendent Chris Powell, Public Affairs Mike Savidge, Strategic Planning Lee Shenk, Business Mgmt. Yvette Ruan, Resource Protection Tamara Williams, Natural Resources |
| Golden Gate National Park Conservancy | Cathie Barner |
| National Oceanic and Atmospheric Administration | Ed Ueber |
| Pacific West Regional Office | Martha Crusius |
| California State Parks | Tom Lindberg |
| NPS Water Resources Division | Don Weeks Mark Flora |
| Denver Service Center Facilitators | Stephan Nofield Scott Robson Terri Urbanowski |

References

Rothman, Hal K. The Park That Makes Its Own Weather: An Administrative History of Golden Gate National Recreation Area, National Park Service, Revised 2002.

Weeks, Don P, Water Resources Information and Issues overview Report, Golden Gate National Recreation Area. 2005, National Park Service - Water Resources Division

1999 December. Golden Gate National Recreation Area, Resources Management Plan - Natural Resources Section. Prepared by the National Park Service.

Appendix 1 Park Legislation

Legislation Index
Legislation Excerpts
Complete Legislation

Appendix 2 Fortifications and Military Installations

The following is a description of the fortifications and military installations that are preserved within Golden Gate National Recreation Area and Fort Point National Historic Site.

The Presidio of San Francisco—Established in 1776 by the Spanish and continued as a military post under the Mexicans and the Americans, the Presidio possesses a visual unity and a high degree of integrity that relates well to its historical importance and continuity through successive periods of development.

The Presidio of San Francisco was the oldest Army installation operating in the American West and was one of the longest-garrisoned posts in the country. More than 200 years of military occupation of the Presidio have resulted in the development of a complex historic district of several overlaid historic landscapes, each composed of buildings, structures, objects, sites, and other features that represent at least eight distinct phases of development.

The breadth and diversity of contributing resources are vast and include a veritable outdoor museum of military and related architecture. The significance of the Presidio is unequalled by any post in the country and rests not only on resources within post boundaries, but also on the preeminence of two adjacent and interrelated landscapes: the urban development of the city of San Francisco and the natural geography of San Francisco Bay. Further, no other military reservation within a major United States city is as large as the Presidio and so prominently located within the surrounding urban setting. For more than 100 years, the post served San Francisco as a man-made forested reserve amidst the city's dense residential development; the lush character of the Presidio as a wooded reserve has endured to the present day.

The important interrelationship between the Presidio and the city of San Francisco has been part of a broader interrelationship between the Presidio the entire Bay Area. As headquarters for the protection of the Bay and for military expeditions throughout the West, the Presidio remained strategically the most significant military post on America's Pacific Coast during most of its extended history, until its closure in 1994. Contributing resources (approximately 660) include buildings and structures, archeological sites, and cultural landscapes and their features.

Fort Point National Historical Site— Constructed between 1853 and 1861, Fort Point is the only example of a casemated Third System fort completed on the Pacific Coast. It is also the most unaltered such fort left in the United States. Situated on the southern tip of the Golden Gate, the Fort was a vital part of San Francisco's harbor defense during the Civil War, and played a role in defending the harbor entrance in World War I and World War II.

San Francisco Port of Embarkation National Historic Landmark— During the early months after the United States entered World War II, the U.S. Army's San Francisco Port of Embarkation shipped more military supplies than all other military ports in the United States combined.

The statistical returns for the entire war showed that San Francisco was second only to New York in the numbers and amounts of personnel shipped to the war zones. Between December 1941 and August 1945, 1,745,000 personnel embarked at San Francisco. In addition, more than half a million veterans of the war debarked at San Francisco during the same period. An equal number came through the Golden Gate after conclusion of the hostilities.

All American dead being returned to the United States from the Pacific were brought through the port. Japanese and German prisoners of war were processed through this port's facilities.

More than 25 million measurement tons of cargo were shipped through San Francisco. For various periods of time between 1941 and 1944, the ports of Los Angeles, California; Portland, Oregon; and Seattle, Washington, were administered by San Francisco. In the Bay Area, Fort Mason oversaw port operations for no fewer than 13 other installations. San Francisco was the primary port for Army troops and supplies in the central, south, and southwest Pacific areas. Moreover, the task force that drove the Japanese from Alaska's Aleutian Islands was mounted from San Francisco.

Alcatraz Island National Historic Landmark—Alcatraz Island has been the site of events that have had an important impact on the nation as a whole from before the Civil War through an Indian Occupation of the 1970s. Its significance in the areas of military history, social history (penology), and maritime commerce is enhanced by the integrity of the resource because access to the island has been strictly limited by the U.S. government throughout its history.

By the start of the Civil War, Alcatraz was the key fort in the center of the most important Pacific Port in 19th century America, had mounted the first permanent cannons on the West Coast of the United States, and featured a brick and masonry defensive barracks that may have been unique in the annals of American military

architecture. In the areas of both military and social history, Alcatraz is noteworthy because it was the first official army prison in the nation.

Forts Baker, Barry, and Cronkhite—These fortifications comprise some of the earliest coastal defense artillery batteries in Marin County and are significant in tracing the development of the American defense system. This land, strategically located at the northern point of the Golden Gate, commands the approaches to the San Francisco Bay entrance.

In 1866 Forts Baker and Barry were acquired by purchase to be used for military defense. Fort Cronkhite was acquired in the same manner in 1914 but was considered a portion of Fort Barry until officially designated as Fort Cronkhite in 1937. The fortifications proposed for construction on this land were to augment those at the Presidio of San Francisco and elsewhere in San Francisco to prevent successful passage of hostile ships through the Golden Gate into the Bay. The batteries and their ancillary structures (observation posts and garrisons) span five systems of defense against attack, from the Civil War to the Cold War eras, and equipment ranged from smoothbore breach-loading guns to rifled, break loading guns, including emplacements for 155 mm anti-motor torpedo and 90 mm anti-aircraft guns to Nike anti-aircraft missiles.

Fort Mason Historic District - Beginning in 1797 and lasting through the Spanish and Mexican administrations of Alta Paige California, Fort Mason (*including Bateria San José, Punta Medanos, Battery Yerba Buena, Point San José, Black Point, and Post of Point San José*) was one of two sites in San Francisco Bay that was armed with artillery for the defense of the harbor.

For over forty years of American administration, Fort Mason has played a role in the coastal defenses of the bay from the Civil War to post-Spanish-American War. It also served as an important element in the first submarine mining of San Francisco Bay, during the Spanish-American War. From the Spanish-American War to the Korean War, Fort Mason's was the the headquarters of the San Francisco Port of Embarkation.

Fort Mason contains a collection of military structures dating from the 1850s to the Korean War that illustrates the evolution of an army post and seacoast fortifications over a period of 100 years. The contrasts and many moods of the architecture, the effect of the Army's caste system on the quarters, the charm of the earliest officers' row, the simple lines of the Endicott battery, the WPA architecture of the Great Depression, the Army's determination in landscaping—all these blend together to present a history of this place and its times.

Six-inch Gun No. 9 (Baker Beach)— This six-inch breech-loading rifle on disappearing carriage is one of only two such guns that survived the scrapping of coastal defense ordnance following World War II, is the only one with a recoiling mechanism that can be moved between firing and loading positions. It embodies the distinctive characteristics of a type, of a period, and of a method of construction, of Endicott-period seacoast defense ordnance, representative of the golden age of coast artillery dating from the last decade of the 19th Century and the early decades of the 20th Century. It is a rare, surviving example of once common weaponry. This gun was manufactured at the Waterville Arsenal at Troy, New York, in 1908 and was the still earlier Model of 1905. The carriage was Model of 1903. [*Six-Inch Rifled Gun No.9, Model of 1905, on Disappearing Carriage, No. 2, Model of 1903 National Register of Historic Places Registration Forms, 1979*]

Fort Miley—The battery emplacements, fire control stations, and searchlight facilities of East and West Fort Miley were part of the defense of the strategic harbor of San Francisco, long regarded by army engineers and strategists as the most important harbor on the West Coast of the United States.

The fortification of Point Lobos in 1899 marked the final phase of the Endicott system of seacoast defense, when it was realized that the guns and mortars should be placed as far toward the sea as possible and that the inner harbor defense represented by the early Endicott-type batteries was of less importance.

The guns of Fort Miley, together with those of Fort Barry on the northern side of the Golden Gate, became the important "outer line of defense" at the turn of the century. The massive concrete and earth batteries, Chester and Livingston, represented the latest in design and engineering of the Endicott works as of 1900. Later installations at Fort Miley, such as a coastal searchlight powerhouse and fire control stations for other and later batteries, mark further advances in the theory, practice, and technology of seacoast defenses.

Fort Miley's continuing importance in the harbor defenses of San Francisco is illustrated by the construction there of a 6-inch gun battery during World War II and the subsequent arming of this battery as late as 1948—the last of the coastal guns to be mounted in the San Francisco Bay Area.

Fort Funston— Also known as *Rancho Laguna de La Merced* and Laguna Merced Military Reservation, this historic district contributed as a coastal defense of strategic importance to San Francisco Bay through the crucial period of World War II, during which its

armament was the primary defense against an enemy approach from the south.

Fort Funston contributed to the advancement of engineering and design of seacoast fortifications. The planning and construction developed the prototypical casemates of Battery Davis, which were used for the protection of guns from aircraft bombing attacks. Battery Davis's construction marked the introduction of the mighty 16-inch gun batteries on the Pacific Coast of the United States. Later, the site became the location for a Nike missile battery—the defensive weapon that first replaced the traditional cannon.

Hill 640 Military Reservation - This reservation and the remains of its radar set and the fire control stations are prime examples of the methods that evolved for the better direction of coast artillery fire against enemy vessels at sea. They are the best surviving representatives of the most northerly complexes of fire control installations for the defense of San Francisco Bay during the critical years of World War II. The radar, a surface detector set, was the first of its type assigned to the San Francisco Harbor defenses.

Fort McDowell— With concern mounting over threats to the Bay Area from Confederate sympathizers and naval forces, the federal government established Camp Reynolds (West Garrison) on Angel Island in 1863.

Artillery batteries were built near the camp and at Points Stuart, Knox, and Blunt. After the Civil War, Camp Reynolds became an infantry camp, serving as a depot for recruits and as a staging area for troops serving in campaigns against the Apache, Sioux, Modoc, and other Indian tribes.

In 1886 a report critical of Pacific Coast harbor defenses led to development of new gun batteries on the southwest side of the island facing the Golden Gate. Batteries Ledyard, Wallace, and Drew (the remains of which are visible today) were in operation by 1904, but decommissioned as obsolete just five years later.

A quarantine station was built at Fort McDowell (East Garrison) on the eastern end of the island. Through World War II (with name changes, such as designating the entire island as Fort McDowell and various installations on the island with geographic designations), the island continued as a major part of the Army's presence in San Francisco Bay.