



GOLDEN GATE NATIONAL RECREATION AREA MUIR WOODS NATIONAL MONUMENT

DRAFT GENERAL MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT

VOLUME 1

Draft
General Management Plan / Environmental Impact Statement
Golden Gate National Recreation Area and Muir Woods National Monument
Marin County, San Francisco City and County, and San Mateo County, California

Established in 1972, Golden Gate National Recreation Area has been operating under its first general management plan, approved in 1980. Since the park was established, it has doubled in size, and the park staff has gained a better understanding of the natural and cultural resources of the park and the many recreational uses that occur within the park areas. Muir Woods was declared a national monument in 1908 and is currently managed as part of the Golden Gate National Recreation Area. A new management plan is needed to guide the parks for the next 15-20 years. This *Draft General Management Plan / Environmental Impact Statement* describes three alternatives for managing Golden Gate National Recreation Area and Muir Woods National Monument.

The no-action alternative consists of the existing park management and serves as a basis for comparison in evaluating the other alternatives. **Alternative 1, “Connecting People with the Parks,”** would further the founding idea of “parks to the people,” and would engage the community and other potential visitors in the enjoyment, understanding, and stewardship of the park’s resources and values. Park management would focus on ways to attract and welcome people, connect people with the resources, and promote understanding, enjoyment, preservation, and health. Alternative 1 is the National Park Service’s preferred alternative for park lands in Marin, San Francisco, and San Mateo counties. **Alternative 2, “Preserving and Enjoying Coastal Ecosystems,”** would place an emphasis on preserving, enhancing, and promoting the dynamic and interconnected coastal ecosystems in which marine resources are valued and prominently featured. Recreational and educational opportunities would allow visitors to learn about and enjoy the ocean and bay environments, and gain a better understanding of the region’s international significance and history. **Alternative 3, “Focusing on National Treasures,”** would place an emphasis on the park’s nationally important natural and cultural resources. The fundamental resources of each showcased site would be managed at the highest level of preservation to protect the resources in perpetuity and to promote appreciation, understanding, and enjoyment of those resources. Visitors would have the opportunity to explore the wide variety of experiences that are associated with many different types of national parks—all in this park. All other resources would be managed to complement the nationally significant resources and associated visitor experiences. Alternative 3 is the National Park Service’s preferred alternative for Alcatraz Island and Muir Woods National Monument.

The impacts of implementing the various alternatives were analyzed.

(TO BE COMPLETED AFTER VOLUME 2 IS FINALIZED)

HOW TO COMMENT ON THIS PLAN

Comments on this *Draft General Management Plan / Environmental Impact Statement* (GMP/EIS) are welcome and will be accepted during the 60-day public review and comment period. The easiest way to submit your comments is via the online form at <http://parkplanning.nps.gov/goga> (click on “General Management Plan” and then “Open for Public Comment”). We also accept written comments on the enclosed postage free response card or you may submit a letter. All written comments should be mailed or hand delivered to:

Superintendent
Golden Gate National Recreation Area
General Management Plan / Environmental Impact Statement
Fort Mason, Building 201
San Francisco CA 94123

The National Park Service will accept public comments until **add date.**

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Draft General Management Plan / Environmental Impact Statement



Golden Gate National Recreation Area
Muir Woods National Monument

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SUMMARY

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3 To be completed after document contents have been finalized.

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Background



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INTRODUCTION

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3 Nearly thirty years ago the National Park Service adopted a plan outlining the future of
4 what was then a new and different unit of the national park system, bringing national
5 parks to urban areas. Because of the size and diversity of the Bay Area community and
6 the National Park Service's commitment to a pioneering public involvement process, it
7 took five years to prepare the plan. This diligence paid off and the final plan won the
8 unanimous support of the community. This plan, along with several amendments, has
9 firmly guided the preservation and enhancement of the park for three decades.

10 It is not unusual for many long-range plans to just sit on the shelf and gather dust—
11 usually as a result of inadequate funding to implement the dreams they offer, but also
12 because of changing conditions and fading public support. When the future of Crissy
13 Field was being discussed early in the planning process, one member of the park's
14 advisory commission confided that the National Park Service would never get the funds
15 to improve it, especially considering demolition and toxic cleanup costs. Today Crissy
16 Field stands as an international standard for waterfront restoration and is a top tourist
17 destination.

18 Success stories like Crissy Field happen here because of the appeal and popularity of the
19 park's resources, enhanced by the efforts of the Golden Gate National Parks
20 Conservancy, and the resultant financial support of generous members of the community.

21 When considering the transformational expectations offered by the 1980 general
22 management plan, it has been a remarkable success. The visions for Alcatraz, Fort
23 Mason, Crissy Field, the Cliff House, Fort Baker, and much of the Marin Headlands have
24 been achieved.

25 Today, Golden Gate National Recreation Area constitutes one of the largest urban
26 national parks in the world, extending north of the Golden Gate Bridge to Tomales Bay in
27 Marin County and south to Half Moon Bay in San Mateo County. These lands represent
28 coastal preserves that encompass bay and ocean shorelines.

29 The park contains an abundance of historical and cultural assets, including sites such as
30 Alcatraz Island, Marin Headlands, Fort Mason, as well as Muir Woods, Fort Point, and
31 the Presidio of San Francisco. These landmarks contain a variety of archeological assets,
32 military forts and other historic structures that present a rich account of 200 years of
33 United States history. Chronicles of Native American settlements, the Spanish Empire
34 frontier, the Mexican Republic, evolution of American coastal fortifications, maritime
35 history, 19th century and early 20th century agriculture and ranching, military history,
36 California Gold Rush, Buffalo Soldiers, and the growth of San Francisco are told in the
37 settings in which they occurred.

38 Golden Gate National Recreation Area is also rich in natural resources. The park is
39 comprised of 19 types of ecosystems in numerous distinct watersheds and is home to over
40 1,200 known plant and animal species. The park provides habitat for many sensitive, rare,
41 threatened, or endangered species, including the mission blue butterfly, northern spotted
42 owl, California red-legged frog, and Coho salmon.

PART 1: BACKGROUND

1 Each year 16-20 million visitors explore the park, with over 1.4 million touring Alcatraz
2 Island and approximately 750,000 visiting Muir Woods National Monument. Trips to the
3 park account for nearly 50% of all visits to the 29 national parks in California.

4 In looking back at the 1980 general management plan and where the park is today, there
5 appears to be only one major goal yet to be accomplished—the ambitious transportation
6 proposals contained in the document. Lack of operational funding and jurisdictional
7 issues have thwarted their accomplishment. However, one of the principal goals of this
8 element of the plan was to provide access to the park to under-represented populations—
9 other strategies have apparently made progress in reaching that goal.

10 General observations indicate that increasing numbers of young people—many of them
11 minorities—have been visiting the park. It can be safely assumed that this apparent trend
12 is strengthened by the many educational and volunteer programs managed by the park
13 and park partners.

14 It is our goal to continue this trend. Golden Gate National Recreation Area and Muir
15 Woods National Monument are situated in one of the most diverse regions in America. In
16 addition, demographic trends forecast a dramatic increase in the diversity of the statewide
17 population and in the number of residents who are less than 18 years of age. As a result,
18 the park is uniquely situated to “reconnect people with their parks,” with a goal of
19 reaching a 21st century audience—more diverse and younger than today’s national park
20 visitor—and sustaining their engagement.

21 Even before the 1980 plan was approved, the park was growing. Legislation for a
22 boundary expansion was passed by Congress in 1978 and since then [REDACTED] additional
23 acts of Congress have added more than [REDACTED] acres to the park. Research and
24 management activities have revealed new resource values, both cultural and natural.
25 Visitation has increased and new activities have put pressures on park resources not
26 anticipated in the original plan. In short, today’s park is quite different from the one
27 covered in the 1980 plan. The first plan served to shape a new park and reach a consensus
28 on the definition of its identity. This new document will serve to fine tune and expand the
29 vision for an already mature national park and will shape and define new areas coming
30 into the park. Although different in many ways, the new plan will follow the same basic
31 directive outlined for the 1980 plan by the park’s first Superintendent, Bill Whalen, “our
32 job is just to polish the jewels.”

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PURPOSE AND NEED

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3 The purpose of the general management plan is to guide planning and decision making at
4 Golden Gate National Recreation Area and Muir Woods National Monument for the next
5 20 years. The first general management plan, completed in 1980, is now more than 30
6 years old. Since the completion of that first plan, the issues, opportunities, and challenges
7 associated with the park and monument have significantly changed. In addition, park
8 managers have had 30 years to better understand the natural and cultural resources of the
9 park and monument and the changing needs of park visitors.

10 This new general management plan will serve as a foundation and framework for the
11 management of these park lands. The plan articulates the desired future conditions for
12 park resources and visitor experiences that will best fulfill the legislative and presidential
13 mandates that established these units as part of the national park system.

14 This plan has been developed by an interdisciplinary team in consultation with NPS
15 offices; park partners; tribal, federal, state, and local agencies; and other interested
16 parties. There has been substantial input and participation from the general public. These
17 public involvement and consultation efforts helped to ensure that the decisions made
18 through this planning process are widely supported and sustainable over time. A
19 completed general management plan represents an agreement with the citizens of the
20 United States about how these lands will be managed. The plan will be a blue print for
21 the future.

22 The “Planning Issues” section of this general management plan provides details of these
23 issues, opportunities and challenges. Generally, the overall need for a new general
24 management plan includes the following:

- 25 • The park has significantly expanded in size and includes many new lands in San
26 Mateo County. This planning process is based on a comprehensive look at the
27 park as a whole versus, rather than its individual pieces. This comprehensive
28 parkwide approach will help ensure that the management of the natural and
29 cultural resources and visitor experiences are consistent and thorough across all
30 park areas.
- 31 • There is an increased public demand for access to and use of open spaces within
32 the ever-growing urban development of the San Francisco Bay region. The
33 general management plan provides a regional collaborative approach to open
34 space preservation.
- 35 • The changing demographics in the Bay Area are bringing notable shifts in park
36 visitation, uses, and trends. The general management plan will provide desired
37 conditions that will guide the decision making needed to accommodate the
38 anticipated visitation growth.
- 39 • Through research and park management that has occurred since the 1980 plan,
40 the park staff has gathered a considerable amount of new information and
41 knowledge regarding resources and visitor use. This new awareness is
42 incorporated into the desired conditions, proposed management actions, and
43 policies of this general management plan.

PART 1: BACKGROUND

- 1 • Since the 1980 plan, climate change has become better understood and its effects
2 more evident on both ecological systems and cultural resources. The general
3 management plan looks at the potential impacts of climate change to park
4 operations and visitor use, and identifies direction and management actions to
5 guide efforts to minimize the park’s carbon footprint.
- 6 • How visitors access the park continues to evolve as the local transportation
7 infrastructure changes. The strategies that were identified in 1980 continue to be
8 explored; new ideas and techniques are also identified to help address traffic
9 congestion within the park.

10

11 This general management plan addresses the overall issues noted above and the detailed
12 issues identified in the “Planning Issues” section; the alternatives suggest ways to address
13 these issues over the next 20 years.

GUIDING PRINCIPLES FOR PARK MANAGEMENT

2

3 In addition to the many laws, policies, and directives that govern management of all units
4 of the national park system, the leadership at Golden Gate National Recreation Area and
5 Muir Woods National Monument has highlighted some of the principles that are most
6 deeply rooted and distinctive at this park. These flow from the 1916 act that established
7 the National Park Service to “...*promote and regulate the use of the Federal areas known*
8 *as national parks, monuments, and reservations...by such means and measures as to...*
9 *conserve the scenery and the natural and historic objects and the wild life therein and to*
10 *provide for the enjoyment of the same in such manner and by such means as will leave*
11 *them unimpaired for the enjoyment of future generations.*”

12

13

14 **SUSTAINABILITY**

15 We will continue to learn about and use practices that help sustain the resources of our
16 park. Sustainability will be fundamental to the facilities, projects, programs, and
17 operations of the park, using sound environmental management practices. We will seek
18 opportunities to promote sustainability and stewardship to park visitors, neighboring
19 communities, and the stakeholders we serve.

20

21

22 **COMMUNITY-BASED STEWARDSHIP**

23 We are committed to ongoing involvement of individuals and organizations in
24 understanding, caring for, and preserving the park’s natural habitats, historic places, and
25 trails. This community stewardship brings the commitment to preserve our common
26 heritage and public lands—national treasures that can best be sustained with the efforts of
27 many.

28

29

30 **CIVIC ENGAGEMENT**

31 We are dedicated to ongoing, dynamic conversations about the contemporary relevance
32 of park resources. We will also provide opportunities for meaningful involvement to
33 promote better understanding and communication, discuss concerns, and express values
34 and preferences when park decisions and policies are being developed and implemented.

35

36

37

1 **PARTNERSHIPS**

2 We will continue to build on the legacy of the many partnerships that have extended our
3 ability to protect resources and serve the public since the park was established. Through
4 mutual collaboration, shared values, and learning, these partnerships have created
5 outcomes beyond any one organization’s individual capacity. Partnerships will continue
6 to be an important way to accomplish the park’s mission and build a community of
7 stewardship.

8

9

10 **REGIONAL COLLABORATION**

11 In working to preserve our park’s resources unimpaired for future generations, we will
12 establish and maintain cooperative relationships with managers of adjacent public lands
13 and watersheds; tribal, state, and local governments; community organizations; and
14 private landowners. We will collaborate with others to ensure that watersheds,
15 ecosystems, viewsheds, and trail and transportation systems that extend beyond park
16 boundaries are considered holistically, in order to best preserve important park resources,
17 provide equitable and sustainable access, and advance the goal of creating a seamless
18 network of protected lands.

19

20

21 **INCLUSION**

22 Recognizing the special opportunities and obligations resulting from our location within a
23 region of great demographic and socioeconomic diversity, we will strive to assure that
24 Golden Gate is a “park for all.” Working *with*, rather than *for*, various community
25 partners, we will undertake proactive strategies that make the park welcoming and
26 accessible to those at every economic strata, people with disabilities, and ethnic and
27 cultural communities who have not traditionally visited national parks in numbers
28 proportionate to the changing demographics of California and the nation.

29

THE PLANNING AREA

2

3 This new general management plan addresses the NPS-administered lands within the
4 legislative boundaries of Golden Gate National Recreation Area and Muir Woods
5 National Monument. Over the last 15 years, the park staff has completed numerous land
6 use and site plans for areas within the Golden Gate National Recreation Area. These
7 plans and environmental documents are current and therefore are not included in the
8 planning area for this updated general management plan.

9 The new general management plan will provide park management guidance for the
10 following park sites: 1) those park lands that are not covered by recent land use
11 management plans and agreements; 2) those lands that are newly acquired or in the
12 process of acquisitions; 3) lands and waters that are leased to the National Park Service or
13 are under other management arrangements or easements (such as the San Francisco
14 Public Utilities Commission Peninsula Watershed).

15 Specifically these areas include the following:

- 16 • Alcatraz Island and the surrounding bay environment
- 17 • park lands in Marin County, including Stinson Beach to Bolinas-Fairfax Road;
18 Slide Ranch; Muir Beach; Lower Redwood Creek; Golden Gate Dairy;
19 Tennessee Valley; Marin Headlands; and the offshore ocean and bay
20 environment
- 21 • park lands in San Francisco, including Upper Fort Mason, China Beach, Lands
22 End, Fort Miley, Ocean Beach, Fort Funston, and offshore ocean and bay
23 environment
- 24 • park lands in San Mateo County, including the coastal area extending south from
25 Fort Funston to Mussel Rock; Milagra Ridge; Sheldance Nursery Area; Sweeney
26 Ridge, including Cattle Hill and Picardo Ranch; Mori Point; San Pedro Point;
27 Devil's Slide coastal area; Rancho Corral de Tierra; Montara Lighthouse; Phleger
28 Estate; San Francisco Public Utilities Commission (SFPUC) Watershed
29 Easements; and the offshore ocean environment
- 30 • all lands within Muir Woods National Monument

31

32 The following are the Golden Gate National Recreation Area sites that have recently
33 completed new land use management plans, and therefore are not included in the GMP
34 planning area. These park areas will not be revisited in this plan.

- 35 • Presidio of San Francisco and Crissy Field
- 36 • Baker Beach
- 37 • Lobos Creek Valley
- 38 • Fort Point National Historic Site
- 39 • Sutro Historic District, including the Cliff House, Sutro Heights Park, Sutro
40 Baths, and Lands End

PART 1: BACKGROUND

- 1 • Fort Baker
- 2 • Lower Fort Mason (Fort Mason Center)
- 3 • Golden Gate National Recreation Area Northern District, north of Bolinas-
- 4 Fairfax Road (These lands are managed by Point Reyes National Seashore and
- 5 are being addressed in the *Point Reyes National Seashore/ Golden Gate National*
- 6 *Recreation Area Northern District General Management Plan.*)
- 7

8 The park staff is currently working on a variety of detailed project and program
9 implementation plans. The implementation plans cover topics such as detailed actions for
10 natural and cultural resource restoration and preservation, visitor use, transportation, and
11 park operations. Below is a list of the major project and program implementation plans
12 that are in the process of being prepared or implemented. In the preparation of this
13 general management plan, the planning team coordinated with the development of these
14 plans to ensure consistency. Ongoing plans include

- 15 • Marin Headlands and Fort Baker Transportation Infrastructure and Management
16 Plan Final Environmental Impact Statement
- 17 • Wetland and Creek Restoration at Big Lagoon, Muir Beach Final Environmental
18 Impact Statement
- 19 • Marin Equestrian Plan/Environmental Assessment
- 20 • Headlands Institute Campus Improvement and Expansion Plan
- 21 • Dog Management Plan for Golden Gate National Recreation Area /
22 Environmental Impact Statement
- 23 • Doyle Drive – South Access to the Golden Gate Bridge
- 24 • Point Reyes National Seashore General Management Plan
- 25
- 26
- 27
- 28



PART 1: BACKGROUND

1 back of map

Foundation Statements: Guidance for Planning

In 1916, with the passage of the National Park Service Organic Act, Congress established the National Park Service to oversee and manage the national parks of the United States. Individual national parks continue to be established by Congress or by presidential proclamation. The legislation that authorizes a new national park area guides the management of that park. (See appendix A for legislation related to the National Park Service, Golden Gate National Recreation Area, and Muir Woods National Monument.)

The following pages present foundation statements first for Golden Gate National Recreation Area and then for Muir Woods National Monument; they are presented separately since they are two distinct units of the national park system. These foundation statements include the elements describe below.



PARK PURPOSE

The park purpose is a statement that summarizes why Congress and/or the president established the area as a unit of the national park system. It is based on the enabling legislation and the legislative history of the park unit. The purpose statement provides the most fundamental criteria against which the appropriateness of all plan recommendations, operational decisions, and actions are tested.

PARK SIGNIFICANCE

Statements of park significance define what is most important about a park's many resources and values. In developing these significance statements, the planning team was guided by the park's legislation and knowledge acquired through management, research, and civic engagement. The significance statements focus on the attributes that make the area's resources and values important enough to be included in the national park system. Each unit in the national park system contains many significant resources, but not all of these resources contribute to the purpose for which the park or monument was established as a unit of the national park system.

The park purpose and significance statements are used to guide all planning and management decisions. This ensures that the resources and values that Congress and the president wanted preserved are understood and are the park's first priority.

FUNDAMENTAL RESOURCES AND VALUES

The National Park Service works to ensure the conservation and public enjoyment of those resources and values that are fundamental to the park significance. Fundamental resources and values are those resources and values that directly contribute to the significance for which the park was established.

PRIMARY INTERPRETIVE THEMES

Primary interpretive themes describe the key stories and concepts of the park that help visitors understand and appreciate the park purpose and significance. The development and interpretation of primary interpretive themes provide the foundation on which the park's educational and interpretive program is based.

Foundation Statements for Golden Gate National Recreation Area

The founders of Golden Gate National Recreation Area, established in 1972, intended to bring national park experiences to urban populations. The park's extensive collection of natural, historic, and scenic resources and diverse recreational opportunities fulfill that purpose of bringing "parks to the people"—particularly to the 7 million people who live in the San Francisco Bay Area. Today, however, the resources of Golden Gate National Recreation Area are nationally and internationally recognized as well; extending their value to all of America and beyond.

PARK PURPOSE

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

Recreational and Educational Opportunities

SIGNIFICANCE

The continuum of park resources at the doorstep of the San Francisco Bay Area provides an abundance of recreational and educational opportunities.

FUNDAMENTAL RESOURCES AND VALUES

- **Diverse Park Settings** – The diversity of settings, from remote to urban, provides visitors with active and passive recreational and educational opportunities, including participation in park stewardship.
- **Park Access** – A system of designated trails and scenic park roads supports access to settings that provide visitors with a broad range of activities and varied experiences.

INTERPRETIVE THEME

The park provides for diverse recreational and educational opportunities from contemplative to active pursuits, including participation in stewardship and volunteer activities. Its proximity allows an urban population to connect with nature and history.

Coastal Corridor

SIGNIFICANCE

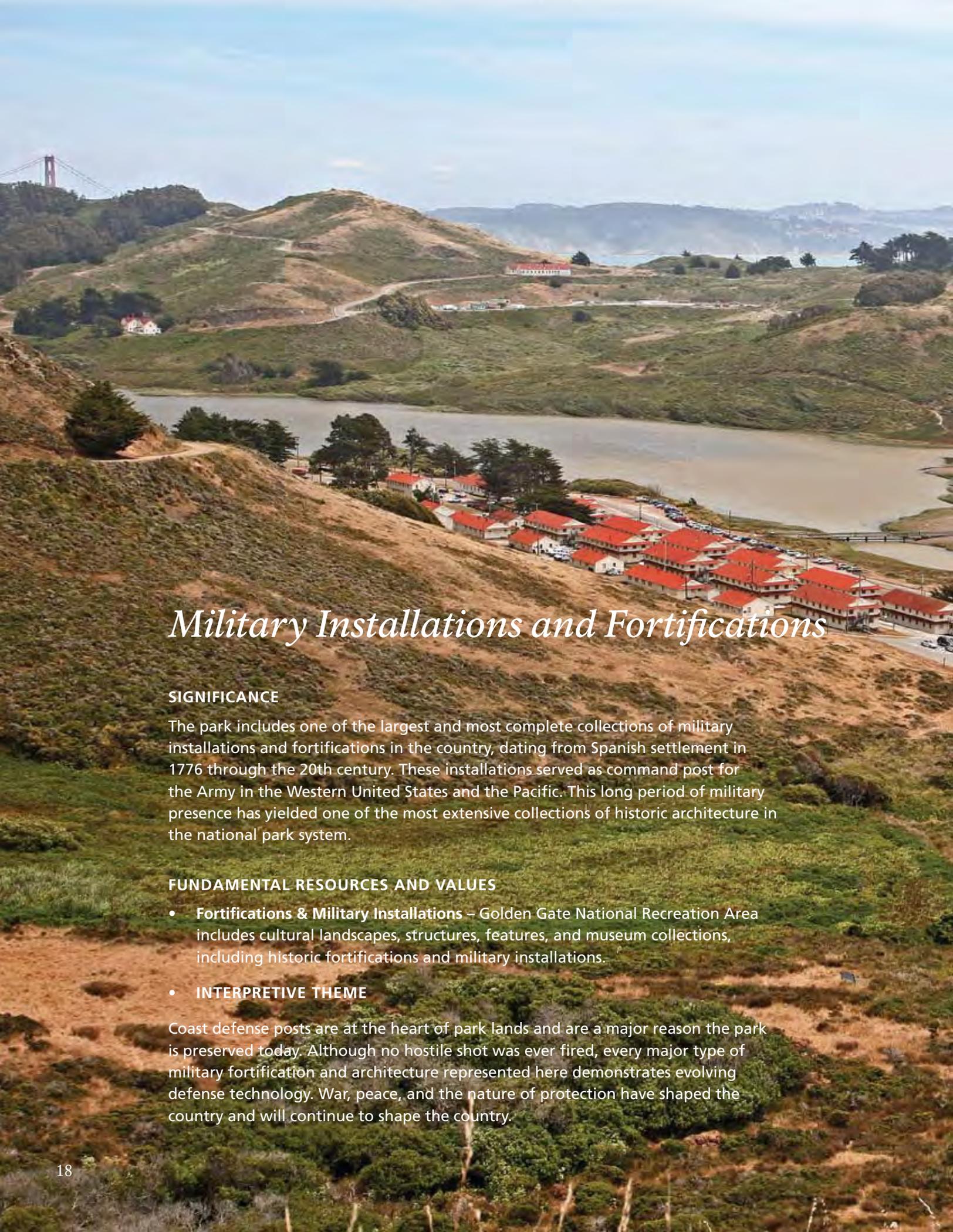
The remnant undeveloped coastal corridor of marine, estuarine, and terrestrial ecosystems supports exceptional native biodiversity and provides refuge for one of the largest concentrations of rare, threatened, and endangered species in the national park system.

FUNDAMENTAL RESOURCES AND VALUES

- **Ocean and Bay Environment** – Oceanic conditions, such as tides, currents, waves, surf, upwelling, and sea level, influence Golden Gate National Recreation Area’s coastal environment, including climate and the land.
- **Coastal Ecosystems** – Golden Gate National Recreation Area contains a rich assemblage of coastal native plant and animal habitat that includes forests, coastal scrub, grassland, freshwater, estuarine and marine habitats, beaches, coastal cliffs, and islands.
- **Threatened and Endangered Species** – Golden Gate National Recreation Area supports one of the largest numbers of federally listed threatened and endangered species in the national park system. This island of refuge is due to the protected confluence of unique and diverse habitats adjacent to the urban San Francisco Bay region.
- **Water Resources** – Golden Gate National Recreation Area’s water resources support coastal corridor ecosystems and these consist of groundwater sources (aquifers and springs); freshwater systems (streams, lakes, and ponds); coastal, estuarine, and marine water resources (the Pacific Ocean and San Francisco Bay); and other wetlands.

INTERPRETIVE THEME

In a world of diminishing biological diversity and threatened natural resources, the Golden Gate National Recreation Area preserves islands of biodiversity within and near a large urban area. The accelerating rate of global climate change threatens even these remnants.



Military Installations and Fortifications

SIGNIFICANCE

The park includes one of the largest and most complete collections of military installations and fortifications in the country, dating from Spanish settlement in 1776 through the 20th century. These installations 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.

FUNDAMENTAL RESOURCES AND VALUES

- **Fortifications & Military Installations** – Golden Gate National Recreation Area includes cultural landscapes, structures, features, and museum collections, including historic fortifications and military installations.

- **INTERPRETIVE THEME**

Coast defense posts are at the heart of park lands and are a major reason the park is preserved today. Although no hostile shot was ever fired, every major type of military fortification and architecture represented here demonstrates evolving defense technology. War, peace, and the nature of protection have shaped the country and will continue to shape the country.

Alcatraz Island

SIGNIFICANCE

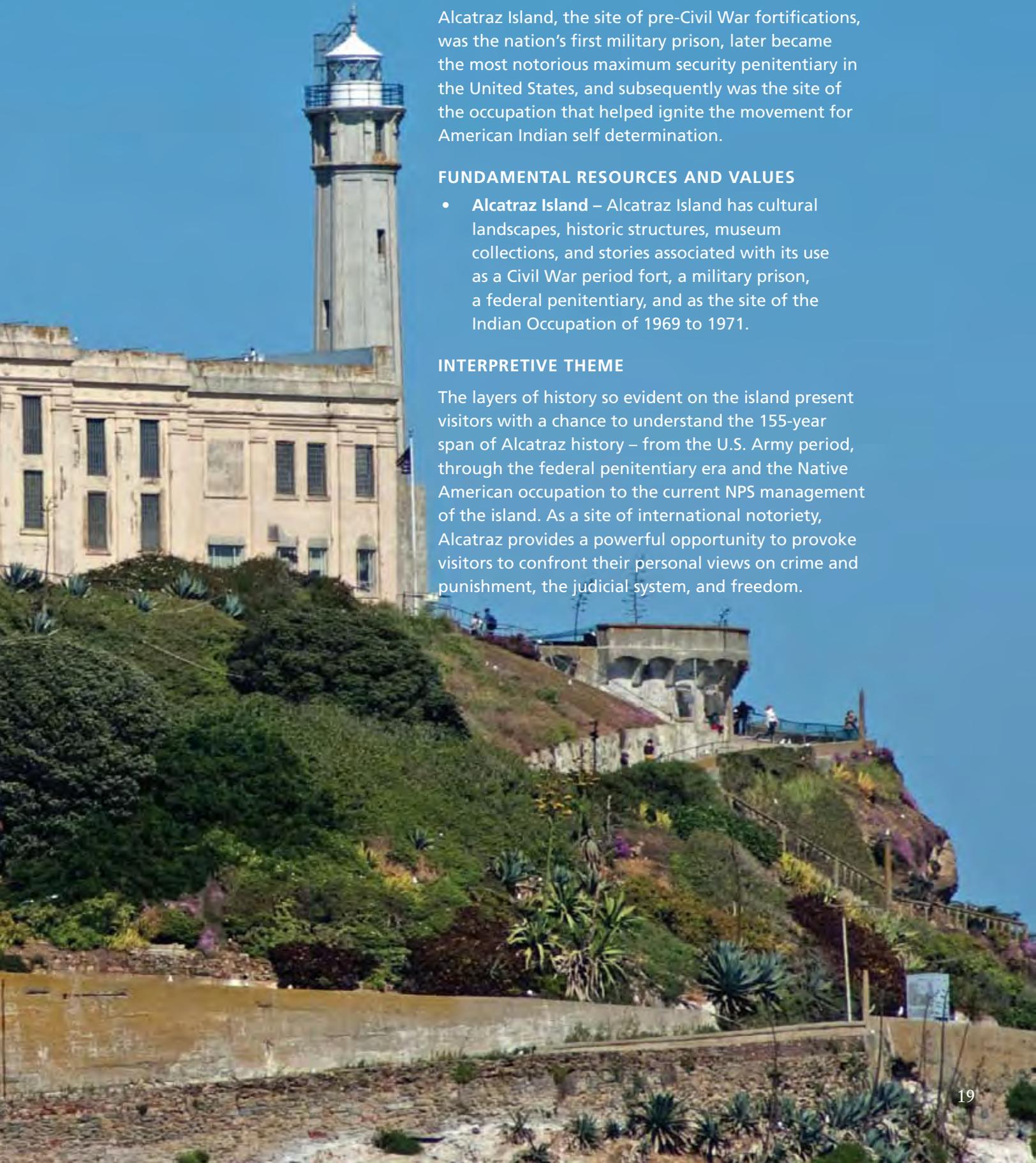
Alcatraz Island, the site of pre-Civil War fortifications, was the nation's first military prison, later became the most notorious maximum security penitentiary in the United States, and subsequently was the site of the occupation that helped ignite the movement for American Indian self determination.

FUNDAMENTAL RESOURCES AND VALUES

- **Alcatraz Island** – Alcatraz Island has cultural landscapes, historic structures, museum collections, and stories associated with its use as a Civil War period fort, a military prison, a federal penitentiary, and as the site of the Indian Occupation of 1969 to 1971.

INTERPRETIVE THEME

The layers of history so evident on the island present visitors with a chance to understand the 155-year span of Alcatraz history – from the U.S. Army period, through the federal penitentiary era and the Native American occupation to the current NPS management of the island. As a site of international notoriety, Alcatraz provides a powerful opportunity to provoke visitors to confront their personal views on crime and punishment, the judicial system, and freedom.



Scenic Beauty

SIGNIFICANCE

The headlands of the Golden Gate have long been recognized for their outstanding scenic qualities. The remarkable convergence of land and sea and of bay and ocean—combined with the palpable energy of 16 major rivers merging—create a spectacle that is truly unique.

FUNDAMENTAL RESOURCES AND VALUES

- **Dramatic Settings** – In concert with the open lands that frame it, the Golden Gate serves as the backdrop to the San Francisco metropolitan area. The dynamic contrasts between urban environments and undeveloped spaces—ranging from the open waters of the Pacific Ocean and San Francisco Bay to beaches, estuaries, headlands, and valleys—contribute greatly to the scenic experience enjoyed by area residents and visitors alike.
- **Compelling Historical Stage** – With its exceptional diversity of natural settings and central role in many significant chapters from America’s past, the Golden Gate promotes a continuous sense of wonder and appreciation in the viewer. The integrity of this open space contributes significantly to the ability to recount the epic stream of history that flowed between the headlands.

INTERPRETIVE THEME

The powerful positive influences that park land and undisturbed open space can exert on urban settings—and residents—constitute a critical interpretive message. The scenic beauty of the park’s historic and natural undeveloped landscapes inspired a grassroots movement that led to their protection. Proposed development that would have destroyed these lands sparked Bay Area community members to organize and ultimately preserve the open spaces that contribute so much to their quality of life.



Physical Landforms

SIGNIFICANCE

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

FUNDAMENTAL RESOURCES AND VALUES

- Geologic Resources – Golden Gate National Recreation Area’s geologic resources include faults, plate margins, and a subduction zone; a diversity of rock types and deposits representing more than 100 million years of the earth’s history; and complex geologic processes that continue to shape the landscape.

INTERPRETIVE THEME

The park’s underlying natural geologic systems and processes, and the resulting effects on people and the environment, link the park to the highly visible and significant geologic forces around the world.



Ohlone and Miwok

SIGNIFICANCE

Park lands are within the traditional homelands of Coast Miwok and Ohlone people. They contain indigenous archeological sites with native heritage, historic, and scientific values.

FUNDAMENTAL RESOURCES AND VALUES

- Archeological Sites – Sites in the park document the traditional homelands of the Coast Miwok and Ohlone people.

INTERPRETIVE THEME

The natural features and resources of the park, along with its location on the San Francisco Bay estuary, sustained the Ohlone and Miwok people who lived on the lands now comprising the park for thousands of years before Europeans arrived. Archeological sites in the park link to these pre-European inhabitants and to their descendants who retain a vibrant culture to this day.

Foundation Statements for Muir Woods National Monument

Until the 19th century, redwood trees were in abundance in the many coastal valleys of northern California; however, logging soon removed most of them to supply the building materials for a growing population. In 1905, when William Kent and his wife, Elizabeth Thacher Kent, realized that Redwood Canyon, a popular hiking and recreation destination, contained one of the San Francisco Bay Area's last uncut stands of old-growth redwood, they bought 612 acres there for \$45,000. To protect the trees, the Kents donated 298 acres containing the core of the forest to the United States government. President Theodore Roosevelt declared the area a national monument in 1908. The proclamation states that the tract contains "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 trees." At Kent's suggestion, the monument was named for conservationist John Muir. Due to circumstances surrounding its founding, Muir Woods National Monument holds a significant place in conservation history. It was the tenth national monument to be designated under the Antiquities Act, the first to be located in proximity to a major city, and the first to consist of formerly privately owned lands.

PARK PURPOSE

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.

Muir Woods National Monument

PARK SIGNIFICANCE

Muir Woods National Monument preserves the last remnant old-growth forest close to metropolitan San Francisco that retains its primeval character.

The establishment of the monument is an important manifestation of early 20th century conservation history.

FUNDAMENTAL RESOURCES AND VALUES

- **Old Growth** – Muir Woods National Monument preserves plant and animal species and the natural processes associated with the once abundant coastal redwoods ecosystem.
- **Conservation Movement** – The efforts of the people who ensured the preservation of this old-growth redwood forest continue to inspire conservation and stewardship actions today.

INTERPRETIVE THEME

The majestic, primeval old-growth redwoods of Muir Woods invite visitors, in the words of namesake John Muir, to “come to the woods, for here is rest.” The forest ecosystem of these towering trees and the creek beneath them supports an abundance of life. This remnant of the Bay Area’s once abundant redwood forests inspires visitors through its seminal conservation story, today welcoming travelers from around the world to have what is, for many, their first wildlands experience.

SPECIAL MANDATES AND ADMINISTRATIVE COMMITMENTS RELATED TO GOLDEN GATE NATIONAL RECREATION AREA

4

5 Special mandates are park-specific requirements that expand on the park’s legislated
6 purpose. These mandates generally require the National Park Service to perform some
7 particular action as directed through congressional legislation. Administrative
8 commitments are agreements that have been reached through formal, documented
9 processes, and include agreements such as a conservation easement. The ongoing
10 mandates and commitments for Golden Gate National Recreation Area are described in
11 this section.

12

13

14 LAND ACQUISITION

15 Several pieces of legislation specify how Golden Gate National Recreation Area will
16 conduct land acquisition activities:

- 17 • PL 92-589, Golden Gate National Recreation Area’s enabling legislation,
18 specifies that “any lands or interests owned by the State of California, or any
19 political subdivision thereof, may only be acquired by donation” (see appendix
20 A).
- 21 • Public Law 95-625, Sec. 317(e), specifies that Golden Gate National Recreation
22 Area (through the secretary of interior) “shall accept and manage any land and
23 improvements adjacent to the recreation area which are donated by the State of
24 California or its political subdivisions.”
- 25 • Public Law 96-199, Sec. 103(b), specifies spending limits on land acquisition.

26

27

28 MANAGEMENT AND ADMINISTRATION

- 29 • Public Law 95-625, Sec. 317(f), specifies that “no fees or admissions shall be
30 charged, except to portions under lease or permit for a specific purpose. The
31 Secretary [of the Interior] may authorize reasonable charges for public
32 transportation.”
- 33 • Public Law 106-291, Sec. 140, gives the park authority for fee-based education,
34 interpretive and visitor service functions within the Crissy Field and Fort Point
35 areas of the Presidio.
- 36 • Public Law 96-199, Sec. 103(b), specifies spending limits on park development.
- 37 • Golden Gate National Recreation Area signed a Memorandum of Understanding
38 (MOU) for the UNESCO Golden Gate Biosphere Reserve that requires the

1 recreation area to cooperate with the reserve partners and promote reserve
2 activities.

3
4

5 **PENINSULA WATERSHED CONSERVATION EASEMENT**

6 The San Francisco Public Utilities Commission’s Peninsula Watershed is home to three
7 drinking water reservoirs. Located in San Mateo County, 13 miles south of San
8 Francisco, the Peninsula Watershed consists of 23,000 acres of forested hills, coastal
9 scrub, and grasslands.

10 On January 15, 1969, the United States of America was granted conservation easements
11 on 23,000 acres of watershed lands owned by the City/County of San Francisco. Two
12 separate easements, a scenic easement and a scenic & recreation easement, were granted
13 by San Francisco and accepted by the secretary of the interior. In 1972, Golden Gate
14 National Recreation Area was charged with the responsibility of ensuring that the
15 conditions of the easements are upheld.

16 The scenic easement generally includes the area within the watershed west of the Crystal
17 Springs and San Andreas reservoirs. The primary purpose of this easement is to preserve
18 the property in its natural state while permitting “the collection, storage, and transmission
19 of water and protection of water quality for human consumption.”

20 The scenic & recreation easement generally includes the area within the watershed east of
21 the Crystal Springs and San Andreas reservoirs. The primary purpose of this easement is
22 to preserve the property in its natural state while permitting “the collection, storage, and
23 transmission of water and protection of water quality for human consumption; outdoor
24 recreation; and other [compatible] uses.”

25 Both easements contain numerous restrictions on use or modifications of the property.
26 The scenic & recreation easement also grants the public “the right, subject to rules and
27 regulations as may be imposed and published by [the Public Utilities Commission], to
28 enter the premises for recreational purposes.” Golden Gate National Recreation Area has
29 the right and obligation to monitor use of the land for consistency with the terms of the
30 two easements.

31
32

33 **OTHER EASEMENTS**

34 Golden Gate National Recreation Area is required to recognize numerous title
35 encumbrances, including easement rights for access, utilities, and other purposes. These
36 publicly and privately held rights can affect park operations and resources. Park
37 managers cooperate with easement holders to protect park resources and provide visitor
38 access.

39
40

1 **TIDELANDS AND SUBMERGED LANDS LEASE**

2 Golden Gate National Recreation Area leases tidelands and submerged lands from the
3 California State Lands Commission. The term of the lease began August 1, 1987 and
4 extends through July 31, 2036. Under the conditions of the lease, public access to and use
5 of the existing beaches and strands shall remain open and available for public use subject
6 to reasonable regulation. The recreation area is required to notify the state within 10 days
7 in the event that the public is charged any direct or indirect fee for the use and enjoyment
8 of the leased areas. The lease also specifies that hunting on leased lands is prohibited.

9 Five primary management purposes are identified in the lease:

- 10 1. To enhance public safety, use, and enjoyment of the subject lands and waters.
- 11 2. To protect and conserve the environment and any cultural and historical
12 resources that may be present.
- 13 3. To preserve the subject lands in their natural state and protect them from
14 development and uses that would destroy their scenic beauty and natural
15 character.
- 16 4. To provide for recreation and educational opportunities.
- 17 5. Management of the subject lands shall be consistent with the administration and
18 management of Golden Gate National Recreation Area, so long as it is not
19 inconsistent with California state law.

20

21

22 **LIGHTHOUSES**

23 In September 2006, the United States Coast Guard notified the park of their plan to
24 excess and transfer five lighthouses and navigational aids to the Department of the
25 Interior in compliance with the park's enabling legislation (P. L. 92 as amended under
26 P. L. 96-607) and the 2000 National Historic Lighthouse Preservation Act. The properties
27 include Point Bonita Lighthouse, Point Diablo, and Lime Point in Marin County; the
28 Montara lighthouse in San Mateo County; and the Alcatraz lighthouse in San Francisco
29 County.

30 Following transfer to the park, U. S. Coast Guard will continue to use the five sites as
31 navigational aids under an NPS permit. The properties require substantial environmental
32 cleanup and structure safety improvements to ensure public safety and visitor access at
33 these sites in the future. The Park Service and the Coast Guard are cooperating to
34 complete due diligence reports including environmental testing and analysis, building
35 condition assessments, and cost estimates to determine remediation and structural safety
36 requirement.

37 The park staff anticipates additional planning for the long-term preservation and use of
38 the five lighthouses and is seeking funding prior to transfer. At the times of this writing,
39 the timeframe and milestones for the property excess and transfer from the Coast Guard
40 have not been established.

PLANNING ISSUES

2

3 Just as citizens helped to establish Golden Gate National Recreation Area, citizens helped
4 identify the needs and opportunities that will shape the future management of the parks.
5 In 2006, more than 4,000 copies of the first GMP newsletter were distributed in a variety
6 of ways: through a mailing list; at park visitor centers, at popular park destinations and
7 park events; and through park partners. That newsletter asked people for their opinions on
8 what they value and enjoy most about the parks, their concerns and suggestions for
9 management, their ideas for the future of the parks, and for any other comments they
10 wanted to provide to the planning team. The park staff held six public open houses in
11 April 2006 to gather additional input from the public. A scoping roundtable was attended
12 by representatives of many local and regional jurisdictions, resource and regulatory
13 agencies, and other public land managers. Discussion groups with environmental,
14 historic, and community organizations, and meetings with American Indian tribal
15 representatives, park partners, and park founders were held to gather information. In
16 addition, meetings with NPS staff were conducted as part of the scoping process.

17 The information gathered during these activities was used to develop and clarify the
18 important planning issues. The planning issues are summarized below. Exploring
19 different ways to address the issues was the basis for developing the range of
20 management concepts and the creation of the different management alternatives.

21

22

23 ISSUES TO BE ADDRESSED

24 **Visitor Access: Transportation and Trails**

25 The current systems of access to the park and monument do not fully address the needs of
26 some park visitors or adequately protect park resources. The high reliance on cars and the
27 lack of affordable transit options excludes some visitors, adds to roadway congestion, and
28 increases emissions, resulting in a greater carbon footprint. This also creates problems
29 with informal parking, public safety, visitor experience, and access for the park's
30 neighbors. In some places, the condition of trails and their lack of connectivity to desired
31 destinations do not meet all visitor and resource protection needs. Connections from
32 communities within the region to the park are not adequate. There is a need for improved,
33 safe trail connections between park sites and between communities and park sites to
34 provide seamless, safe, direct access alternatives. Visitor information and directional
35 signs are inadequate; this leads to visitor frustration and the underutilization of park
36 resources. The general management plan will address visitor access to and within the
37 park in order to improve visitor experiences, improve connections among park sites and
38 the larger community, and protect resources.

39

40

1 **Recreation Opportunities and Conflicts**

2 Park use has increased in recent years, especially by traditional recreational users such as
 3 hikers, bicyclists, and equestrians. New activities such as boardsailing and mountain
 4 biking continue to develop and evolve since the 1980 GMP was completed. There is interest in
 5 expanding current uses, including bicycling, hang gliding, dog walking, individual and
 6 group camping, group day-use/picnicking, and hiking, and introducing new and different
 7 types of recreation. Requests to use the park and monument as venues for special events
 8 continue to increase. Conflicts between users—primarily between equestrians, mountain
 9 bikers, dog walkers, and hikers—have increased as overall park use has increased. There
 10 is concern about resource impacts associated with existing recreation activities, including
 11 habitat fragmentation, eroding trails, wildlife disturbance and harassment, litter,
 12 vandalism and graffiti, and vegetation trampling. The general management plan will
 13 address recreational opportunities by identifying the types of use, desired experiences,
 14 and support facilities that are appropriate for different park areas and sites in response to
 15 visitor demand and resource sensitivity.

16

17 **Sustainable Natural Resource Preservation and Management**

18 Gate National Recreation Area is rich in natural resources: it comprises 19 types of
 19 ecosystems in numerous distinct watersheds and is home to rare, threatened, and
 20 endangered plant and animal species. The park is incorporated into the UNESCO Golden
 21 Gate Biosphere Reserve, designated by the United Nations Educational, Scientific, and
 22 Cultural Organization’s Man and the Biosphere Program—a program that provides a
 23 global network of sites representing the world’s major ecosystem types. Historically, the
 24 lands within the park have been used for ranching, dairy farming, and military activities;
 25 this use has resulted in the modification of many of the area’s natural ecosystems. Fire
 26 suppression and other management activities have also influenced natural ecosystems.
 27 Invasive plants from adjacent urban communities have taken root within the park.

28 The general management plan will address how park staff can preserve fundamental
 29 natural resources, as the fragility of those resources becomes better understood at the
 30 same time that visitation is increasing. The plan will provide direction for preserving and
 31 managing fundamental natural resources of the park in a sustainable manner and will
 32 provide direction for encouraging ongoing public stewardship.

33 Ocean resources, including natural marine resources and submerged cultural resources,
 34 are at risk due to a variety of threats. Global climate change has begun to cause sea level
 35 rise, change storm patterns, and affect ocean acidification. Natural sediment transport,
 36 which affects shoreline and beach dynamics, is affected by activities outside of park
 37 boundaries, including sand mining, dredging, dredge disposal, shoreline stabilization
 38 structures, and altered flow regimes. Overflights, boating, and other uses of marine
 39 habitats cause disturbance to marine species. Invasive exotic species inhabit the park’s
 40 ocean and estuarine waters, displacing native species. Recreational and commercial
 41 fisheries may impact nearshore fish populations and ecosystem dynamics. Water quality
 42 is threatened by pollution from runoff, landslides, shoreline development, sewage
 43 outfalls, vessel traffic, oil spills, and contaminants exposed from dredging. Potential
 44 wave and tidal energy developments may alter habitat and disrupt physical processes.

1 Numerous aquatic environments are in need of restoration. Currently the park has limited
2 enforcement capacity for marine and estuarine resource protection.

3 Alcatraz Island is a unique part of Golden Gate National Recreation Area. Accounts of
4 early explorers describe the island as having little plant life and being covered with bird
5 guano. Construction of fortifications during the Civil War and later the federal
6 penitentiary changed the landscape significantly, sharpening the incline of the shoreline
7 cliffs and flattening the slopes. Most of the existing plants on Alcatraz Island are a result
8 of prison gardens or other means of importation, including soils brought from Angel
9 Island during the fort construction. Since the closure of the prison, many bird species
10 have made the island home. Waterbirds and terrestrial landbirds (songbirds) have taken
11 advantage of planted and unmanaged vegetation on the island. The seabirds and
12 waterbirds are colonial nesting species that are highly susceptible to disturbance. Coupled
13 with limited preservation of historic landscape features, the extent of sea bird habitat has
14 grown sharply since 1972. The result is a tension between habitat protection and visitor
15 access to many of the island’s historic points.

16
17 Muir Woods National Monument preserves one of the last remaining ancient redwood
18 forests in the Bay Area. From its inception, Muir Woods National Monument was
19 designed to protect the “primeval character” of the redwood forests, and today, ecological
20 integrity is a major driving force behind the management of the monument . Surrounding
21 Muir Woods National Monument are mostly protected lands, including other units of the
22 Golden Gate National Recreation Area and lands managed by California State Parks
23 (Mount Tamalpais State Park) and Marin Municipal Water District.

24
25 Muir Woods National Monument is located entirely within the watershed of Redwood
26 Creek, which originates on Mount Tamalpais (over 2,400 feet in elevation), flows
27 through the heart of the national monument, bisects Frank Valley, and discharges into the
28 Pacific Ocean at Muir Beach, approximately three miles below Muir Woods National
29 Monument. The Redwood Creek watershed—extending from Mount Tamalpais to Muir
30 Beach—is a delicate ecosystem that includes the Northern Spotted Owl, Coho Salmon,
31 and Steelhead Trout, and demands utmost care and vigilance. The Civilian Conservation
32 Corp implemented projects to harden the banks of the creek in order to direct the flow of
33 water away from Redwood groves. The stream stabilization on Redwood Creek impacted
34 the natural functions of the creek.

35

36 **Sustainable Cultural Resource Preservation and Management**

37 The park has a large collection of historic structures and archeological sites within a
38 mosaic of cultural and natural landscapes. The majority of these cultural resources are
39 nationally significant; however, their condition varies. The identification of appropriate
40 preservation treatments, including sustainable adaptive uses of these resources, poses a
41 substantial challenge. Cultural resources and archeological sites are impacted in a variety
42 of ways such as through weathering, increases in visitor use, erosion, vandalism, and
43 deferred maintenance. There is a continued need for developing baseline documentation
44 of historic structures, cultural landscapes, and archeological inventories throughout the
45 park. The park staff continues to work to balance the preservation needs of the park’s
46 natural and cultural resources. Still, there is a need to identify priorities when such

1 balance is not very clear. The general management plan will address how the park staff
2 should work to preserve fundamental cultural resources where visitation is increasing at
3 the same time the fragility and significance of those resources are better understood. The
4 general management plan will provide direction for preserving and managing
5 fundamental cultural resources of the park in a sustainable manner and will provide
6 direction for encouraging ongoing public stewardship.

7 Golden Gate National Recreation Area houses its museum collections in 15 separate
8 facilities throughout the park that function as visitor centers, interpretive exhibits, or
9 dedicated storage areas. Of the four largest storage repositories, three are located in
10 buildings owned by the Presidio Trust with no lease agreements in place. One of these
11 structures, which is being removed in 2010 to make way for the Doyle Drive Project,
12 houses the park's archeology lab. The park museum collections are in a vulnerable
13 position due to temporary space and deteriorating structural conditions. The current
14 conditions for museum collections in the park do not meet National Park Service
15 standards for the long-term preservation, protection, and use of museum collections.
16 Staffing for the museum collections has not been stable, thus precluding reliable access
17 for researchers, the public, and park staff. Although planning has been underway, a
18 suitable location for the park's museum collections has yet to be finally determined.

19 Alcatraz Island is a designated national historic landmark because of its national
20 significance in the areas of military history and social history (penology: the study of
21 incarceration). Although Alcatraz is a highly visible and popular site in San Francisco
22 Bay, many of its buildings, archaeological features, and landscape features are
23 deteriorating, and sections of its shoreline are eroding. The park lacks the funding and
24 personnel to protect and preserve all of the island's historic resources. In addition, some
25 conflict has arisen over management strategies for protecting the island's cultural and
26 natural resources (e.g., protecting important bird nesting habitat), since nesting habitat
27 can inhibit historic preservation. The general management plan will provide direction for
28 preserving and managing historic structures, archaeological sites, cultural landscapes, and
29 museum collections.

30

31 **Climate Change**

32 Climate change has begun to affect both park resources and visitors. The effects are
33 predicted to include changes in temperature, precipitation, evaporation rate, ocean and
34 atmospheric chemistry, local weather patterns and increase storm intensities, and sea
35 level rise. These effects will likely have direct implications for resource management and
36 park operations and will likely influence the way visitors experience the park. Sustaining
37 and restoring park resources will require the National Park Service to address many
38 challenges, including fiscal and ecological threats and threats to the integrity of cultural
39 and natural resources. Proactive planning and management actions will allow the park to
40 avoid, mitigate, adapt to, and interpret these effects.

41 The general management plan will provide guidance on how to assess, respond to, and
42 interpret the impacts of global climate change on park resources, and will identify
43 objectives for reducing greenhouse gas emissions.

44

1 **Land Acquisition Strategy**

2 The 1978 National Parks and Recreation Act (16 USC 1a-7) requires general
3 management plans to address potential modifications to the park boundaries. Current or
4 potential changes in adjacent land uses could pose threats to the fundamental resources of
5 the park and could limit the park’s ability to protect the resources that support the park
6 purpose and significance.

7 The diversity of park lands presents challenges for land and boundary management. The
8 park needs to strengthen its strategic approach to land acquisition and park boundary
9 changes and management in coordination with agencies and owners of property within
10 the park boundary. A reassessment of guidelines and priorities is needed.

11 Golden Gate National Recreation Area and Muir Woods National Monument are portions
12 of a larger area of protected open space in the Bay Area. The natural and cultural
13 resources of the park would face a greater threat if not for the many other open space
14 areas that contribute to the integrity of coastal ecosystems, scenic beauty, recreational
15 opportunities, and the preservation of historic resources. The general management plan
16 will address future land protection and boundary changes that support both the
17 preservation of the park’s fundamental resources and regional conservation priorities.

18

19 **Reaching New Audiences**

20 Visitation at many park sites does not reflect changing regional or state demographics.
21 Some groups may not be aware of the park, feel a direct connection to it, or view the park
22 as a recreational opportunity or a resource to be protected. Changing technology can also
23 influence the park’s relevancy to future generations. Reaching these audiences is essential
24 to effective park management and to achieving civic engagement and community-based
25 stewardship goals. The general management plan will include strategies to help engage
26 new audiences.

27

28 **Operational Facilities**

29 Park resources, visitor safety, and visitor experience have suffered because of the lack of
30 adequate operational facilities in appropriate locations. Golden Gate National Recreation
31 Area has expanded in size in recent years, especially to the south in San Mateo County;
32 the current distribution of facilities is no longer effective or efficient for day-to-day
33 operations. Park maintenance and public safety functions are scattered throughout the
34 park and are often located at sites and facilities that were not intended for such uses.
35 Often, these functions operate out of makeshift facilities because they have been
36 displaced by other park uses or outside forces, or have outgrown previous spaces. These
37 operations have been forced to adapt to conditions that do not adequately meet their
38 space, size, function, mobility, and security requirements. The general management plan
39 will identify a strategy and actions for locating operational facilities.

40

41

1 **Scenic Beauty and Natural Character**

2 The park’s scenic beauty and natural character provide opportunities for visitors to
3 experience dramatic settings. The park’s varied landscapes are the stage for multisensory
4 experiences that are a hallmark of the Bay Area. Preserving these important scenic
5 resources and making them available to the public are primary reasons the park was
6 established. The National Park Service needs to protect these resources from degradation
7 that can result from modern intrusions, including new development on the surrounding
8 lands and waters. The general management plan will provide guidance in the preservation
9 and enhancement of scenic resources.

10

11 **Regional Cooperation**

12 Visitor experience and resource protection in the park are affected by a variety of outside
13 influences. Watersheds, viewsheds, soundscapes, ecosystems, and trail and transportation
14 systems all extend beyond park boundaries; their management and preservation require
15 cooperation with other adjacent public land managers, local jurisdictions, and private
16 landowners. The park is located in an urban/suburban setting, which places demands on
17 park lands and resources (especially by local public utility needs). The park staff cannot
18 successfully manage the natural and cultural resources and visitor experiences by looking
19 only within the park boundary. The general management plan will provide guidance on
20 improving communication, coordination, and participation with public and private
21 stakeholders with a goal of protecting ecosystems, watersheds, viewsheds, and visitor
22 opportunities that cross jurisdictional boundaries.

23

24 **National Park Service Identity**

25 For a variety of reasons, the park does not have an easily recognized identity as part of
26 the national park system. These reasons include the large number of points of entry with
27 minimal or no identifying entry features; the lack of NPS staff presence in many
28 locations; the close juxtaposition of city, county, and state lands with NPS lands; and the
29 lack of clearly marked park boundaries. The general management plan will provide
30 guidance on improving and promoting the recognition of Golden Gate National
31 Recreation Area and Muir Woods National Monument as national park units and as areas
32 where many visitors are first introduced to the concept and values of the national park
33 system.

34

35 **Partnerships**

36 Partners are fundamental to long-term sustainability of the park. They help the park
37 manage natural and cultural resources, deliver public programs, reach new audiences, and
38 remain relevant and inclusive. They also help the park innovate and build community
39 support. The park cannot fully accomplish parts of its mission without partners. Despite
40 the many commonalities and objectives shared by the park and its partners, the current set
41 of partners creates a diversity of goals and interests that may not be compatible with park
42 goals. Partners’ needs cannot always be accommodated in the park. The general
43 management plan will provide guidance on partnership development and management

1 that enables the NPS managers to make effective decisions and foster flexible, productive
2 relationships that strengthen the purpose and mission of the park.

3

4 **American Indian Values**

5 Since the late 1990s, the park staff has worked with American Indian groups, including
6 the Federated Indians of Graton Rancheria (the federally recognized tribe comprised of
7 park-associated Coast Miwoks and Southern Pomo), the many Ohlone tribes seeking
8 federal recognition, and Ohlone individuals who partake in the stewardship of Ohlone
9 heritage. Park lands in Marin County are the aboriginal homelands of Coast Miwoks.
10 Park lands in San Francisco and San Mateo counties are the aboriginal homelands of
11 Ohlones. The park staff desires to build on the relationship and civic engagement with
12 American Indians in three broad activity areas: cultural resource management,
13 interpretation and education, and revitalization of community and tradition. The general
14 management plan will provide guidance for integrating American Indian values with the
15 management of resources and visitor experiences.

16

17

18 **ISSUES THAT WILL NOT BE ADDRESSED**

19 **Dog Management**

20 This general management plan does not make decisions about dog walking in the park.
21 The National Park Service is conducting a separate planning process to develop a dog
22 management plan that will decide how best to manage dog walking. The dog
23 management plan will identify a range of alternatives, evaluate them, solicit public
24 review, and make decisions. The planning team for the general management plan
25 continues to coordinate with the dog management planning team to ensure consistency
26 between the plans. The National Park Service could make minor changes to the preferred
27 alternative in the general management plan to make the plan consistent with the final dog
28 management plan.

29

30

RELATIONSHIP OF THIS PLAN TO OTHER PLANS

2

3 Golden Gate National Recreation Area and Muir Woods National Monument do not exist
4 separately from surroundings neighbors. Adjacent to the park, there are a variety of
5 public and private open spaces. These lands and waters combine to form a large and
6 comprehensive natural open space corridor. Within Golden Gate National Recreation
7 Area, there are sites that are being managed with guidance from recently completed land
8 use or site management plans.

9 The complex physical and political landscape of the San Francisco Bay Area has
10 produced an environment where a multitude of planning takes place regarding
11 transportation, conservation, recreation, growth and development, and coastal and ocean
12 resources. Most of these public and private land and marine areas are covered by
13 approved plans prepared by a whole host of federal, state, regional, and local agencies.
14 Management of these lands and waters could influence or be influenced by actions
15 presented in this *General Management Plan/Environmental Impact Statement*. The
16 following narrative briefly describes the various planning efforts and projects at the
17 federal, park, state, and county levels, and how they may be influenced by the general
18 management plan.

19

20

21 **NPS LAND USE PLANS FOR GOLDEN GATE NATIONAL** 22 **RECREATION AREA SITES NOT INCLUDED IN THE GENERAL** 23 **MANAGEMENT PLAN**

24 Many of the park sites within Golden Gate National Recreation Area have recent
25 management plans and environmental documents that provide updated guidance in how
26 the lands will be managed. The following NPS management plans and decisions were
27 reviewed in the preparation of the general management plan to ensure a coordinated
28 management of park lands. For a complete understanding of how all lands and marine
29 areas will be managed at Golden Gate National Recreation Area, the managers will be
30 guided by this new general management plan in addition to the plans that cover park sites
31 outside of this planning process. Each of these plans followed a prescribed planning
32 process that involved public participation in their development. Following is a description
33 of those management plans that together with this plan provide the guidance for
34 managing the park.

35

36 **Point Reyes National Seashore/Golden Gate National Recreation** 37 **Area Northern District Draft General Management Plan (draft)**

38 The current guiding document for Point Reyes National Seashore and Golden Gate
39 National Recreation Area is the 1980 *Golden Gate National Recreation Area/Point Reyes*
40 *National Seashore General Management Plan* and its subsequent amendments. Since the
41 1980 plan was approved, Point Reyes National Seashore has managed the lands of the

1 Northern District of Golden Gate National Recreation Area from the Bolinas/Fairfax road
2 and north. The 1980 GMP is being updated through the GMP/EIS planning process for
3 Point Reyes National Seashore and the North District of Golden Gate National
4 Recreation Area. The staff at Golden Gate National Recreation Area participated in the
5 planning process for the Golden Gate National Recreation Area Northern District and
6 worked to ensure consistency between the plans.

7

8 **Fort Baker Plan Final Environmental Impact Statement (2000)**

9 In 1995, the remaining military land at Fort Baker was determined to be excess to the
10 needs of the military by the Department of Defense's Base Realignment and Closure
11 Committee. As a requirement of that determination, the land was transferred to the
12 National Park Service, consistent with Public Law 92-589. The Fort Baker site includes a
13 historic district listed on the National Register of Historic Places containing 45
14 contributing features (including post-Civil War era coastal fortifications), a marina and
15 waterfront area at Horseshoe Cove, and important open space and scenic and natural
16 areas including habitat for the federally listed endangered mission blue butterfly. The
17 purpose of the 2000 EIS was to identify the following:

- 18 • the program and types of uses that would be accommodated in historic buildings
19 and generate adequate revenue for building rehabilitation and preservation
- 20 • improvements to facilitate public uses, including new construction and removal
21 of buildings, landscape treatments, trails, parking, circulation, and locations and
22 patterns of use
- 23 • waterfront improvements
- 24 • opportunities for habitat restoration
- 25 • an approach to the protection, rehabilitation, and maintenance of the historic and
26 natural resources

27 The highlights of the plan included development of a conference and retreat center,
28 improvements to the Bay Area Discovery museum, and retention of the Coast Guard's
29 Golden Gate Station. The plan provided guidance for the restoration of the historic parade
30 ground, use of the historic boat shop as a public center; improvements to the marina;
31 restoration of the beach; protection of mission blue butterfly habitat; and preservation of
32 fortifications, batteries, and historic landscapes. Implementation of this plan contributes
33 to the diversity of recreational opportunities provided at Golden Gate National Recreation
34 Area and preserves military structures and landscapes that reflect the military history of
35 the site. Actions in the *General Management Plan* alternatives are consistent with the
36 Fort Baker Plan and Final Environmental Impact Statement.

37

38 **Fort Mason Center Long-term Lease Environmental Assessment** 39 **(2004)**

40 Fort Mason is part of the San Francisco Port of Embarkation National Historic Landmark
41 District, historically serving as a major point of embarkation for American troops. In
42 1972, the U.S. Army transferred responsibility for its maintenance, restoration, and use of
43 the long-time military base to the National Park Service as part of the Golden Gate

1 National Recreation Area. In 1975, a nonprofit group expressed an interest in moving to
2 the lower part of Fort Mason, and the Fort Mason Foundation, a private nonprofit
3 organization, was created by San Francisco civic and business leaders to negotiate with
4 the National Park Service on behalf of the nonprofit community. In 2004, following an
5 Environmental Assessment and public review process, the National Park Service entered
6 into a long-term lease with the Fort Mason Center to continue its public programming
7 and management of Lower Fort Mason, and to invest in the capital improvements needed
8 for historic building preservation. The long-term lease accommodates continued use of
9 Building E by San Francisco Maritime National Historical Park. The alternatives in this
10 general management plan are consistent with this environmental assessment and long-
11 term lease.

12

13 **Presidio General Management Plan Amendment and** 14 **Environmental Impact Statement (1994)**

15 The Presidio of San Francisco's transition from military post to national park began in
16 1972 when, in the legislation creating the Golden Gate National Recreation Area,
17 Congress included a provision that the Presidio would become part of the national
18 recreation area if the military ever declared the base excess to its needs. After the Presidio
19 was designated for closure in 1989 by the Base Realignment and Closure Act, the U.S.
20 Army transferred the jurisdiction over the Presidio to the National Park Service in 1994.
21 As part of the transition, in July 1994, the National Park Service completed and issued a
22 final general management plan amendment (GMPA) for the Presidio laying out a vision
23 for its future use and management.

24 Once the general management plan amendment was created, difficult issues remained
25 regarding how to fund implementation of the plan. The National Park Service recognized
26 that implementing the amendment would require innovative approaches and unique
27 authorities to manage those aspects of the amendment. The National Park Service also
28 recognized that the costs associated with this unit were high and uncharacteristic for the
29 National Park Service. In 1996, Congress established the Presidio Trust (Trust) pursuant
30 to the Presidio Trust Act for the purpose of preserving, enhancing, and maintaining the
31 Presidio as a park, using the revenues from its leasable assets to fund that effort. In
32 response to competing public policy goals, Congress gave the Trust the unique
33 responsibility to reduce and eventually eliminate the costs of the Presidio to the federal
34 government while retaining the Presidio within Golden Gate National Recreation Area.

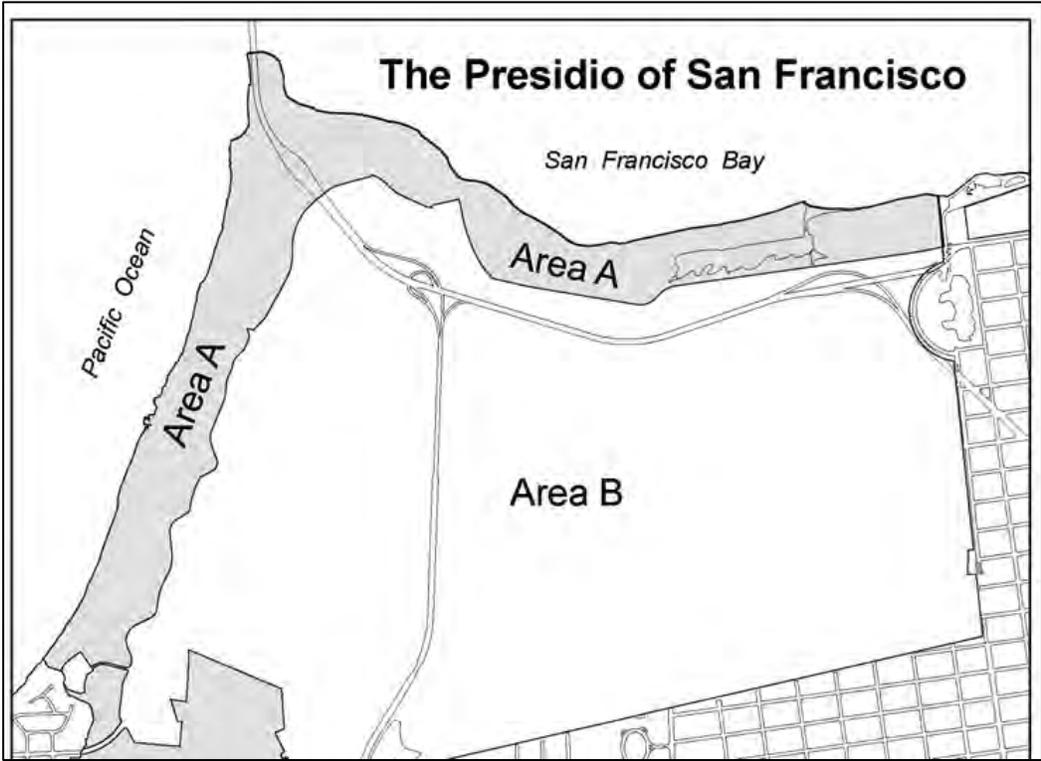
35 The Trust assumed jurisdiction over 80% of the Presidio of San Francisco (referred to as
36 Area B) on July 1, 1998 and the National Park Service retains jurisdiction over the
37 coastal areas and Lobos Creek and dunes (referred to as Area A). The general
38 management plan amendment remains the foundation plan that guides the Trust's
39 planning and decision making. In 2000, the Trust decided to develop a long-term
40 management plan that would set the parameters within which the Trust would balance its
41 preservation and financial responsibilities.

42 The general management plan amendment guidance for Area A, managed by the National
43 Park Service, provides for natural resource restoration, education, and outdoor recreation
44 along the coastal areas of San Francisco Bay and the Pacific Ocean. Major sites within

PART 1: BACKGROUND

1 Area A include Crissy Field, Fort Point National Historic Site, Baker Beach, and Lobos
2 Creek and dunes.
3 For Area A, the actions proposed in this general management plan are consistent with the
4 amendment that covers management of the lands within the Presidio of San Francisco.
5 The waters of the Pacific Ocean and San Francisco Bay that are adjacent to the Presidio
6 have been zoned in the new general management plan.

7
8 **Figure 2: Areas A and B of the Presidio of San Francisco**



9

10

11 **Crissy Field Plan (1996)**

12 **Add narrative**

13

14

15 **Sutro Historic District Comprehensive Design and Environmental**
16 **Assessment (1993)**

17 The *Sutro Historic District Comprehensive Design and Environmental Assessment*
18 provides management guidance for the landscape rehabilitation of the Adolph Sutro
19 Historic District. The plan retains the historic character while making changes to the
20 property for new uses and interpretation for park visitors. The National Park Service
21 continues to manage the Sutro Historic District structures and landscape, including the

1 Cliff House, Sutro Baths, and the Sutro Heights Park. The landscape adjacent to the
2 historic district includes a visitor center, trails, and parking, and the extended area is
3 managed for natural and scenic values. The actions proposed in this general management
4 plan recognize that the natural attributes and biotic systems of the larger surrounding park
5 landscape contribute to the historical significance of the historic district. The alternatives
6 are consistent with this environmental assessment.

7
8 **Sweeney Ridge General Management Plan Amendment**

9 *TO BE ADDED. GOGA staff will be providing GMP Amendment information.*

10
11
12 **CURRENT PLANS FOR OTHER NATIONAL PARK AREAS NOT**
13 **MANAGED BY THE NATIONAL PARK SERVICE**

14 **Presidio Trust Management Plan: Land Use Policies for Area B of**
15 **the Presidio of San Francisco (2002)**

16 The Presidio Trust Management Plan (PTMP) is an update of the 1994 General
17 Management Plan Amendment (1994 GMP amendment) for the portion of the Presidio
18 transferred to the Trust’s jurisdiction in 1998. The Trust Act directs the Trust to manage
19 Area B in accordance with the park purposes identified in the enabling legislation for
20 Golden Gate National Recreation Area and the “general objectives” of the 1994 GMP
21 amendment, the latter were defined in Trust Board Resolution 99-11 (“General
22 Objectives”). The Presidio Trust Management Plan provides an updated land use policy
23 framework for Area B of the Presidio wholly consistent with the 1994 GMP
24 amendment’s general objectives, and which retains and builds on the 1994 GMP
25 amendment’s policies and principles. Since the time the 1994 GMP amendment was
26 adopted and the Presidio Trust Act was enacted, key land use and financial conditions
27 have changed. The Presidio Trust Management Plan is needed to take into account the
28 new Trust Act requirements, conditions that have changed since the 1994 GMP
29 amendment was adopted, new policies and management approaches, and to build in a
30 measure of flexibility not contemplated in the 1994 GMP amendment. The Presidio Trust
31 Management Plan is the plan that the Trust looks to in making future management and
32 implementation decisions in Area B, consistent with the purposes of the Golden Gate
33 National Recreation Area enabling legislation and the general objectives of the 1994
34 GMP amendment. The 1994 GMP amendment remains unaltered as the plan for NPS
35 management of Area A of the Presidio.

36 The actions proposed in this general management plan are consistent with the Presidio
37 Trust Management Plan.

38
39
40

1 **OTHER NATIONAL PARK SERVICE PLANS**

2 In addition to the overall vision and management plans described above, the National
3 Park Service develops detailed project and program implementation plans in order to
4 implement the goals and objectives of those broader plans. The implementation plans
5 cover topics such as natural and cultural resource restoration and preservation, visitor use,
6 transportation, and park operations. An overall description of each plan or program listed
7 below, along with its relationship to this general management plan, is provided in
8 Appendix B.

9

10 **NPS Trails and Transportation Plans and Programs**

- 11 • Marin Headlands and Fort Baker Transportation Infrastructure and Management
12 Plan Final Environmental Impact Statement
13 • Trails Forever
14

15 **NPS Restoration Plans**

- 16 • Alcatraz Island Historic Preservation and Safety Construction Program
17 Environmental Impact Statement
18 • Easkoot Creek restoration at Stinson Beach Environmental Assessment
19 • Lower Redwood Creek Floodplain and Salmonid Habitat Restoration, Banducci
20 Site – Environmental Assessment
21 • Lower Redwood Creek Interim Flood Reduction Measures and Floodplain /
22 Channel Restoration Environmental Assessment
23 • Mori Point Restoration and Trail Plan – Environmental Assessment
24 • Ocean Park Stewardship Action Plan, 2007-2008 National Park Service
25 • Pacific Ocean Park Strategic Plan, National Park Service
26 • Redwood Creek Watershed: Vision for the Future
27 • Wetland and Creek Restoration at Big Lagoon, Muir Beach Final Environmental
28 Impact Statement
29

30 **NPS Program Implementation Plans**

- 31 • Alcatraz Development Concept Plan and Environmental Assessment
32 • Climate Change Action Plan
33 • Comprehensive Interpretive Plan for the Golden Gate National Parks
34 • Fire Management Plan / Final Environmental Impact Statement (FEIS) for
35 Golden Gate National Recreation Area
36 • Golden Gate National Recreation Area – Park Asset Management Plan
37

38

1 **NPS Park Partner Plans**

- 2 • Headlands Center for the Arts Master Plan
3 • Headlands Institute Campus Improvement and Expansion Plan
4 • Marine Mammal Center Site and Facilities Improvements Project Environmental
5 Assessment
6 • Slide Ranch Master Plan and Environmental Assessment
7

8 **NPS Plans in the Process of Being Developed**

- 9 • DEIS/Dog Management Plan for Golden Gate National Recreation Area
10 • Golden Gate National Recreation Area – Long-Range Transportation Plan
11 • Southern Marin Equestrian Plan
12 • Alcatraz Embarkation Environmental Impact Statement
13

14 **Other NPS General Management Plans**

- 15 • San Francisco Maritime National Historical Park General Management Plan
16 Preparation of a new general management plan for the historical park is
17 anticipated to begin shortly and will require close coordination with the staff at
18 the Golden Gate National Recreation Area.”
19

20
21 **OTHER FEDERAL PLANS**

- 22 • National Oceanic and Atmospheric Administration (NOAA)—Joint Management
23 Plan for Cordell Bank, Gulf of the Farallones, and Monterey Bay National
24 Marine Sanctuaries 2004)
25
26

27 **STATE AND REGIONAL PLANS**

- 28 • Association of San Francisco Bay Area Governments: Bay Trail Plan
29 • California Department of Parks and Recreation – Angel Island State Park
30 Resource Management Plan/General Development Plan/Environmental Impact
31 Report
32 • California Department of Parks and Recreation – California Outdoor Recreation
33 Plan (2002)
34 • California Department of Parks and Recreation – Gray Whale Cove State Beach
35 General Plan Amendment
36 • California Department of Parks and Recreation – Pacifica State Beach General
37 Plan

PART 1: BACKGROUND

- 1 • California Department of Parks and Recreation – Mount Tamalpais State Park
- 2 General Plan
- 3 • Caltrans District 4 Devil's Slide Project
- 4 • Coastal Conservancy – Completing the California Coastal Trail (2003)
- 5 • Golden Lands, Golden Opportunity: Preserving vital Bay Area Lands for all
- 6 Californians (Greenbelt Alliance, Bay Area Open Space Council, Association of
- 7 Bay Area Governments
- 8 • San Francisco Bay Conservation and Development Commission (BCDC)
- 9 • San Francisco Bay Plan
- 10 • San Francisco Bay Area Seaport Plan
- 11 • San Francisco Bay Area Water Transit Authority (2003) Final Program EIR:
- 12 Expansion of Ferry Transit Service in the San Francisco Bay Area
- 13 • South Access to the Golden Gate Bridge – Doyle Drive FEIS/R

14

15

16 COUNTY AND LOCAL PLANS

- 17 • Central Marin Ferry Connection Project
- 18 • Fitzgerald Marine Reserve Master Plan
- 19 • Huddart and Wunderlich Parks Master Plan
- 20 • Marin County Bicycle and Pedestrian Master Plan
- 21 • Marin County Local Coastal Program Unit 1
- 22 • Marin Countywide Plan (2007) and amended (2009)
- 23 • Midcoast Action Plan for Parks and Recreation: Planning Team Report
- 24 • City of Pacifica Pedro Point Headlands Coastal Trail Connection
- 25 • Peninsula Watershed Management Plan – San Francisco Public Utilities
- 26 Commission (SFPUC)
- 27 • PG&E Jefferson-Martin 230kV Transmission Line Proposed Settlement and
- 28 Environmental Assessment
- 29 • Regional Bicycle Plan for the San Francisco Bay Area
- 30 • San Francisco General Plan
- 31 • San Mateo County Comprehensive Bicycle Route Plan
- 32 • San Mateo County Trails Plan
- 33 • San Mateo Countywide Transportation 2010 Plan
- 34 • San Pedro County Park
- 35 • Sausalito General Plan
- 36 • Extension of San Francisco Municipal Railway's Historic Streetcar
- 37 Environmental Impact Statement

38

RELATED LAWS AND NATIONAL PARK SERVICE POLICIES

3

4 Many park management directives are specified in laws and policies guiding the National
5 Park Service and are not subject to alternative approaches. For example, there are laws
6 and policies about managing environmental quality (such as the Clean Air Act, the
7 Endangered Species Act; Executive Order 13112: “Invasive Species,” and Executive
8 Order 11990: “Protection of Wetlands”); laws governing the preservation of cultural
9 resources (such as the National Historic Preservation Act and the Native American
10 Graves Protection and Repatriation Act); and laws about providing public services (such
11 as the Americans with Disabilities Act)—to name only a few. In other words, a general
12 management plan is not needed to decide that it is appropriate to protect endangered
13 species, control exotic species, protect historic and archeological sites, conserve artifacts,
14 or provide for access for disabled persons. Laws and policies have already decided those
15 and many other things. Although attaining some conditions set forth in these laws and
16 policies may have been temporarily deferred in the park because of funding or staffing
17 limitations, the National Park Service will continue to strive to implement these
18 requirements with or without a new general management plan.

19 There are other laws and executive orders that are applicable solely or primarily to units
20 of the national park system. These include the 1916 Organic Act that created the National
21 Park Service; the General Authorities Act of 1970; the act of March 27, 1978, relating to
22 the management of the national park system; and the National Parks Omnibus
23 Management Act (1998).

24 The NPS Organic Act (16 *United States Code*, Section 1) provides the fundamental
25 management direction for all units of the national park system:

26 *[P]romote and regulate the use of the Federal areas known as national parks,*
27 *monuments, and reservations . . . by such means and measure as conform to the*
28 *fundamental purpose of said parks, monuments and reservations, which purpose is*
29 *to conserve the scenery and the natural and historic objects and the wild life*
30 *therein and to provide for the enjoyment of the same in such manner and by such*
31 *means as will leave them unimpaired for the enjoyment of future generations.*

32 The National Park System General Authorities Act (16 *United States Code* [USC]
33 Section 1a-1 et seq.) affirms that while all national park system units remain “distinct in
34 character,” they are “united through their interrelated purposes and resources into one
35 national park system as cumulative expressions of a single national heritage.” The act
36 makes it clear that the NPS Organic Act and other protective mandates apply equally to
37 all units of the system. Further, amendments state that NPS management of park units
38 should not “derogate[e] . . . the purposes and values for which these various areas have
39 been established.”

40 The National Park Service also has established policies for all units under its stewardship.
41 These are identified and explained in a guidance manual entitled *NPS Management*
42 *Policies 2006*. The “action” alternatives considered in this document (alternatives 1, 2,
43 and 3), as well as the no-action alternative (current management), incorporate and comply

PART 1: BACKGROUND

1 with the provisions of these mandates and policies. Appendix C details key NPS policies
2 and their desired conditions and strategies.

3

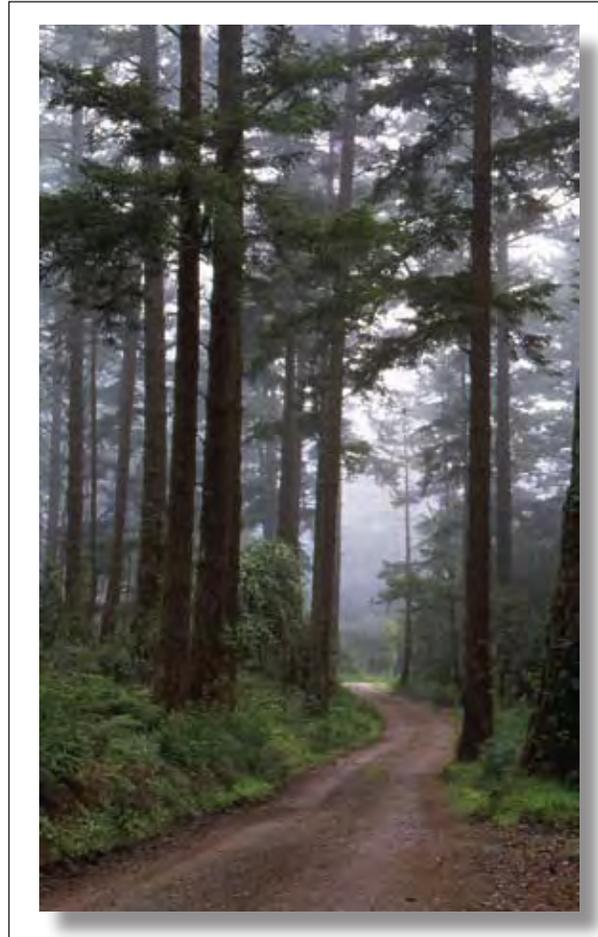
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7

Building the Management Alternatives



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INTRODUCTION

2

3 The development of the alternatives began with newsletter 1 (spring 2006) and public
4 open houses that asked people what they valued and enjoyed most about Golden Gate
5 National Recreation Area and Muir Woods National Monument. Additionally, people
6 were asked for their concerns and suggestions for the future management of the park. The
7 public response was analyzed and reported in newsletter 2 (spring 2007). During this
8 time, the planning team was also meeting with park staff, park partners, and other
9 stakeholders to collect information on existing conditions and related issues.

10 Throughout the scoping process, the planning team was collecting and analyzing
11 information about the park's natural and cultural resources, and about visitor
12 characteristics and use patterns. Guided by the public input and the results of the analysis,
13 the planning team defined the issues that the new general management plan would
14 address (the issues were described earlier in this document). Next, the planning team
15 explored different ways to address the issues. This exploration formed a set of concepts
16 that would be used to develop the alternatives for the general management plan. The
17 planning team developed four management concepts, each exploring a different possible
18 future for Golden Gate National Recreation Area and Muir Woods National Monument.
19 These management concepts were presented to the public in newsletter 3 (fall 2007). The
20 management concepts included

21 Concept 1, "Connecting People with the Parks"

22 Concept 2, "Preserving and Enjoying Coastal Ecosystems"

23 Concept 3, "Focusing on National Treasures"

24 Concept 4, "Collaborating Regionally"

25 The planning team used these management concepts to guide their development of the
26 preliminary alternatives for the general management plan. Each preliminary alternative
27 consists of two main components. First, there is a management concept that creates a
28 general theme for the overall management of the park. Second, management zones are
29 created that identify a range of potential desired conditions for natural and cultural
30 resources, opportunities for visitor experiences, and general levels of development and
31 visitor use and services, based on the purpose and significance of the park. These
32 management zones are then applied to the park in different ways to reflect the concept of
33 each alternative.

34 Eight management zones were developed for this general management plan. The desired
35 conditions are different in each management zone and reflect the focus of that particular
36 zone. Guided by each management concept, zones were applied to the park in different
37 configurations, forming the basis of the preliminary alternatives. The preliminary
38 alternative maps reflected the intent of each concept, and showed how the zones would
39 be allocated.

40 As the preliminary alternatives were being developed, it became apparent to the planning
41 team that the fourth management concept, "Collaborating Regionally," was a philosophy
42 that applied to the overall management of the park and was applicable in all of the

1 alternatives, rather than a specific park vision used to guide the development of one
2 alternative. Therefore, the park managers adopted the “Collaborating Regionally”
3 concept as a *guiding principle* for managing the park and did not further develop a fourth
4 preliminary alternative.

5 Once developed, the three preliminary alternatives were described in detail in newsletter
6 4 (spring 2008) and shared with the public. The planning team hosted local workshops to
7 explain and test the alternatives with the public. Using the public comments, the planning
8 team worked to strengthen the alternatives and identify the NPS preferred alternative.
9 With the alternatives approved by park managers, the planning team began preparation of
10 this *Draft General Management Plan/Environmental Impact Statement*.

11 This general management plan presents the draft alternatives with their zone maps and
12 supporting narratives, including the National Park Service’s preferred alternative, for
13 future management of Golden Gate National Recreation Area and Muir Woods National
14 Monument. Also included is a description of current conditions, representing the
15 management direction and trends that are based on the 1980 *General Management Plan*
16 and its subsequent amendments. The description of the current conditions serves as a
17 basis of comparison with the three alternatives and is referred to as the “No-action
18 Alternative.” The other draft alternatives are referred to as “Action Alternatives.”

19 The next section presents the three management concepts that were used to guide the
20 development of the alternatives for the general management plan. This is followed by an
21 explanation of how the NPS preferred alternatives were selected. Then the reader is
22 presented with a general explanation of management zones and a short summary of the
23 eight zones. A detailed description of the eight management zones can be found in the
24 booklet in the pocket located inside the back cover of this document.

25

CONCEPTS FOR FUTURE MANAGEMENT

2

3 The legislation that established the parks, the histories of the parks, and the issues and
4 needs that were identified early in the planning process all helped to shape four general
5 concepts for future management of the parks. While four concepts were developed, only
6 three of them were carried forward to guide the development of the alternatives. The
7 following three concepts, then, formed the basis for developing potential management
8 alternatives.

9

10 **CONCEPT 1: CONNECTING PEOPLE WITH THE PARKS (EVOLVED**
11 **INTO ALTERNATIVE 1)**

12 The emphasis of this concept is to reach out and engage the community and other visitors
13 in the enjoyment, understanding, and stewardship of the park’s resources and values.
14 Park management would focus on ways to attract and welcome people, connect people
15 with the resources, and promote understanding, enjoyment, preservation, and health—all
16 as ways to reinvigorate the human spirit. Visitor opportunities would be relevant to
17 diverse populations now and in the future.

18

19 **Rationale**

20 This concept emphasizes the park’s management commitment to the founding idea of
21 “parks to the people,” and the park’s fundamental purpose of bringing national park
22 experiences to a large and diverse urban population. Improving connections between the
23 park and the people is fundamental to achieving the park’s purpose and to maintaining
24 the public’s continued interest and support.

25

26 **Goals**

27 ***Visitor Experience***

- 28
- 29 • Actively seek opportunities to respond to the needs and interests of the diversity
30 of visitors
 - 31 • Encourage visitors to engage in a wide range of opportunities and experiences in
32 a diversity of settings
 - 33 • Enhance outreach and access to and within the park and monument and make
34 them welcoming
 - 35 • Foster the visitor’s deep personal connection to the park and discovery of the
36 values and enjoyment of the natural environment.
 - 37 • Encourage hands-on stewardship through visitor opportunities that promote
38 personal health and responsibility.

38

39

1 **Cultural Resources**

- 2 • Maximize adaptive reuse and rehabilitation of cultural resources (structures,
3 landscapes, and archaeological sites) to support visitor enjoyment, understanding,
4 and community connections.
- 5 • Work with interested groups and populations to preserve and protect cultural
6 resources.
- 7 • Preserve and protect cultural resources so that visitors can connect with and
8 appreciate these resources and their stories.

9 **Natural Resources**

- 10 • Maintain the integrity and diversity of natural resources and systems.
- 11 • Enhance the public’s access to natural resources to promote visitor understanding
12 and appreciation.
- 13 • Integrate natural resource preservation and concepts with visitor stewardship
14 opportunities to deepen visitor understanding.

15

16

17 **CONCEPT 2: PRESERVING AND ENJOYING COASTAL**
18 **ECOSYSTEMS (EVOLVED INTO ALTERNATIVE 2)**

19 The emphasis of this concept is to preserve, enhance, and promote dynamic and
20 interconnected coastal ecosystems in which marine resources are valued and prominently
21 featured. Recreational and educational opportunities would allow visitors to learn about
22 and enjoy the ocean and bay environments, and gain a better understanding of the
23 region’s international significance and history.

24

25 **Rationale**

26 The concept creates a vision for intentionally connecting resources and systems to form
27 contiguous habitat from the ocean to the coastal hills. The more connected the water and
28 land base, the better the ability for ecosystems to adjust and adapt, thus increasing their
29 resiliency to urban pressures and climate change. This concept also responds to the
30 public’s strong interest in having more natural wild lands in close proximity to the urban
31 communities of the San Francisco Bay Area.

32

33 **Goals**

34 **Visitor Experience**

- 35 • Connect visitors with resources and the park through expanded and diverse
36 science and stewardship programs that are focused on preservation and
37 restoration of coastal and marine resources and address the implications of
38 climate change.
- 39 • Provide greater opportunities for visitors to explore wild areas and immerse
40 themselves in nature.

- 1 • Manage low-impact visitor use that enhances the qualities of solitude, quiet, and
2 naturalness in sensitive natural resource areas, and accommodate active
3 recreational pursuits in other areas.
- 4 • Increase visitor understanding, awareness, and support for coastal resources
5 through participation in stories and programs about human interaction with and
6 dependency on natural resources.

7 **Cultural Resources**

- 8 • Incorporate the history and collections related to natural resources to raise
9 awareness of America’s ongoing efforts to conserve marine ecosystems.
- 10 • In park interpretation and education programs, emphasize sites and stories
11 connected to coastal resources, including shipwrecks, archeological sites,
12 agricultural lands and uses, coastal defense, and lighthouses, so visitors can
13 connect with those resources.
- 14 • Maximize adaptive reuse and rehabilitation of cultural resources to support
15 visitor enjoyment, understanding, and community connections.
- 16 • Work with interested groups and populations to preserve and protect cultural
17 resources.
- 18 • Preserve and protect cultural resources so that visitors can connect with and
19 appreciate these resources and their stories.

20 **Natural Resources**

- 21 • Reconnect fragmented habitat within and adjacent to the park to strengthen the
22 integrity and resiliency of the coastal ecosystem to respond to climate change and
23 urban pressures.
- 24 • Optimize recovery of special status species and survival of wide-ranging wildlife.
- 25 • Restore natural processes and/or allow these processes to evolve unimpeded to
26 the greatest degree feasible.
- 27 • Promote partnerships to help the park become a center for innovative coastal
28 science, stewardship, and learning.

29

30

31 **CONCEPT 3: FOCUSING ON NATIONAL TREASURES (EVOLVED** 32 **INTO ALTERNATIVE 3)**

33 The emphasis of this concept is to focus on the park’s nationally important natural and
34 cultural resources. The fundamental resources of each showcased site would continue to
35 be managed at the highest level of preservation to protect the resources in perpetuity and
36 to promote appreciation, understanding, and enjoyment of those resources. Visitors
37 would have the opportunity to explore the wide variety of experiences that are associated
38 with many different types of national parks—all in this park. All other resources would
39 be managed to complement the nationally significant resources and associated visitor
40 experiences.

41

42

1 **Rationale**

2 The concept highlights the park’s variety of nationally significant resources. By
3 distinguishing the nationally significant resources and promoting the National Park
4 Service identity, the objective of bringing exemplary national park experiences to an
5 urban population would be met. The concept would also allow the National Park Service
6 to focus the management of the park’s resources, visitor experiences, and partnerships,
7 giving priority to the most significant sites.

8

9 **Goals**

10 ***Visitor Experience***

- 11 • Provide visitors with opportunities to explore, learn, and enjoy the park’s unique
12 resources and stories.
- 13 • Allow the park’s distinctive resources and associated stories to shape recreational
14 opportunities.
- 15 • Emphasize active public participation in stewardship programs at the showcased
16 sites.
- 17 • Provide visitors with opportunities for understanding and enjoying national park
18 experiences.

19 ***Cultural Resources***

- 20 • Emphasize the fundamental resources that contribute to the national significance
21 of the park, including national historic landmarks. Manage all other resources to
22 complement the significant resources and visitor experiences.
- 23 • Tie all the associated cultural resources, museum collections, and stories to the
24 showcased sites.
- 25 • Preserve and protect cultural resources to highlight the interpretive and
26 educational values and provide, wherever possible, direct contact with the
27 resources.

28 ***Natural Resources***

- 29 • Emphasize the preservation of fundamental natural resources that contribute to
30 the significance of each park unit. Manage all other resources to complement the
31 distinctive resources and experiences.
- 32 • Protect or restore the integrity of fundamental natural resources and processes
33 that support the significance of each park unit.
- 34 • Manage distinctive natural resources to ensure their ecological integrity while
35 providing opportunities to engage the visitors in hands-on stewardship and
36 exploration.

37

38

SELECTION OF THE NPS PREFERRED ALTERNATIVES

3 The NPS preferred alternatives were developed following an analysis of the advantages
4 of each preliminary alternative, including consideration of public comments received in
5 response to Newsletter 4. The National Park Service uses a process called “Choosing by
6 Advantages” (CBA) that allows the agency to evaluate the relative advantages of the
7 alternatives, determine the importance of those advantages based on the park’s purpose
8 and related public interest, and assess whether those advantages are worth their
9 associated costs.

10 The topics that the planning team used to evaluate the relative advantages between the
11 alternatives were as follows:

- 12 • strengthen the integrity and resiliency of coastal ecosystems
- 13 • strengthen the integrity of resources that contribute to the National Register of
14 Historic Places, National Historic Districts, and National Historic Landmarks
- 15 • support a diversity of recreational opportunities and national park experiences
- 16 • improve and promote public understanding of park resources, identity, and NPS
17 values
- 18 • provide visitors with safe and enjoyable access and circulation to and within the
19 park

20

21 The evaluation of the advantages and costs of each alternative were initially identified by
22 park managers during a weeklong workshop, with several follow-up meetings to further
23 refine the NPS preferred alternative. The CBA process indicated the following:

24 **Alternative 1** represents the greatest advantage for the park lands of Golden Gate
25 National Recreation Area in Marin, San Francisco and San Mateo counties.

26 **Alternative 3** represented the greatest advantage for Alcatraz Island and Muir
27 Woods National Monument.

28 The CBA evaluation was an important step in selecting and refining the NPS preferred
29 alternatives. Critical changes to the NPS preferred alternatives were made to incorporate
30 ideas from the other alternatives where they were consistent with the management
31 concept and provided additional “advantages” to the park. We continued to shape the
32 preferred alternatives well after the CBA workshop through additional public comment
33 and in consultation with the staff at the NPS Pacific West Regional Office.

34

35

36

MANAGEMENT ZONES

2

3 Management zones are the heart of the alternatives developed for the general
4 management plan. Each zone defines a set of desired conditions for natural and cultural
5 resources, visitor experiences, and general levels of development. These desired
6 conditions are different in each management zone and reflect the overall focus of that
7 particular zone. Eight management zones have been developed. Further detailed
8 information about the zones is presented in a booklet in a pocket on the inside back
9 cover.

10

11

12 **DIVERSE OPPORTUNITIES ZONE**

13 This management zone provides a range of natural and historic settings and facilities to
14 welcome and support a wide variety of visitor opportunities appropriate in the park.
15 Significant fundamental park resources would be preserved while different levels of
16 visitor use would be accommodated. People would have a wide range of educational,
17 interpretive, and recreational opportunities to enjoy and appreciate the park's resources.

18

19

20 **SCENIC CORRIDOR ZONE**

21 This management zone includes scenic trails, roads, and coastlines that provide for
22 sightseeing and related recreational opportunities. Resources could be modified in this
23 zone, and facilities would highlight and enhance the natural, cultural, and scenic values,
24 as well as provide for a safe tour route.

25

26

27 **EVOLVED CULTURAL LANDSCAPE ZONE**

28 This management zone would preserve significant historic, archeological, architectural,
29 and landscape features while being adaptively reused for contemporary park and partner
30 needs. Cultural resources, as well as the surrounding natural resources that are often
31 integral to the historic site, would be preserved and interpreted. This zone could
32 contribute to visitor enjoyment and exploration of the historic values and events while
33 providing for other types of uses.

34

35

36

1 **HISTORIC IMMERSION ZONE**

2 This management zone would preserve historic sites, structures, and landscapes that are
3 evocative of their period of significance. Selected exteriors and designated portions of
4 interior spaces would be managed to protect their historic values and attributes. Visitors
5 would have opportunities to be immersed in the historic setting to explore history with
6 direct contact to cultural resources, complemented by rich interpretation of past stories
7 and events.

8

9

10 **INTERPRETIVE CORRIDOR ZONE**

11 **(This management zone is applied only to alternatives for Muir Woods National**
12 **Monument.)**

13 This management zone would preserve the monument’s natural character and would be
14 richly interpreted through a variety of means. Visitor use would be managed to preserve
15 important natural and cultural resources and their associated values and could involve
16 controlled access.

17

18

19 **NATURAL ZONE**

20 This management zone would retain the natural, wild, and dynamic characteristics and
21 ecological functions. The natural resources would be managed to preserve and restore
22 resource integrity while providing for backcountry types of visitor experiences. Visitors
23 would have opportunities to directly experience the natural resources primarily from
24 trails and beaches. Visitor use would be managed to preserve resources and their
25 associated values and could involve controlled access. External threats to resources
26 would be aggressively addressed. Modest facilities that support management and visitor
27 use within this zone, such as a trailhead, could be placed on the periphery of the zone.

28

29

30 **SENSITIVE RESOURCES ZONE**

31 This management zone would consist of fundamental natural resources that are highly
32 sensitive to a variety of activities and would receive the highest level of protection.
33 Resources would be managed to preserve their fundamental values while being
34 monitored and often studied for scientific purposes. Access to these areas would be
35 highly controlled. These areas could be subject to closures, and access could be restricted
36 to the less sensitive edges of the zone. External threats to resources would be
37 aggressively addressed.

38

1 **PARK OPERATIONS ZONE**

2 This management zone would primarily support developed facilities for park and partners
3 operations and maintenance functions. This zone would be managed to provide facilities
4 that are safe, secured, and appropriate for functions required for park management.
5 Access to these areas for visitors would be controlled and limited to organized meetings,
6 programs, and access to park administration.

7

Table 1: General Summary of Management Zones

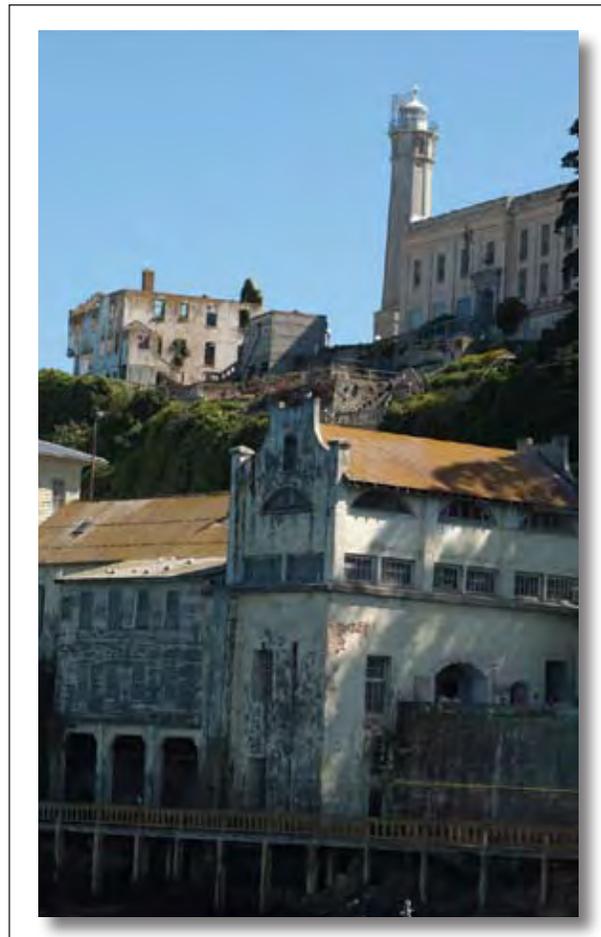
	Diverse Opportunities Zone	Scenic Corridor Zone	Evolved Cultural Landscape Zone	Historic Immersion Zone	Interpretive Corridor Zone (applies only to alternatives for Muir Woods National Monument)	Natural Zone	Sensitive Resources Zone	Park Operations Zone
Zone Concept	This management zone provides a range of natural and historic settings and facilities to welcome and support a wide variety of visitor opportunities appropriate in the park. Significant fundamental park resources would be preserved while different levels of visitor use would be accommodated. People would have a wide range of educational, interpretive, and recreational opportunities to enjoy and appreciate the park's resources.	This management zone includes scenic trails, roads, and coastlines that provide for sightseeing and related recreational opportunities. Resources could be modified in this zone, and facilities would highlight and enhance the natural, cultural, and scenic values, as well as provide for a safe tour route.	This management zone would preserve significant historic, archeological, architectural, and landscape features while being adaptively reused for contemporary park and partner needs. Cultural resources, as well as the surrounding natural resources that are often integral to the historic site, would be preserved and interpreted. This zone could contribute to visitor enjoyment and exploration of the historic values and events while providing for other types of uses.	This management zone would preserve historic sites, structures, and landscapes that are evocative of their period of significance. Selected exteriors and designated portions of interior spaces would be managed to protect their historic values and attributes. Visitors would have opportunities to be immersed in the historic setting to explore history with direct contact to cultural resources, complemented by rich interpretation of past stories and events.	This management zone would preserve the monument's natural character and would be richly interpreted through a variety of means. Visitor use would be managed to preserve important natural and cultural resources and their associated values and could involve controlled access.	This management zone would retain the natural, wild, and dynamic characteristics and ecological functions. The natural resources would be managed to preserve and restore resource integrity while providing for backcountry types of visitor experiences. Visitors would have opportunities to directly experience the natural resources primarily from trails and beaches. Visitor use would be managed to preserve resources and their associated values and could involve controlled access. External threats to resources would be aggressively addressed. Modest facilities that support management and visitor use within this zone, such as a trailhead, could be placed on the periphery of the zone.	This management zone would consist of fundamental natural resources that are highly sensitive to a variety of activities and would receive the highest level of protection. Resources would be managed to preserve their fundamental values while being monitored and often studied for scientific purposes. Access to these areas would be highly controlled. These areas could be subject to closures, and access could be restricted to the less sensitive edges of the zone. External threats to resources would be aggressively addressed.	This management zone would primarily support developed facilities for park and partners operations and maintenance functions. This zone would be managed to provide facilities that are safe, secured, and appropriate for functions required for park management. Access to these areas for visitors would be controlled and limited to organized meetings, programs, and access to park administration.
Natural Resources	Natural resources provide distinct visitor opportunities and experiences through a range of park settings. The natural elements of these park settings would help define and locate visitor opportunities, services, and facilities.	Visitor opportunities and park operations would be managed to maintain and restore natural resource integrity. Opportunities that allow visitors to view high quality natural resources and their inherent scenic qualities would be provided.	Natural resource integrity would be maintained and restored while the area would provide for historic preservation, visitor activities, and park operations. Natural resources are often an integral component of cultural landscapes and would be managed to highlight the cultural resources and their associated values and characteristics. Natural resource objectives would be pursued in collaboration with, and where they complement, cultural resource objectives.	Natural resource integrity would be maintained and restored as compatible with historic preservation objectives. The natural elements of cultural resources and designated cultural landscapes would be managed to highlight the cultural resources and their associated values and characteristics. Natural resource objectives would be pursued in collaboration with, and where they complement, cultural resource objectives.	Natural resource integrity would be maintained and restored while providing for visitor opportunities and park operations.	Natural resource integrity would be maintained by preserving and restoring natural resources and their processes, systems, and values. Rare and exceptional natural resources, processes, systems, and values would be preserved and enhanced. Natural functions and processes would be reestablished in human-disturbed areas of the park to improve and maintain the resource integrity.	Rare and exceptional natural resources, processes, systems, and values would be preserved and enhanced. Natural functions and processes would be reestablished in human-disturbed areas to improve and maintain the resource integrity.	Natural resources would be managed to accommodate operational uses/activities and to facilitate sustainable maintenance operations. The intrusion of maintenance and operations activities on the surrounding park setting would be minimized through planning, design, screening, and noise reduction efforts. New facilities would be developed at locations that do not conflict with natural resource management objectives.

	Diverse Opportunities Zone	Scenic Corridor Zone	Evolved Cultural Landscape Zone	Historic Immersion Zone	Interpretive Corridor Zone (applies only to alternatives for Muir Woods National Monument)	Natural Zone	Sensitive Resources Zone	Park Operations Zone
Cultural Resources	Cultural resources would provide distinct visitor opportunities and experiences through a range of park settings. The cultural elements of these park settings would be the backdrop for interpretation, visitor use and activities, and other visitor services.	The scenic qualities of cultural resources or designated cultural landscapes would be managed to preserve their visual and historic characteristics.	Cultural resources would be preserved through adaptive reuse. Historic values and characteristics would be preserved for interpretation and enjoyment.	Cultural sites, structures, and landscapes would be preserved, rehabilitated, or restored to reflect their period of significance, allowing people to experience these resources firsthand and learn about their associated stories and events.	Cultural resources would be preserved by managing for adaptive reuse. Historic values and characteristics would be preserved for interpretation and enjoyment.	Cultural resource objectives would be pursued in collaboration with, and where they complement, natural resource objectives. These cultural resources could be stabilized and preserved to maintain their integrity.	Cultural resource objectives would be pursued in collaboration with, and where they complement, natural resource objectives. These cultural resources would be stabilized and preserved to maintain their integrity.	Cultural resources could be preserved by adaptive reuse for the purposes of park operations and administration.
Visitor Experience <i>General</i>	People could participate in a range of recreational, interpretive, and educational opportunities supported by a variety of visitor services.	Visitors would have the opportunity to tour through the scenic corridors with multiple opportunities to stop along the route for sightseeing, wildlife viewing, picnicking, or interpretive or educational information.	Visitors would have the opportunity to explore designated portions of historic landscapes and structures while participating in contemporary activities.	Visitors would have the opportunity to be immersed in a historic setting. Visitors could experience the sights, sounds, and activities that are evocative of the site's period of significance.	Visitors would have the opportunity to be immersed in a natural environment (which could include historic resources) and participate in a variety of interpretive and educational opportunities to gain an in-depth understanding of these resources. Opportunities to experience natural sounds and closeness to nature would be important aspects of a visit to this area. Visitor use would be controlled to ensure that activities and their intensities are compatible with protecting resource integrity.	Visitors would have the opportunity to be immersed in a natural environment and could seek areas where they could experience natural sounds, tranquility, closeness to nature, and a sense of remoteness and self-reliance. Visitor use would be controlled to ensure that activities and their intensities are compatible with protecting resource integrity.	Visitors would have the opportunity to experience and understand the fundamental resources in the zone. In particular, visitors would be able to understand and value the sensitive nature of these resources. Visitor use would be highly controlled and managed to ensure that activities and their intensities are compatible with protecting resource integrity.	Visitors would have the opportunity for limited and controlled access to these areas for purposes of orientation, organized meetings, and access to park administration.
<i>Types of Activities</i>	Beach activities: informal beach sports, walking, swimming, picnicking, and surf fishing Marine activities: fishing, boating, crabbing, kayaking, surfing, and sightseeing	Beach activities: informal beach sports, walking, swimming, picnicking, and surf fishing Marine activities: fishing, boating, crabbing, kayaking, surfing, and sightseeing	Beach activities: informal beach sports, walking, swimming, picnicking, and surf fishing Marine activities: fishing, boating, crabbing, kayaking, surfing, and sightseeing	Beach activities: guided or self-guiding interpretive walks, tours, or participation in historic interpretive programs Marine activities: guided or self-guiding boat/kayaking trips or tours relevant to historic interpretive programs	Walking, hiking, sightseeing, and wildlife viewing Programs and special events could include environmental education, stewardship, history, and science.	Beach activities: walking, swimming, and surf fishing Marine activities: fishing, crabbing, kayaking, surfing, and sightseeing	Beach activities: walking and guided tours Marine activities: kayaking, sightseeing, and guided tours	stewardship activities

	Diverse Opportunities Zone	Scenic Corridor Zone	Evolved Cultural Landscape Zone	Historic Immersion Zone	Interpretive Corridor Zone (applies only to alternatives for Muir Woods National Monument)	Natural Zone	Sensitive Resources Zone	Park Operations Zone
<i>Use Levels/ Density/ Encounters</i>	<p>Land activities: developed camping, overnight lodging, picnicking, biking, hiking, walking, running, horseback riding, hang gliding, sightseeing, and bird and wildlife viewing</p> <p>Other activities: exploring historic sites and structures, participating in interpretive programs and participating in stewardship programs, nature study, photography, artistic endeavors, and special events</p> <p>High levels of use in centralized activity nodes would be expected, leading to the likelihood of high rates of encounters among visitors. Groups of many sizes would be accommodated.</p>	<p>Land activities: developed camping, overnight lodging, picnicking, biking, hiking, walking, running, horseback riding, hang gliding, sightseeing, and bird and wildlife viewing</p> <p>Other activities: exploring historic sites and structures, participating in interpretive programs and participating in stewardship programs, nature study, photography, artistic endeavors, and special events</p> <p>Moderate to high use levels would be expected along scenic corridors, leading to the likelihood of moderate to high rates of encounters between visitors, particularly at locations such as overlooks, day use areas, and waysides. Groups would be accommodated, but group sizes could be limited based on facility capacities and/or experiential objectives.</p>	<p>Land activities: overnight lodging, picnicking, biking, hiking, walking, running, horseback riding, sightseeing, and bird and wildlife viewing</p> <p>Other activities: exploring historic sites and structures, participating in interpretive programs and participating in stewardship programs, nature study, photography, artistic endeavors, and special events</p> <p>Moderate use levels would be expected around focused activity nodes, leading to the likelihood of moderate numbers of encounters with other visitors. Group sizes could be limited based on facility capacities and/or experiential objectives.</p>	<p>Land activities: guided and self-guiding walks, hikes, tours, experiential learning (may include overnight stays), or historic study</p> <p>Other activities: exploring historic sites and structures, participating in interpretive programs and participating in stewardship programs, photography, artistic endeavors, and special events</p> <p>Moderate use levels would be expected around focused activity nodes, leading to the likelihood of moderate numbers of encounters between visitors. Group sizes could be limited based on facility capacities and/or experiential objectives.</p>	<p>Land activities: primitive camping, hiking, walking, biking, horseback riding, sightseeing, and bird and wildlife viewing</p> <p>Other activities: exploring historic sites and structures, nature study, photography, artistic endeavors, participating in stewardship programs, and a limited number of special events (e.g., running events on established trails), but events would be highly regulated and monitored to mitigate impacts to resources and other visitors.</p> <p>Moderate to high use levels would be expected along interpretive corridors, leading to the likelihood of moderate to high rates of encounters between visitors. Groups would be accommodated, but group sizes could be limited based on facility capacities and/or experiential objectives</p>	<p>Land activities: primitive camping, hiking, walking, biking, horseback riding, sightseeing, and bird and wildlife viewing</p> <p>Other activities: exploring historic sites and structures, nature study, photography, artistic endeavors, participating in stewardship programs, and a limited number of special events (e.g., running events on established trails), but events would be highly regulated and monitored to mitigate impacts to resources and other visitors.</p> <p>Low to moderate use levels would be expected in this zone, with moderate use levels often found at entry points or points of interest. A moderate rate of encounters with other visitors would be expected, but opportunities for solitude might be found in certain areas if a visitor seeks it. Group sizes could be limited to protect experiential and resource protection objectives.</p>	<p>Land activities: hiking, walking, sightseeing, bird and wildlife viewing, and guided tours</p> <p>Other activities: guided trips through historic sites and structures, and participation in stewardship programs</p> <p>No special and organized events would be permitted.</p> <p>Low use levels would be expected in these areas. At entry points or points of interest, a moderate number of encounters between visitors would be expected. As visitors travel away from these areas, there would be fewer encounters with other visitors. Group sizes could be limited to promote resource protection objectives.</p>	<p>Land activities: hiking, walking, sightseeing, bird and wildlife viewing, and guided tours</p> <p>Other activities: guided trips through historic sites and structures, and participation in stewardship programs</p> <p>No special and organized events would be permitted.</p> <p>Low use levels would be expected because this area is intended for staff and visitors on official business. Frequency of encounters with other visitors would be low.</p>

	Diverse Opportunities Zone	Scenic Corridor Zone	Evolved Cultural Landscape Zone	Historic Immersion Zone	Interpretive Corridor Zone (applies only to alternatives for Muir Woods National Monument)	Natural Zone	Sensitive Resources Zone	Park Operations Zone
Development and Management	Development could include a diversity of facilities to welcome, orient, and support visitors.	Development may include road and trail corridors and associated day use facilities that support and direct visitor use.	Development may include a blend of historic and compatible modern structures to support visitor use and services.	Development would include sensitive rehabilitation or restoration of historic resources and may include nonhistoric visitor facilities if they can be blended into the historic fabric of the site.	Development would be minimal and would be aimed at facilities that provide access, public safety, resource protection, and interpretation/education (e.g., trails, restrooms, boardwalks, fencing, interpretive gathering areas).	Development would be minimal and would be aimed at facilities that provide access, public safety, and resource protection (e.g., trails, restrooms, and resource protection). Nonhistoric structures could be removed and the site restored.	There would be minimal, if any, development except for some visitor facilities such as trails to allow for the concentration and direction of visitor use and the protection of resources.	Development patterns would include a diversity of facilities to support visitor services and park administration.

Actions Common to All Alternatives



Back of divider

INTRODUCTION

2 While three different concepts for management are presented in the three action
3 alternatives described in this document, there is some overarching management direction
4 that will continue to guide the park and monument, regardless of the alternative selected.
5 Some of these actions have developed through time from the founding principles of the
6 park and monument; some are currently underway; and some are required by law or
7 policy. The actions discussed in this section will occur regardless of the management
8 alternative selected.

9

10

11

12

BOUNDARIES

2

3 The 1978 National Parks and Recreation Act (16 USC 1a-7) requires general
4 management plans to address potential modifications to the park boundaries. Park
5 boundaries are often initially drawn to reflect a wide range of practical considerations,
6 and they do not necessarily reflect natural or cultural resource features, administrative
7 considerations, or changing land uses. Current or potential changes in adjacent land uses
8 could pose threats to park resources and limit the staff's ability to strengthen the
9 fundamental resources that support the park purpose and significance.

10 Golden Gate National Recreation Area and Muir Woods National Monument are part of a
11 larger area of protected open space in the Bay Area. The natural and cultural resources of
12 the park would face a greater threat if not for the many other open space areas that
13 contribute to the integrity of coastal ecosystems, scenic beauty, recreational
14 opportunities, and the preservation of historic resources.

15

16

17 GOALS

18 The potential park boundary modifications would be guided by the following three major
19 goals:

- 20 1. Strengthen the diversity of park settings and opportunities supporting the park
21 purpose to encourage, attract, and welcome diverse current and future
22 populations while maintaining the integrity of the park's natural and cultural
23 resources.
24
- 25 2. Strengthen the integrity and resilience of coastal ecosystems by filling habitat
26 gaps, creating habitat links, providing for the recovery of special status species
27 and the survival of wide-ranging wildlife. In addition, boundary modifications
28 would restore natural processes and ecosystem capacity to respond to the effects
29 of climate change. Boundary adjustments would be guided by science-based
30 approaches that build on the goals of cooperative regional efforts.
31
- 32 3. Preserve nationally important natural and cultural resources related to the park's
33 purpose.
34

35 In addition to following this guidance, the park staff would play a partnership role in
36 regional land and marine area protection efforts. This role includes coordinating and
37 developing multiple strategies with adjacent public land managers and open space
38 organizations when land acquisition goals and objectives can be shared.

39 Any proposed boundary changes would be critically evaluated to confirm that such
40 actions contribute to achieving the park's mission and resource protection goals and that
41 the park is not accepting undue management burdens. Proposed land acquisitions must be
42 feasible to administer considering their size, configuration, costs, and ownership. In

1 addition, changes could be made if the land acquired was needed to address operational
2 and management issues, such as visitor access, or to have logical and identifiable
3 boundaries. The potential boundary modifications would continue to be made with
4 regional collaboration in mind, while working to strengthen and protect the park's
5 natural, cultural, recreational, and scenic resources.

6

7

8 **PROPOSED BOUNDARY ADJUSTMENTS**

9 Below are proposed boundary adjustments. Each meets NPS criteria for boundary
10 adjustments and is consistent with the goals stated above.

11

12 **Ocean Environment, San Mateo County**

13 In San Mateo County, the park's legislative boundary along the Pacific coast includes
14 about 10 miles of shoreline. Unlike in San Francisco and Marin counties, the boundary
15 does not extend beyond the line of mean high tide. The single exception is at the
16 Fitzgerald Marine Reserve where the boundary extends 0.25 mile offshore. The boundary
17 does not include sections of the coast that are densely settled, such as Pacifica, or areas of
18 private property except where the park has easements. This exclusion of offshore areas
19 restricts coordinated management of critical resources and visitor activities with the
20 National Oceanic and Atmospheric Administration, the Bureau of Land Management,
21 and California State Parks. Lack of a consistent boundary also poses difficulties in
22 coordinating with local public safety departments for visitor protection services, which
23 can complicate rescue and recovery efforts.

24 The proposed boundary adjustment would establish a consistent offshore boundary for
25 NPS lands in San Mateo County. The proposed boundary would extend 0.25 mile from
26 the line of mean high tide wherever the park's legislative boundary already extends to the
27 shore. Areas that are offshore of property that is not already in the park's legislative
28 boundary would not be included in this adjustment. See figure 3.

29 Management of the areas added to the park boundary would be guided by NPS Ocean
30 Stewardship policy and the primary management purposes identified in the California
31 state tide and submerged lands leases that the park retains over other portions of the
32 offshore ocean and bay environment in San Francisco and Marin counties. These
33 purposes include the following:

- 34 1. To enhance public safety, use, and enjoyment of the subject lands and waters.
- 35 2. To protect and conserve the environment and any cultural resources that may be
36 present.
- 37 3. To preserve the subject lands in their natural state and protect them from
38 development and uses that would destroy their scenic beauty and natural
39 character.
- 40 4. To provide for recreational and educational opportunities.

- 1 5. To consistently manage the subject lands with the administration and
2 management of Golden Gate National Recreation Area, so long as it is not
3 inconsistent with California state law.

4 In a separate action, the park could pursue additional state land leases in order to manage
5 tide and submerged resources within the park’s boundary in San Mateo County.

6

7 **Gregerson Property, San Mateo County**

8 Forming a long rectangle of about 207 acres, with three sides in common with the 4,200-
9 acre Rancho Corral de Tierra property, the Gregerson property was acquired by Peninsula
10 Open Space Trust in 2001. The property is largely undeveloped, with the exception of an
11 access road and residential structures. The road, which runs along the ridge, provides
12 access to the upper reaches of Rancho Corral de Tierra and would be critical for park
13 management purposes. In addition to supporting this operational need, the property
14 would simplify and reduce the length of the park’s perimeter, expand the area of habitat
15 for federally listed plant and animal species, connect wildlife habitats, support
16 recreational opportunities—including trail connections along the scenic ridgetop on an
17 existing narrow road—and protect remarkable scenic coastal views. The Gregerson
18 property addition has the same qualities as Rancho Corral de Tierra and would be
19 managed as part of the larger Rancho Corral de Tierra unit. The residence, with a
20 functioning well, septic system, and solar panel complex, could be retained for
21 environmental education, park operations, or other park purposes. Rancho Corral de
22 Tierra was added to the park boundary in 2005, through Public Law 109-131.

23

24 **Vallemar Acres – Part of Cattle Hill, San Mateo County**

25 The parcel consists of 60 acres of undeveloped land owned by the city of Pacifica. It is on
26 the southern, lower slope of Cattle Hill and extends to the property lines of residences on
27 the north side of Fassler Avenue. This parcel would be managed as part of the Cattle Hill
28 parcel. The area was determined appropriate for acquisition in the *Pacifica Boundary*
29 *Study* (NPS 1998) and is adjacent to lands with similar characteristics that were added to
30 the park in Public Law 106-350.

31

32 **Highway Frontage – Part of West Cattle Hill, San Mateo County**

33 This rectangular parcel consists of 5 acres of undeveloped land along Highway 1. It is
34 owned by the state and managed by Caltrans. It forms the western end of Cattle Hill. This
35 parcel would be managed as part of the larger adjacent Cattle Hill parcel. The area was
36 determined appropriate for acquisition in the *Pacifica Boundary Study* (NPS 1998) and is
37 adjacent to lands with similar characteristics that were added to the park in PL 106-350;
38 these lands could provide trailhead access to NPS managed lands at Cattle Hill and
39 Sweeney Ridge.

40

41

1 **McNee Ranch, San Mateo County**

2 This 625-acre former ranch property is a unit of the California state park system,
3 managed as part of Montara State Beach. The property is the only state park land adjacent
4 to the Golden Gate National Recreation Area that is not also within the federal authorized
5 boundary. Flanked by Rancho Corral de Tierra and land the National Park Service
6 anticipates it will receive from Caltrans following completion of the Devil's Slide
7 Tunnel, coordinated resource preservation and management of visitors to this property is
8 critical. The park includes a small trailhead at Highway 1, and a pedestrian bridge and
9 ranger residence near the equestrian center on Martini Creek in Rancho Corral de Tierra.
10 No other major structures are present. No major changes in management would likely
11 result if the land were added to the federal holding.

12 At present, visitors enjoy sweeping vistas of the Pacific Coast and rugged coastal hills
13 from a network of multiuse trails and unpaved fire roads. These routes connect Pacifica
14 with the coastside communities of Montara and Moss Beach, and lead to the highest
15 points on Montara Mountain. The Bay Area Ridge Trail and San Francisco Public
16 Utilities Commission are planning east-west trail connections that would better link the
17 bay with the ocean. The park has extensive biodiversity, especially on the serpentine soils
18 of the lower slopes where such endangered species as Hickman's potentilla (*Potentilla*
19 *hickmanii*) and San Mateo thornmint (*Acanthomintha duttonii*,) are found.

20

21 **Bolinas Lagoon**

22 Bolinas Lagoon is one of Marin County's most significant natural resources. Its 1,100
23 acres, known as the Bolinas Lagoon Open Space Preserve and managed by the Marin
24 County Open Space District, was designated a Wetland of International Importance by
25 the Ramsar Convention in 1998. Along with Drake's Estero and Tomales Bay, Bolinas
26 Lagoon provides an important coastal environment for fish, birds, and mammals that is
27 unparalleled along the northern California coast between the San Francisco and
28 Humboldt bays. Most of the eastern shoreline of the lagoon and portions of the adjacent
29 uplands and small tributary creeks that support federally endangered steelhead trout are
30 managed by the National Park Service. The Gulf of the Farallones National Marine
31 Sanctuary also encompasses Bolinas Lagoon with overlapping management authority
32 with Marin County and the National Park Service. Marin County, the National Oceanic
33 and Atmospheric Administration, and the Army Corps of Engineers are currently
34 developing plans for restoring natural processes and ecosystem integrity to the lagoon to
35 mitigate for past human activity in the watershed.

36

37

38 **POTENTIAL FUTURE BOUNDARY ADJUSTMENTS**

39 The National Park Service does not manage all the lands within the legislative boundaries
40 of Golden Gate National Recreation Area; there are public lands within the boundaries
41 that are managed by other agencies. Golden Gate National Recreation Area staff will
42 continue to monitor these lands and coordinate with these land managers in a way that
43 maintains and enhances the values that contributed to the lands being included in the

1 boundary. Some of these efforts could lead to eventual acquisition by the National Park
2 Service.

3 Several areas are of great interest to the National Park Service and appear to meet the
4 NPS criteria for boundary adjustments. The park would continue working with open
5 space partners to pursue protection of these properties, possibly including an NPS
6 boundary adjustment, guided by the goals expressed earlier.

7

8 **Priority Conservation Areas**

9 Four areas adjacent to the park were identified as Priority Conservation Areas through a
10 regional planning effort led by the Association of Bay Area Governments and
11 documented in *Golden Lands, Golden Opportunities* (Bay Area Open Space Council,
12 2009). Multiple strategies and multiple land managers could have a role in managing
13 these lands. At this time, no specific boundary adjustments are proposed by the park in
14 these areas (which are listed below). However, future studies are anticipated that would
15 evaluate which specific properties within these areas would be most appropriately
16 managed by the National Park Service.

17 ***Marin City Ridge, Marin County***

18 Undeveloped lands adjacent to the park's Marin Headlands unit could enhance protection
19 for the park's natural, scenic, and recreational resources while improving trail
20 connections into an underserved community. These sites were evaluated in a boundary
21 study in 2005 and determined appropriate for inclusion into the park.

22 ***Pacifica Conservation Area (South of Mussel Rock to McNee Ranch), 23 San Mateo County***

24 Disconnected, undeveloped parcels at the fringes of the Pacifica community could
25 enhance continuity of existing Golden Gate National Recreation Area lands, including the
26 park's trail links to the California Coastal Trail and Bay Area Ridge Trail and improve
27 natural resource corridors.

28 ***Montara Mountain Complex, San Mateo County***

29 Undeveloped parcels adjacent to Rancho Corral de Tierra could strengthen protection of
30 threatened and endangered species and contribute to the regional conservation efforts
31 focused on preserving large natural resources corridors and scenic beauty.

32 ***Gateway to the San Mateo County***

33 Comprising a large area of land between Rancho Corral de Tierra and Highway 92, this
34 area could contribute substantially to natural resource protection, the regional trails
35 network, and preservation of scenic and rural character.

36

37 **Other Potential Acquisitions**

38 ***Marin County Transportation Hub***

39 The park anticipates requesting the authority to extend the boundary to include a location
40 for a transit hub that would serve the Muir Woods shuttle. The hub would support

1 improved public access to Muir Woods and other nearby recreational areas, and reduce
2 congestion associated with recreational travel to west Marin County. This hub would
3 need to occur somewhere along the developed Highway 1-U.S. 101 transit corridor in
4 southern Marin County.

5 ***Upland Goals Conservation Areas***

6 A science-based approach towards identifying biologically important lands for protection
7 in the San Francisco Bay Area was developed by the Bay Area Open Space Council
8 (Weiss et al. 2008), with participation of NPS staff. The result is a network of
9 conservation areas based on computer models that strives to achieve conservation goals
10 for targeted vegetation types and individual species along with assessments of viability,
11 ecological integrity, and level of connectivity of conservation lands. The model output
12 identifies lands adjacent to the park that would help sustain diverse and healthy
13 communities of plant, fish, and wildlife resources in the nine-county Bay Area. Some of
14 these areas overlap with Priority Conservation Areas identified in the **FOCUS** study.

15 ***Stinson Beach Environs***

16 Currently undeveloped lands located near Panoramic Highway have been identified as
17 essential conservation areas and would help enhance the park's protection of contiguous
18 coastal biological resources.

19 ***Lower Redwood Creek***

20 Lands along the Redwood Creek corridor below its intersection with Highway 1 have
21 been identified as essential conservation areas and would help enhance the park's
22 protection of contiguous stream resources and associated threatened and endangered
23 species.

24 ***Nyhan Creek***

25 Lands along the Nyhan Creek corridor from its headwaters to the bay have been
26 identified as an essential conservation area and would help the park contribute to the
27 protection of contiguous stream resources within the region.

28 ***Mori-Milagra-Sweeney Connector***

29 Currently undeveloped lands in the Pacifica area have been identified as essential
30 conservation areas; their protection would help the park increase the long-term resiliency
31 of small natural areas such as Milagra Ridge as well as secure important habitat corridors
32 to facilitate species and community movements over time and space.

33 ***San Pedro Mountain and Rancho Corral de Tierra Environs, south to Highway 92***

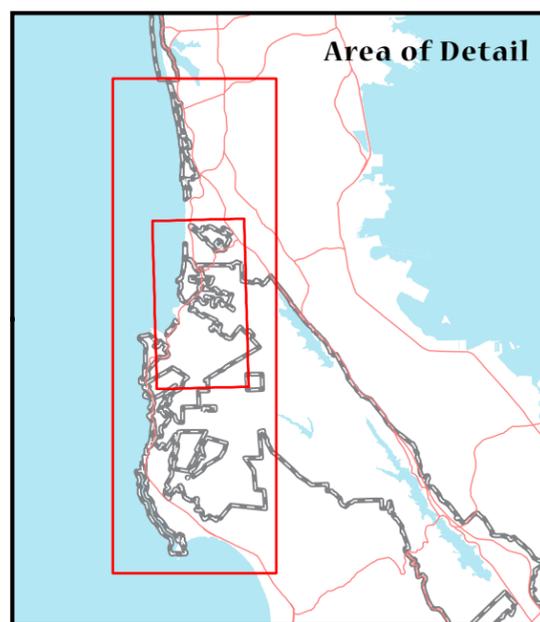
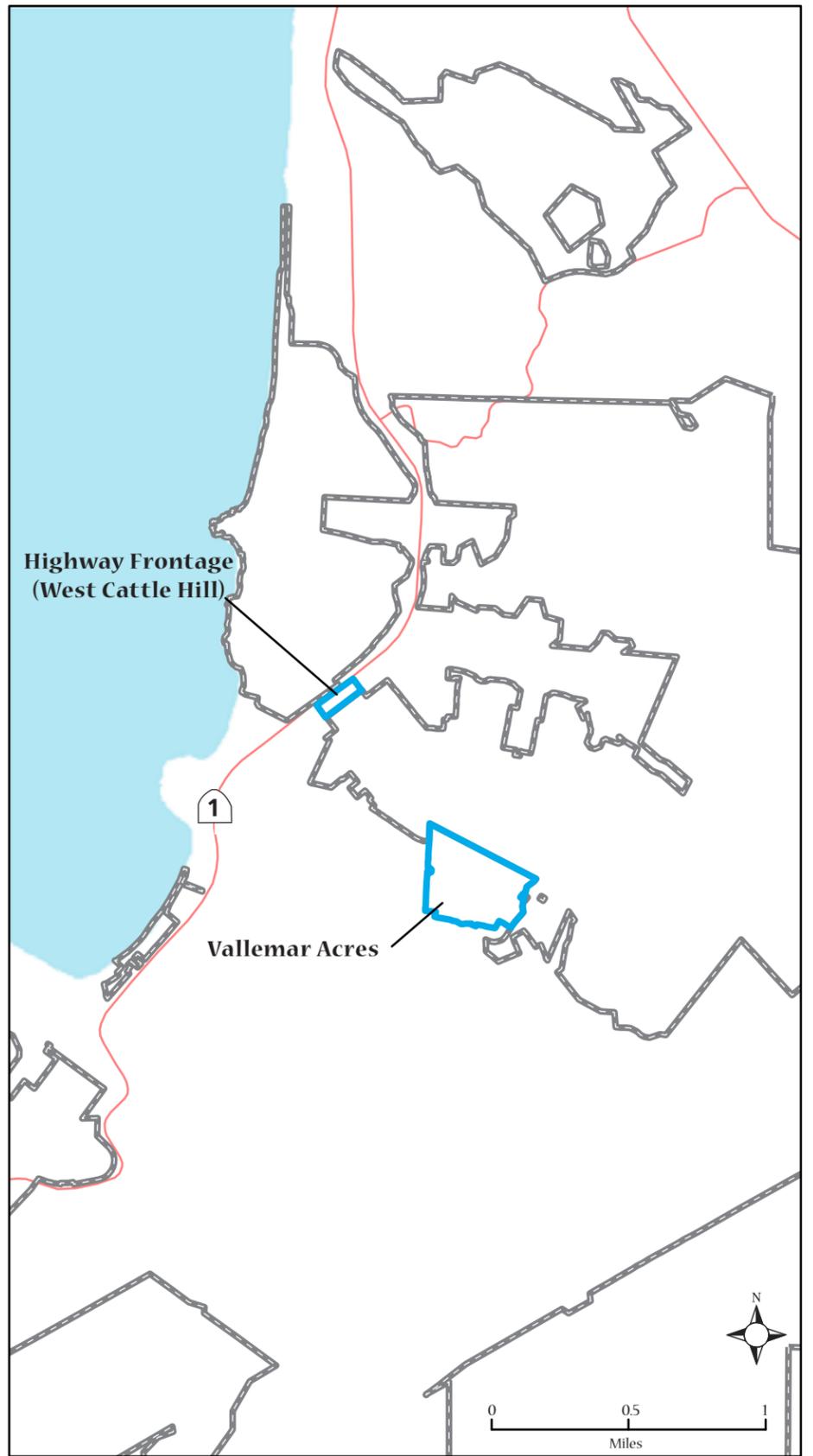
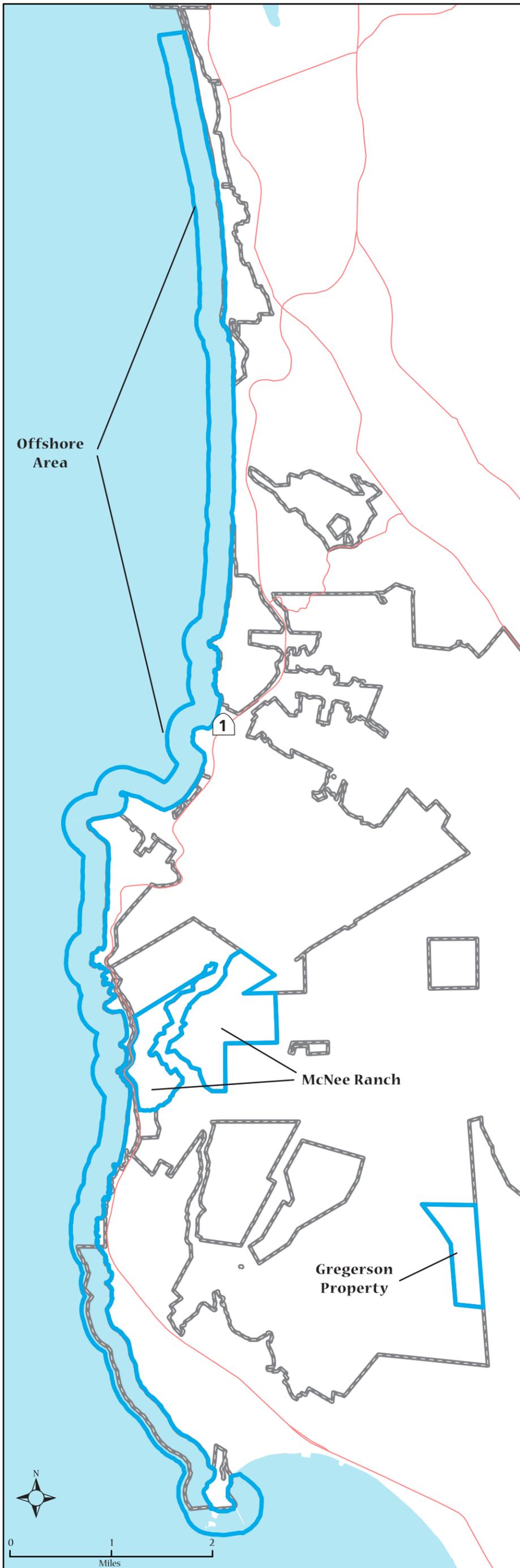
34 Currently undeveloped lands in the Montara, Moss Beach, and Half Moon Bay areas
35 have been identified as essential conservation areas; their protection would help the park
36 increase the core of protected lands along the spine of the San Francisco peninsula.
37 Similar to those in the Pacifica area, these protected areas would provide important
38 habitat corridors to facilitate species and community movements over time and space.

39 ***Undeveloped Land Adjacent to Sweeney Ridge and County of San Francisco Jail Property***

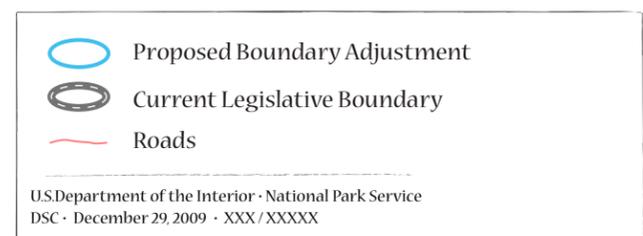
41 The property is adjacent to park land, sharing two sides with Sweeney Ridge. It contains
42 county jails #3 and #7, along with a plant nursery and cultivated fields. A large portion of
43 the 145-acre property, roughly 50 acres, is undeveloped and relatively undisturbed. This

PART 3: ACTIONS COMMON TO ALL ALTERNATIVES

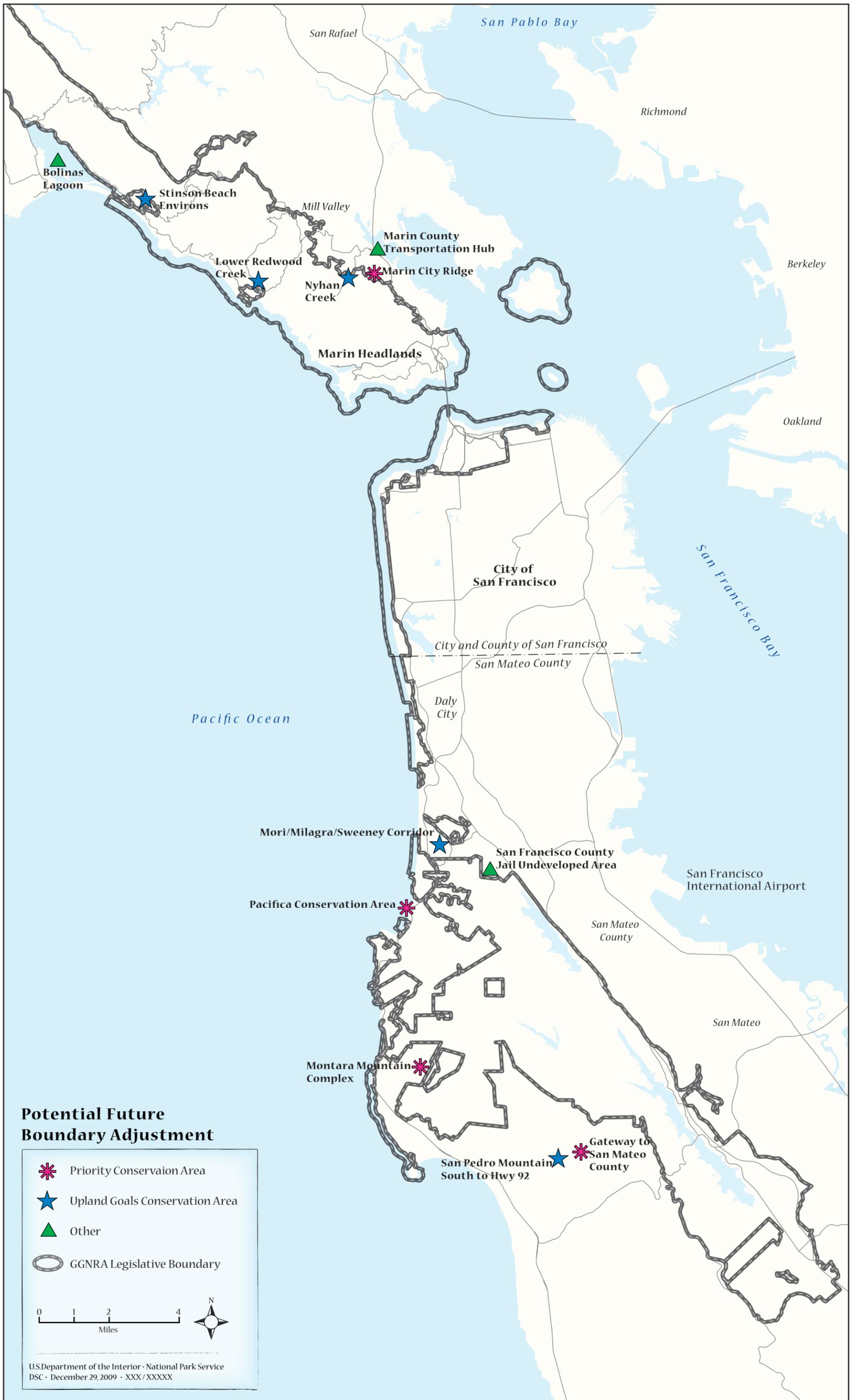
1 undeveloped area is contiguous with the extensive coastal ecosystems that the National
2 Park Service manages on Sweeney Ridge. It has similar scenic qualities and habitat
3 values, including potential habitat for threatened and endangered species. Inclusion of the
4 undeveloped area in the park's boundary would enable the National Park Service to
5 receive it, should the county government declare the property excess.
6
7



Proposed Boundary Adjustments



PART 3: ACTIONS COMMON TO ALL ALTERNATIVES



PART 3: ACTIONS COMMON TO ALL ALTERNATIVES

CLIMATE CHANGE

2

3 The National Park Service has developed goals to guide the way climate change would be
4 addressed. Sustaining and restoring park resources in the face of climate change will
5 require the National Park Service to address many challenges to the integrity of cultural
6 and natural resources. The *General Management Plan* describes the approach that the
7 park would take to reduce emissions, educate visitors on the topic, and adapt to the
8 effects of climate change during the next 20 years. In addition, the park maintains a
9 “Climate Change Action Plan” that outlines the actions that would be taken to
10 accomplish these broad goals.

11

12

13 GOALS

14 1. Reduce CO₂ Emissions

15 Become a carbon neutral park by 2016 by reducing the CO₂ emissions of NPS
16 and partner operations, increasing the use of renewable energy and other
17 sustainable practices, and reducing visitor emissions by lessening dependency on
18 personal automobiles.

19 National parks can demonstrate how to minimize their contribution to global
20 warming through practices such as energy efficiency and use of renewable
21 energy. Because emissions from visitor driving are estimated to contribute to
22 more than 90% of the park’s emissions, the park staff and partners would assist
23 in reducing visitor greenhouse gases by providing opportunities for alternative
24 transportation options.

25

26 2. Educate and Interpret

27 Help park visitors understand the process of global warming, climate change, the
28 threats to the park, and how they can respond. Visitors are inspired to action
29 through leadership and education.

30 Through the efforts of employees, partners, and educational and interpretive
31 media, the park staff can engage visitors on the topic of climate change, provide
32 the latest park research and monitoring data and trends, inform the public about
33 what response is being taken at the park, and inspire visitors to aid in that
34 response.

35

36 3. Assess Impacts and Respond to Changing Conditions

37 Proactively monitor, plan, and adapt to the effects of climate change by using the
38 best information as it becomes available.

1 Climate change is a global phenomenon, outside the control of the National Park
2 Service. The park cannot control the impacts of climate change on the park
3 through its own emissions reductions and education practices. However, the park
4 staff would do our part to improve conditions and demonstrate environmental
5 leadership.

6 NPS staff would use and promote innovation, best practices, and partnerships to
7 respond to the challenges of climate change and its effects on park resources. By
8 using and developing tools and monitoring methods, including seeking outside
9 assistance, the park staff can better respond to climate change. The park staff
10 would interpret climate change science and develop management strategies,
11 which may include predicting and projecting expected changes. The park staff
12 would coordinate with other agencies in developing tools and strategies to help
13 identify and manage climate change impacts. By adopting the best information
14 on climate change as it becomes available, the park staff would be positioned to
15 respond quickly and appropriately to the local effects of climate change.

16 The park staff may choose to use an adaptive management framework to respond
17 to the effects of climate change. Temperature and precipitation changes may
18 require that the park manages for native biodiversity and ecosystem function
19 instead of managing for natural communities. In most cases park managers would
20 allow natural processes to continue unimpeded, except when public health and
21 safety or the park's fundamental resources and values are threatened. Scenario
22 planning would likely play a pivotal role in developing the park's responses to
23 climate change.

24 The park staff would coordinate with neighboring communities while
25 implementing adaptation strategies that support the protection, preservation, and
26 restoration of coastal wetlands and coastal processes, and can serve as vital tools
27 in buffering coastal communities from the effects of climate change and sea level
28 rise.

29

30

31 **MANAGEMENT STRATEGIES**

32 To meet the above goals, a more detailed management approach would be developed.
33 The management approach would be an evolving process. The park staff would utilize
34 local, regional, and larger scale monitoring, modeling and mapping evaluations. Through
35 this data gathering, the park staff would identify and refine the assessment of park lands
36 and resources that are vulnerable to sea-level rise, extreme storms, and associated coastal
37 erosion. Predictions and observations of other climate change effects, including weather,
38 local climatic conditions, and phenology, would be gathered. Based on this information
39 combined with the results of targeted monitoring, park managers could position
40 themselves to respond and adapt according to changing conditions—a sort of early
41 detection system. The following approaches and management actions could be
42 implemented to respond to the effects of climate change on park resources:

43

1 **Natural Resources**

- 2 • Reduce current and future stressors to the resource and the environment; this
3 would improve the condition of the resource and build resiliency in the
4 ecosystem that would help to minimize future adverse effects of climate change.
- 5 • Collect and/or document resources that would be otherwise lost to the effects of
6 the climate change (e.g., fossils, unique geologic resources, unique biological
7 resources).
- 8 • Sustain native biodiversity.
- 9 • Reduce habitat fragmentation and increase habitat connectivity and movement
10 corridors.
- 11 • Restore and enhance habitats.
- 12 • Focus on ecosystem management and natural processes.
- 13 • Restore naturally functioning ecosystems.
- 14 • Manage for biological diversity.
- 15 • Minimize impact of invasive species.
- 16 • Plan for post-disturbance management.
- 17 • Employ adaptive management.
- 18 • Manage for realistic outcomes (triage).

19
20 **Cultural Resources**

- 21 • Reduce current and future stressors to the resource; this would improve the
22 condition of the resource and help to minimize future adverse effects from
23 climate change.
- 24 • Develop triage criteria that would assist the park staff in prioritizing preservation
25 treatments and other management actions. The decision on how to best treat a
26 resource facing potential adverse effects from climate change should be based on
27 (1) significance of the resource, (2) feasibility of the preservation action, (3) cost
28 of the treatment/action, and (4) confidence in the data used to determine potential
29 effects of sea-level rise or climate change on the resource.
- 30 • Give highest priority to preserving cultural resources and artifacts in situ, coupled
31 with sustainable efforts (intervention techniques) to mitigate and reduce any
32 stressors that might adversely affect the resource.
- 33 • Pursue managed retreat when the results of the triage process indicate that
34 preservation treatment or relocation is not practical.
- 35 • Pursue recordation and relocation of the resources with high significance and
36 technically and economically feasible treatment and relocation options, and
37 where there is high confidence in the predicted effects of sea-level rise or other
38 climate change impacts.

39
40

1 **Visitor Experience**

- 2 • Continue to provide a range of experiences by transitioning recreational use away
3 from locations where changes in resource conditions no longer support such uses.
- 4 • Remove existing visitor facilities and discontinue recreational uses where
5 continued use is unsafe, infeasible, or undesirable due to changing environmental
6 conditions.
- 7 • Evaluate and support changing visitor use patterns as appropriate.
- 8

FACILITIES NOT DIRECTLY RELATED TO THE PARK MISSION

3

4 Maintaining park facilities in acceptable condition is a continuing challenge that requires
5 a multitude of management strategies. The park manages 1,150 assets without the
6 funding required to do so adequately. Some of the facilities do not meet the needs of the
7 park and its partners, and therefore are unused and deteriorating.

8 The total assets of the park requires \$24.6 million in annual operations and maintenance;
9 yet, typically, only \$5.3 million has been allocated towards that need. This leaves a gap
10 of nearly \$20 million of maintenance need unfunded each year. Related to the inability to
11 fund all maintenance needs is the \$198.1 million in deferred maintenance backlog related
12 to park and partner assets. The \$6.0 million typically allocated from special project
13 funding each year for this need does not adequately reduce the deferred maintenance
14 backlog.

15 This general management plan proposes to remove assets that are in poor condition and
16 are not contributing to the preservation of natural or cultural resources or supporting the
17 visitor experience. Disposal of unneeded assets would allow funding and staff resources
18 to be redistributed to higher value assets.

19 While building the GMP alternatives, the planning team identified facilities that did not
20 contribute to the park mission. Further evaluation with an interdisciplinary team led to the
21 identification of assets proposed for removal and the development of the following
22 strategies. Before any facility would be scheduled for removal, appropriate National
23 Environmental Policy Act and National Historic Preservation Act determinations would
24 be completed.

25 The management team will continue to monitor and identify facilities not needed for
26 implementation of the selected alternative in an effort to bring assets to acceptable
27 conditions and to sustain those conditions over time.

28

29

GOALS

- 31 • Address the gap between maintenance funding and maintenance needs through
32 reducing the number of park assets that require ongoing maintenance
- 33 • Continue to address deferred maintenance by reducing the number of park assets
- 34 • Support asset management strategies identified in the park asset management
35 plan
- 36 • Enhance the preservation of natural and cultural resources, support the visitor
37 experience, and support park and partner operational needs through asset removal

38

39

1 **MANAGEMENT STRATEGIES**

2 1. Muir Woods National Monument Maintenance Facilities

3 The park staff has identified inefficient and deteriorating structures to be
4 removed from the monument. Removal would allow for further natural resource
5 restoration and a reduced development footprint consistent with the action
6 alternatives. Through these actions, there is potential for deferred maintenance
7 reductions of \$40,000.

8

9 2. Camino del Canyon and Conlon Avenue Structures

10 The park staff has proposed removal of deteriorating structures that do not
11 significantly contribute to cultural resource preservation. Removal would be in
12 concert with natural resource restoration objectives, including habitat restoration,
13 and restoration of the natural functioning of the tributary creek. Through this
14 action, there is potential for deferred maintenance reductions of \$210,000.

15

16 3. Lower Redwood Creek and Tennessee Valley Structures

17 Facilities that do not support the park mission and some that are in deteriorated
18 condition were identified for removal. Removal of these structures would allow
19 for extensive natural resource restoration, including a return of natural watershed
20 processes, preservation of outstanding natural features, and protection of
21 threatened and endangered species like the Coho salmon and red legged frog.
22 Riparian areas adjacent to Tennessee Valley would also be enhanced through
23 facility removal. Through this action, there is potential for deferred maintenance
24 reductions of \$600,000.

25

26 4. Structures in Marin County park lands, including Capehart housing

27 Housing and associated sheds and outbuildings north of Bunker Road were
28 identified for removal to improve the scenic entrance to the Rodeo Valley. Other
29 structures were identified for removal in support of the cultural landscape and for
30 habitat restoration. Through this action, there is potential for deferred
31 maintenance reductions of \$670,000.

32

MAINTENANCE, PUBLIC SAFETY, AND MUSEUM STORAGE FACILITIES

3

4 Park maintenance, public safety, and museum collections storage functions are scattered
5 throughout the park at sites and facilities that in many cases were not intended for these
6 uses. These functions have had to adapt to conditions that do not adequately meet their
7 space, size, function, mobility, and security requirements. Maintenance and public safety
8 operations have also had to move numerous times, requiring them to reprogram their
9 operations each time, resulting in many inefficiencies. Locating the park's museum
10 collection in multiple storage facilities jeopardizes long-term preservation and restricts
11 the collection's availability for research, education, and interpretive programming, thus
12 limiting its usefulness to the public and park personnel.

13 The following section proposes a comprehensive approach to building and facility uses
14 necessary to meet the existing and projected needs of these operational functions in
15 conjunction with all draft alternatives. The actions proposed are based on a thorough
16 analysis of park programs and facilities, including the possibilities for locating functions
17 outside park boundaries. The park has other operational facilities such as staff offices,
18 housing, native plant nurseries, and horse patrol facilities. The locations of these facilities
19 vary among the alternatives and are addressed in the description of the alternatives.

20

21

GOALS

23 The large scale of the park, with sites distributed across three counties, poses a distinct
24 challenge to providing facilities for maintenance and public safety operations. Over the
25 years, a system organized around centralized facilities supported by smaller satellite sites
26 has been an effective and successful means to manage the park. It is proposed to continue
27 this organizational concept, but to more permanently establish the locations of the
28 centralized facilities. This will allow the park to gain efficiencies through consolidation
29 of some functions in central facilities and still retain the flexibility to meet dispersed
30 maintenance and safety needs through the satellite offices.

31

32

MANAGEMENT STRATEGIES

Centralized Maintenance Facilities

35 Three new maintenance facilities would be established in the park. North of the Golden
36 Gate Bridge, a new centralized facility would be constructed in part of the Capehart
37 housing area of the Marin Headlands. This new facility, about 45,000 square feet in size,
38 would be a state-of-the-art, environmentally sustainable complex that would
39 accommodate the park's Buildings and Utilities, Roads, and Marin Grounds functions.
40 The project would include the demolition of selected housing units and new construction

1 of shops, offices, covered storage, parking, and work yards. Maintenance operations
2 presently located in Fort Baker (Building 513) and Fort Cronkhite (Buildings 1046, 1070,
3 Nike missile launch site) would be relocated to this new facility.

4 South of the Golden Gate Bridge, the National Park Service would rehabilitate one of the
5 buildings in the Presidio that formerly served as stables for the U.S. Cavalry to house the
6 centralized maintenance functions for Area A, the part of the Presidio for which the Park
7 Service is responsible. Reuse of the cavalry stables building would be contingent upon an
8 agreement between the National Park Service and the Presidio Trust. Existing NPS
9 maintenance operations currently spread among several Presidio buildings would be
10 consolidated at the former stables site.

11 At Muir Woods National Monument, essential public safety and maintenance functions
12 would continue to be located near the monument entrance. These functions could remain
13 in existing structures or be incorporated into the new welcome center. However, the other
14 maintenance operations would move from the Old Inn and lower Conlon Avenue areas to
15 a new facility shared with California State Parks in Kent Canyon. This action is
16 dependent upon an interagency agreement with California State Parks.

17

18 **Public Safety Hub**

19 A single centralized operational hub would be developed at Fort Baker to meet park law
20 enforcement needs. These functions would be located in Building 507. Park wildland fire
21 functions (offices, garaged vehicles, and fire caches) would be relocated from Fort
22 Cronkhite Buildings 1068 and 1069. These functions would move to the former Nike
23 missile launch site near the Marine Mammal Center that would be vacated by the current
24 Roads operation. The historic fire station would remain at Fort Cronkhite. Dispatch and
25 communications operations that serve the park and the Presidio would remain at Presidio
26 Building 35 in the Main Post area.

27

28 **Satellite Offices**

29 A well distributed system of park operations satellite offices already exists in Marin
30 County and San Francisco County park lands. These sites would need minor
31 improvements to function more efficiently. Satellites would be extended into San Mateo
32 County by adapting existing park sites for these uses, or through partnerships with other
33 agencies. Typically, each satellite site may have the capacity to collocate functions from
34 several different divisions. The following is a list of satellite locations:

- 35 • Stinson Beach – No change is anticipated to the scale of the office, which serves
36 both maintenance and public safety functions.
- 37 • Marin Headlands – Law enforcement would continue to have access to offices
38 used by the wildland fire program in Fort Cronkhite .
- 39 • Presidio of San Francisco – Public safety would continue to have access to
40 offices by the U.S. Park Police.
- 41 • Alcatraz Island – Public safety offices would remain in Building 64, and
42 maintenance facilities would be expanded in the rehabilitated Quartermaster
43 Warehouse.

- 1 • Fort Mason – Maintenance and public safety would continue to have
2 administrative offices at park headquarters in Fort Mason. Grounds maintenance
3 facilities would remain.
- 4 • Fort Miley –Maintenance and public safety facilities would continue at East Fort
5 Miley.
- 6 • Fort Funston –The existing public safety and maintenance offices would remain. A
7 small building for heavy equipment would be constructed.
- 8 • San Mateo County north of Devil’s Slide –Maintenance and public safety offices
9 could be located at the current Sheldance nursery area or at San Pedro County
10 Park in Pacifica.
- 11 • San Mateo County south of Devil’s Slide– A new satellite office for maintenance
12 and public safety offices would be developed at a location yet to be determined.

13

14

15 **GOALS FOR MUSEUM STORAGE FACILITIES**

16 The park’s museum collection would be consolidated into two neighboring buildings in
17 the Presidio that formerly served as stables for the U.S. Cavalry. The buildings would
18 provide adequate space for the collection, and their rehabilitation would meet national
19 standards for security, fire protection, and environmental control. This facility would also
20 provide public space for exhibits and programs that engage visitors in memorable and
21 meaningful learning opportunities based on the collection. This action is dependent upon
22 an interagency agreement with The Presidio Trust.

23

24

NATIVE AMERICAN ENGAGEMENT

2

3 Since the late 1990s, the NPS staff has worked with the Federated Indians of Graton
4 Rancheria (the federally recognized tribe comprised of park-associated Coast Miwoks
5 and Southern Pomo), with the many Ohlone tribes seeking federal recognition, and with
6 Ohlone individuals who partake in the stewardship of Ohlone heritage. Park lands in
7 Marin County are the aboriginal homelands of Coast Miwoks. Park lands in San
8 Francisco and San Mateo counties are the aboriginal homelands of Ohlones. The park
9 staff would continue to work with Coast Miwoks and Ohlones in the three broad activity
10 areas in which it has worked with them to date: cultural resource management,
11 interpretation and education, and revitalization of community and tradition.

12

13

14 GOALS

15 1. Survey, Identify, and Inventory Archeological and Ethnographic Sites

16 The park staff, together with tribal representatives, would continue to conduct
17 fieldwork to survey, identify, and inventory archeological and ethnographic sites, as
18 well as test, record, and preserve these sites.

19 American Indians are permitted by law, regulation, or policy to pursue customary
20 religious, subsistence, and other cultural uses of resources with which they are
21 traditionally associated. Recognizing that its resource protection mandate affects this
22 human use and cultural context of park resources, the National Park Service would
23 plan and execute programs in ways that safeguard cultural and natural resources
24 while reflecting informed concern for the contemporary peoples and cultures
25 traditionally associated with them.

26

27 2. Work with Park-Associated Native People on a Range of Interpretive and 28 Educational Activities

29 The park would continue to work with park-associated native people on a range of
30 interpretive and educational activities. These activities could include Indian-led
31 interpretive programs offered throughout the park, permanent and temporary exhibits
32 on native history and culture, annual commemorative festivals with native
33 components, teacher trainings on Native American curricula, and participation of
34 native people on visitor center advisory boards.

35

36 3. Continue to support the Revitalization of Coast Miwok and Ohlone Communities and 37 Traditions

38 The park would continue to support the revitalization of Coast Miwok and Ohlone
39 communities and traditions. Native people would continue to conduct religious
40 activities in the park, gather natural materials for use in traditional crafts, participate

1 in the study of native histories and genealogies, and work with the park staff on
2 ethnographic landscape restoration efforts.

3

4

5 **MANAGEMENT STRATEGIES**

6 To provide direction for these activities, the National Park Service would work to
7 establish and implement a set of protocols that would institutionalize the way that park
8 staff engages Native Americans in the park. Each protocol agreement would be tailored
9 to the specific type of relationship that the National Park Service and the tribe have
10 developed or are in the process of developing. Protocols and agreements could be
11 developed that may include the following elements or stipulations:

- 12 1. government-to-government relationship with the tribe by first contacting or
13 notifying the tribal chair when issues arise
- 14 2. contacts by the park superintendent (or designated staff) with specific tribal
15 representatives or tribal council office(s) designated by the tribal council or tribal
16 chairperson to deal with specific park proposals (or issues) that may arise (The
17 agreement should include a list of the types of proposed NPS activities for which
18 the tribe would like to be contacted.)
- 19 3. routine notification of appropriate tribal officials (designated by the tribal council
20 or tribal chairperson) by the park regarding park planning, project development,
21 or environmental impact assessments (Appropriate methods for this preliminary
22 notification should be summarized in the agreement—e.g., letter, telephone
23 contact, meeting with tribal chair, cultural committee, tribal council.)
- 24 4. meetings between park management and the tribe on a periodic basis to review
25 upcoming park plans or projects that may impact American Indian resources in or
26 near the park (e.g., once a year, once every six months)
- 27 5. exchange of information and research results, and technical assistance between
28 the National Park Service and the tribe
- 29 6. timeframe for responding to oral and written communications
- 30 7. steps for resolving disputes (e.g., alternative dispute resolution processes, third
31 party mediation, or mediation by the NPS regional director or Native American
32 Affairs Office director)
- 33 8. process for amending or modifying the agreement
- 34 9. time period in which the agreement would remain in effect
- 35 10. process for ending or canceling the agreement

36

OCEAN STEWARDSHIP

2

3 This section of the general management plan articulates an ocean stewardship policy that
4 is based on and intended to support the Pacific West Region's strategic plan. The
5 strategies and objectives included below are targeted at addressing the unique needs of
6 Golden Gate National Recreation Area's ocean resources. The park would develop an
7 implementation plan that would contain specific actions intended to achieve the measures
8 included below.

9 With its boundary extending a quarter of a mile offshore, Golden Gate National
10 Recreation Area manages miles of coastline and the associated marine and estuarine
11 resources inside San Francisco Bay and along the outer coast. The park holds a lease
12 from the State Lands Commission for management of tidelands and submerged lands
13 within the park boundary to 1000 feet offshore. In certain areas, the park shares
14 overlapping management authority with the Gulf of the Farallones and Monterey Bay
15 National Marine Sanctuaries (NMS).

16 Ocean resources, including natural marine resources and submerged cultural resources,
17 are at risk due to a variety of threats. Climate change will cause sea level rise, changing
18 storm patterns, and ocean acidification. Natural sediment transport, which affects
19 shoreline and beach dynamics, is affected by sand mining, dredging, dredge disposal,
20 shoreline stabilization structures, and altered flow regimes such as dams. Overflights,
21 boats, and other uses of marine habitats cause disturbance to marine species. Invasive
22 exotic species inhabit the park's ocean and estuarine waters, displacing native species.
23 Recreational and commercial fisheries may impact nearshore fish populations and
24 ecosystem dynamics. Water quality is threatened by pollution from runoff, landslides,
25 shoreline development, sewage outfalls, vessel traffic, oil spills, and contaminants
26 exposed from dredging. Potential wave and tidal energy developments may alter habitat
27 and disrupt physical processes.

28 Effective management of the park's natural and cultural ocean resources requires a
29 strategic approach. In 2006, the National Park Service developed an Ocean Park
30 Stewardship Action Plan (NPS 2006) to respond to the issues and threats described
31 above. The next year, in 2007, the Pacific West and Alaska Regions of the National Park
32 Service developed a strategic plan for Pacific Ocean parks (NPS 2007), which provided
33 guidance and implementation details for achieving the goals of the Servicewide plan.

34

35

36 GOALS AND MANAGEMENT STRATEGIES

37 In order to be an effective steward of the park's natural and cultural ocean resources, park
38 staff must research, monitor, and protect these resources, expand current and explore new
39 partnerships with other agencies and organizations, and communicate an ocean
40 stewardship message to visitors, park managers, and the public. To accomplish this, park
41 staff must develop a plan and then pursue funding and leverage partnerships.

1 **Goal 1. Support a Seamless Network of Ocean Parks, Sanctuaries, Refuges, and**
2 **Reserves**

3 In order to effectively and efficiently manage the park's ocean resources, park staff must
4 work with other agencies that have shared goals and objectives for marine resource
5 protection. This local network currently includes Gulf of the Farallones National Marine
6 Sanctuary, Monterey Bay National Marine Sanctuary, Cordell Bank National Marine
7 Sanctuary, Point Reyes National Seashore, Farallon National Wildlife Refuge, Bolinas
8 Lagoon Open Space Preserve, James V. Fitzgerald Marine Reserve, and portions of
9 California Coastal National Monument.

10 Strategy 1.1. To ensure that the network is seamless in practice, park staff will work
11 to expand current collaboration and strengthen communication with federal, state,
12 and local agencies with overlapping and adjacent jurisdiction and with
13 nongovernment organizations for management of ocean resources.

14

15 **Goal 2. Inventory, Map, and Protect Ocean Parks**

16 In collaboration with other agencies and organizations managing ocean resources, park
17 staff will further develop their understanding of the park's natural and cultural ocean
18 resources.

19 Strategy 2.1. Through collaboration with other agencies and organizations, the park
20 will continue to conduct and support regional baseline inventories, monitoring, and
21 mapping of marine and estuarine resources.

22 Strategy 2.2. Park staff will identify and quantify threats to marine resources,
23 including those associated with climate change and land- and water-based activities.

24 Strategy 2.3. Through the establishment of sensitive resource zones and special
25 closure areas, the park will protect the most sensitive biological resources from
26 disturbance.

27 Strategy 2.4. Park staff will engage in restoration of estuarine and coastal wetland
28 habitats and will assess new restoration opportunities in response to changes from
29 climate change.

30 Strategy 2.5. Park staff will continue to work with the State Lands Commission to
31 obtain additional state lease of all tidelands and submerged lands within the park's
32 legislated boundary.

33 Strategy 2.6. Park staff will pursue the necessary authorization to correct coastal
34 boundary deficiencies with respect to mean high tide line.

35 Strategy 2.7. Park staff will increase public awareness of park jurisdiction by
36 working with the National Oceanic and Atmospheric Administration (NOAA) and
37 the Federal Aviation Administration to include park boundaries and special closure
38 areas on nautical and aviation charts.

39 Strategy 2.8. Park staff will work proactively with NOAA, the Minerals
40 Management Service, and the Federal Energy Regulatory Commission, and other
41 agencies where appropriate, in addressing planning efforts as they relate to
42 renewable ocean energy.

1 Strategy 2.9. Park staff will work with local, regional, and state agencies to reduce
2 point and nonpoint pollution sources within and adjacent to the park and improve
3 water quality in the marine and estuarine waters by implementing best management
4 practices.

5 Strategy 2.10. Park staff will work with the State Lands Commission, NOAA, and
6 other agencies to identify and formally assess the condition and value of submerged
7 shipwrecks and other submerged archaeological resources, and strategize for their
8 protection, treatment, and interpretation.

9

10 ***Goal 3. Engage Visitors and the Public in Ocean Park Stewardship***

11 Given the park's location and its millions of visitors each year, the park affords
12 outstanding opportunities to educate the public about threats to ocean resources.
13 Communication of scientific findings and outreach through education and stewardship
14 programs are needed to elevate awareness of ocean issues, protect resources, and actively
15 engage visitors and the public in ocean stewardship.

16 Strategy 3.1. Through collaboration with park partners, park staff will work to
17 improve public understanding of the park as an ocean park through expanded
18 interpretation and outreach through media and new technologies.

19 Strategy 3.2. Park staff will collaborate with the NPS Pacific Coast Science and
20 Learning Center to expand communication of ocean science and research to park
21 staff, visitors and the general public.

22 Strategy 3.3. Park staff will continue to engage students and visitors in ocean
23 stewardship through the Crissy Field Center, park partners, and other organizations
24 through educational programs.

25 Strategy 3.4. Park staff will support the Bay Water Trail as a form of sustainable
26 recreation and collaborate with other organizations to outreach to trail users to
27 ensure protection of marine and estuarine resources.

28

29 ***Goal 4. Increase Technical Capacity for Ocean Exploration and Stewardship***

30 By drawing on the resources and expertise of other agencies and organizations, the park
31 will leverage partnerships and increase its technical capacity to protect natural and
32 cultural ocean resources.

33 Strategy 4.1. Through joint research programs with other agencies and
34 organizations, park staff will facilitate research that improves our understanding of
35 ocean resources.

36 Strategy 4.2. Park staff will partner with regional agencies on research and modeling
37 of, and management response to, sediment dynamics and other coastal and ocean
38 processes within the San Francisco littoral cell.

39 Strategy 4.3. Park staff will actively support ocean stewardship programs of park
40 partners, such as California Seabird Protection Network, Gulf of the Farallones

1 National Marine Sanctuary Beach Watch program, and Point Reyes Bird
2 Observatory (PRBO) Conservation Science's Alcatraz Island seabird program.
3 Strategy 4.4. Park staff will continue to partner with regional, state, and federal
4 agencies to monitor and model sea level rise and other local effects of climate
5 change and assess affects on ocean and coastal resources.
6 Strategy 4.5. Park staff will partner with local and regional scientific and political
7 entities to develop protection, mitigation, adaptation and restoration strategies and
8 provide guidance on management of park resources that may be affected by climate
9 change, including inundation and accelerated coastal erosion associated with sea
10 level rise, increased storm wave energy and altered flow regimes.
11

PARK COLLECTIONS

2

3 The park collections represent the fourth largest in the national park system, reflecting
4 more than 200 years of the area’s history. The park’s legacy is reflected through artifacts
5 relating to Native American culture, the evolution of military history from Spanish
6 Colonial times to the coastal defense and cold war periods, the advances of maritime
7 history and westward expansion, and the park’s relationship with the surrounding San
8 Francisco Bay Area communities. Highlighting this rich chronicle of history are
9 significant collections from Alcatraz Island, the U.S. Army and Nike Missile Site;
10 archeological remains from every episode of the park’s history; and archival photographs,
11 oral histories, architectural drawings, and documents. The park’s natural specimen
12 collections reflect the unique geological features and fragile biodiversity of the central
13 Californian coastal ecosystems.

14 To convey the diversity and scope of the collections and their representation of the park’s
15 cultural and natural resource heritage, these policies allow the collections to be better
16 understood through continued access, study, interpretation, and education, while ensuring
17 their preservation.

18 The goals described below broaden the scope of collection management for long-term
19 preservation and for the use of the collections in interpretive and educational programs.

20

21

22 GOALS AND MANAGEMENT STRATEGIES

23 1. Connect People with the Park’s Collections

- 24 • Develop a park collection program that engages the visitor in memorable and
25 meaningful learning opportunities, broadens public access, and creates a
26 sense of place within historic sites.
- 27 • Create opportunities for individuals to participate in the stewardship of the
28 park collections so that visitors connect with, learn about, and enjoy this park
29 resource.
- 30 • Conduct oral histories that capture the stories associated with the park’s
31 resources and primary interpretive themes. Preserve the oral histories and
32 make them accessible to staff, visitors, researchers, and scholars.
- 33 • Develop a research and scholar’s program that expands our knowledge and
34 understanding of the park collections. Using evolving technologies, develop
35 partnerships with and links to local and national organizations to place the
36 collections in a broader historical and scientific context.
- 37 • Provide outreach opportunities to a wider community and national audiences
38 through virtual technologies and traveling exhibits. These technologies and
39 exhibits would inform and orient visitors, increase understanding and
40 appreciation of park resources, and improve public use and accessibility of
41 the park collections.

- 1 2. Strengthen the Collection Policy
- 2 • Strengthen the park collections’ comprehensiveness and representation of the
- 3 park’s significance and varied resources through the targeted collection of
- 4 materials that are missing or misrepresented in the collections.
- 5 • Establish a set of protocols with the repositories that maintain the park’s
- 6 natural history specimen collections that allows access for park staff, visitors,
- 7 researchers, and scholars. Define parkwide policies for future collection and
- 8 storage of the park’s natural history specimens.
- 9
- 10 3. Preserve and Maintain the Collections
- 11 • Provide facilities and implement programs that ensure the long-term
- 12 preservation of the collections through regular maintenance and preventive
- 13 conservation.
- 14 • Evaluate and catalog the entire collection to ensure that materials are
- 15 accessible and relevant to the park’s purpose and significance.
- 16 • Establish a curatorial and research facility that allows for consolidation of the
- 17 park collections while meeting the national standards for security, fire
- 18 protection, and environmental control. Provide public space for research and
- 19 changing exhibits in this facility.
- 20
- 21

PARTNERSHIPS

2

3 When people engage with the park through participation in a park or park partner
4 program, they make an emotional connection to the park. This connection often creates
5 an appreciation and support for the national park and its resources. Golden Gate National
6 Recreation Area has effectively created and maintained partnerships that have increased
7 the number and diversity of channels through which the community and visitors can
8 engage with the park, thus extending the opportunity of engagement to more people, in
9 more ways. These opportunities not only strengthen ties to Golden Gate National
10 Recreation Area, they help to strengthen Americans' ties to their national park system.

11 The entire organization at Golden Gate National Recreation Area works to facilitate and
12 maintain partnership opportunities by incorporating partnership development into every
13 aspect of the organization. This includes specifically recruiting and training for partnering
14 skills, organizing park staff in a way that facilitates partnerships, and actively seeking
15 partners in the search for solutions to park management issues. Park managers are
16 constantly evolving the partnership concept and exploring partnership practices from
17 around the globe to gather innovative partnership ideas and best practices. The park
18 aspires to continue its role as a learning laboratory in developing powerful and successful
19 partnerships in a national park. The park staff will continue its focus on partnership
20 development using the following goals.

21

22 1. Be Proactive in Identifying Partnership Opportunities

23 A partnership solution will be actively considered when tackling park management
24 issues. The decision to establish a specific partnership is guided by a need that ties to
25 and supports the park's purpose and significance, and which is best fulfilled or
26 strengthened with a park partner. First, define the management issue and objectives;
27 second, ask if a partner may be able to assist in meeting those objectives, or if
28 working with a partner may improve park management's capabilities, the process, or
29 level of community engagement. Then seek out the partner or partners who might be
30 the most qualified and capable of meeting the objectives.

31

32 2. Develop Win-Win Partnerships

33 Each partner needs to see their contribution alongside the benefit gained. Selecting
34 and maintaining a partner requires a clear understanding of the mutual benefits. It is
35 important to tie the partnership and its outcomes to the missions of each partner.
36 Sharing resources, benefits, and recognition of successes keeps the partnership from
37 becoming lopsided or dominated by any one player.

38

39 3. Be Innovative in Crafting Partnerships

40 Partnerships may often be limited in vision, or significantly constrained by a risk-
41 adverse perspective or a need to control outcomes. Golden Gate National Recreation

- 1 Area managers commit to a broad partnership vision that includes a capability to take
2 reasonable risk in partnerships within the parameters of policy and a willingness to
3 share control in enacting the vision for its park lands.
4
- 5 4. Share the Vision
- 6 The partners collaborate in developing and refining a shared vision of the need that is
7 to be fulfilled and the work that is to be accomplished through the partnership. The
8 shared vision is reflected both in the broad body of work and in each project or
9 initiative that is undertaken. Each partnership will require a culture of full
10 engagement from the very beginning that leads to collective enthusiasm and clear
11 results.
12
- 13 5. Maintain Clear Expectations
- 14 Partnerships will require formal written agreements and work plans that define
15 mutual interests and expectations, the roles and responsibilities of each partner, and
16 clear accountability for the work to be performed. The staff of each partner
17 organization needs to truly understand and embrace the mission and role of each
18 partner and their contribution to stewardship of park resources and visitor
19 opportunities. Good park partnerships represent a delicate balance between
20 maintaining one’s own identity and adding value to a collective effort of park
21 stewardship.
22
- 23 6. Commit to Actively Managing Partnerships
- 24 All partners will invest time and resources in revisiting the partnership as needed to
25 ensure it is on track and meeting the objectives. If a partnership is underperforming
26 or not performing, Golden Gate National Recreation Area managers will
27 reinvigorate, restructure, or end the partnership—redirecting the resources to a more
28 successful or new partner.
29
30

REDWOOD CREEK VISION

2 Successful management of the Redwood Creek watershed requires a coordinated effort
3 among the watershed’s public and private landowners and resource managers. A vision
4 for the Redwood Creek watershed was crafted through an extensive public planning
5 process in 2003. This vision provides a foundation for land managers (including
6 managers of Golden Gate National Recreation Area), residents, and businesses to manage
7 the watershed for its ecosystem function, recreational opportunities, educational
8 opportunities, cultural and agricultural resources, and rural character.

9 The vision for the future of the Redwood Creek watershed as an intact natural ecosystem
10 offers opportunities for people to learn about, experience, and protect a blend of nature,
11 rural character, and cultural history in an urbanized area. This vision is stated as a set of
12 guiding principles for managing the watershed and desired future conditions for the
13 watershed’s natural and cultural resources; resident and visitor communities; and local
14 infrastructure, facilities, and emergency services.

15 These desired future conditions are “what” statements, describing goals for resource
16 conditions and human experience for the watershed’s future. They do not prescribe how
17 to attain these conditions. Determining how best to meet these conditions and where they
18 should apply in the watershed would be accomplished in future planning, either on a
19 watershed-wide basis or for individual projects or jurisdictions within the watershed.

20

21

22 GUIDING PRINCIPLES

- 23 1. Land management agencies, local communities, and the public work together to build
24 support for and implement the watershed vision.
- 25 2. The watershed is managed as a model of the interdependency of all resources and
26 beings, acknowledging the presence and activities of people historically and
27 currently.
- 28 3. The natural beauty and rustic character of the landscape is maintained.
- 29 4. Sustainable land management and resource use practices are used to ensure natural
30 and cultural resource protection, resident quality of life, and quality of visitor
31 experience.
- 32 5. An adaptive, scientifically based approach provides the foundation for informed
33 resource decision making and management of the watershed’s resources, and
34 scientific research in the watershed is encouraged and supported.
- 35 6. Education is provided as a foundation for future watershed protection and
36 stewardship.
- 37 7. Opportunities for interactions with the natural and cultural environment are fostered.
- 38 8. People are active stewards of the watershed, and land management agencies provide
39 an example for and promote stewardship of the watershed’s resources by watershed
40 residents and visitors.

1 **DESIRED FUTURE CONDITIONS: NATURAL RESOURCES**

- 2 1. The watershed is managed as an intact, continuous, and linked system from the ridge
3 tops to the ocean, with all parts contributing to the health of the whole.
- 4 2. Ecosystem management in the watershed is founded on the restoration and protection
5 of natural processes and disturbance regimes, such as fire and flooding.
- 6 3. Native plant communities are healthy and comprise a mosaic of diverse cover types,
7 including native grasslands, chaparral, riparian woodland, hardwood and redwood
8 forests, and wetlands.
- 9 4. Restoration and protection of a full range of natural geomorphic and hydraulic
10 functions (such as sediment transport, channel migration, and recruitment of large
11 wood) in Redwood Creek from its headwaters to the Pacific Ocean support complex
12 instream and floodplain structure that, in turn, supports a diverse community of
13 native aquatic and riparian-dependent species.
- 14 5. Aquatic ecosystem health is not impaired by water diversion or water quality
15 degradation.
- 16 6. Invasion by and the adverse effects of nonnative plant and animal species on the
17 ecosystem are reduced or reversed, and imperiled habitats are restored.
- 18 7. Special status and locally rare plant and animal species are protected and, where
19 appropriate, their populations are expanded.
- 20 8. Human-caused erosion on watershed lands does not impact fish and aquatic habitat.
- 21 9. Native wildlife populations are viable and diverse, and key habitats and habitat links
22 (i.e., corridors) are protected and restored.
- 23 10. Potential negative impacts of surrounding land uses are minimized.

24
25

26 **DESIRED FUTURE CONDITIONS: CULTURAL RESOURCES**

- 27 1. Residents and visitors are connected to the human history of the Redwood Creek
28 watershed—its heritage as the ancestral homeland of the Coast Miwok, its role in
29 agriculture in western Marin County, and its place in the history of recreation and the
30 environmental conservation movement—through the preservation and interpretation
31 of historically significant properties embodying this history.
- 32 2. Archeological sites in the watershed are identified, preserved, and interpreted.
- 33 3. The Coast Miwok heritage in the watershed is maintained and enhanced through
34 cooperation with the Federated Indians of the Graton Rancheria, the descendent of
35 the Coast Miwok inhabitants of the watershed.
- 36 4. The public agency landowners in the watershed work cooperatively to identify,
37 preserve, and interpret archeological sites, artifacts, structures, and cultural
38 landscapes of historic significance on public lands in the watershed.
- 39 5. Historically significant structures are preserved, rehabilitated, and reused, where
40 opportunity allows and as appropriate.

1 **DESIRED FUTURE CONDITIONS: VISITOR EXPERIENCE**

- 2 1. Visitor experiences that are unique to this watershed are encouraged.
- 3 2. The watershed provides a range of visitor experiences, from wild to structured and
- 4 from solitary to shared.
- 5 3. Access to the watershed and recreational opportunities are provided for a range of
- 6 trail users through a well designed, comprehensive trail system.
- 7 4. Visitor uses and use levels are compatible with protection of natural and cultural
- 8 resources of the watershed and visitor enjoyment.
- 9 5. Public education about watersheds, watershed management, and resource
- 10 sustainability is provided through a range of program —both within and outside the
- 11 watershed.
- 12 6. Visitors to the watershed are active stewards of watershed resources as volunteers,
- 13 educators, students, land managers, and citizen experts.
- 14 7. People visit the watershed in a manner that minimizes traffic congestion and its
- 15 related negative impacts to communities and watershed resources.
- 16 8. Visitor use rules and regulations for each land management agency in the watershed
- 17 are made readily available and understandable for park visitors.
- 18 9. Visitor services are adequate to support visitor experience but are kept minimal to
- 19 protect the natural and cultural resources and rural character of the watershed.

20

21

22 **DESIRED FUTURE CONDITIONS: RESIDENT COMMUNITY**

- 23 1. Resident communities are an integral part of the watershed and have minimal impacts
- 24 on the natural environment.
- 25 2. Local residents are active stewards of the watershed and implement sustainable
- 26 resource practices in their communities.
- 27 3. Watershed visitor traffic, parking, and recreation have minimal impacts on local
- 28 communities.
- 29 4. Domestic water supply needs are met while minimizing impacts to natural resources.
- 30 5. Sustainable agriculture minimizes impacts on natural resources and provides visible
- 31 connections to food production and the area’s agricultural history.

32

33

34 **DESIRED FUTURE CONDITIONS: INFRASTRUCTURE, FACILITIES,**

35 **AND EMERGENCY SERVICES**

- 36 1. Water use throughout the watershed is monitored, and its effects on the watershed’s
- 37 creeks and aquatic resources are understood.

- 1 2. Infrastructure and its maintenance are appropriate to public safety and the anticipated
- 2 use while minimizing impacts on natural and cultural resources.
- 3 3. Infrastructure management is coordinated among responsible agencies, businesses,
- 4 utilities, and residents.
- 5 4. Emergency services are provided throughout the watershed.
- 6
- 7

TRANSPORTATION

2 Continued transportation planning and management is key to providing the broadest
3 range of access for all visitors to the Golden Gate National Recreation Area while
4 reducing the park's carbon footprint. To protect the park's natural and cultural resources
5 and provide for a high quality visitor experience, addressing congestion, improving
6 safety, and facilitating access/circulation to and within the park must remain important
7 components of park planning. Access to the park must be provided and improved via
8 alternative modes such as transit, bicycle, ferries, and trails. These transportation
9 strategies were highlighted in the 1980 general management plan for the park and they
10 are even more relevant today, in the face of climate change.

11 The park would pursue sustainable, multimodal access to park sites in partnership with
12 other organizations. By improving trails, roads, and transit connections, a network of
13 equitable energy efficient, low-emissions multimodal transportation options would allow
14 for enjoyable access to park sites.

15

16

17 GOALS

- 18 • Reduce greenhouse gas emissions.
- 19 • Create enjoyable and welcoming transportation experiences for all visitors.
- 20 • Preserve and protect park resources by minimizing transportation impacts.
- 21 • Create equitable and convenient multimodal transportation options to and within
22 the park.
- 23 • Inspire an environmental consciousness by demonstrating environmental
24 excellence in transportation.
- 25 • Optimize management of the park transportation system through coordinated
26 planning, programming, management, and maintenance.

27

28

29 MANAGEMENT STRATEGIES

30 1. Expand Regional Park Ferry Access

31 As envisioned in the 1980 general management plan, the staff at the Golden Gate
32 National Recreation Area continues to pursue expanded ferry access as an alternative
33 means of travel among Fort Baker, Fort Mason, and the Presidio including possible
34 links to Alcatraz, Angel Island, Sausalito, Tiburon, Larkspur and the East Bay.

35 The National Park Service would continue to collaborate with the Water Emergency
36 Transportation Authority and the San Francisco Port Authority to explore a range of
37 future ferry connections. These planning efforts seek to improve visitor experience
38 with links between park sites and the regional ferry network. Water taxi access would

- 1 also be considered as a component of the full network of waterborne access where
2 fixed route and scheduled ferry service many not be warranted.
3
- 4 2. Address Alcatraz Ferry Access
- 5 Consistent with regional, multiagency planning efforts, the National Park Service is
6 evaluating new ferry departure points for Alcatraz Island from the northern
7 waterfront of San Francisco.
8
- 9 3. Pursue online Trip Planning/Wayfinding
- 10 The park would continue to pursue improved mapping capabilities to enable visitor
11 trip planning, integrated interpretive information and route planning, and other
12 interactive tools. These ongoing improvements would be both online and at park and
13 gateway sites. These website improvements would facilitate a broader understanding
14 of park resources and the full array of transportation modes available to access them.
15 Online trip planning would be linked or integrated with existing regional trip
16 planning systems and other new technology encouraging use of alternative modes of
17 access where available.
18
- 19 4. Explore Tools for Congestion Management
- 20 Congestion management or transportation demand management is a collection of
21 management tools focused on shifting personal travel patterns to off-peak periods,
22 more efficient modes (such as public transit and ridesharing) and alternative modes
23 (such as cycling and walking) to offset vehicle congestion, particularly during peak
24 periods. Tools could include improving and promoting transit options, shifting
25 employee work hours, and congestion fees (such parking fees). The park staff would
26 continue to explore a full range of these tools to offset congestion at park sites.
27
- 28 5. Expand the Muir Woods Shuttle
- 29 The park staff would continue to collaborate with Marin County to improve the Muir
30 Woods shuttle service.
31
- 32 6. Employ Intelligent Transportation Systems (ITS)
- 33 Intelligent transportation systems use technology to improve transportation
34 efficiency, such as electronic highway message signs with up-to-date travel
35 information or electronic bus stop signs with up-to-the-minute information about bus
36 arrivals. These tools help travelers better plan their trip and often help travelers
37 choose alternative routes or modes to avoid congestion. As a result, the total
38 distribution of travelers is spread more evenly across the system and the system
39 functions more efficiently. Park managers would continue to work with Caltrans and
40 other agencies to employ ITS tools to support the Muir Woods shuttle and other
41 alternative transportation access to park sites.
42
43

- 1 7. Implement the *Marin Headlands and Fort Baker Transportation Infrastructure and*
2 *Management Plan of 2009*
- 3 Continue to implement actions that provide improved access to and within the Marin
4 Headlands and Fort Baker for a variety of users, and to initiate these improvements in
5 a way that minimizes impacts to the rich natural and cultural resources of the park.
6
- 7 8. Improve Mobility, Access, Connectivity, and Collaboration
- 8 Mobility, access, and connectivity form the keystone of the park and monument’s
9 multimodal transportation system. Although cars will continue to be an important
10 part of the transportation system, the park staff is committed to reducing dependence
11 on the automobile by increasing the efficiency of other modes of travel. Creating
12 practical transportation choices and educating the public of their viability and
13 desirability will increase use of modes other than cars. The park staff will continue to
14 collaborate with regional partners to achieve the vision of creating a seamless
15 multimodal transportation system to access the park for residents and visitors in the
16 Bay Area. This collaboration extends to applying “universal design” principles that
17 provide access for people with disabilities.
18
- 19 9. Develop a Long-Range Transportation Plan
- 20 Golden Gate National Recreation Area is developing the first park-level long-range
21 transportation plan. An important component of this process is the creation of a list of
22 prioritized future transportation projects, or the transportation improvement plan.
23 Together, they would articulate the transportation priorities of the park.
- 24 As a pilot project, the park staff would develop a model for park-level transportation
25 planning in a manner that is consistent with state and metropolitan planning
26 organizations. The project would provide NPS leaders with a replicable park-level
27 transportation planning process, benchmarks for evaluating transportation projects,
28 and park guidance for future planning and operational decisions.
29
30
31
32

TRAILS

2

3 Golden Gate National Recreation Area’s trail system would continue to be managed and
4 improved to provide an enduring system of sustainable trails. Trails provide one of the
5 most important ways that visitors experience and enjoy the park and discover its diverse
6 settings.

7 The park’s extensive network of trails allows millions of people to discover the natural
8 world and deepen their awareness of the grandeur and fragility of park landscapes and
9 resources. Sustainably designed and maintained trails welcome public use while
10 protecting habitat and landscape and, in some cases, are historic resources themselves.
11 Trails can support healthy lifestyles and offer a nonmotorized way to get to the park and
12 its destinations.

13 A system of ranch and military roads inherited when the park was established in 1972
14 was the basis for much of the current trail system. Since then, park managers, with
15 partners and the community, have planned and completed many improvements to park
16 trails to better serve public use and protect park resources.

17 Much of the trail system still requires upgrading to improve conditions, provide more
18 sustainable alignments and to fill gaps in the system. New areas where the park is
19 expanding, such as Rancho Corral de Tierra, a thorough evaluation and plan would be
20 required following this general management plan to guide needed improvements.

21 The successful Trails Forever initiative that was launched in 2003 with a focus on the
22 California Coastal Trail is the most current and best example of the potential of public-
23 community collaboration to establish a network of exceptional trails. Looking beyond the
24 trails to incorporate caring for the setting through which they travel has integrated
25 improvements to the natural and cultural resources along trail corridors into the trail
26 projects. This approach has expanded the benefits of the program, and its reach and has
27 inspired an unprecedented level of volunteer support that is key to the ongoing success of
28 the program.

29 Golden Gate National Recreation Area’s trail system would provide a sustainable
30 network for visitors to access, enjoy, and understand the diversity of park settings while
31 protecting park resources. The recreation area’s trails would connect communities to the
32 park, and park sites and destinations to each other, to adjacent public lands, and to the
33 regional network of trails.

34

35

36 GOALS AND MANAGEMENT STRATEGIES

37 1. Provide a system of trails integrated with the trail network beyond park
38 boundaries, with coordinated regulations and supported by accurate maps and
39 consistent signs.

40 2. Continue to coordinate with other agencies and organizations to complete a
41 comprehensive regional trail system that includes the California Coastal Trail,

- 1 Bay Area Ridge Trail, San Francisco Bay Trail, and San Francisco Bay Water
2 Trail.
- 3 3. Establish and maintain a trail system that offers a diversity of park experiences,
4 including walking, hiking, scenery viewing, learning, horseback riding,
5 bicycling; trails of varying lengths and loop configurations , varying degrees of
6 challenge, access to a diversity of park settings, and opportunities for universal
7 access where appropriate.
- 8 4. Locate, design, and maintain new or improved trails and trailheads using best
9 practices and sustainable design to protect the park’s natural and cultural
10 resources; provide enjoyable, safe access; and reduce ongoing maintenance
11 requirements.
- 12 5. Integrate improvements to the landscape and surrounding habitats when creating
13 or rehabilitating trails and, where appropriate, convert former management roads
14 to trails.
- 15 6. Create trails and trailheads that promote nonmotorized travel to and within the
16 park, reducing the carbon footprint and supporting healthy communities.
- 17 7. Establish a coordinated system of signs to provide wayfinding information,
18 support understanding of the park history and resources, and communicate
19 regulations.
- 20 8. Create and support partnerships and community involvement in trail planning
21 and ongoing stewardship, while continuing to engage the community through the
22 Trails Forever initiative.

23

24 **Marin County Trails**

25 The Marin trail system is well established. For much of Golden Gate National Recreation
26 Area’s Marin County lands, trail improvements have been identified in recent plans and
27 trail system improvements are ongoing. Future efforts would focus on continuing to
28 improve existing trails, including sustainable alignments and design, improving
29 connectivity and accessibility, and providing wayfinding signs.

30

31 **San Francisco City and County Trails**

32 The more formal trails of San Francisco lands in the planning area are the Bay Trail, the
33 California Coastal Trail, and their connectors. Continued efforts to improve these trails
34 would focus on sustainable design to protect park resources, address the volume of use,
35 and improve connectivity, especially to transit and the regional trail system.

36

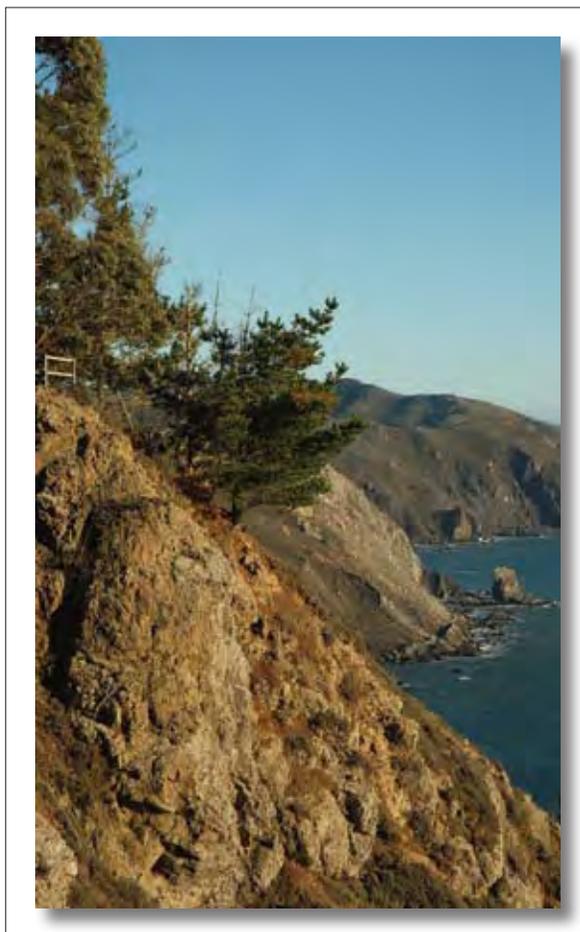
37 **San Mateo County Trails**

38 In established areas of the park (Mori Point, Milagra Ridge, Sweeney Ridge) future
39 efforts would focus on continuing to improve existing trails, including sustainable
40 alignments and design, improved connectivity and accessibility, and provision of
41 wayfinding signs. Safe trailheads, appropriate for both local and regional visitors, would
42 be provided. Where appropriate, former management roads would be converted to trails.

- 1 A more comprehensive approach to trail planning would be required for new areas
- 2 coming into park management (Pedro Point, Rancho Corral de Tierra) and areas where
- 3 trail deficiencies have not been addressed (Phleger Estate).
- 4
- 5

1

The Alternatives Applied to Golden Gate National Recreation Area including Alcatraz Island



back of divider

ALCATRAZ ISLAND: NO-ACTION ALTERNATIVE

2 OVERVIEW

3 Alcatraz Island is one of the most popular destinations in the park. The only former
4 federal penitentiary open to the public, it attracts more than 1.4 million visitors each year.
5 However, the prison era is only part of its long and fascinating history. Alcatraz Island
6 was a fort during the Civil War, the home of the West Coast’s first lighthouse, and the
7 birthplace of the American Indian “Red Power” movement. There is also a natural and
8 scenic side to Alcatraz Island. Plant communities, tide pools, and birdlife are among its
9 features, and a walk on the island promises panoramic views of the city skyline, ships,
10 bridges, and bay waters.

11 Under the no-action alternative, the island would continue to be managed to preserve the
12 historic and natural resources, and provide public access to the variety of settings and
13 experiences where appropriate and safe. The primary visitor experience would be day
14 use, beginning with a ferry ride from San Francisco. The island experience would
15 continue to be centered on the federal penitentiary; however, other periods of the island
16 history and bird life would also be interpreted. Scheduled evening tours of Alcatraz
17 Island would continue to provide visitors with this unique opportunity.

18 The harsh island environment, deterioration of buildings and landscapes, and the
19 protection of areas for bird nesting habitat limits visitor access to much of the island, at
20 least for part of the year. Rehabilitation of historic buildings and landscape areas would
21 be ongoing and subject to available funding.

22 The island supports one of the largest concentrations of colonial nesting waterbirds along
23 the Central Coast of California. Many areas of the island would continue to be closed
24 during breeding season to protect the colonies from human disturbance. In areas open to
25 the public, western gulls would be managed under an agreement with the U.S. Fish and
26 Wildlife Service in accordance with the Migratory Bird Treaty Act, through the use of
27 bird exclusion measures and other deterrents to protect visitor health and safety.
28 Education and stewardship opportunities would inform visitors about the importance of
29 the island to nesting birds, and what the public can do to help protect them.

30 Management of Alcatraz Island is currently guided by the 1980 general management plan
31 and the 1993 Alcatraz Island development concept plan, which established zones of year-
32 round and seasonal access and established areas that are closed year-round to visitors. See
33 “Figure 8: 1980 General Management Plan, Park Lands in Marin and San Francisco
34 Counties (No-action Alternative)” for additional information on the current management

35

36

37 FERRY EMBARKATION

38 Access to the island would remain at the docks on San Francisco’s northern waterfront.
39 The park would continue to provide basic orientation and visitor services at the pier.
40 Ticketing would continue to be through a reservation system, and ferries would operate

1 daily on a year-round schedule. The length of the ferry trip between the mainland and
2 Alcatraz would remain approximately 10-15 minutes.

3

4

5 **ARRIVAL AREA (INCLUDING THE ENTRY PIER, BUILDING 64,**
6 **HISTORIC BARRACKS, AND THE SALLYPORT)**

7 The arrival area continues to provide visitors with orientation, restrooms, and other
8 support services for visitors arriving and departing Alcatraz Island. This area includes a
9 mix of structures and landscapes that would continue to support the high volume of
10 visitation. Portions of the first floor of Building 64, the historic barracks, would be
11 adaptively used for administrative purposes and some visitor services, including a small
12 gift shop, exhibits, and a theater. The upper floors have not been rehabilitated and would
13 remain unused. All visitors would continue to pass through the Sallyport, one of the
14 oldest structures on the island.

15

16

17 **MAIN PRISON BUILDING AREA (INCLUDING THE CITADEL, MAIN**
18 **CELLBLOCK, HOSPITAL WING, ADMINISTRATION WING,**
19 **RECREATION YARD, NEW INDUSTRIES BUILDING, OFFICERS'**
20 **CLUB, AND PARADE GROUND)**

21 The Main Prison Building and several adjacent areas, like the Recreation Yard, have been
22 rehabilitated to represent the federal penitentiary era. They would continue to be
23 managed as part of the central visitor experience. Visitors would have access to most of
24 the building and yard. Several areas, like the Civil War-era Citadel (located below the
25 Main Cellblock) and part of the building's hospital wing, would remain closed. Visiting
26 the Main Prison Building would primarily be a self-guided experience facilitated by an
27 audio tour.

28 Many adjacent landscape areas would continue to be minimally preserved and inhabited
29 by waterbirds both seasonally and year round, while other areas include the restoration of
30 the island's historic gardens. Before the National Park Service assumed management of
31 the island, the Government Services Administration demolished several residential
32 structures on the Parade Ground. The piles of rubble from these demolished structures
33 would remain and would be used seasonally by waterbirds.

34

35

36 **LIGHTHOUSE**

37 The lighthouse would continue to be managed for its historic function as an early aid to
38 navigation in San Francisco Bay. It is currently managed by the U.S. Coast Guard, but is
39 expected to be transferred to the National Park Service. Visitor access would be highly
40 controlled.

1 **NORTH END OF THE ISLAND**

2 These buildings and adjacent yards were once active parts of the prison. They would
3 continue to house the island’s diesel generators that currently provide all power to the
4 island’s facilities and be used for operations and maintenance functions. The state of
5 preservation is minimal, and visitors would generally not be permitted in this area.

6

7

8 **ISLAND PERIMETER**

9 The perimeter of the island, including the steep cliffs and immediate shore, would
10 continue to be managed to preserve habitat for birds and marine wildlife. Visitor access
11 would be on primary trails that are open year-round, and on seasonal trails such as the
12 Agave Trail. Other areas would be closed year-round for visitor safety and seabird habitat
13 protection.

14

15

16 **OFFSHORE BAY ENVIRONMENT**

17 The National Park Service has jurisdiction over the bay environment extending
18 approximately 1,000 feet from the island’s shore. This area would not be actively
19 managed, although access to the island would only be through the park’s ferry
20 concessionaire.

21

22

23 **SUSTAINABILITY**

24 The National Park Service would continue to develop and implement sustainable
25 approaches to meet the island’s energy, water, and wastewater needs. Actions that are
26 being considered include replacing diesel generators with renewable (e.g. photovoltaic
27 panels) and grid-tied energy sources. These infrastructure technologies would be
28 interpreted where possible.

29

30

31 **COST ESTIMATES**

32 The estimated costs of the no-action alternative reflect the continuation of current
33 management. One-time costs for the no-action alternative are costs for those projects that
34 are currently approved and funded—any requested but unfunded projects are not
35 considered in this analysis. Therefore, while the action alternatives contain estimates for
36 20 years of proposed projects, the no-action alternative assumes no new projects would

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA
INCLUDING ALCATRAZ ISLAND

- 1 take place except those funded in 2009. Funded projects include electrical upgrades and
- 2 repair of the Alcatraz morgue. Total one-time costs are \$4 million.
- 3 Operating costs and staff numbers for Alcatraz Island are included in the Golden Gate
- 4 National Recreation Area analysis.
- 5

ALCATRAZ ISLAND: ALTERNATIVE 1, CONNECTING PEOPLE WITH THE PARKS

3

4 OVERVIEW

5 Many who visit Alcatraz are drawn by the island's notorious prison reputation. Others
6 want to see the crumbling ruins set against the spectacular scenery of San Francisco and
7 the Golden Gate or understand the island's human dimension: the American Indian
8 occupation or the gardens tended by guards and their families.

9 In this alternative Alcatraz would be managed to provide an expanded variety of settings
10 and experiences that will pleasantly surprise visitors attracted by the notoriety of the
11 prison, and connect them to the greater breadth of the island's resources and stories. The
12 park would seek to enrich the scenic, recreational, and educational opportunities in the
13 heart of San Francisco Bay.

14 Visitors would have access to the majority of the island's historic structures and
15 landscapes to experience the layers of island history and its natural resources, and
16 settings. The indoor and outdoor spaces currently inaccessible to visitors would be
17 reopened to expand the range of available activities.

18 All historic structures would be preserved; most would be rehabilitated and adaptively
19 reused for visitor activities and park operations. Food service, meeting and program
20 space, and overnight accommodations (possibly including a hostel or camping) would be
21 provided.

22 Sensitive wildlife areas, like the shoreline, would be protected. Park managers would
23 provide visitors with opportunities to see wildlife and nesting waterbirds and to
24 participate in resource stewardship activities. Gulls would be managed to reduce conflicts
25 in core visitor use areas.

26

27

28 FERRY EMBARKATION

29 The visitor's immersion in Alcatraz history would begin at one or more off-island ferry
30 docks that could include the historic Alcatraz dock at Fort Mason. The primary
31 embarkation site would remain on San Francisco's northern waterfront where orientation
32 and visitor services could be enhanced. Additional ferry connections could also be
33 provided between Alcatraz and other park sites. Ticketing would continue to be through a
34 reservation system, and ferries would operate daily on a year-round schedule. The length
35 of the ferry trip between the mainland and Alcatraz would remain approximately 10-15
36 minutes.

37

38

1 **ARRIVAL AREA (INCLUDING THE ENTRY PIER, BUILDING 64,**
2 **HISTORIC BARRACKS, AND THE SALLYPORT)**

3 **Diverse Opportunities Zone**

4 This area would be managed to welcome visitors and provide orientation to the expansive
5 opportunities on the island. Building 64 would be rehabilitated as a multipurpose facility
6 to host an expanded variety of visitor services that could include hospitality (food service
7 and overnight accommodations), interpretation and exhibit space, an audiovisual center,
8 and administrative areas.

9
10

11 **MAIN PRISON BUILDING AREA (INCLUDING THE CITADEL, MAIN**
12 **CELLBLOCK, HOSPITAL WING, ADMINISTRATION WING,**
13 **RECREATION YARD, NEW INDUSTRIES BUILDING, OFFICERS'**
14 **CLUB, AND PARADE GROUND)**

15 **Historic Immersion Zone** (Main Prison Building)

16 The park would manage this area to immerse visitors in the federal penitentiary period. A
17 variety of programming and exhibits would bring prison history alive. Rehabilitation or
18 restoration, where appropriate, would enhance resource integrity.

19

20 **Evolved Cultural Landscape Zone** (Guardhouse, Officers' Club, and gardens)

21 In this alternative, the park would manage the structures and landscaped areas
22 surrounding the Main Prison Building to protect and interpret the layers of history. The
23 Officers' Club and Warden's House ruins would be stabilized and the Guardhouse would
24 be rehabilitated.

25

26 **Diverse Opportunities Zone** (Hospital Wing of Main Prison Building, Recreation Yard,
27 New Industries Building, and Parade Ground)

28 These buildings and outdoor spaces would be rehabilitated to provide a range of visitor
29 activities that could include informal gatherings, interpretive programs, and special
30 events. The New Industries Building would be rehabilitated as a multipurpose facility. It
31 would include flexible space that could accommodate interpretation, special events,
32 classrooms and meetings and would include service areas to support these uses. The
33 perimeter trail would use the existing path on the west side of the structure with
34 appropriate separation to protect nesting birds on the cliff below.

35 The building rubble on the Parade Ground could be removed and bird populations would
36 be managed to accommodate enhanced visitor access in coordination with the
37 management of the Western gulls. This rehabilitation of the parade ground could
38 incorporate measures to support wildlife.

39

40

1 **LIGHTHOUSE**

2 **Historic Immersion Zone**

3 The lighthouse and surrounding area would be preserved to give visitors opportunities to
4 learn about the maritime history of Alcatraz and its strategic location in the bay. Access
5 and interpretation would be enhanced.

6

7

8 **NORTH END OF THE ISLAND**

9 **Park Operations Zone**

10 The historic structures in this zone, including part of the Model Industries Building,
11 would be rehabilitated and adaptively reused for maintenance, storage, and public safety
12 functions. They could house green, sustainable infrastructure technologies. Where
13 appropriate, visitor access would be provided to showcase the technologies and interpret
14 the island's energy history.

15

16

17 **ISLAND PERIMETER**

18 **Natural Zone** (northeastern and southern perimeter of the island)

19 This area would be managed to protect natural habitat values while providing
20 opportunities for visitors to walk on trails around more of the island's perimeter, at all
21 times of the year to the extent feasible.

22

23 **Sensitive Resources Zone** (western coastal cliffs)

24 Visitor access along the western coastal cliffs and tide pools would be highly managed to
25 protect visitors and natural habitat values. Seasonal closures would protect sensitive
26 seabird habitat.

27

28

29 **OFFSHORE BAY ENVIRONMENT**

30 **Sensitive Resources Zone** (extending 100 feet from the island's western shore)

31 This area would be managed to protect marine resources. The National Park Service
32 would prohibit boat landing in this area and exclude boat tours from this area.

33

34 **Scenic Corridor Zone** (extending beyond the Sensitive Resources Zone and along the
35 island's eastern shore)

36 This area on the east side of the island would be managed to accommodate ferry service
37 to the island. Boat tours around the island and some types of water-based recreation could

1 be permitted. The area adjacent to the entry pier would be managed to expand the
2 capacity and range of uses that may occur. This would enable the island to be part of the
3 San Francisco Bay Water Trail, welcoming nonmotorized boats via permits or
4 reservations.

5

6

7 **SUSTAINABILITY**

8 The National Park Service would continue to develop and implement sustainable
9 approaches to meet the island's energy, water, and wastewater needs. Actions that are
10 being considered include replacing diesel generators with renewable (e.g. photovoltaic
11 panels) and grid-tied energy sources. These infrastructure technologies would be
12 interpreted where possible.

13

14

15 **COST ESTIMATES**

16 Alternative 1 for Alcatraz Island would provide an expanded variety of settings and
17 experiences, thereby connecting visitors to the greater breadth of the island's resources
18 and stories. Visitors would have access to the majority of the island's historic structures
19 and landscapes, including areas currently closed to the public.

20

21 One-time facility costs of this alternative reflect the extensive rehabilitation required to
22 open buildings to the public for contemporary uses. Most buildings and areas of the
23 island would be open to the public or for park operations, including areas not currently in
24 use, such as the Parade Ground and the Model Industries building. Other buildings, such
25 as the entry pier and Building 64, the Main Prison Building, and the New Industries
26 Building would be rehabilitated for a range of visitor activities and learning experiences.
27 Many of the structures on Alcatraz Island are in a deteriorated state and the stabilization
28 costs to ensure the continuation of national landmark status alone is large. Total one-time
29 costs for alternative 1 are estimated at \$149 million.

30



Management Zones

- | | | |
|---|---|---|
|  Diverse Opportunities |  Historic Immersion |  NPS Managed |
|  Scenic Corridor |  Natural |  Marine Resources |
|  Interpretive Corridor |  Sensitive Resources |  Island Shoreline |
|  Evolved Cultural Landscape |  Park Operations | |

Connecting People with the Parks

**Alternative 1
Golden Gate National Recreation Area
Alcatraz Island**

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA
INCLUDING ALCATRAZ ISLAND

back of map

ALCATRAZ ISLAND: ALTERNATIVE 2, PRESERVING AND ENJOYING COASTAL ECOSYSTEMS

3

4 OVERVIEW

5 Isolation—whether for soldiers, prisoners, birds, or plants—is a recurrent theme in the
6 story of Alcatraz. This alternative would highlight the island’s inhospitable and
7 isolated—yet strategic—location at the entry to the Golden Gate and San Francisco Bay.
8 The island’s past and present significance to colonial nesting birds and its layers of
9 human history—the Civil War fortress, the lighthouse, the prison and penitentiary—all
10 derive from its position in the bay.

11 The island’s changing natural and built landscape would continue to evolve, further
12 enhancing habitat for nesting birds. Only those buildings and features necessary to
13 maintain the island’s national historic landmark status would be preserved; the natural
14 elements would reclaim other features as part of the wilding of Alcatraz.

15 Visitors would be immersed in opportunities that showcase the island’s isolation, its
16 natural resources, and all the layers of history that can be found at the Main Prison
17 Building. Visitor experiences would include outdoor learning, and natural and cultural
18 resource stewardship programming delivered in partnership with Bay Area nonprofits.

19 While access would be managed to protect sensitive resources, visitors would be able to
20 more freely explore, discover, and experience nature reclaiming Alcatraz, and understand
21 the role the island plays in the broader marine ecosystem (reaching from San Francisco
22 Bay to the Farallon Islands) as a result of its strategic location.

23

24

25 FERRY EMBARKATION

26 The visitor’s immersion in Alcatraz history would begin at one or more off-island ferry
27 docks that could include the historic Alcatraz dock at Fort Mason. The primary
28 embarkation site would remain on San Francisco’s northern waterfront where orientation
29 and visitor services could be enhanced. Additional ferry connections could also be
30 provided between Alcatraz and other park sites. Ticketing would continue to be through a
31 reservation system, and ferries would operate daily on a year-round schedule. The length
32 of the ferry trip between the mainland and Alcatraz would remain approximately 10-15
33 minutes.

34

35

1 **ARRIVAL AREA (INCLUDING THE ENTRY PIER, BUILDING 64,**
2 **HISTORIC BARRACKS, AND THE SALLYPORT)**

3 **Evolved Cultural Landscape Zone**

4 This area would welcome visitors while protecting the layers of cultural resources.
5 Building 64 would be adaptively reused to support the science, education, and
6 stewardship programs. It could include space for offices, classrooms, labs, minimal food
7 service, and hostel-like overnight facilities for program participants. Co-locating these
8 functions would promote interactive learning and association among the scientists,
9 teachers, and student participants. Administrative functions would also be housed in this
10 building.

11 The park would also manage the structures and landscaped areas (such as the Guardhouse
12 and gardens) between the entry pier and the Main Prison Building to protect and interpret
13 the layers of history.

14

15

16 **MAIN PRISON BUILDING AREA (INCLUDING THE CITADEL, MAIN**
17 **CELLBLOCK, HOSPITAL WING, ADMINISTRATION WING,**
18 **RECREATION YARD, NEW INDUSTRIES BUILDING, OFFICERS'**
19 **CLUB, AND PARADE GROUND)**

20 **Historic Immersion Zone** (Main Prison Building, including the Hospital Wing and
21 Recreation Yard)

22 These historic structures would be managed to provide visitors with access to the wide
23 range of resources in historically accurate conditions, from the military period through
24 the Indian occupation. Rehabilitation or restoration of historic resources would enhance
25 their historic integrity.

26

27 **Natural Zone** (Model Industries Building, New Industries Building, Parade Ground, and
28 western side of island)

29 The park would manage these structures and adjacent areas to enhance bird habitat and
30 protect sensitive resources. Visitor use would be managed and controlled to support
31 natural resource management goals. The New Industries Building and would be stabilized
32 as a ruins, and no efforts would be made to avoid the loss of these buildings to coastal
33 erosion. Visitor access could be provided for wildlife viewing, research, and education
34 but would be highly controlled. The rubble piles on the Parade Ground would be retained
35 to maintain and enhance seabird habitat. The existing Agave Trail would protect natural
36 habitat while providing seasonal access to the shoreline for visitors. The Model Industries
37 Building would be stabilized as a ruin to allow expanded habitat for nesting birds. No
38 efforts would be made to avoid the loss of the building to coastal erosion. Visitor access
39 could be provided for wildlife viewing, research, and education but would be highly
40 controlled.

41

1 **LIGHTHOUSE**

2 **Historic Immersion Zone**

3 The lighthouse and surrounding area would be preserved to give visitors opportunities to
4 learn about the maritime history of Alcatraz and its strategic location in the bay. Access
5 and interpretation would be enhanced.

6

7

8 **NORTH END OF THE ISLAND**

9 **Park Operations Zone** (Officers' Club, Quartermaster Warehouse, and Power Plant)

10 The interior spaces of the Officers' Club, Quartermaster Warehouse, and Power Plant
11 would be dedicated park operation activities. The Officers' Club would be stabilized as a
12 ruin to preserve the exterior of the structure. An interior shell could be constructed within
13 the ruin to support park operational functions if needed. Maintenance activities and
14 visitor access outside and close to these structures would be managed to prevent
15 disruption of sensitive natural resources.

16

17

18 **ISLAND PERIMETER**

19 **Sensitive Resources Zone** (majority of the island perimeter)

20 The majority of the perimeter of Alcatraz Island would be preserved to protect natural
21 habitat values. Visitor use and access would be highly managed.

22

23

24 **OFFSHORE BAY ENVIRONMENT**

25 **Sensitive Resources Zone** (extending 300 feet from the island's western shore)

26 This zone extends out 300 feet and would be managed as a marine protected area to
27 preserve coastal resources, including submerged resources, and seabird colonies using the
28 island's cliffs. The area would be closed to boats during seabird breeding season.

29

30 **Scenic Corridor Zone** (extending beyond the Sensitive Resources Zone and along the
31 island's eastern shore)

32 This area would be managed to accommodate ferry access to the island. Some other types
33 of water-based access could also be permitted. Enforcement of resource protection
34 measures and visitor access regulations would be strengthened. For example, tours near
35 the island would be regulated.

36

1 **SUSTAINABILITY**

2 The National Park Service would continue to develop and implement sustainable
3 approaches to meet the island's energy, water, and wastewater needs. Actions that are
4 being considered include replacing diesel generators with renewable (e.g. photovoltaic
5 panels) and grid-tied energy sources. These infrastructure technologies would be
6 interpreted where possible.

7

8

9 **COST ESTIMATES**

10 Alternative 2 for Alcatraz Island would highlight the island's isolated location, harsh
11 environment, and strategic location in telling the story of the island. The weather, plants,
12 and wildlife would reclaim much of the island, leaving only the historic landmark
13 structures preserved.

14 One-time costs reflect the rehabilitation of select buildings for contemporary uses and
15 limited restoration to historic conditions, allowing other buildings and areas to be
16 managed for natural resource objectives or as ruins. Many of the structures on Alcatraz
17 Island are in a deteriorated state and the stabilization costs to ensure the continuation of
18 national landmark status alone is quite large. Total one-time costs fro alternative 2 are
19 estimated at \$98 million.

20

21



Management Zones

- Diverse Opportunities
- Scenic Corridor
- Interpretive Corridor
- Evolved Cultural Landscape
- Historic Immersion
- Natural
- Sensitive Resources
- Park Operations

- NPS Managed
- Marine Resources
- Island Shoreline

Preserving and Enjoying Coastal Ecosystems

**Alternative 2
Golden Gate National Recreation Area
Alcatraz Island**

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA
INCLUDING ALCATRAZ ISLAND

back of map

ALCATRAZ ISLAND: ALTERNATIVE 3, FOCUSING ON NATIONAL TREASURES (THE NPS PREFERRED ALTERNATIVE)

4

5 OVERVIEW

6 For more than 150 years, Alcatraz Island has been reworked and altered by human
7 activity. This alternative would immerse visitors extensively in all of Alcatraz’s historic
8 periods, including the Civil War military fortifications and prison, federal penitentiary,
9 and American Indian occupation. Alcatraz’s history would be interpreted, first and
10 foremost with tangible and accessible historic resources, including the buildings, ruins,
11 cultural landscape, archeology, and museum collection. These resources contribute to the
12 island’s national historic landmark status and its recognition as an international icon.

13 The visitor’s immersion in Alcatraz history would begin on a ferry from one or more
14 embarkation points that could include the original Alcatraz dock at Fort Mason. Passing a
15 line of historic warning buoys, the experience would continue at the island’s arrival dock,
16 with greater access to restored portions of Building 64, the historic barracks. Visitors
17 would ascend to the Main Prison Building through a landscape of preserved historic
18 structures and features. While the primary visitor experience would focus on the federal
19 penitentiary, visitors also would be exposed to the other layers of history, literally and
20 programmatically.

21 This alternative would require extensive stabilization, rehabilitation, and restoration of
22 historic buildings and landscapes, as well as creative interpretative and educational
23 programs and visitor services. It would create additional opportunities for cultural
24 resource stewardship programs.

25 Visitors would have opportunities to learn about the natural history of San Francisco Bay.
26 The colonial waterbird habitat that has grown in regional importance would be protected,
27 enhanced, and interpreted. Visitors would explore the island perimeter trail, managed to
28 protect sensitive bird populations while providing opportunities to observe them or
29 participate in stewardship activities. The large population of gulls would be managed to
30 reduce conflicts in primary visitor use areas like the Parade Ground.

31

32

33 FERRY EMBARKATION

34 The visitor’s immersion in Alcatraz history would begin at one or more off-island ferry
35 docks that could include the historic Alcatraz dock at Fort Mason. The primary
36 embarkation site would remain on San Francisco’s northern waterfront where orientation
37 and visitor services could be enhanced. Additional ferry connections could also be
38 provided between Alcatraz and other park sites. Ticketing would continue to be through a
39 reservation system, and ferries would operate daily on a year-round schedule. The length

1 of the ferry trip between the mainland and Alcatraz would remain approximately 10-15
2 minutes.

3

4

5 **ARRIVAL AREA (INCLUDING THE ENTRY PIER, BUILDING 64,**
6 **HISTORIC BARRACKS, AND THE SALLYPORT)**

7 **Historic Immersion Zone**

8 Here, as in alternative 1, the park would welcome, orient, and begin to immerse visitors
9 in the island's prison landscape, creating an atmosphere evocative of its history. Selected
10 areas of Building 64 would be restored to tell the story of its history and use. Period
11 restoration in the building would include the post office, canteen, and a prison-era guard
12 apartment to extend the immersive experience. Other areas would be rehabilitated for
13 visitor services and administrative functions and could include modest dorm-like
14 overnight accommodations for participants in education, conservation, and stewardship
15 programs. The upper floors would be stabilized to preserve the structure's integrity.

16

17

18 **MAIN PRISON BUILDING AREA (INCLUDING THE CITADEL, MAIN**
19 **CELLBLOCK, HOSPITAL WING, ADMINISTRATION WING,**
20 **RECREATION YARD, NEW INDUSTRIES BUILDING, OFFICERS'**
21 **CLUB, AND PARADE GROUND)**

22 **Historic Immersion Zone**

23 The many historic resources of the Main Prison Building would provide visitors with the
24 opportunity to explore the federal penitentiary's history. Visitors would also have access
25 to the wide range of historic structures and features, in historically accurate conditions
26 that tell stories about the different layers of island history. Park managers would look for
27 opportunities to expose visitors to the tangible resources (including artifacts in the park's
28 museum collection) of the federal penitentiary and military eras.

29 Treatments ranging from upgrades to exhibits and furnishings to more complete
30 restoration would continue with the goal of increasing access and interpretation of the
31 structure's history.

32 In this alternative, the park would also manage most of the adjacent areas, such as the
33 Warden's House and the Parade Ground, to reinforce the sense of history as visitors
34 move around the island. The Parade Ground would be rehabilitated to portray its historic
35 period and support year-round visitor exploration of this area in coordination with the
36 management of Western gulls. The rehabilitation could incorporate measures to support
37 wildlife and the piles of rubble would be removed.

38 The Officers' Club would be stabilized as a ruin while providing visitors with
39 opportunities to explore this historic structure. Additional preservation would be possible

1 with the involvement of partners to make a more complete visitor experience and
2 interpret the building's history.

3
4 **Evolved Cultural Landscape Zone (New Industries Building)**

5 The New Industries Building would be rehabilitated as a multipurpose facility. It would
6 include flexible space that could accommodate interpretation, special events, classrooms,
7 and meetings, and would include service areas to support these uses. The perimeter trail
8 would connect through the building and provide bird-viewing opportunities from its
9 interior.

10

11

12 **LIGHTHOUSE**

13 **Historic Immersion Zone**

14 The lighthouse and surrounding area would be preserved to give visitors opportunities to
15 learn about the maritime history of Alcatraz and its strategic location in the bay. Access
16 and interpretation would be enhanced.

17

18

19 **NORTH END OF THE ISLAND**

20 **Park Operations Zone**

21 The Quartermaster Warehouse would be rehabilitated and used as an operational center
22 for maintenance, public safety, and a conservation/stewardship workshop.

23 The Power Plant would be stabilized to house green, sustainable infrastructure
24 technologies. Where appropriate, visitor access would be provided to showcase the
25 technologies and interpret the island's energy history.

26

27 **Evolved Cultural Landscape Zone (including Model Industries Building)**

28 To prevent disruption of nearby sensitive habitat for nesting waterbirds, the Model
29 Industries Building, the adjacent courtyard, and lower cliff area would be closed to
30 general visitation and operational uses. The building would be stabilized as a ruin.

31

32

33 **ISLAND PERIMETER**

34 **Evolved Cultural Landscape Zone (majority of the island perimeter)**

35 The perimeter of the island, including the coastal cliffs, would be managed to stabilize
36 significant historic resources and interpret the island's evolving cultural and natural
37 history. The perimeter trail would provide visitors with enhanced access to much of the

1 island. Sensitive design and seasonal closures of the trail, which could include the
2 existing Agave Trail, would protect nesting waterbird habitat.

3

4

5 **OFFSHORE BAY ENVIRONMENT**

6 **Sensitive Resources Zone** (extending 300 feet around most of Alcatraz Island)

7 This zone extends out 300 feet and would be managed as a marine protected area to
8 preserve coastal resources, including submerged resources, and seabird colonies using the
9 island's cliffs. The area would be closed to boats during seabird breeding season.

10

11 **Historic Immersion Zone** (extending from the Sensitive Resources Zone out to 1,000
12 feet from the island's shore)

13 The National Park Service would manage this area to accommodate ferry service to the
14 island. Park managers would mark and interpret the historic no-trespass zone that was in
15 place during previous periods. The zone would be demarcated by buoys circling the
16 island. Only approved vessels, like the visitor ferry, would be allowed to approach and
17 use the island's dock.

18

19

20 **SUSTAINABILITY**

21 The National Park Service would continue to develop and implement sustainable
22 approaches to meet the island's energy, water, and wastewater needs. Actions that are
23 being considered include replacing diesel generators with renewable (e.g. photovoltaic
24 panels) and grid-tied energy sources. These infrastructure technologies would be
25 interpreted where possible.

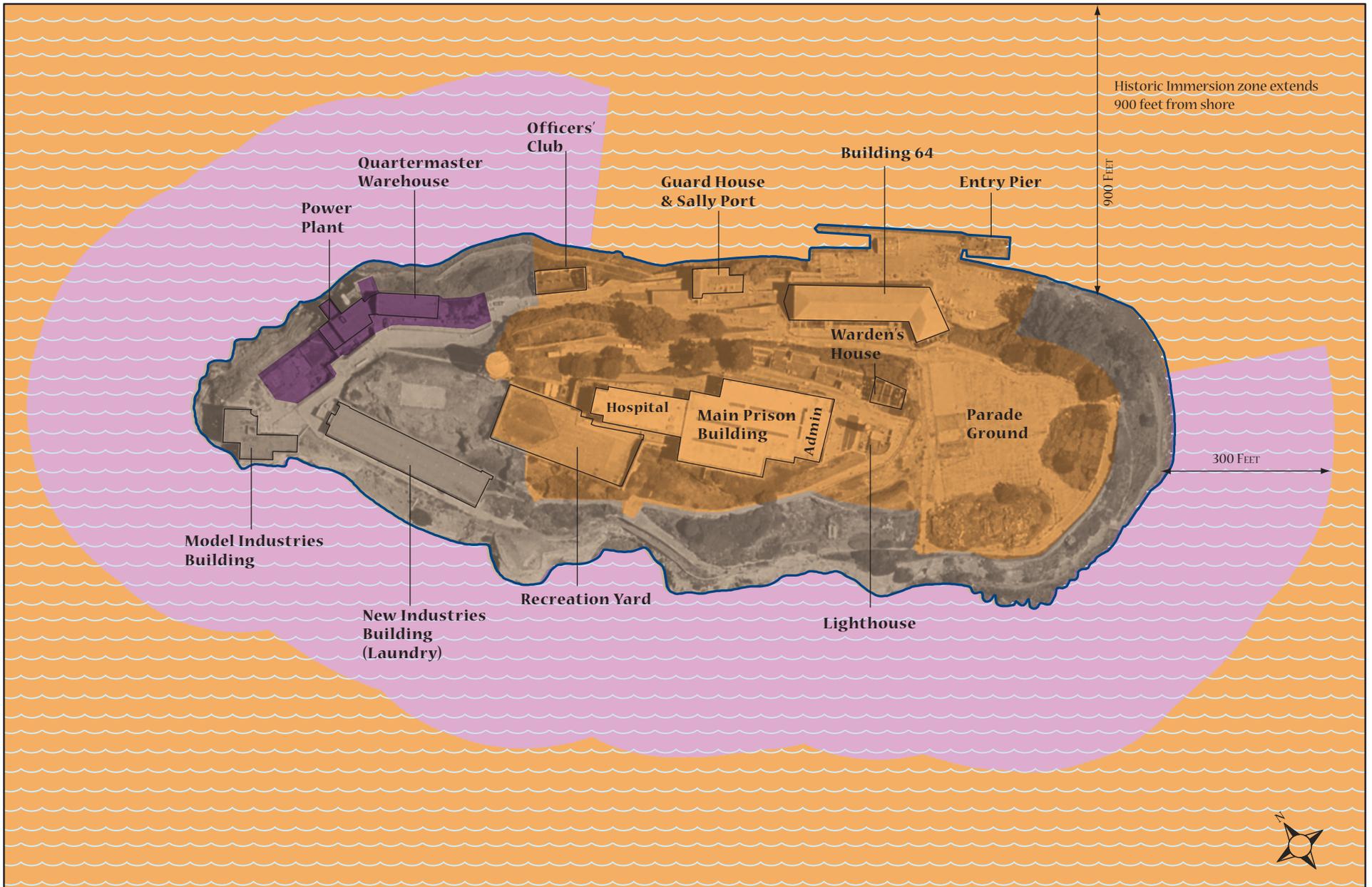
26

27

28 **COST ESTIMATES**

29 Alternative 3 for Alcatraz Island would require extensive but focused stabilization,
30 rehabilitation, and restoration to effectively immerse the visitor in the history of Alcatraz
31 Island. Stewardship programs would be supported through dorm-like facilities in
32 Building 64. The Model Industries Building would be stabilized to preserve the historic
33 integrity of the structure, while protecting sensitive natural resources. Many of the
34 structures on Alcatraz Island are in a deteriorated state and the stabilization costs to
35 ensure the continuation of national landmark status alone is quite large. Total one-time
36 costs for alternative 3 are estimated at \$77 million.

37



Management Zones

- | | | |
|---|--|---|
|  Diverse Opportunities |  Historic Immersion |  NPS Managed Marine Resources |
|  Scenic Corridor |  Natural |  Sensitive Resources |
|  Interpretive Corridor |  Park Operations |  Island Shoreline |
|  Evolved Cultural Landscape | | |

Focusing on National Treasures

**Alternative 3 – Preferred Alternative
Golden Gate National Recreation Area
Alcatraz Island**

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA
INCLUDING ALCATRAZ ISLAND

Back of map

SUMMARY COST ESTIMATES FOR ALCATRAZ ISLAND

2

3 The cost figures shown here and throughout the plan are intended only to provide
 4 conceptual costs for a general comparison of alternatives. National Park Service and
 5 industry cost estimating guidelines were used to develop the costs (in 2009 dollars), but
 6 the estimates should not be used for budgeting purposes. Specific costs will be
 7 determined in subsequent, more detailed planning and design exercises, identifying
 8 detailed resource protection needs and changing visitor expectations. Actual costs to the
 9 National Park Service will vary depending on if and when the actions are implemented,
 10 and on contributions by partners and volunteers.

11 The implementation of the approved plan, no matter which alternative is selected, will
 12 depend on future NPS funding levels and servicewide priorities, and on partnership
 13 funds, time, and effort. The approval of a general management plan does not guarantee
 14 that funding and staffing needed to implement the plan will be forthcoming. Full
 15 implementation of the plan could be many years in the future.

16

17 **Table 2: Costs Associated with the Implementation of the Alternatives for Alcatraz Island**

	No Action Alternative	Alternative 1	Alternative 2	Alternative 3 (NPS Preferred)
Annual Operating Costs ¹	See Table 5; costs associated with the operation of Alcatraz Island are included in the Golden Gate National Recreation Area costs			
Staffing (FTE) ²	See Table 5; staffing levels for Alcatraz Island are included in the staffing levels for Golden Gate National Recreation Area			
Total One-Time Costs ³	\$4,245,000	\$149,425,000	\$98,925,000	\$77,525,000
Facility Costs ⁴	1,920,000	147,100,000	96,600,000	75,200,000
Non-Facility Costs ⁵	2,325,000	2,325,000	2,325,000	2,325,000

18

19 **TABLE 2 NOTES:**

20 1 Annual operating costs of Alcatraz Island are included in the analysis for Golden Gate National
 21 Recreation Area.

22 2 Staff numbers for Alcatraz Island are included in the analysis for Golden Gate National
 23 Recreation Area.

24 3 One-time facility and non-facility costs for the no-action alternative include costs associated with
 25 projects already approved and fully funded in 2009. For all alternatives, one-time costs are the sum
 26 of facility costs and non-facility costs.

27 4 Facility costs include the design, construction, restoration, and demolition of facilities.

28 5 Non-facility costs include projects such as such as landscape restoration and management
 29 planning.

SUMMARY TABLES OF THE ALTERNATIVES FOR ALCATRAZ ISLAND

Table 3: Comparison of the Alternatives for Alcatraz Island

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
VISION			
Current management would continue to provide visitors with access to the prison. Visitors would have limited access to the island's outdoor settings and other historic structures.	<p>Expand visitor experience beyond prison focus to include human, natural and historic aspects of Alcatraz Island.</p> <p>Preserve and rehabilitate more structures to share layers of history.</p> <p>Protect sensitive natural areas and provide more visitor opportunities to see wildlife.</p>	<p>Focus on how geographic isolation has impacted the natural and human experience at Alcatraz.</p> <p>Minimally preserve the built environment to maintain national historic landmark status.</p> <p>Visitor experience at the prison is same as alternative 1 but be based on self-discovery throughout the rest of the island.</p> <p>Emphasize natural habitat for nesting birds.</p>	<p>Immerse visitors in all historic periods; interpretation would be focused on tangible historic resources.</p> <p>Stabilize, rehabilitate, and restore historic resources.</p> <p>Visitor experience could begin at original Alcatraz Dock at Fort Mason.</p> <p>Protect colonial waterbird populations.</p>
FERRY EMBARKATION			
Embarkation from San Francisco's northern waterfront would remain as the only access point.	Additional embarkation points could be established.	Same as alternative 1.	Additional embarkation at the original Alcatraz Dock at Fort Mason.
ARRIVAL AREA			
Adaptively use for administrative purposes and some visitor services; majority of the structure would remain unused.	This area would be rehabilitated and used as a multi-purpose facility with expanded visitor services.	This area would be adaptively used to support science, education, and stewardship programs, as well as administrative functions.	<p>This area would be used to welcome and immerse visitors into the island's prison landscape.</p> <p>Selected areas, including the prison post office, canteen, and guard apartment would be restored to reflect historic uses.</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
MAIN PRISON BUILDING AREA			
<p>The Main Prison Building and several adjacent areas, like the Recreation Yard, represent the federal penitentiary era. They would continue to be managed as part of the central visitor experience.</p> <p>Visitors would have access to most of the building and yard. Several areas, like the Civil War-era Citadel (located below the Main Cellblock) and part of the building's hospital wing, would remain closed.</p> <p>Visiting the Main Prison Building would primarily be a self-guided experience facilitated by an audio tour.</p> <p>The piles of rubble on the Parade Ground would remain and would be used seasonally by waterbirds.</p>	<p>The Main Prison Building and several adjacent areas would be managed to immerse visitors in the federal penitentiary period. A variety of programming and exhibits would bring prison history alive. Rehabilitation or restoration, where appropriate, would enhance resource integrity of the historic structures.</p> <p>In this alternative, the park would manage the structures and landscaped areas surrounding the Main Prison Building to protect and interpret the layers of history.</p> <p>The building rubble on the Parade Ground could be removed and bird populations would be managed to accommodate enhanced visitor access in coordination with the management of the Western gulls. This rehabilitation of the parade ground could incorporate measures to support wildlife.</p>	<p>Visitors would have access to Main Prison Building and features in historically accurate conditions that tell the stories of the different layers of island history. The Main Prison Building and several adjacent areas would be managed to provide visitors with access to the wide range of resources in historically accurate conditions, from the military period through the Indian occupation. Rehabilitation or restoration of historic resources would enhance their historic integrity.</p> <p>The park would manage these structures and adjacent areas to enhance bird habitat and protect sensitive resources. Visitor use would be managed and controlled to support natural resource management goals.</p> <p>The rubble piles on the Parade Ground would be retained to maintain and enhance seabird habitat.</p>	<p>The Main Prison Building and several adjacent areas would provide visitors with the opportunity to explore the federal penitentiary's history. Visitors would also have access to the wide range of historic structures and features, in historically accurate conditions that tell stories about the different layers of island history. Park managers would look for opportunities to expose visitors to the tangible resources (including artifacts in the park's museum collection) of the federal penitentiary and military eras.</p> <p>Treatments ranging from upgrades to exhibits and furnishings to more complete restoration would continue with the goal of increasing access and interpretation of the structure's history.</p> <p>The Parade Ground would be rehabilitated to portray its historic period and support year-round visitor exploration of this area in coordination with the management of Western gulls. The rehabilitation could incorporate measures to support wildlife and the piles of rubble would be removed.</p>
LIGHTHOUSE			
<p>The lighthouse would be managed for historic function with highly controlled visitor access.</p>	<p>The lighthouse would be preserved to allow enhanced access and interpretation.</p>	<p>Same as alternative 1.</p>	<p>Same as alternative 1.</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
NORTH END OF ISLAND			
<p>Area and buildings would continue to be used for operations and maintenance.</p> <p>Visitors are not permitted.</p>	<p>Historic structures including Model Industries Building would be rehabilitated and adaptively reused for maintenance, storage, and public safety.</p> <p>Some visitor access would be provided to showcase technologies.</p>	<p>The interior of Officers' Club, Quartermaster House, and Power Plant would be used for administration.</p> <p>The Model Industries Building would be stabilized as a ruin to provide additional nesting bird habitat.</p> <p>Visitor access would be highly controlled.</p>	<p>The Quartermaster Warehouse would be rehabilitated for administration and conservation functions; the Power Plant would be stabilized to house green, sustainable infrastructure with possible visitor access and interpretation.</p> <p>The Model Industries Building would be stabilized as a ruin, to protect sensitive natural resources.</p> <p>Visitor access would be encouraged.</p>
ISLAND PERIMETER			
<p>This area would continue to be managed cliffs and shore for bird and wildlife habitat.</p> <p>Year-round and seasonal trails would remain; other areas closed for visitor safety and sea bird protection.</p>	<p>This area would be managed for natural habitat. Trails would provide year-round visitor access.</p> <p>Visitor access to western coastal cliffs and tide pools would be highly managed. Seasonal closures would protect sea bird habitat.</p>	<p>The perimeter would be preserved to protect natural resources.</p> <p>Visitor use and access would be highly managed.</p>	<p>The perimeter and coastal cliffs would be managed to stabilize historic resources.</p> <p>Visitor access would be provided through the Discovery Trail.</p>
OFFSHORE BAY ENVIRONMENT			
<p>NPS jurisdiction extends 1000' from shore; no active management of this area; access would continue to be limited to the ferry.</p>	<p>The western shore and the area extending 100 ft beyond it would be managed to protect marine resources. Boat landings and boat tours would be prohibited.</p>	<p>The western shore and the area extending 300 ft beyond it would be managed to protect coastal resources and nesting seabird colonies on the cliffs. The area would be closed to boats during breeding season.</p>	<p>Most of the shoreline and the area extending 300 ft beyond it would be managed to protect coastal resources and nesting seabird colonies on cliffs. The area would be closed to boats during breeding season.</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
OFFSHORE BAY ENVIRONMENT (continued)			
	The eastern shore and the area beyond 300 ft. from the western shore would be managed to accommodate ferry service and allow boat tours and water-based recreation.	The eastern shore and area beyond 300 ft from western shore would be managed to accommodate ferry access. Enforcement of resource protection measures would be strengthened.	The area extending out to 1,000 feet from the islands shore would be managed to accommodate only ferry service and would enforce the historic no-trespass zone.

1

2

Table 4: Summary of Key Impacts of Implementing the Alternatives for Alcatraz Island

This table will be completed after the regional review is completed.

PARK LANDS IN MARIN, SAN FRANCISCO, AND SAN MATEO COUNTIES: NO-ACTION ALTERNATIVE

3

4 PARK LANDS IN MARIN COUNTY

5 Overview

6 In Marin County, the Golden Gate National Recreation Area forms the southern core of a
7 large network of regional, state, and federal protected lands and waters (many of which
8 are recognized as part of the UNESCO Golden Gate Biosphere Reserve). Under the no-
9 action alternative, the park would continue to manage this large expanse of preserved
10 natural landscape, with scattered concentrations of developed facilities, to provide
11 visitors with multiple opportunities for recreation: miles of trails, preserved historic
12 military fortifications, and scenic and historic landscapes.

13 The county features some of the most varied landscapes in Golden Gate National
14 Recreation Area, including lush woodlands, rugged coasts, sandy beaches, meadows,
15 marshes, grasslands, and coastal shrubs. As a result, visitors would experience an array of
16 wildlife throughout the seasons and several different habitats in one brief hike.

17 Much of this area has been managed as part of the Golden Gate National Recreation Area
18 since the recreation area was established in 1972. Management of this land would
19 continue to be guided by the park’s 1980 general management plan and subsequent land
20 use and implementation plans (as described in the “Relationship of This Plan to Other
21 Plans” section and in Appendix B).

22 A diverse set of park partners—many housed in historic structures—would continue to
23 provide programs and facilities for visitors’ education and enjoyment. These facilities and
24 programs currently include a hostel, environmental education and arts programming,
25 equestrian facilities, and a marine mammal rehabilitation center. Park-managed visitor
26 facilities would continue to include a visitor center, scenic overlooks, trails, campsites,
27 and beaches ranging from wild and rugged below Slide Ranch to the developed
28 recreational setting at Stinson Beach.

29 National Park Service maintenance facilities, staff housing, administrative offices, and
30 various partner offices would also continue to be located in the park.

31

32 Stinson Beach North to Bolinas–Fairfax Road

33 The developed area would continue to be managed to support intensive use as a scenic
34 recreational beach receiving a high number of visitors. A variety of facilities would
35 support activities that include picnicking, beach recreation, and water recreation (surfing,
36 windsurfing, and boogie boarding). Two public bus routes currently serve this area.
37 Easkoot Creek and the dunes would continue to be managed to preserve and enhance
38 natural habitat. Areas of the park east of Bolinas Lagoon would be managed for their
39 natural resource values and would have few trails or other visitor facilities.

40

1 This area would continue to be managed to protect and restore the coastal ecosystems,
2 and contribute to the restoration of natural processes that affect Bolinas Lagoon.
3 Partnerships with neighboring land managers would be strengthened to achieve these
4 goals across the broader landscape.

5

6 **Highway 1 and Panoramic Highway**

7 Stretches of these roads pass through or alongside park lands. The roads are not under
8 federal jurisdiction; however, as the underlying land manager, the National Park Service
9 would continue to cooperate with Caltrans and Marin County for management of the road
10 infrastructure and rights-of-way to protect park resources and preserve the scenic rural
11 character of the setting.

12 Highway 1, a segment of the Pacific Coast Highway, is a designated national scenic
13 byway. In general, the park land in this area would continue to be managed to preserve
14 and enhance natural and cultural resources and offer access to park sites and recreational
15 activities.

16

17 **Slide Ranch**

18 This area would continue to be managed by a park partner to operate an environmental
19 and farm education center in a natural landscape with public access to trails and the
20 shoreline. Slide Ranch would provide day and overnight experiences for program
21 participants and promotes healthy eating, healthy living, and environmental awareness.
22 The rocky shoreline and natural area surrounding the program site would continue to be
23 managed by the park to protect natural and ecological values and provide access on
24 existing trails.

25

26 **Lower Redwood Creek (former Banducci flower farm and 27 surrounding area)**

28 This area would continue to be managed to preserve and enhance natural processes in the
29 creek, floodplain, and surrounding natural landscape. The National Park Service would
30 work with other land managers in the restoration and preservation of the watershed and in
31 the protection of threatened and endangered species like Coho salmon and the red legged
32 frog. Land and water management would be consistent with the *Lower Redwood Creek
33 Floodplain and Salmonid Habitat Restoration Plan* and the *Redwood Creek Watershed:
34 Vision for the Future* plan. Existing residential structures could continue to provide
35 housing for volunteers who contribute to site restoration and stewardship.

36

37 **Muir Beach**

38 This small but popular beach lies at the mouth of Redwood Creek and at the confluence
39 of several park trails. In the no-action alternative, the National Park Service would
40 continue to support recreation, hiking, access to the beach. The park staff will continue
41 extensive wetland and creek restoration of the area.

1 **Golden Gate Dairy and Vicinity**

2 The developed area along Highway 1 would be managed to support a small equestrian
3 facility and the Muir Beach Volunteer Fire Department, which would continue to be
4 housed in historic ranch buildings. Park housing would continue to be provided in
5 nonhistoric structures. A small buffer area protects a tributary to Redwood Creek. The
6 surrounding uplands would be managed to provide trail connections through a natural
7 coastal landscape. Recent trail and trailhead improvements connect this area to the Dias
8 Ridge Trail.

9

10 **Tennessee Valley (from Oakwood Valley to the ocean)**

11 A major trailhead, multiple trails, Haypress Meadow hike-in campground, and an
12 equestrian center are in the upper end of the valley. A site in the lower valley contains a
13 nursery operation, the park's small volunteer horse patrol, an environmental education
14 program, and the Youth Conservation Corps seasonal group campsite. This area would
15 continue to be managed in a way that accommodates these intense and varied visitor uses.
16 The management of equestrian facilities in this area would reflect the equestrian
17 management environmental assessment that is underway.

18 The majority of the valley would be managed as a natural landscape with a trail system
19 that provides access to a variety of destinations and landscapes. Remnants of former
20 agricultural uses, including farm ponds, fence lines, and nonnative trees, would remain in
21 the landscape. The creek corridor and shoreline would continue to be managed to protect
22 sensitive natural resources. Tennessee Valley is not currently served by transit. In
23 addition, the trail connections are poor between Tennessee Valley, Oakwood Valley, and
24 the Tamalpais Valley community along Tennessee Valley Road.

25

26 **Marin Headlands: Marin City Ridge and Gerbode Valley (the**
27 **coastal ridges and valleys)**

28 This extensive area would continue to be managed to preserve natural resources and
29 processes, restore native habitats, and protect sensitive species, in addition to coastal
30 fortifications while providing for trail use, trail improvements, and primitive camping.
31 The Marin City Ridge will continue to be managed as part of the adjacent Marin
32 Headlands in order to support public access on the trails that connect to the community,
33 and protecting and restoring natural habitats.

34

35 **Marin Headlands: Fort Barry and Fort Cronkhite**

36 Within this area, historic structures and their settings would be preserved or adaptively
37 reused for recreation, education, and other uses, including park operations. Adaptive use
38 of historic structures would continue to be the foundation of the robust program of park
39 partners who preserve buildings and offer programs that further the mission of the park.
40 Planned road, trail, and transit projects will improve access for visitors and partners (e.g.,
41 *Marin Headlands and Fort Baker Transportation Infrastructure and Management Plan*
42 *Final Environmental Impact Statement*).

1 Park operations located in the area currently include a fire station, roads and maintenance
2 facilities, staff offices, and a native plant nursery.

3 Recreational experiences supported in the area would continue to include beach activities
4 hiking, bicycle riding, horseback riding, picnicking and environmental education.

5 The upland areas would be managed to preserve natural resources and processes,
6 continue habitat restoration, protect sensitive species and habitats, and allow for
7 continued trail use.

8

9 **Capehart Housing Area**

10 The National Park Service would continue to manage this area of housing on the north
11 and south side of Rodeo Creek, located at the intersection of the two roads that access the
12 Rodeo Valley, to provide workforce housing for park and partner staff. This area is
13 named Capehart after the senator who sponsored the military housing act.

14

15 **Conzelman, Bunker, and McCullough Roads (including Battery 16 Spencer and Hawk Hill)**

17 This area would continue to be managed to preserve historic and natural resources and
18 scenic views of the Golden Gate and Pacific Ocean. The coastal defense fortifications
19 would continue to be accessible and interpreted while protecting sensitive species and
20 native habitats. Currently, scenic driving, bicycling, and walking the California Coastal
21 Trail are popular activities. Planned road, trail, and transit projects will improve access
22 for visitors and reduce congestion at scenic overlooks (e.g., *Marin Headlands and Fort
23 Baker Transportation Infrastructure and Management Plan Final Environmental Impact
24 Statement*).

25

26 **Kirby Cove**

27 This area would continue to provide a small campground and group picnic area. The
28 beach would be accessible on foot or by nonmotorized boats. The historic coastal
29 fortifications and forest would be preserved.

30

31 **Point Bonita Lighthouse Complex**

32 The lighthouse and several structures, including a small outbuilding, bridge, and access
33 trail, would continue to be preserved. Visitors would be immersed in an authentic historic
34 setting with interpretation about the site's maritime and military history. Access would
35 continue to be highly managed.

36

37 **Offshore Ocean and Bay Environment**

38 The National Park Service has jurisdiction through a management lease with the State of
39 California over a 1,000-foot-wide band of coastal waters immediately offshore. The area
40 includes a variety of marine habitat. The shoreline in Point Bonita Cove would continue

1 to be closed to public access year round to protect the harbor seal haul-out, except for
2 approved research. Park management of these areas would continue to accommodate
3 public uses such as boating. The park staff would continue to encourage and support
4 research, inventory, monitoring, and consultation and cooperation with other resource
5 managing agencies.

6

7

8 **PARK LANDS IN SAN FRANCISCO COUNTY**

9 **Overview**

10 San Francisco park lands in the planning area include upper Fort Mason, China Beach,
11 Lands End, East and West Fort Miley, Ocean Beach, and Fort Funston.

12 Areas that have recently completed land use plans, or are implementing recently
13 completed plans are not included in this plan: lower Fort Mason (The Fort Mason
14 Center), the Presidio (including Crissy Field), Fort Point National Historic Site, the Sutro
15 Historic District (Sutro Heights Park, Sutro Baths, and the adjacent parking lot and trail),
16 and the Cliff House.

17 Park lands in San Francisco County ring the northern and western shores of the city of
18 San Francisco, preserving a greenbelt next to dense urban neighborhoods. They are
19 central to the quality of life, offering city dwellers places to recreate, rejuvenate, and
20 learn about the fascinating natural and cultural history of the region. For visitors, the park
21 lands help define San Francisco as one of the most beautiful cities in the world.

22 Management of these lands and marine/bay waters would continue to focus on preserving
23 natural, cultural, and scenic resources, and providing for a variety of recreational uses in
24 the varied settings along San Francisco Bay and the Pacific coast.

25

26 **Upper Fort Mason**

27 Fort Mason would continue to be managed to preserve the historic district and to
28 adaptively use the many historic military structures for a variety of park and park partner
29 uses, including staff offices, maintenance, community garden, and a program center for
30 other park partners. A hostel would continue to be the primary public use in the historic
31 structures. The National Park Service manages a leasing program that provides the
32 opportunity for the San Francisco community to live in historic residences, much like
33 army personnel before them, while providing a source of funds for preservation and
34 maintenance. The Fort Mason Officers' Club would continue to be available to the public
35 for events, such as weddings and conferences.

36 The "Great Meadow" would continue to provide a flexible space that accommodates a
37 range of informal uses and occasional large special events. The San Francisco Bay Trail
38 through Fort Mason would continue to provide a continuous waterfront multiuse
39 promenade that links to San Francisco Maritime National Historical Park and many park
40 destinations along the City and Presidio waterfront. Planning is underway to bring water
41 shuttle access to a pier at lower Fort Mason. The City of San Francisco is also evaluating

1 Bus Rapid Transit Service along Van Ness Avenue to terminate at an improved transit
2 hub at North Point Boulevard, immediately adjacent to Fort Mason.

3

4 **China Beach**

5 This area would continue to be managed for the recreational enjoyment of the small
6 secluded beach and to provide opportunities for bird watching. Park facilities such as
7 picnicking, restrooms, and showers would continue to be provided. The area's natural
8 resources would be managed for native vegetation and slope stability.

9

10 **Lands End**

11 Only the northern area of Lands End is covered in this plan. This area would continue to
12 be managed to preserve and enhance the rugged coastal landscape and its natural
13 appearance, and to provide trail access. Public safety staff would continue to be located at
14 this site. The southern portion of Lands End, the Sutro Historic District including the
15 Cliff House, is not part of this plan. This area was recently transformed by the addition of
16 a new parking lot, promenade, scenic overlooks, and extensive renovation of the
17 Monterey cypress forest.

18

19 **Fort Miley**

20 Fort Miley is divided into East Fort Miley and West Fort Miley by the active Veterans
21 Administration Medical Center (VAMC) hospital. Park managers would continue to
22 preserve the historic structures and landscapes, providing for both public and park
23 operation uses. East Fort Miley would continue to be managed as a small maintenance
24 center housed in historic structures, with public access to an unimproved landscape
25 setting primarily through the VAMC Hospital campus.

26 West Fort Miley's historic forest would continue to provide an outdoor skills and fitness
27 course and a small picnic area set among historic fortifications with spectacular coastal
28 views. The historic Marine Exchange Lookout Building (Octagon House) would remain
29 unused.

30

31 **Ocean Beach**

32 Ocean Beach would continue to be managed to provide a recreational beach that
33 accommodates high levels of diverse use, while preserving its natural values, including
34 habitat for shorebirds such as the *threatened* western snowy plover. It would continue to
35 provide a long trail connection between Fort Funston and the Cliff House, as well as
36 preserve the historic O'Shaughnessy seawall and promenade. The National Park Service
37 would continue to collaborate with the City and County of San Francisco on Ocean
38 Beach management issues.

39

40

1 **Fort Funston**

2 This park unit would continue to provide trail and beach access for a variety of
3 recreational uses, including dog walking and hang gliding. It would also preserve
4 important natural and cultural resources, including endangered species habitat and
5 historic coastal defense fortifications. Former military structures support park operations
6 and partner programs such as environmental education and native plant nursery.

7

8 **Offshore Ocean and Bay Environment**

9 The National Park Service has jurisdiction through a management lease with the State of
10 California over a 1,000-foot-wide band of coastal waters immediately offshore. The area
11 includes a variety of marine habitat. Park management of these areas would continue to
12 accommodate public uses e.g boating. The park staff would continue to encourage and
13 support research, inventory, monitoring, and consultation and cooperation with other
14 resource managing agencies.

15

16

17 **PARK LANDS IN SAN MATEO COUNTY**

18 **Overview**

19 At the time the previous general management plan was developed, the Golden Gate
20 National Recreation Area did not manage any land in San Mateo County. Since that time,
21 NPS-managed land within the designated park boundary has grown to include almost
22 30,000 acres in San Mateo County.

23 Stretching along the San Mateo coast to Rancho Corral de Tierra and inland to the
24 Phleger Estate, the southern park lands feature a remarkable wealth of natural and historic
25 resources. From rugged coastal bluffs and windswept ridgelines to a redwood forest,
26 wetlands, and streams, these lands support an abundance of plants and wildlife and tell
27 the story of the people who have shaped this peninsula over generations.

28 Golden Gate National Recreation Area park lands in San Mateo County serve a large and
29 diverse local population, offering many opportunities for recreation and enjoyment.
30 Whether enjoying the trails, strolling the beaches, or taking in panoramic views up and
31 down the Pacific coast, there are unlimited ways to explore and appreciate these park
32 lands.

33 Currently the National Park Service's presence in San Mateo County is limited, sites are
34 not well identified, and there are few basic facilities to support access. Management of
35 park lands in San Mateo County is guided by the park's authorizing legislation (its
36 purpose) and the management policies common to units of the national park system. This
37 management approach would continue under the no-action alternative, with the exception
38 of Sweeney Ridge, for which a general management plan amendment was approved in
39 1985 and provides specific management guidance.

40 Site planning for other places like Mori Point has also been completed. The park has
41 consulted with other agencies to achieve fundamental park goals regarding the San

1 Francisco Public Utilities Commission watershed, where the park holds scenic and
2 recreational easements.

3

4 **The Area South of Thornton State Beach to South of Mussel Rock**

5 The National Park Service manages approximately 30 acres in two parcels in this
6 geologically dynamic coastline: one parcel south of Thornton State Beach and one parcel
7 south of Mussel Rock. No improvements for public access have been made by the
8 National Park Service, and there is no active NPS presence in this area. In the absence of
9 a general management plan, management is guided by the park's authorizing legislation
10 (its purpose) and the management policies common to units of the national park system.
11 This would continue under the no-action alternative.

12

13 **Milagra Ridge**

14 This area would continue to be managed to protect and restore natural habitat (including
15 endangered species habitat), to protect historic coastal defense fortifications, and to
16 provide public access through a system of trails so people can enjoy the site and its scenic
17 beauty. Recent acquisition by the park of a conservation easement on the northwest slope
18 allows potential development of a Bay Area Ridge Trail connection to the coast.

19

20 **Shelldance Nursery Area**

21 Portions of the Shelldance Nursery area were added to the park in 1988 and 1993. This
22 small area would continue to be managed for trail access, including a trailhead and trails
23 to Sweeney Ridge; office and storage of park maintenance equipment; and to
24 accommodate a commercial nursery.

25

26 **Sweeney Ridge (including Cattle Hill and Picardo Ranch)**

27 Sweeney Ridge was added to the park in 1984. The area would continue to be managed
28 for natural values and protection of historic resources, such as the San Francisco Bay
29 Discovery Site National Historic Landmark and the 20th century Nike facilities. Cattle
30 Hill is expected to be transferred to the National Park Service by the City of Pacifica in
31 the near future and recent collaboration has provided trail and habitat improvements on
32 this site. Picardo Ranch and the western extension of Cattle Hill are both private lands not
33 managed by the National Park Service at this time. Picardo Ranch includes the lower
34 slopes of Cattle Hill, and its trails connect to Sweeney Ridge. Currently, an equestrian
35 facility provides horse boarding. Land and conservation easement acquisition would be a
36 priority for the park.

37

38 **Mori Point**

39 Mori Point was added to the park in 2002. This site would continue to be managed to
40 preserve and enhance habitat for threatened and endangered species (San Francisco garter
41 snake, California red-legged frog) and to restore natural functions to a highly degraded

1 site. A network of hiking trails, including the California Coastal Trail, is under
2 development to provide visitors access to the area’s scenic beauty. Management of this
3 site would be guided by the Mori Point Restoration and Trail Plan environmental
4 assessment.

5

6 **Pedro Point, Devil’s Slide, and San Pedro Mountain**

7 These rugged coastal areas are not managed by the National Park Service. However, they
8 will be greatly affected by the opening of the Highway 1 tunnel now under construction,
9 and may be added to the park within the planning horizon of the general management
10 plan. The City of Pacifica manages Pedro Point to preserve its natural features and open
11 space. The Devil’s Slide segment is managed by Caltrans to support Highway 1; several
12 agencies have been involved in planning trailheads for the future conversion of the road
13 to a multiuse trail when the Devils Slide tunnel opens in 2011. Lands adjacent to
14 Highway 1 in this area and on San Pedro Mountain are in public and private ownership.

15

16 **Rancho Corral de Tierra**

17 One of the largest areas of open space near San Francisco, this 4,200–acre site is
18 managed by the Peninsula Open Space Trust (POST) and encompasses the majority of an
19 1839 Mexican Land Grant. The isolated and undisturbed condition of the land provides
20 unique and productive habitat for a diverse array of plant and animal species, including
21 several threatened and endangered species. The headwaters of four major coastal
22 watersheds are contained within this property, providing important riparian habitat and a
23 scenic backdrop that visually distinguishes the San Mateo mid-coast region.

24 Limited public access would continue to be provided for recreation such as hiking and
25 horseback riding. The area would be managed to provide for these current uses, such as
26 equestrian facilities, and anticipated new public uses in a way that maintains and protects
27 resources.

28 The acquisition process is underway to transfer some of this land to the National Park
29 Service. Approximately 300 acres of the Rancho Corral de Tierra will not be included in
30 the park. Those acres encompass farmland of “Local Significance” as designated by the
31 State of California Department of Conservation, and will remain in agricultural use.

32

33 **Montara Lighthouse**

34 The site is presently managed by the US Coast Guard. Under an agreement with
35 California State Parks, a hostel is operated in several structures related to the lighthouse.
36 Day use of the site is focused on scenic beauty and lighthouse history. Transfer of this
37 site to the park is anticipated within the planning horizon of the general management
38 plan. If this occurs, the site would be managed for its current uses.

39

40

1 **Phleger Estate**

2 This area was added to the park in 1994. It would continue to be managed to preserve the
3 cultural and natural resources of this 1,000-acre, second-growth redwood forest and to
4 provide access to the regional trail system.

5

6 **San Francisco Public Utilities Commission Peninsula Watershed**
7 **Easements**

8 These 23,000 acres are managed by San Francisco Public Utilities Commission to protect
9 San Francisco’s water supply and the scenic, ecological, and cultural resources of the
10 watershed. The management is guided by the commission’s *Peninsula Watershed*
11 *Management Plan*. The Golden Gate National Recreation Area manages two easements
12 over the Peninsula Watershed: a scenic easement and a scenic and recreation easement
13 that provide for preservation of natural values and limited recreational use. Compatible
14 recreational, educational, and scientific uses are highly controlled. Primary public access
15 is on trails along the eastern edge of the watershed where the trails are easily accessible
16 from adjacent communities. Access on the 10-mile Cahill Ridge alignment of the Bay
17 Area Ridge Trail is provided by guided tours. The San Francisco Public Utilities
18 Commission and National Park Service cooperate to assure that ongoing water operations
19 and other allowable uses are compatible with the preservation and access components of
20 the easements. The Peninsula Watershed forms the core of the UNESCO Golden Gate
21 Biosphere Reserve, an area rich in native plant and animal life.

22

23 **Offshore Ocean Environments**

24 In areas where the park boundary coincides with the Fitzgerald Marine Reserve (FMR),
25 the two organizations would continue to cooperate in the implementation of the
26 provisions of the California State Marine Life Protection Act. The FMR area between
27 Montara State Beach and Ross Cove has been designated as the Montara State Marine
28 Reserve: no fishing, harvesting, or collecting would be allowed in this area. The FMR
29 area between Ross Cove and Pillar Point Harbor has been designated as the Pillar Point
30 Marine Conservation Area; some fishing would be allowed in this area.

31

32

33 **COST ESTIMATES**

34 The estimated costs of the no-action alternative reflect the continuation of current
35 management. One-time costs for the no action alternative are costs for those projects that
36 are currently approved and funded—any requested but unfunded projects are not
37 considered in this analysis. Therefore, while the action alternatives contain estimates for
38 20 years of proposed projects, the no action alternative assumes no new projects would
39 take place except for those projects funded this fiscal year. Funded projects include
40 preservation of seacoast fortifications, trail realignment, and photovoltaic panel
41 installation on the headquarters building. Non-facility projects currently include
42 conservation of museum collections, visitor use management and monitoring, and

1 restoration of native plants. Total one-time costs of the no-action alternative are \$26
2 million.

3 Operating costs and staff numbers for Alcatraz Island and Muir Woods National
4 Monument are included in this analysis, since staff and operational cost cannot easily be
5 divided among the three park areas. Annual operating costs are \$28 million. Total staff is
6 335 FTE (full time equivalent).

7 The financial and in-kind support of park partners and volunteers is not included in the
8 costs to the park. However, Golden Gate National Recreation Area staff would not be
9 able to provide the level of service to the community and visitors without park partners
10 and volunteers. For every dollar of total federal funding or revenue received, the park
11 leverages an additional dollar's worth of in-kind services and donations from park
12 partners and volunteers. Additionally, many park partners invest in renovations and large-
13 scale improvements to the facilities they occupy. Recent examples include the
14 construction of the Marine Mammal Center headquarters and the substantial restoration
15 and reuse of Fort Baker as Cavallo Point.

16

17

18 **MANAGEMENT ZONES FOR THE NO-ACTION ALTERNATIVE** 19 **(FROM THE 1980 GENERAL MANAGEMENT PLAN)**

20 **Natural Resource Zones**

21 ***Intensive Landscape Management Zone***

22 Lands within this zone occur entirely within southern reaches of the park and basically
23 include all areas where exotic vegetation predominates. Although all of these areas have
24 been substantially modified through human activities, many of them still contain isolated
25 populations of natural wildlife and vegetation which will be carefully preserved. When
26 choices are available in these zones they should favor native species wherever possible.
27 Within this category the following two subzones have been recognized.

28 ***Natural Appearance Subzone: (Ocean Beach, Fort Funston, Lands End, and Rodeo***
29 ***Lagoon picnic area).*** To many park users lands in this subzone may appear to be as
30 natural as wilderness areas at Point Reyes, but they are in fact man-created landscapes
31 which in many cases will require the same degree of maintenance as an urban park
32 setting. The primary management goal in these areas will be to continue to accommodate
33 relatively high use levels with a commitment to intensive maintenance in order to retain
34 the appearance of a natural landscape. Examples of intensive measures that will be
35 required in this subzone include reforestation of Monterey cypress and stabilization and
36 maintenance of planted sand dunes.

37 ***Urban Landscape Subzone: (Crissy Field, West Fort Mason, Fort Barry parade***
38 ***ground, Stinson Beach developed areas)***

39 This subzone is characterized by familiar elements found in traditional city parks—well
40 tended trees, shrubs and flowers, irrigated and mowed lawns, and hard-surfaced areas for
41 walking and congregating. These areas are designed for intensive use and should look

1 complete only when filled with people. Primary resource management activities will
2 include mowing, irrigation, weeding, fertilization, replanting, and trash pickup.

3

4 **Natural Landscape Management Zone (Marin Headlands and Stinson**
5 **Beach area)**

6 In this zone natural resources and processes will remain as undisturbed as possible given
7 a relatively high level of natural park uses (hiking, primitive camping, etc.). Management
8 activities will be directed primarily at protecting wildlife and vegetation from misuse and
9 overuse and at maintaining a variety of landscape settings conducive to recreation (open
10 grasslands as well as forests).

11

12 **Special Protection Zone**

13 This zone includes lands that have received legislative or special administrative
14 recognition of exceptional natural qualities requiring strict protection measures. Further
15 analysis of park resources in the future could result in additional lands being placed in
16 this category.

17 **National Monument Subzone: (Muir Woods).** Although contained within the boundary
18 of Golden Gate National Recreation Area, Muir Woods retains its special status as a
19 national monument, the sole purpose of which is to protect a stand of virgin coast
20 redwoods for public enjoyment of their scientific, scenic, and educational values.

21 **Biotic Sensitivity Subzone: (shoreline and stream courses).** This subzone, derived from
22 high sensitivity ratings in the information base, generally identifies those natural
23 resources in the park that are particularly sensitive to human use or are especially
24 valuable from an ecological or scientific point of view. Use and development in these
25 areas should be either discouraged or mitigated sufficiently to avoid significant levels of
26 deterioration.

27 Most of the areas covered by this subzone are water courses or bodies of water
28 recognized for their importance in sustaining wildlife and vegetation. Because the lands
29 near these resources have been and will continue to be the most attractive locations for
30 use and minor development, mitigation measures will be particularly important. Siting of
31 minor facilities will be crucial. For example, locating a campground directly upon the
32 bank of a stream could cause unacceptable impacts that could be avoided by shifting the
33 facility only several hundred feet.

34

35 **Historic Resource Zones**

36 **Preservation Zone (Fort Point, ships, lighthouses, fortifications, historic**
37 **buildings at Alcatraz)**

38 Spaces and objects placed in this category are managed and used primarily for the
39 purpose of facilitating public enjoyment, understanding, and appreciation of their historic
40 values. Management activities will include the protection of structures from influences
41 and uses that could cause deterioration and the presentation of tours, exhibits, or other
42 appropriate interpretive efforts.

1 Because of the unusually large number of historic structures in the parks, many that are
2 suitable for adaptive use have been placed in this category simply because a use has not
3 yet been specifically identified for them. Undoubtedly some of these will be adapted for
4 management or visitor uses in the future, but in the meantime they will be simply
5 protected from damage and deterioration.

6

7 ***Enhancement Zone (Sutro Baths, Sutro Heights, Cliff House, Aquatic***
8 ***Park)***

9 All of the areas within this subzone were developed originally as recreation spaces and
10 still derive their primary value from recreation use. Management practices will be
11 directed at preserving the basic integrity of their settings and specific structures within
12 them. Enhancement of the usability and attractiveness of these partially rundown and
13 deteriorated areas will be accomplished through the addition of elements and the practice
14 of maintenance activities similar to those described for the urban landscape subzone

15

16 ***Adaptive Use Zone (Alcatraz grounds, north and east Fort Mason,***
17 ***Haslett Warehouse, East Fort Miley, areas of Marin Headlands)***

18 This subzone defines structures or spaces of historic value that have been or will be
19 adapted for recreation, park management, and related activities. Although as much
20 historic integrity as possible will be retained throughout all areas of the park, the interior
21 spaces of structures included in this zone may be modified considerably to accommodate
22 recreation, education, and other park-related uses. Exterior settings may also be modified
23 to include site improvements such as landscaping in cases where such modification is
24 deemed necessary to properly accommodate public use.

25

26 ***Special Use Zone (Vedanta Society, Audubon Canyon Ranch, Zen***
27 ***Center, Mount Tamalpais and Angel Island state parks, Lincoln Park and***
28 ***Marina Green city parks, Presidio of San Francisco)***

29 Lands within this zone are located within the authorized boundaries of Golden Gate
30 National Recreation Area or Point Reyes National Seashore but are not currently or
31 expected in the foreseeable future to come under the jurisdiction of the National Park
32 Service. Management policies and practices of the agencies and organizations
33 administering these lands appear to adequately provide for the continued preservation of
34 the natural, scenic, recreational, and historic values which motivated their inclusion
35 within the boundaries.

36

Not shown: Areas to north managed by Point Reyes National Seashore

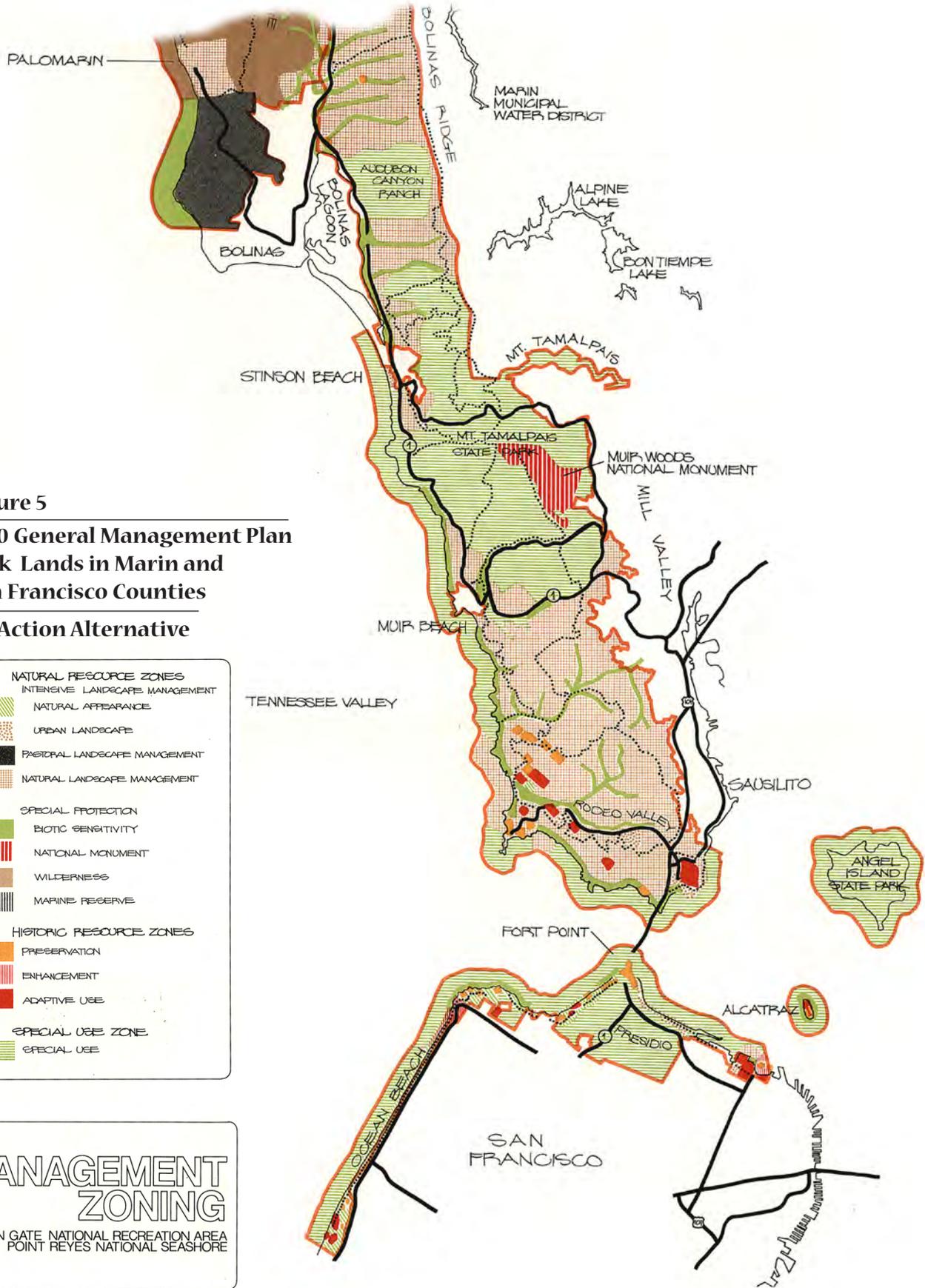


Figure 5
1980 General Management Plan
Park Lands in Marin and
San Francisco Counties
No-Action Alternative

NATURAL RESOURCE ZONES	
	INTENSIVE LANDSCAPE MANAGEMENT
	NATURAL APPEARANCE
	URBAN LANDSCAPE
	PASTORAL LANDSCAPE MANAGEMENT
	NATURAL LANDSCAPE MANAGEMENT
SPECIAL PROTECTION	
	BIOTIC SENSITIVITY
	NATIONAL MONUMENT
	WILDERNESS
	MARINE RESERVE
HISTORIC RESOURCE ZONES	
	PRESERVATION
	ENHANCEMENT
	ADAPTIVE USE
SPECIAL USE ZONE	
	SPECIAL USE

MANAGEMENT ZONING
 GOLDEN GATE NATIONAL RECREATION AREA
 POINT REYES NATIONAL SEASHORE

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

Back of map

PARK LANDS IN MARIN, SAN FRANCISCO, AND SAN MATEO COUNTIES: ALTERNATIVE 1, CONNECTING PEOPLE WITH THE PARKS (THE NPS PREFERRED ALTERNATIVE)

5

6 PARK LANDS IN MARIN COUNTY

7 Overview

8 In this alternative, park managers would preserve the natural, cultural, scenic, and
9 recreational qualities that are enjoyed today and would improve access to the park for all
10 visitors. The park would enhance the facilities that support visitors' experiences in what
11 author John Hart calls "the wilderness next door." Park managers would work to preserve
12 and restore these interconnected coastal ecosystems through collaborative partnerships
13 with other land management agencies in the region. A stronger national park identity and
14 message would welcome people as they arrive, and improved orientation and information
15 services would inform them of the variety of experiences available in the park. Important
16 park operational uses would remain in the Marin Headlands, and the facilities at these
17 sites would be improved.

18

19 The park lands in Marin County are an outdoor recreationist's paradise, with an extensive
20 network of trails through valleys, atop windblown coastal bluffs, along rocky shores, and
21 among redwoods and oaks. Sustainable approaches to rehabilitating facilities that are in
22 place today would improve a number of trailheads and trails as well as roads, parking
23 lots, campsites, picnic areas, restrooms, and other structures at popular destinations.
24 Some new facilities would be developed to improve visitor services and support the
25 growing stewardship programs. Park partners would continue to play important roles in
26 preserving resources and offering programs and services to visitors in support of the
27 park's mission. Public transportation and multimodal access to all park sites would be
28 improved.

29

30 Stinson Beach North to Bolinas–Fairfax Road

31 Diverse Opportunities Zone (beach, dunes, and developed area)

32 At Stinson Beach, the setting and facilities would be improved to better support beach
33 recreation, expand the creek buffer to protect endangered species habitat, and enhance the
34 dunes. Visitor facilities would be removed if it becomes infeasible to maintain them
35 because of climate change. Sustainable new facilities would replace deteriorated
36 restrooms, showers, picnic areas, and parking lots. A warming hut could combine
37 existing services (food service, equipment rental) and interpretive and educational
38 programs. Maintenance and public safety offices with ranger housing would be retained.

39 The park would explore ways to improve visitor access to Stinson Beach, such as
40 increasing transit on weekends during the peak season and enhancing regional trail

1 connections. The park would also continue to work with the community and Marin
2 County to manage parking and reduce traffic using congestion management tools.

3 The park would continue to work with the Stinson Beach Community Services District,
4 Marin County, and the local community to find sustainable solutions to flooding and
5 floodplain function, water use, water quality, and wastewater treatment, and sea level rise
6 related to climate change where these affect park resources. More detailed site planning
7 for proposed improvements will involve working with the community to identify
8 alternatives for vulnerable facilities, including off-site locations and increased transit
9 service to offset reduces parking.

10

11 **Natural Zone** (surrounding park land north to Bolinas–Fairfax Road, except Stinson
12 Beach)

13 This area would be managed to protect and restore the coastal ecosystems, and contribute
14 to the restoration of natural processes that affect Bolinas Lagoon. Partnerships with
15 neighboring land managers would be strengthened to achieve these goals across the
16 broader landscape. The park would improve trails, trailheads, and directional signage to
17 provide access to other nearby park lands.

18

19 **Highway 1 and Panoramic Highway**

20 **Scenic Corridor Zone**

21 Park lands in this area would be managed to enable visitors traveling by car, bicycle, and
22 transit to enjoy spectacular views of the Pacific coast and natural habitats, and to provide
23 trail access to park sites.

24 The park would collaborate with Caltrans, Marin County, California State Parks and
25 other land managing agencies to improve the roadways and trail crossings for the safety
26 and enjoyment of park visitors. New facilities could include overlooks and trailheads
27 with parking, restrooms, interpretive exhibits, picnic areas, enhanced trail and transit
28 connections, and a unified wayfinding system. A small trailhead parking area could be
29 developed in the vicinity of the former White Gate Ranch. Improvements east of
30 Panoramic Highway in the vicinity of Homestead Hill would enhance trail and transit
31 access in this area. Improvements would fit with the rural character of the area. Park
32 managers also would seek to minimize impacts to natural resources caused by road use,
33 maintenance, and drainage.

34

35 **Slide Ranch**

36 **Diverse Opportunities Zone** (developed area)

37 This area would be managed to enhance the environmental and farm education center
38 facilities and provide improved facilities for public day use of the site, including a picnic
39 area, trail access, and a scenic overlook.

40

41

1 **Natural Zone** (land surrounding the developed area)

2 The landscape that surrounds the educational programs would be managed to enhance its
3 natural and scenic values, retain flexibility to adapt to coastal geologic processes, and
4 provide for public trail use and access to the coast.

5

6 **Lower Redwood Creek (former Banducci Flower Farm and**
7 **surrounding area)**

8 **Natural Zone** (majority of Lower Redwood Creek)

9 Park managers would continue to restore the natural coastal ecosystem and the riparian
10 habitat of Redwood Creek while providing improved trail connections to Mount
11 Tamalpais State Park and other area trails, including the California Coastal Trail. All
12 unnecessary structures would be removed.

13

14 **Evolved Cultural Landscape Zone** (developed area and adjacent approximately 6-acre
15 site)

16 Park managers would preserve the rural, pastoral character of the landscape. Stewardship
17 facilities relocated from Muir Woods, and equestrian uses relocated from Golden Gate
18 Dairy, **could** be accommodated in this zone. The stewardship center, incorporating a
19 native plant nursery, would reinvigorate the horticultural traditions of the site and engage
20 the community. Existing buildings would support park programs and operations.

21 The National Park Service would work with California State Parks to provide a small
22 trailhead parking and picnic area near the Santos Meadow and the Frank Valley horse
23 camp, and provide access to the equestrian facilities from Muir Woods Road, also known
24 as Frank Valley Road.

25 A sustainable approach to providing for water supply and wastewater treatment would be
26 identified and implemented to confirm the viability of possible uses at this site. To further
27 protect the creek's endangered salmon, park managers could collaborate with the
28 community to increase water storage capacity for use during the dry season.

29 Park managers would continue to work with Marin County and California State Parks to
30 explore realignment of Muir Woods Road to reduce impacts to Redwood Creek and
31 repair and reopen damaged road segments.

32

33 **Muir Beach**

34 **Natural Zone**

35 The National Park Service would manage the area to restore and sustain the wetlands,
36 creek, dunes, and lagoons with improvements for beach and trail access that preserves the
37 community's natural setting. The park would continue to collaborate with the
38 community, Muir Beach Community Services District, and Marin County to understand
39 and address water quality issues that impact park resources.

40

41

1 **Golden Gate Dairy and Vicinity**

2 **Evolved Cultural Landscape Zone** (developed area only)

3 The area would be managed to preserve the historic structures and pastoral character
4 while continuing to support park and community services such as the Muir Beach
5 Volunteer Fire Department. Site improvements to accommodate a small trailhead and
6 public transit stop, and enhance the creek corridor, would be included. Equestrian
7 facilities, except as needed for a small volunteer horse patrol, **could** be relocated to Lower
8 Redwood Creek. Nonhistoric residences along Highway 1 could be removed if they do
9 not contribute to essential community services or park operational needs.

10 The National Park Service would continue to promote regularly scheduled transit service to reduce
11 vehicle traffic and to work with Caltrans to improve the safety of Highway 1 for park visitors
12 including traffic calming and improved pedestrian crossing.

13 **Natural Zone** (surrounding uplands)

14 The uplands surrounding the dairy would be managed to preserve and enhance the natural
15 setting, protect the coastal prairie and scrub habitat, and provide connections to trails to
16 the beach and the adjacent Mount Tamalpais State Park.

17

18 **Tennessee Valley (from Oakwood Valley to Tennessee Valley**
19 **Road)**

20 **Diverse Visitor Opportunities** (Tennessee Valley trailhead and the upper stables area)

21 Trailhead site improvements, including potable water, restrooms, and an improved picnic
22 and parking area, would enhance this “portal” to the park that supports hiking, biking,
23 and equestrian activities. A small food and information kiosk could be included in this
24 area.

25 In collaboration with Marin County and the community, park managers would explore
26 transit to the trailhead on peak season weekends, extend a multiuse trail to connect with
27 Oakwood Valley and the Mill Valley Bike Path (San Francisco Bay Trail), and manage
28 traffic congestion.

29 Equestrian facilities would be retained and could be expanded to suitable adjacent areas.
30 Site improvements would be made to incorporate best management practices and protect
31 the adjacent riparian area. The National Park Service would continue to work with
32 equestrian operators to expand programs that benefit the public.

33 Modest facilities could be located within this zone that support stewardship, education,
34 youth programs, and the volunteer horse patrol relocated from lower Tennessee Valley.

35
36 **Diverse Opportunities Zone** (Oakwood Valley)

37 Visitor access improvements, including trailhead and parking, picnicking, and restrooms,
38 would be provided in this zone to support access to the trail system.

39

40 **Natural Zone** (from the trailhead to the ocean and the surrounding uplands including
41 Oakwood Valley)

1 The existing multiuse trail would be enhanced to support family groups and improve
2 accessibility.

3 All facilities and structures would be removed. Unnecessary management roads could be
4 converted to trails and natural processes restored. Primitive, walk-in group camping
5 could be retained at Haypress and and the Youth Conservation Corps seasonal group
6 camp. All other existing functions could be accommodated closer to the trailhead.

7 The scenic hills that surround the main trail corridor and trailhead would be managed to
8 preserve and enhance the expanse of undeveloped coastal habitat, outstanding natural
9 features, and the scenic beauty of a large contiguous natural area extending to the north
10 and south. An improved, more sustainable trail system would provide access to the
11 variety of settings. The remaining dams and artificial ponds would be removed. Native
12 wetland and riparian habitat would be restored in these areas.

13

14 **Marin Headlands: Marin City Ridge and Gerbode Valley**

15 **Natural Zone** (majority of the Marin Headlands extending south of Tennessee Valley)

16 This area would be managed to preserve the expansive undeveloped wilderness-like
17 character of the landscape, preserve natural resources and processes, continue habitat
18 restoration, protect endangered and sensitive species, and improve the trail system with
19 more sustainable trails and better connections to adjacent communities. Visitor amenities
20 could include expanded primitive and accessible camping opportunities. The National
21 Park Service would collaborate with other agencies and the community to develop a
22 community trailhead in Marin City.

23

24 **Marin Headlands: Fort Barry and Fort Cronkhite**

25 **Diverse Opportunities Zone** (lower elevations of Rodeo Valley along Bunker Road and
26 Fort Barry and Fort Cronkhite)

27 This zone would be managed to provide visitors with a variety of recreational,
28 educational, and stewardship activities consistent with the protection of the nationally
29 significant cultural resources in the area. Visitor amenities could be expanded to include
30 improved trailheads, accessible trails, camping, picnicking, and orientation. These
31 facilities would welcome visitors and give access to the adjacent natural areas. Fort
32 Cronkhite would continue to be the visitor portal to the Headlands.

33 This alternative would build upon the nucleus of existing programs offered by the park
34 and its partners. Rehabilitated historic structures and limited new construction would
35 continue to be used by the park and its partners to provide visitors with an expanded
36 menu of opportunities that are strongly linked to the park's purpose. Programs would
37 focus on environmental education, science, history and culture, recreation, healthy
38 lifestyle activities, and special events. Housing in existing facilities and limited new
39 construction for staff, interns, and volunteers of the park and its partners would be
40 provided within this zone. A facility combining visitor information, education and
41 interpretive services with food service would be developed in a location near the beach,
42 replacing the existing chapel visitor center at Fort Barry, and incorporating a transit stop.

1 This zone would also continue to provide for park operational needs including
2 maintenance, public safety, staff offices, and a stewardship-nursery facility.
3 Fort Barry and other historic sites and structures within this zone would continue to
4 support programs provided by the park and its partners consistent with the concept
5 described for Fort Cronkhite. The chapel at Fort Barry could serve as a multiuse meeting
6 and program facility. Public serving equestrian facilities would be supported in this area
7 of the Headlands.

8
9 **Natural Zone** (uplands)

10 This area of Marin Headlands would be managed as part of the extensive natural
11 landscape, with emphasis on the protection and restoration of habitat for threatened and
12 endangered species.

13
14 **Evolved Cultural Landscape Zone** (Rodeo Beach and seacoast fortifications)

15 This zone would be managed for the enjoyment of the beach, trails, and other outdoor
16 recreation and educational opportunities. The landscape would be managed to preserve
17 and interpret the significant military features and structures in the natural coastal setting.

18
19 **Sensitive Resources Zone** (Rodeo Lagoon and Rodeo Lake)

20 This area would be managed to preserve and restore coastal habitat for threatened and
21 endangered species. Visitor access would be highly controlled and restricted to
22 designated trails.

23
24 **Historic Immersion Zone** (Nike Missile Site)

25 The restored compound would continue to provide visitors with an experience that is
26 evocative of its historic use.

27
28 **Capehart Housing Area**

29 **Park Operations Zone**

30 New sustainable workforce housing could be constructed in the neighborhood on the
31 south side of Bunker Road. A new park operational facility would be considered within
32 this zone, also south of Bunker Road. Housing lost through the removed of housing units
33 to construct this facility could be accommodated in another location, either in existing
34 structures or through limited new construction.

35 **Natural Zone**

36 The residences on the north side of Bunker Road would be removed to provide for creek
37 restoration and to create a more scenic entrance to Rodeo Valley.

38
39

1 **Conzelman, Bunker, and McCullough Roads (including Battery**
2 **Spencer and Hawk Hill)**

3 **Scenic Corridor Zone**

4 Managers would highlight the fundamental coastal resources, endangered species habitat,
5 military fortifications, and spectacular views of the Golden Gate Bridge, San Francisco
6 Bay, and the urban skyline of San Francisco from the roads. Safe pedestrian, bike, and
7 motor vehicle access to overlooks and to interpretive and recreational opportunities
8 would be provided. Some overlooks would be improved with amenities such as
9 interpretive signs, restrooms, and benches.

10

11 **Kirby Cove**

12 **Evolved Cultural Landscape Zone**

13 This area would be managed for beach access and camping, and would support additional
14 uses by visitors on the new San Francisco Bay Water Trail. Rustic cabin accommodations
15 could be developed, maintaining the setting and character of this park site. The coastal
16 fortifications and the historic forest would be preserved and interpreted.

17 Habitat restoration would continue outside of the historic forest with removal of invasive
18 nonnative vegetation and expansion of habitat for the endangered mission blue butterfly.

19

20 **Point Bonita Lighthouse Complex**

21 **Historic Immersion Zone**

22 The park would continue to preserve the historic structures and interpret the site's
23 maritime and military history. The coastal environment and the sensitive marine habitat
24 would be protected.

25

26 **Offshore Ocean and Bay Environment**

27 **Scenic Corridor Zone** (all offshore areas except Point Bonita Cove and Bird Rock)

28 Park managers would work to preserve the integrity of the ocean and bay environment,
29 while accommodating public uses including surfing, boating, and noncommercial fishing.
30 Management actions would protect the marine habitat, rocks, sea caves, and other natural
31 features of the area in coordination with the Monterey Bay and Gulf of the Farallones
32 National Marine Sanctuaries. This zone would support the San Francisco Bay Water Trail
33 where appropriate.

34

35 **Sensitive Resources Zone** (Offshore areas at Point Bonita Cove and Bird Rock)

36 The park would preserve sensitive marine resources—intertidal resources, seabirds, and
37 marine mammals—in these two locations. Visitation would be highly restricted to protect
38 resources that are easily disturbed. Park-approved research would be the primary activity
39 in this zone, but would be conducted in a manner that is highly protective of sensitive
40 resources.

1 **PARK LANDS IN SAN FRANCISCO COUNTY**

2 **Overview**

3 The national park lands of San Francisco provide opportunities to experience nature,
4 explore our heritage, and enjoy the company of families, friends, and fellow community
5 members. Under this alternative, these areas would be managed to preserve and enhance
6 a variety of settings, and improve and expand the facilities that welcome and support
7 visitors to the “National Park Next Door.”

8 The visibility and identity of National Park Service sites would be improved in settings
9 from military to “wild,” and visitors would be introduced to the Golden Gate National
10 Recreation Area and the national park system through facilities, information, and
11 programming at popular arrival nodes and recreational destinations.

12 This alternative would also emphasize the importance of education, civic engagement,
13 and healthy outdoor recreation, including offering nature experiences to city children and
14 their families. Existing and new facilities, including a state-of-the-art museum collection
15 facility, would support visitor enjoyment, learning, and community-based natural and
16 cultural resource stewardship. Recreational and stewardship opportunities would promote
17 healthy parks and healthy communities. Similar to Crissy Field, this alternative would
18 engage the community to revitalize coastal park areas such as Ocean Beach, Fort
19 Funston, and Lands End.

20 The park would continue to improve trails and trailheads throughout its San Francisco
21 park lands to make the park accessible to the broadest array of visitors. Sites would be
22 connected to each other and to communities by the trail system and the city’s transit and
23 multimodal access systems.

24

25 **Upper Fort Mason**

26 **Evolved Cultural Landscape Zone** (eastern portion of the site)

27 The historic district would become a portal to the Golden Gate National Recreation Area,
28 using historic structures to welcome visitors in a setting that would remain a peaceful
29 contrast to the more bustling northern waterfront of Fisherman’s Wharf and Lower Fort
30 Mason. The park would preserve and rehabilitate select historic structures for new uses
31 that provide orientation, information, food service, special events, and other services for
32 visitors. With improved visibility, signs, and additional activities, this site would provide
33 visitors with better access and understanding of the opportunities available throughout the
34 park.

35 Historic residences would continue in residential use where compatible with preservation
36 goals. Other nonresidential historic structures would be preserved for uses such as a
37 hostel and other overnight accommodations, park headquarters, partner offices, and other
38 programs that support the park mission.

39 The two neighboring national park units, Golden Gate National Recreation Area and San
40 Francisco Maritime National Historical Park, would collaborate on unified visitor
41 welcoming and orientation, exploring the potential to share facilities. Consistent NPS site

1 identification and directional signs would be placed along the popular Waterfront Bay
2 Trail and at transit nodes.

3 An expanded stewardship program would connect the park with San Francisco through
4 youth programs offered by the park and its partners.

5 The historic district’s landscape would be restored and rehabilitated. The park would
6 transform the overgrown gardens on the east and northeast slopes and retain the
7 community garden in its current location.

8 This alternative anticipates improved access to Fort Mason by the development of a water
9 shuttle. Visitor access to the historic Alcatraz pier (Pier 4) for interpretive programs and
10 ferry access to Alcatraz Island would also be considered. Visitor circulation and
11 wayfinding improvements would be implemented in response to new adjacent bus transit
12 and ferry connections. These concepts would require close collaboration with San
13 Francisco Maritime National Historical Park and the City of San Francisco.

14
15 **Diverse Opportunities Zone** (“Great Meadow”)

16 The “Great Meadow” would continue to support the variety of current uses and special
17 events with modest improvements to enhance the landscape, enhance the safety of
18 pedestrians and bicyclists on the paths, and provide formal opportunities for picnicking.

19
20 **Park Operations Zone**

21 Park operations could remain in their current locations. Adjacent structures would
22 continue to house a conservation corps program. If the program relocates, the site and
23 structures would serve park operational needs.”

24
25 **Sensitive Resource Zone** (shoreline at Black Point, including a 100-foot offshore buffer
26 to protect intertidal resources)

27 This area would be managed to protect the last remaining natural rocky shoreline in San
28 Francisco inside the Golden Gate. An overlook would be developed in the adjacent zone
29 to allow visitors to experience this small site.

30

31 **China Beach**

32 **Diverse Opportunities Zone**

33 Park managers would improve visitor facilities and access to support current uses.

34

35 **Lands End**

36 **Evolved Cultural Landscape Zone**

37 Park managers would continue to enhance the landscape, integrating natural habitat
38 restoration with cultural landscape preservation, and improving the trail system. This
39 would include the California Coastal Trail and the secondary trails that access the
40 shoreline, and would enhance scenic viewpoints and opportunities for bird watching. The
41 area would continue to be managed for the preservation of dark night skies. Trail

1 connections and directional signage to the community and adjacent park lands would also
2 be improved.

3

4 **Fort Miley**

5 **Evolved Cultural Landscape Zone** (West Fort Miley)

6 The historic structures and cultural landscape would be preserved and enhanced. The
7 Marine Exchange Lookout Station (Octagon House) would be rehabilitated to interpret its
8 history and provide for park operational or public uses. Site improvements would focus
9 on enhancing the Fort's appearance and providing better connections to the surrounding
10 community, nearby Lands End site, and the VA hospital campus. Improved picnicking
11 and group camping facilities would be provided in an appropriate location, as would
12 opportunities for outdoor learning and leadership programs. The area would continue to
13 be managed for the preservation of dark night skies.

14

15 **Park Operations** (East Fort Miley)

16 Park maintenance and public safety satellite operations would remain in the historic
17 warehouse and batteries. Safe and more direct vehicle and trail access would be
18 developed to better support its use and preservation.

19

20 **Ocean Beach**

21 **Diverse Opportunities Zone** (along the O'Shaughnessy seawall)

22 Park managers would continue to provide for a diversity of recreational beach use and
23 preserve the natural setting and resource values, including shorebird habitat. The vital
24 community stewardship activities that are part of the successful management of the beach
25 would be promoted.

26 The park would preserve the historic O'Shaughnessy seawall and collaborate with the
27 City of San Francisco to enhance the Ocean Beach corridor with improved amenities that
28 support enjoyment of the beach, including the promenade, parking, and restrooms.

29 The California Coastal Trail and other connections would be improved to link Ocean
30 Beach to Lands End, Fort Funston, city neighborhoods, and other park lands including
31 Golden Gate Park and Lake Merced.

32

33 **Natural Zone** (south of the O'Shaughnessy seawall)

34 The area would be managed to protect shorebirds and threatened species and allow
35 natural coastal and marine processes to occur, while providing for a variety of compatible
36 recreational activities. Public safety activities would be continued.

37

38 **In Both Zones**

39 This alternative supports the City of San Francisco's interest in a broad approach to
40 redesigning the Ocean Beach corridor and exploring sustainable approaches to sea level
41 rise.

1 The park would continue to work with the City of San Francisco and the US Army Corps
2 of Engineers to address coastal erosion: relocating facilities out of vulnerable locations
3 and restoring natural processes.

4

5 **Fort Funston**

6 **Diverse Opportunities Zone** (central area and southern beach)

7 This site would continue to support current recreational activities, including dog walking
8 and the unique opportunity for hang gliding in the park, while making landscape and trail
9 improvements and restoring natural habitat. New visitor facilities would be provided near
10 the parking lot. These could include restrooms, group picnicking facilities, a warming hut
11 combining food service with park information, and other support structures. Battery
12 Davis, the historic seacoast fortification, would be preserved and interpreted and its
13 earthworks fenced and protected.

14

15 **Natural Zone** (corridors along the perimeter and northern beach)

16 Fort Funston's islands of native habitat would be extended to form a continuous habitat
17 corridor that supports recovery of native dune habitat including endangered San
18 Francisco *Lessingia* plants. The northern stretch of beach would be managed to protect
19 shorebirds, including the threatened Western Snowy Plover, coastal bluffs and bank
20 swallows, and to allow natural coastal and marine processes to occur to the extent
21 possible, while providing for a variety of compatible recreational activities.

22

23 **Park Operations Zone** (southeast corner)

24 Operational facilities could be expanded to meet park needs, including public safety
25 offices, nursery, stewardship center, satellite maintenance facilities, and staff or volunteer
26 housing.

27 The existing environmental education center could remain in this zone or be relocated to
28 another site better served by public transportation with appropriate facilities and outdoor
29 settings.

30

31 **Offshore Ocean and Bay Environment**

32 **Scenic Corridor Zone**

33 The park would preserve the ocean and bay environment and accommodate public uses
34 including surfing, boating, and noncommercial fishing. Park managers would protect the
35 marine habitat, geologic resources and processes, and other natural features of the area.

36

37

38

1 **PARK LANDS IN SAN MATEO COUNTY**

2 **Overview**

3 In all three alternatives, park lands and ocean environments in San Mateo County would
4 be managed as part of a vast network of protected lands and waters, some recognized as
5 part of the UNESCO Golden Gate Biosphere Reserve. This network includes San
6 Francisco Public Utilities Commission watershed lands, California state parks, the
7 Monterey Bay National Marine Sanctuary, county parks, and other land held by regional
8 land trusts. Park managers would emphasize connectivity, preservation, and restoration of
9 the area’s vital ecosystems through collaborative partnerships with other land
10 management agencies.

11 In the spirit of the “Parks to People” movement that created the Golden Gate National
12 Recreation Area four decades ago, this alternative would focus on the importance of
13 improving access and community engagement in these newest park lands. Given the
14 significant addition of park land in the county in recent years, a series of actions would be
15 needed to enhance visitor access, enjoyment, appreciation, and stewardship.

16 Key efforts would include increasing the visibility and identity of National Park Service
17 sites. Park trails would be improved to create a sustainable system that provides
18 opportunities to enjoy park sites, connects with local communities, and contributes to an
19 exceptional regional trail network. A comprehensive trail plan would be prepared to
20 achieve these goals. Park managers would work with county transit providers to improve
21 transit connections to local trailheads and east–west transit between bayside communities
22 and Highway 1.

23 The addition of signs and trailhead parking will help visitors find their way to various
24 park sites and will help them gain an understanding of the park’s diverse natural and
25 cultural resources. Equestrian needs would be incorporated in trail and trailhead design.

26 Equally important would be providing facilities to welcome visitors to the park. This
27 alternative would promote visitor information and orientation centers in Pacifica and in
28 the Coastside community south of Devil’s Slide. Park improvements would be consistent
29 with preservation of community character. These facilities could be shared with San
30 Mateo County Department of Parks, California State Parks, Monterey Bay National
31 Marine Sanctuary, local governments, and other organizations.

32

33 **Thornton State Beach to South of Mussel Rock**

34 **Natural Zone**

35 In all alternatives park managers would preserve and enhance the natural and scenic
36 values of the area; allow for natural coastal geologic processes to continue; and provide
37 modest visitor access facilities (trails, trailheads) to beaches, scenic overlooks, and along
38 the California Coastal Trail, where feasible.

39 The beach, dunes, and cliffs extending from San Francisco’s Ocean Beach south to
40 Mussel Rock (a stretch of almost 5 miles) would be managed to protect shorebird habitat,
41 allow natural shoreline processes to continue unimpeded, and provide improved or new

1 trails for visitors to enjoy and view nature. Park staff would work with neighboring
2 communities to mitigate concentrated urban runoff and landslide threat.

3

4 **Milagra Ridge**

5 **Natural Zone**

6 The area would be managed to preserve its wild character and protect habitat for
7 endangered species. Heavily disturbed areas would be restored. Coordinating with other
8 land managers, the park would also make trail improvements that could include
9 connections to Oceana Boulevard, the Pacific coast, Skyline Boulevard, and Sweeney
10 Ridge. Historic structures would be preserved.

11

12 **Scenic Corridor Zone** (center of ridge)

13 Additional amenities would be developed to support visitors and stewardship volunteers.
14 These could include accessibility improvements, trailhead parking, restrooms, and picnic
15 facilities.

16

17 **Shelldance Nursery Area**

18 **Diverse Opportunities Zone and Park Operations Zone**

19 The site would transition from a commercial nursery to an area that provides a variety of
20 visitor services that could include enhanced trailhead parking serving Sweeney Ridge and
21 Mori Point, restrooms, park orientation and information, and a community
22 stewardship/education center. Access from Highway 1 and the trail connection to Mori
23 Point would be improved.

24 In all alternatives, a portion of this park site would be dedicated to park operational needs
25 possibly including a satellite facility for maintenance and public safety, native plant
26 nursery, and ranger workforce or volunteer housing.

27

28 **Sweeney Ridge (including Cattle Hill and Picardo Ranch)**

29 **Natural Zone** (majority of the area)

30 The area would be managed to protect endangered species and the large contiguous
31 natural landscape extending into the SFPUC Peninsula Watershed. Visitors could
32 experience the area through stewardship activities, improved trails, and primitive
33 camping. Connections to the regional trail network and the surrounding public lands
34 (SFPUC lands, San Pedro Valley County Park, McNee Ranch, and Rancho Corral de
35 Tierra) would be developed in coordination with other land managers.

36

37 **Scenic Corridor Zone** (Sneath Lane and part of Sweeney Ridge)

38 Trail amenities would be developed, and connections would be enhanced to the Bay Area
39 Ridge Trail and the Sawyer Camp Trail in the SFPUC Peninsula Watershed. The San
40 Francisco Bay Discovery Site National Historical Landmark would be preserved,
41 enhanced, and interpreted. Limited vehicular access by permit to the discovery site would

1 be permitted. A hikers' hut could be developed as part of a system of huts proposed for
2 the Bay Area Ridge Trail.

3
4 **Diverse Opportunities Zone** (developed portion of Picardo Ranch)

5 If acquired, the existing facilities could be adapted or replaced with new facilities to
6 support visitor activities, potentially including continued equestrian use or environmental
7 education, trailhead improvements, and park operations. Management would include
8 strong protection for the creek corridor and other natural habitats.

9
10 **Mori Point**

11 **Natural Zone**

12 The land would be managed for ongoing restoration of natural habitats and to protect
13 threatened and endangered species while improving the trail system for public enjoyment
14 of the site and its exceptional views and landscapes. Access to Mori Point would be
15 enhanced with modest trailhead and parking improvements.

16 Trail connections to the community, Sweeney Ridge and the adjacent public lands, and
17 the California Coastal Trail would be improved in partnership with other land managers.
18 Collaboration with adjacent land managers would also contribute to expanded efforts to
19 preserve listed species and their habitats, improving habitat connectivity across
20 management boundaries

21
22 **Pedro Point, Devil's Slide, and San Pedro Mountain**

23 **Natural Zone**

24 These lands, if acquired, would be managed to maintain natural features and scenic
25 beauty and to continue with the habitat restoration and access improvements initiated by
26 the community and other agencies. Trailheads and trails would be developed and
27 enhanced to improve accessibility and connections to the California Coastal Trail and
28 adjacent public lands. Public access to Devil's Slide and the surrounding coastal bluffs
29 west of existing Highway 1 would be managed to protect nesting seabirds. Collaboration
30 with adjacent land managers would be essential.

31
32 **Rancho Corral de Tierra**

33 **Natural Zone** (majority of the area)

34 The upland areas and land outside the existing equestrian centers would be managed to
35 preserve the wild, open character of the landscape and offer trail-based recreation that is
36 light on the land, including walking, hiking, bicycling, and horseback riding. Natural
37 habitats and processes in the zone, which includes four creek corridors, would be restored
38 to the greatest extent possible with the help of community stewards.

39 In this zone, visitors would enjoy the scenic coastal environment through an enhanced
40 and sustainable system of multiuse trails. The trail network would connect local
41 communities to the park and link the ridges of Montara Mountain to the Pacific Ocean.

1 The National Park Service would work with the San Francisco Public Utilities
2 Commission to complete a trail connection to Sweeney Ridge through the SFPUC
3 Peninsula Watershed's northwest corner. Unnecessary roads could be converted to trails
4 or removed. Exploration of the park could be facilitated by scenic overlooks, sites for
5 picnicking, primitive camping sites, and possibly a hikers' hut in a remote setting.
6

7 **Diverse Opportunities Zone**

8 Park "portals" would be created in this zone consisting of trailheads and other visitor
9 facilities that provide for the enjoyment of this area. Detailed planning following general
10 management plan approval would determine the mix of uses that would share this zone.
11 Although equestrian facilities and uses would be retained at Rancho Corral de Tierra over
12 the next 20 years, the exact location, type, and scale will be subject to future planning
13 efforts. Park managers would continue to work with equestrian operators to enhance the
14 best management practices employed to protect the environment and expand programs
15 that welcome and benefit the public. New facilities in this zone could include trails,
16 trailheads, a community stewardship/educational center, a warming hut, a group picnic
17 area, a rustic campsite, and a horse camp. Significant constraints on availability of water
18 will influence development and operations of facilities at this site. Any new visitor
19 facility would be sited where natural and cultural resources would be preserved, and
20 where compatible with adjacent uses such as agriculture.

21 In addition, safe trailheads would be developed near Highway 1 to support exploration of
22 this large, diverse landscape and the extensive adjacent public lands. The multiuse trails
23 and trailheads would be compatible with adjacent agricultural uses.

24 Habitat restoration and community stewardship activities would have a strong presence in
25 both zones. The National Park Service would partner with surrounding land managers
26 and the Fitzgerald Marine Reserve, one of the richest intertidal areas on the California
27 coast, to improve habitat connectivity and protect sensitive habitats to protect water
28 quality, restore the creek corridors and reconnect them to the ocean, and to reestablish
29 anadromous fish passage where possible.

30 The National Park Service would connect people to the agriculture history of the Rancho
31 Corral de Tierra through interpretation of its cultural landscape and adjacent working
32 farms, while not impinging on their operations.

33

34 **Montara Lighthouse**

35 **Evolved Cultural Landscape Zone**

36 In all alternatives, the historic lighthouse structures and other associated resources would
37 be preserved and interpreted. Management would enhance the current hostel and day use
38 programming. Trail connections from the hostel up and down the coast would better
39 integrate this site with other park lands and open space. Access from Highway 1 would
40 be improved.

41 The park would look for an opportunity to locate a multiagency visitor information and
42 orientation facility in this vicinity.

43

1 **Phleger Estate**

2 **Natural Zone**

3 In all alternatives, the area would be managed to provide recreation in a natural and
4 contemplative setting that complements the more developed recreation facilities at
5 adjacent Huddart County Park. The redwood forest ecosystem would be restored and
6 managed for trail-based recreation. The history of logging on the estate and its role in the
7 settlement of San Mateo County would be interpreted. Trail connections to adjacent lands
8 and the regional trail system would be pursued in collaboration with San Mateo County
9 and San Francisco Public Utilities Commission. These connections would include the
10 Bay Area Ridge Trail, potential access from trailheads on Cañada Road and Skyline
11 Boulevard, and a multiuse trail connection between Cañada Road and Skyline Boulevard
12 north of Phleger Estate. Community stewardship of the site could contribute to trail and
13 habitat improvements.

14

15 **San Francisco Public Utilities Commission Peninsula Watershed**
16 **Easements**

17 **Natural Zone** (majority of the area, corresponding with the scenic easement)

18 Park managers would continue to cooperate with the San Francisco Public Utilities
19 Commission for the preservation of the natural, cultural, scenic, and recreational features
20 of the watershed. Within this zone, the park would promote completion of the Bay Area
21 Ridge Trail connection from Phleger to Highway 92 and a new trail connection between
22 the Bay Area Ridge Trail and the California Coastal Trail on the existing alignment over
23 Whiting Ridge; this would connect Sweeney Ridge with McNee Ranch and Rancho
24 Corral de Tierra.

25

26 **Scenic Corridor Zone** (eastern area closest to Highway 280, corresponding with the
27 scenic and recreation easement)

28 Park managers would promote preservation of the natural, cultural, and scenic values
29 with improved public access on trails. Proposed trail improvements include connecting
30 the existing San Andreas multiuse trail to Sweeney Ridge via Sneath Lane, and
31 improving trail access to the Phleger Estate from a new trailhead on Cañada Road. Park
32 managers also would promote the implementation of other trails proposed in the San
33 Francisco Watershed Management Plan (2002), including completion of the north–south
34 corridor through the watershed in areas of low sensitivity. The park would work with the
35 San Francisco Public Utilities Commission to provide a multiuse trail connection through
36 the SFPUC watershed lands between Cañada Road and Skyline Boulevard north of
37 Phleger Estate. Preservation of scenic views along the trails, Cañada Road, Skyline
38 Boulevard, Interstate 280, and its vista points would also be promoted in cooperation
39 with the San Francisco Public Utilities Commission and Caltrans. The National Park
40 Service would collaborate with the San Francisco Public Utilities Commission in creating
41 a watershed visitor education center near the Pulgas Water Temple on Cañada Road, as
42 described in the 2004 Peninsula Watershed Management Plan.

43

44

1 **Offshore Ocean Environment**

2 **Sensitive Resources Zone (Fitzgerald Marine Reserve)**

3 In areas where the park boundary coincides with the Fitzgerald Marine Reserve (FMR),
4 the two organizations would continue to cooperate in the implementation of the
5 provisions of the California State Marine Life Protection Act. The FMR area between
6 Montara State Beach and Ross Cove has been designated as the Montara State Marine
7 Reserve: no fishing, harvesting, or collecting would be allowed in this area. The FMR
8 area between Ross Cove and Pillar Point Harbor has been designated as the Pillar Point
9 Marine Conservation Area; some fishing would be allowed in this area.

10

11

12 **COST ESTIMATES**

13 The costs to implement alternative 1 focus on a diversity of facilities to attract and
14 welcome visitors, connect people with the resources, and promote understanding,
15 enjoyment, preservation, and health. Costs reflect all proposals of alternative 1 that could
16 be implemented over the 20-year life of the general management plan.

17 The annual operating costs for alternative 1 are made up of the current annual operating
18 costs, with changes made to reflect additional staffing needs. The annual operating costs
19 of alternative 1 are estimated at \$36 million.

20 Total additional staff needed to support alternative 1, including staff for Alcatraz Island
21 and Muir Woods National Monument, is 90 FTE. A significant amount of staff would be
22 required to support the newly acquired lands in San Mateo County. Staff would support
23 orientation, safety, maintenance, and resource protection in these areas.

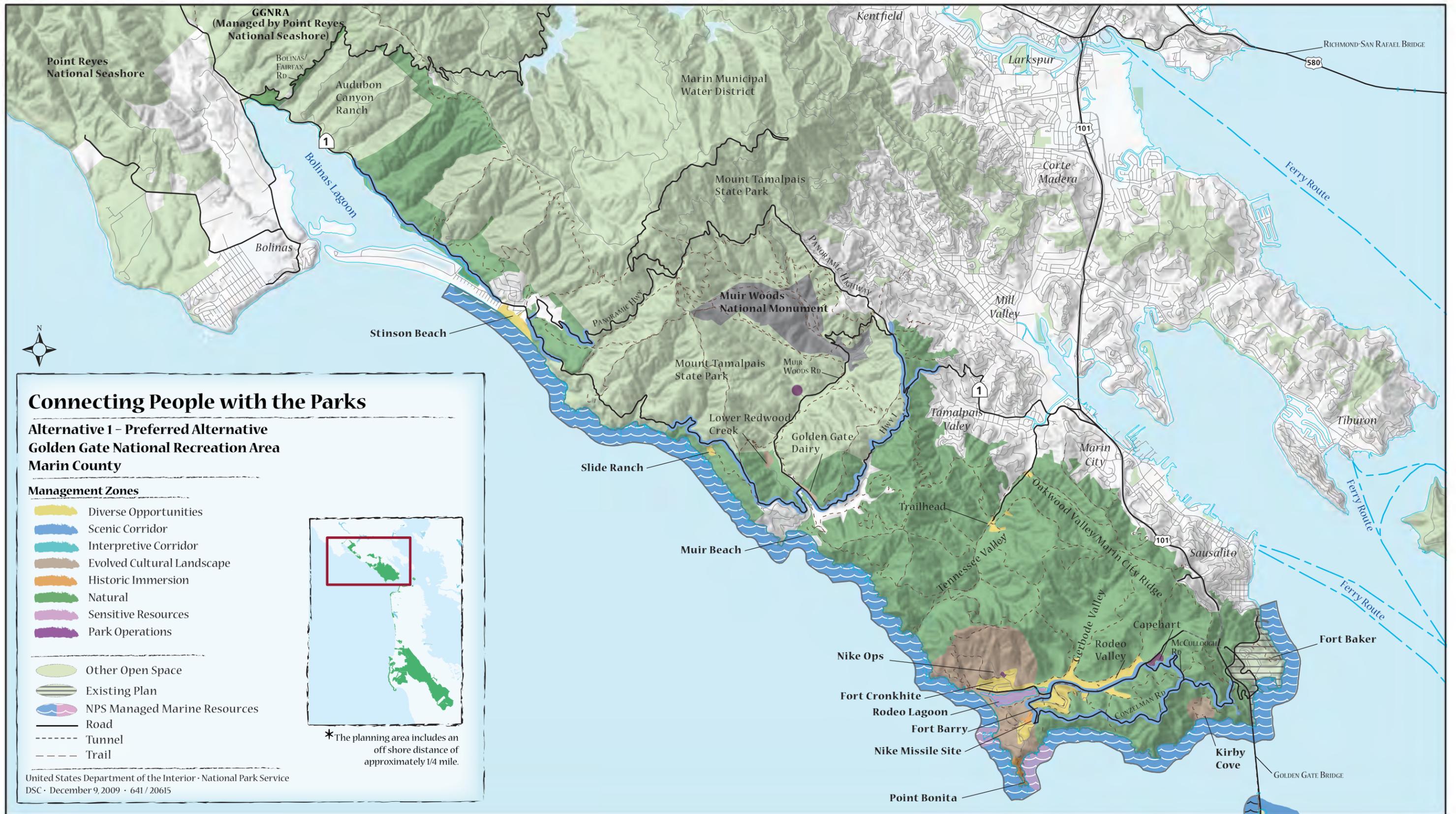
24 Additional staff would be needed to carry out new functional use of the park lands. An
25 increase in interpretive staff would support expanded interpretive programs throughout
26 the park. A greater number of law enforcement officers would allow for needed patrol
27 and response to increased visitor recreational activities. With the addition of new trails
28 and facilities and rehabilitation of other facilities, maintenance responsibilities would
29 increase, also requiring additional staff.

30 The natural resources division would have a need for staff to perform additional
31 inventory and monitoring duties, as well as enhanced management and restoration
32 activities. The cultural resources division staff would support a series of rehabilitation
33 projects, and would require technical specialists in the fields of historic architecture,
34 landscape architecture, archeology, curation, cataloging, and compliance. The
35 responsibilities of the planning division for project coordination, compliance, and public
36 involvement would also expand, requiring additional staff. The business management
37 division would require additional staff to manage additional visitor facilities, Alcatraz
38 Island services, and equestrian operations. New staff would also manage the rigorous user
39 capacity program at Alcatraz Island and Muir Woods National Monument.

40 Other divisions, including administration, environmental and safety, and public affairs
41 would each require a few additional staff members to manage new areas and uses of the
42 park lands.

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

1 One-time costs of alternative 1 reflect extensive rehabilitation to provide a diverse range
2 of visitor activities for the park's many visitors. Some of the more costly projects include
3 adaptive reuse of structures in Fort Mason for visitor services, redevelopment of the
4 Capehart housing area for a consolidated maintenance facility, an expanded trail system,
5 and visitor facilities throughout the park lands. Total one-time costs are estimated at \$95
6 million over the life of the general management plan.
7



Connecting People with the Parks

Alternative 1 – Preferred Alternative Golden Gate National Recreation Area Marin County

Management Zones

- Diverse Opportunities
- Scenic Corridor
- Interpretive Corridor
- Evolved Cultural Landscape
- Historic Immersion
- Natural
- Sensitive Resources
- Park Operations

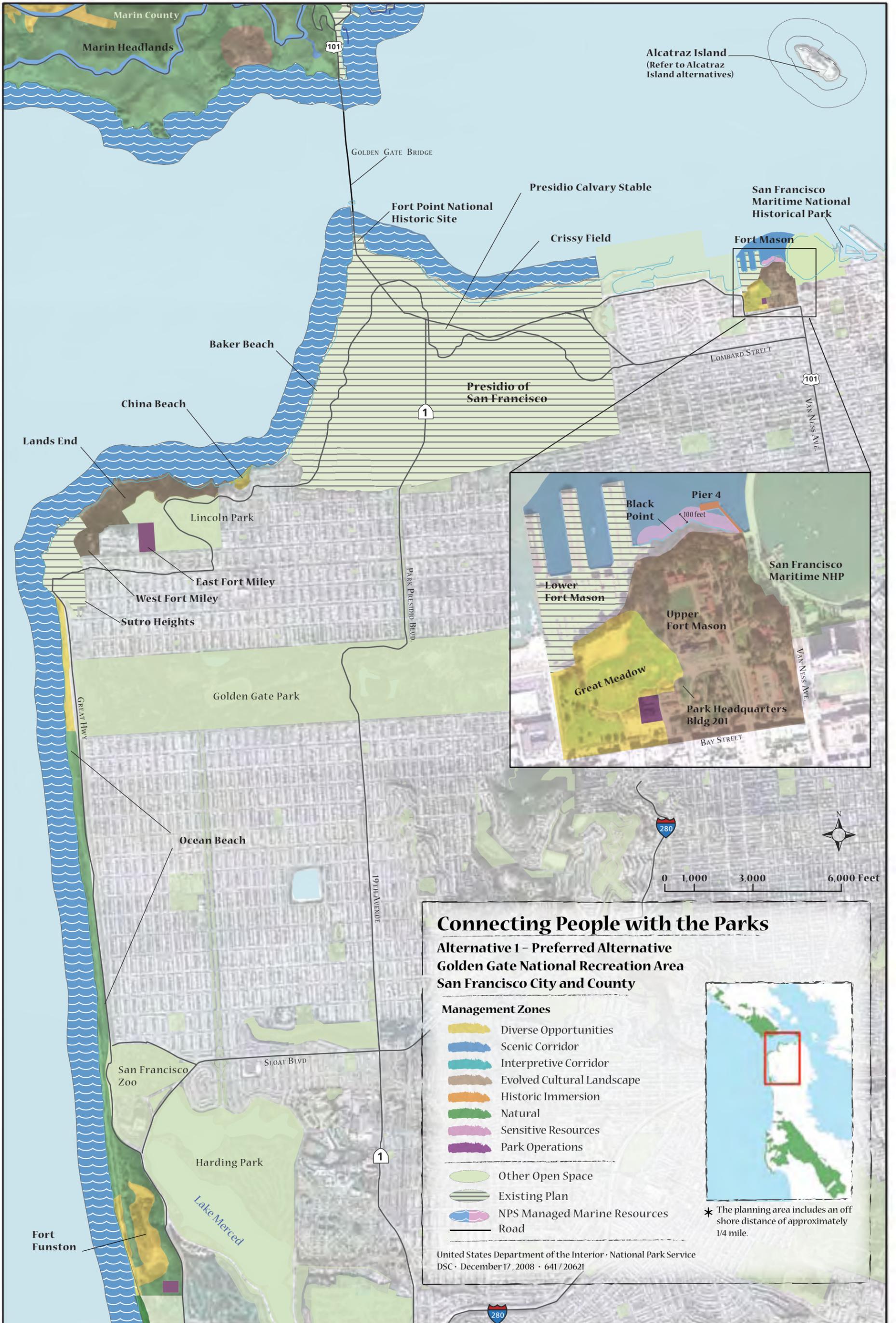
- Other Open Space
- Existing Plan
- NPS Managed Marine Resources
- Road
- Tunnel
- Trail



*The planning area includes an off shore distance of approximately 1/4 mile.

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

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PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

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PARK LANDS IN MARIN, SAN FRANCISCO, AND SAN MATEO COUNTIES: ALTERNATIVE 2, PRESERVING AND ENJOYING COASTAL ECOSYSTEMS

4

5 **PARK LANDS IN MARIN COUNTY**

6 **Overview**

7 In this alternative, management would strive to further preserve and restore the dynamic,
8 interconnected coastal ecosystems at the core of protected lands through collaborative
9 regional partnerships. These lands provide significant swaths of protected habitat for
10 many of the park’s sensitive, rare, threatened, and endangered species. Partners would
11 work on common goals to sustain the area’s native biodiversity, reconnect fragmented
12 habitats and migration corridors, minimize the impact of invasive species, manage for
13 changing fire regimes, protect threatened and endangered species, and restore naturally
14 functioning ecosystems. Proactive management would work to build resiliency to climate
15 change into the natural environment.

16 This alternative would highlight Marin’s park lands and waters as living laboratories,
17 engaging visitors in participatory science, education, and stewardship that nurture
18 personal connections with nature and inspire advocacy.

19 Exploration of trails and beaches would further highlight the park’s coastal natural and
20 cultural resources. Cultural resource sites and stories would emphasize human occupation
21 of the coastal environment, as reflected in lighthouses, coastal defense structures,
22 archeological sites, and agricultural land uses.

23

24 **Stinson Beach North to Bolinas–Fairfax Road**

25 **Diverse Opportunities Zone** (beach and developed area)

26 The current level of visitor services such as restrooms, seasonal lifeguards, and food
27 service, would continue to support beach recreation; however, park facilities such as the
28 central restroom and its septic system would be relocated farther from the dunes and
29 beach to better protect natural resources. As in alternative 1, sustainable new facilities
30 would replace deteriorated restrooms, showers, picnic areas, and parking lots. The
31 Easkoot Creek riparian corridor would be further enhanced by redesigning the parking
32 lot.

33 As in alternative 1, park managers would explore improved weekend transit service at
34 peak times in order to reduce congestion, minimize impacts on natural resources, and
35 provide a way to get to the beach without a car.

36

37 **Natural Zone** (dunes, south parking lot, and surrounding park land north to Bolinas– 38 Fairfax Road)

39 The sand dunes would be restored and the south parking lot would be removed to support
40 wetland restoration. The rest of the lands and waters in the vicinity of Stinson Beach,

1 including the uplands, would be managed to protect and restore the coastal ecosystems,
2 and contribute to the restoration of natural processes that affect Bolinas Lagoon.
3 Partnerships with neighboring land managers would be strengthened to achieve these
4 goals across the broader landscape.

5

6 **Highway 1 and Panoramic Highway**

7 **Natural Zone**

8 As in alternative 1, these park lands would be managed to enable visitors traveling by car,
9 bicycle, and transit to enjoy spectacular views of the Pacific coast, and to provide access
10 to park sites.

11 Under this alternative, greater emphasis would be placed on collaboration with Caltrans
12 and other agencies to further protect and restore the coastal ecosystem. In the event of a
13 catastrophic landslide, park managers would encourage abandonment of Highway 1
14 between Muir Beach and Stinson Beach in the affected segment. Interpretive exhibits
15 could illustrate the dramatic impacts on coastal ecosystems caused by constructing and
16 maintaining the highway.

17

18 **Slide Ranch**

19 **Natural Zone**

20 The existing environmental education center and farm education program would be
21 relocated to a more sustainable and geologically stable site in a less remote location. The
22 area would be managed to promote restoration of coastal resources and to allow for
23 natural geologic processes to continue unimpeded. A modest trailhead near Highway 1
24 would be provided to support visitor access to the rugged coast, but all other structures
25 and farm areas would be removed to allow for restoration of natural conditions.

26

27 **Lower Redwood Creek (former Banducci flower farm and 28 surrounding area)**

29 **Natural Zone**

30 Park managers would continue to restore the native coastal ecosystem, including
31 Redwood Creek and endangered salmon habitat, the riparian corridor and adjacent
32 wetlands, and the uplands that were planted with heather and eucalyptus. Visitors would
33 have opportunities to participate in stewardship activities in the restoration of the natural
34 systems. All facilities and structures would be removed unless needed to support
35 stewardship, restoration activities, and trail use. The California Coastal Trail could also
36 connect at this park site.

37 Park managers would work with Marin County and California State Parks to explore
38 realignment of Muir Woods Road to reduce impacts to Redwood Creek. To further
39 protect the creek's endangered salmon, park managers could collaborate with the
40 community to increase water storage capacity for use during the dry season.

41

1 **Muir Beach**

2 **Natural Zone**

3 Same as alternative 1.

4

5 **Golden Gate Dairy and Vicinity**

6 **Evolved Cultural Landscape Zone** (developed area and surrounding uplands)

7 The area would be managed to preserve the historic structures and pastoral landscape and
8 protect the coastal prairie and scrub habitat.

9 The historic structures could be adaptively reused for a science and stewardship center or
10 for local community services that are consistent with park goals. Nearby nonhistoric
11 residences could be removed if they do not contribute to essential community services or
12 park operational needs that are moved out of Muir Woods. The rest of this park site could
13 be restored to its natural condition. Equestrian use would be provided on designated trails
14 in the area.

15

16 **Tennessee Valley (from Oakwood Valley to the ocean)**

17 **Evolved Cultural Landscape Zone** (Tennessee Valley trailhead and the Miwok Stables
18 area)

19 This area would be managed to retain its traditional equestrian uses and provide for a
20 minimal level of visitor facilities and an improved trailhead to support visitor access to
21 the extensive network of trails. Modest facilities could be located within this zone that
22 support the stewardship and restoration activities and the volunteer horse patrol that are
23 currently located in lower Tennessee Valley.

24

25 **Natural Zone** (from the trailhead to the ocean and the surrounding uplands including
26 Oakwood Valley)

27 Park managers would preserve and enhance the native coastal ecosystem and allow
28 visitors to experience the wild character of the valley. Nonhistoric facilities and structures
29 would be removed. Unnecessary management roads, including Marincello Road, could
30 be converted to trails, or removed if not historic, and natural processes restored.

31 The main Tennessee Valley trail would be converted to a multiuse trail, and the
32 remaining dams and artificial ponds would be removed. Native wetland and riparian
33 habitat would be restored in these areas.

34

35 **Marin Headlands: Marin City Ridge and Gerbode Valley**

36 **Natural Zone** (Marin City Ridge and Gerbode Valley)

37 This area would be managed to restore and preserve the undeveloped coastal corridor of
38 contiguous habitat and natural resources, and the outstanding open space and wild
39 character of these lands. The nonhistoric facilities and infrastructure would be removed
40 and the land restored to a natural condition. Unnecessary management roads could be

1 converted to trails, or removed if not historic, and natural processes restored.
2 Opportunities would be explored to provide trail connections from these park lands to
3 local communities.

4

5 **Marin Headlands: Fort Barry and Fort Cronkhite**

6 **Sensitive Resources Zone** (Rodeo Lagoon and most of the Rodeo Valley uplands south
7 of Bunker Road)

8 This area would be managed to preserve and restore coastal habitat for threatened and
9 endangered species. Visitor access would be highly controlled and restricted to
10 designated trails in this zone.

11

12 **Evolved Cultural Landscape Zone** (Rodeo Beach, Fort Cronkhite, and Fort Barry)

13 These areas would be managed to maintain the military identity of the area, provide for
14 higher levels of visitor use, and provide educational programs, surfing, fishing, and other
15 outdoor recreation opportunities. The adjacent forts would be managed to protect and
16 interpret the national register historic district while allowing for reuse of the buildings for
17 park programming and operations that could include a new visitor center. Habitat
18 restoration within this zone would be consistent with the preservation of the military
19 landscape. Equestrian facilities would be accommodated in this area.

20

21 **Historic Immersion Zone** (Nike Missile Site)

22 Same as alternative 1.

23

24 **Capehart Housing Area**

25 **Sensitive Resources Zone**

26 All structures in the area would be removed; riparian and upland habitats would be
27 restored, and fragmented habitat would be reconnected where possible.

28

29 **Conzelman, Bunker, and McCullough Roads (including Battery 30 Spencer and Hawk Hill)**

31 **Scenic Corridor Zone**

32 Same as alternative 1, except that outside of the immediate road corridor, the area would
33 be managed to protect and restore coastal habitat that supports the threatened mission
34 blue butterfly. Visitor access would be highly controlled and restricted to designated
35 trails in this zone.

36

37 **Kirby Cove**

38 **Evolved Cultural Landscape Zone**

39 The park resources and stories associated with coastal fortifications would be highlighted
40 and camping would promote appreciation of views of the Golden Gate Bridge and the

1 wild-urban interface between the park and city of San Francisco. Facilities would provide
2 visitors with access to the beach and new San Francisco Bay Water Trail.

3 Habitat restoration would continue outside of the historic forest with removal of invasive
4 nonnative vegetation and expansion of mission blue butterfly habitat.

5

6 **Point Bonita Lighthouse Complex**

7 **Historic Immersion Zone**

8 Same as alternative 1.

9

10 **Offshore Ocean and Bay Environment**

11 **Scenic Corridor Zone** (offshore areas except Muir Beach and Point Bonita)

12 Same as alternative 1.

13

14 **Sensitive Resources Zone** (offshore areas around Muir Beach and Point Bonita)

15 The park would preserve sensitive marine resources—intertidal resources, Redwood
16 Creek salmonids, seabirds, and marine mammals—in these two locations. Visitation
17 would be highly restricted to protect resources that are easily disturbed. Park-approved
18 research would be the primary activity in this zone, but would be conducted in a manner
19 that is highly protective of sensitive resources.

20

21

22 **PARK LANDS IN SAN FRANCISCO COUNTY**

23 **Overview**

24 San Francisco’s national park lands are a vital natural refuge, rich in biodiversity and
25 native habitat. As in alternative 1, San Francisco park lands would welcome visitors to
26 the “National Park Next Door”; however, this alternative would focus on engaging
27 visitors, communities, and partners in participatory science, education, and stewardship
28 focused on the coastal environment.

29 The local impacts of global climate change, including rising sea level provide a focal
30 point for individual and collective action and advocacy. The park, in collaboration with
31 community partners, would demonstrate leadership in proactive adaptation and
32 management in the face of accelerated sea level rise. These interpretive messages would
33 reach visitors enjoying the coastal environment along the San Francisco Bay Trail and the
34 California Coastal Trail. Cultural resource sites and stories would also highlight the
35 human connection of the coastal environment; sites and stories would include
36 archeological sites, European exploration, maritime history, and coastal defense.

37

38

1 **Upper Fort Mason**

2 **Evolved Cultural Landscape Zone** (Majority of the site)

3 This zone would be managed similar to alternative 1, but adaptive use of historic
4 structures would bring new park partners who would engage visitors, communities, and
5 others in participatory science, education, and stewardship focused on the coastal
6 environment. A stewardship “hub” would be based at Fort Mason to transport volunteers
7 arriving by public transit to volunteer and stewardship activities in other park locations.
8 Visitor circulation and wayfinding improvements would be implemented in response to
9 new adjacent bus transit and ferry connections.

10

11 **Diverse Opportunities Zone** (“Great Meadow”)

12 Same as alternative 1.

13

14 **Sensitive Resources Zone** (shoreline at Black Point)

15 Same as alternative 1.

16

17 **China Beach**

18 **Diverse Opportunities Zone**

19 Same as alternative 1.

20

21 **Lands End**

22 **Natural Zone**

23 Native habitat and natural processes would be restored within the coastal corridor
24 extending from Eagle’s Point (Sea Cliff neighborhood) south to the area of recent
25 restoration and trail improvements near the new Lands End parking lot.

26 The trail system would be improved to provide access to the shoreline and vistas, as well
27 as connections to the community and adjacent park areas.

28

29 **Fort Miley**

30 **Evolved Cultural Landscape Zone**

31 Same as alternative 1, except that more natural landscape enhancements would be
32 integrated and the Marine Exchange Lookout Building (Octagon House) would be
33 adaptively reused to engage the public in the natural and human history of the ocean
34 environment.

35

36

1 **Ocean Beach**

2 **Diverse Opportunities Zone** (along the O’Shaughnessey seawall)

3 The northern end of Ocean Beach would be managed to provide opportunities for visitors
4 to engage in a variety of beach-related recreational activities.

5 As in alternative 1, the park would collaborate with the City of San Francisco to provide
6 an enhanced oceanfront landscape in the Ocean Beach corridor with improved amenities
7 to support enjoyment of the beach, including the coastal promenade, parking, and
8 restrooms.

9
10 **Natural Zone** (south of the O’Shaughnessey seawall)

11 The area would be managed to protect shorebirds and allow natural coastal and marine
12 processes to occur while providing for a variety of compatible recreational activities that
13 allow visitors to enjoy and view nature. This zone would extend to create approximately
14 5 miles of beach, dunes, and cliffs from central Ocean Beach south to Mussel Rock in
15 San Mateo County. Park managers would protect shorebird habitat, allow natural
16 shoreline processes to continue unimpeded, and provide visitors opportunities for self-
17 discovery while enjoying and viewing nature.

18
19 **In Both Zones**

20 This alternative supports the City of San Francisco’s interest in a broad approach to
21 redesigning the Ocean Beach corridor and exploring sustainable approaches to sea level
22 rise.

23 The park would continue to work with the City of San Francisco and the US Army Corps
24 of Engineers to address coastal erosion by relocating facilities out of vulnerable locations
25 and restoring natural processes.

26

27 **Fort Funston**

28 **Natural Zone** (majority of the site)

29 Fort Funston’s islands of native habitat would be expanded to form a continuous habitat
30 corridor that supports recovery of native dune habitat including endangered San
31 Francisco *Lessingia* plants.

32 The beach, dunes, and cliffs extending from central Ocean Beach south to Mussel Rock
33 (a nearly continuous stretch of almost 5 miles) would be managed to protect shorebird
34 habitat, allow natural shoreline processes to continue unimpeded, and provide improved
35 or new trails for visitors to enjoy and view nature.

36

37 **Diverse Opportunities Zone** (central core of existing facilities)

38 This area would be managed to provide continued high levels of varied visitor use,
39 including hang gliding and dog walking, near the main parking lot, supported by parking,
40 restrooms, and trails. Park managers would preserve Battery Davis as a structure
41 contributing to the history of seacoast fortifications.

42

1 **Park Operations Zone** (southeastern corner)

2 Park operations, stewardship, and education support facilities would remain.

3

4 **Offshore Ocean and Bay Environment**

5 **Sensitive Resources Zone** (Eagle’s Point near China Beach to Seal Rocks, and area at
6 West Crissy Field)

7 These areas would be designated marine reserves to protect seabirds and marine
8 mammals.

9

10 **Scenic Corridor** (all other offshore areas in San Francisco)

11 Same as alternative 1.

12

13

14 **PARK LANDS IN SAN MATEO COUNTY**

15 **Overview**

16 As in the other alternatives, park lands and ocean environments in San Mateo County
17 would be managed as part of a vast network of protected lands and waters. In this
18 alternative, however, park managers would work to preserve and restore these
19 interconnected coastal ecosystems through collaborative partnerships with other land
20 management agencies in the region. Together these groups would work to sustain the
21 area’s native biodiversity, reconnect fragmented habitats and migration corridors,
22 minimize the impact of invasive species, manage for changing fire regimes, and restore
23 naturally functioning ecosystems. Proactive management would build into the
24 environment greater resiliency to climate change.

25 The Golden Gate National Recreation Area park lands in San Mateo County provide an
26 extensive wildlife corridor that includes habitat for threatened and endangered species.
27 Under this alternative, these lands would serve as living laboratories, engaging visitors in
28 participatory science, education, and stewardship—activities that nurture personal
29 connections with nature and inspire advocacy.

30 Exploration along the vast network of trails would further highlight the park’s diverse
31 ecosystems and rich cultural resources. Cultural resource sites and stories—archeological
32 sites, European exploration, agricultural land uses, coastal defense sites, and the
33 lighthouse—would emphasize human occupation of the coastal environment. Most
34 cultural resources would be stabilized if not in conflict with natural resource restoration.

35 Land protection strategies would seek to reconnect fragmented endangered species
36 habitat and strive to remove features that impede movement or migration of species, or
37 disrupt ecological function.

38

39

1 **Thornton State Beach to South of Mussel Rock**

2 **Natural Zone**

3 Same as alternative 1.

4

5 **Milagra Ridge**

6 **Natural Zone**

7 The land would be managed to preserve the wild character of the area and protect
8 endangered species habitat. Heavily disturbed areas would be restored. Coordinating with
9 other land managers, the National Park Service would also make trail improvements that
10 could include connections to Oceana Boulevard, the Pacific coast, Skyline Boulevard,
11 and Sweeney Ridge.

12

13 **Shelldance Nursery Area**

14 **Diverse Opportunities Zone and Park Operations Zone**

15 Same as alternative 1.

16

17 **Sweeney Ridge (including Cattle Hill and Picardo Ranch)**

18 **Natural Zone**

19 This area would be managed to protect endangered species and restore the large
20 contiguous natural landscape extending into the SFPUC watershed. Visitors would
21 experience the wild character of these lands through stewardship activities, trail use, and
22 primitive camping. Sneath Lane could be converted to a trail and connect to the Bay Area
23 Ridge Trail in the SFPUC watershed. Unnecessary fire roads could also be converted to
24 trails or removed if not historic, and natural resources restored. If acquired, a trailhead
25 would be located at Picardo Ranch with modest visitor support facilities (restroom, picnic
26 tables, parking).

27 The San Francisco Bay Discovery Site National Historical Landmark would be preserved
28 and interpreted.

29

30 **Mori Point**

31 **Sensitive Resources Zone**

32 Visitor use would be highly controlled to protect threatened and endangered species that
33 inhabit the site. The public would continue to engage in community stewardship to
34 preserve and restore the native coastal ecosystem.

35

36

1 **Pedro Point, Devil’s Slide, and San Pedro Mountain**

2 **Sensitive Resources Zone** (Devil’s Slide area)

3 If acquired, the rugged coastal areas west of existing Highway 1 would be managed to
4 protect seabirds that are sensitive to human disturbance. Visitor access would be highly
5 managed or closed during breeding seasons.

6

7 **Natural Zones** (other areas)

8 Same as alternative 1.

9

10 **Rancho Corral de Tierra**

11 **Natural Zone** (majority of the area)

12 Management would be the same as alternative 1, but with fewer and more primitive
13 visitor amenities. Unnecessary fire roads could be converted to trails or removed if not
14 historic, and natural processes restored.

15

16 **Sensitive Resources Zone** (creek corridors)

17 In this alternative, the four equestrian facilities would be removed or relocated away from
18 creek corridors over time. The park would partner with surrounding land managers to
19 restore the creek corridors, reconnect them to the ocean, and restore anadromous fish
20 passage.

21

22 **Scenic Corridor Zone** (existing equestrian lease area)

23 These areas would accommodate visitor and equestrian facilities, in sustainable locations
24 and configurations, compatible with natural resource management goals for the
25 surrounding area.

26

27 **Montara Lighthouse**

28 **Evolved Cultural Landscape Zone**

29 Similar to alternative 1, the historic resources would be preserved and adaptively used,
30 but the site would be dedicated to stewardship and environmental education. The site
31 would become a campus focused on enhancing understanding and stewardship of coastal
32 resources, with hostel and overnight accommodations for program participants and staff.

33

34 **Phleger Estate**

35 **Natural Zone**

36 Same as alternative 1.

37

38

1 **San Francisco Public Utilities Commission Watershed Easements**

2 **Sensitive Resources Zone** (majority of the area)

3 In this alternative, the park managers would continue to cooperate with the San Francisco
4 Public Utilities Commission for the preservation of the natural, cultural, scenic, and
5 recreational features of the watershed. Park managers would promote natural resource
6 preservation and highly managed public access in most of the watershed to support the
7 values that resulted in designating this area as the core of the UNESCO Golden Gate
8 Biosphere Reserve.

9
10 **Scenic Corridor Zone** (Sawyer Camp/San Andreas Trail corridor)

11 Park managers would promote access and visitor services along the existing multiuse trail
12 and the implementation of trail improvements proposed in the San Francisco Watershed
13 Management Plan (2002), including completion of the north–south corridor through the
14 watershed in areas of low sensitivity.

15

16 **Offshore Ocean Environment**

17 **Sensitive Resources Zone** (Fitzgerald Marine Reserve)

18 In areas where the park boundary coincides with the Fitzgerald Marine Reserve (FMR),
19 the two organizations would continue to cooperate in the implementation of the
20 provisions of the California State Marine Life Protection Act. The FMR area between
21 Montara State Beach and Ross Cove has been designated as the Montara State Marine
22 Reserve: no fishing, harvesting, or collecting would be allowed in this area. The FMR
23 area between Ross Cove and Pillar Point Harbor has been designated as the Pillar Point
24 Marine Conservation Area; some fishing would be allowed in this area.

25

26

27 **COST ESTIMATES**

28 Alternative 2 proposes to reconnect the coastal ecosystems as well as provide visitors
29 with recreational and educational opportunities that would allow them to learn about and
30 enjoy the coastal and marine environments. Costs to implement this alternative include
31 funding needed for a wide range of landscape restoration activities and stewardship and
32 science programming.

33 The annual operating costs for alternative 2 are made up of the current annual operating
34 costs, with changes made to reflect additional staffing needs. The annual operating costs
35 of alternative 2 are estimated at \$32 million.

36 Additional staffing needs were estimated to support alternative 2. While some divisions
37 would not require changes in staff, total additional staff needed to support alternative 2 is
38 estimated at 68 FTE. Most divisions would require additional staff to support the newly
39 acquired lands in San Mateo County.

40 Other additional staff would be needed to carry out new uses of the park lands. An
41 increase in interpretive staff would support expanded interpretive programs throughout

1 the park. A greater number of law enforcement officers would allow for needed evening
2 coverage, marine patrol, and response to increased visitor recreational activities. With the
3 addition of new trails and facilities and the rehabilitation of other facilities, maintenance
4 responsibilities would increase, also requiring additional staff.

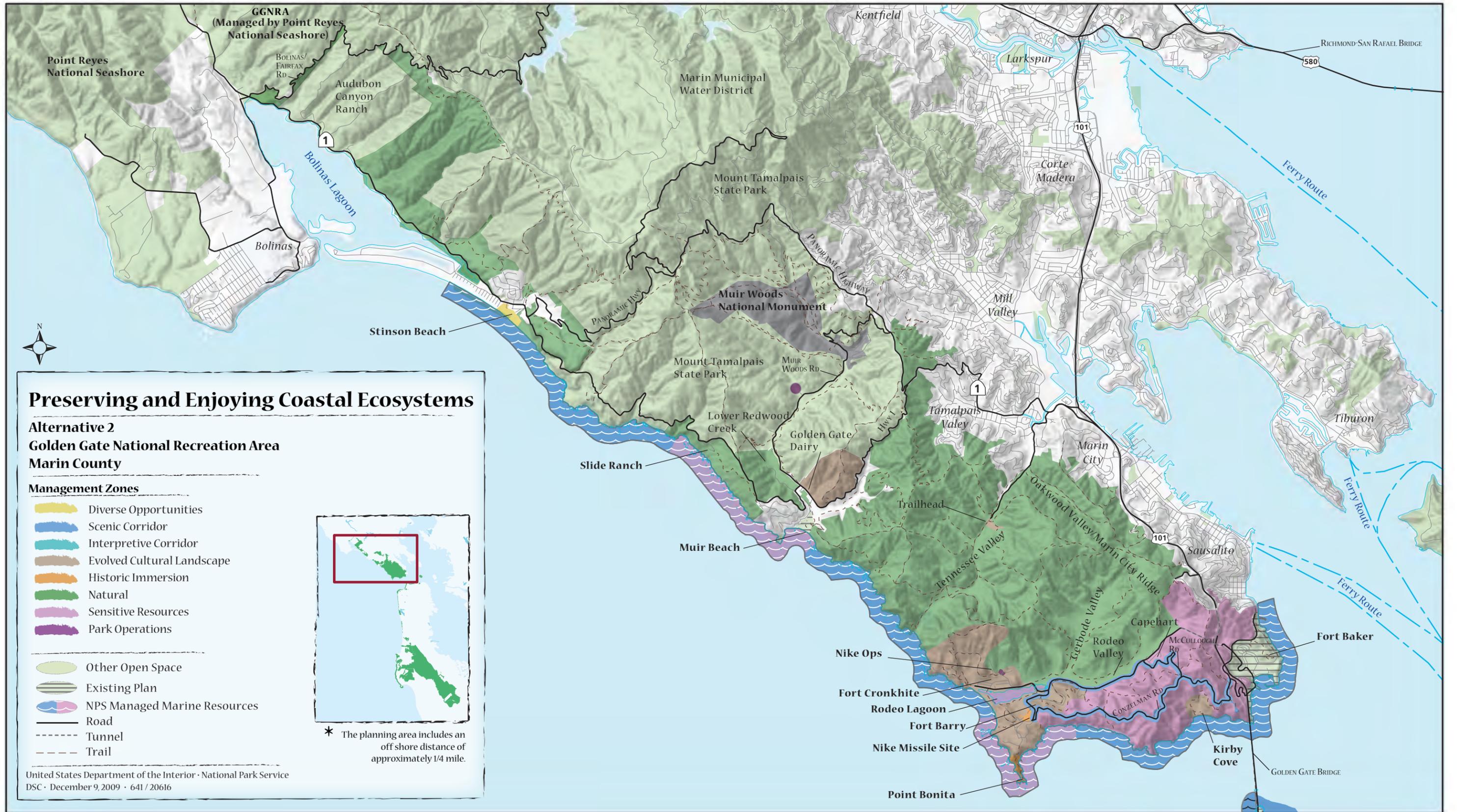
5 The natural resources division would have additional responsibilities related to the
6 inventory, monitoring, and restoration of natural areas and habitats.

7 As a result of the expanded natural areas, cultural resources would require extensive
8 documentation and survey, as well as adaptive management. Significant cultural
9 resources would require rehabilitation for park and partner use. Additional archeological
10 surveys would be needed before areas were allowed to revert to their natural
11 environment. Compliance would be needed in cultural areas and also would be need to
12 document wild areas where buildings may be removed and archeological resources
13 covered by vegetation. The responsibilities of the planning division for project
14 coordination, compliance, and public involvement would also expand, requiring
15 additional staff.

16 Other divisions, including business and administration, environmental and safety, and
17 public affairs would each require a few additional staff members to manage new areas
18 and uses of the park lands. New staff would also manage the rigorous user capacity
19 program at Alcatraz Island and Muir Woods National Monument.

20 One-time costs of alternative 2 reflect extensive restoration of the landscape, as well as
21 rehabilitation of facilities in concert with the goals of the alternative. Fort Mason
22 rehabilitation would carry a large cost; the historic structures would be adaptively used
23 for park partners and programs for participatory science, education, and stewardship.
24 Proposed facility needs in this alternative reflect the overarching goal of creating a park
25 that preserves and promotes enjoyment of the coastal ecosystems. Total one-time costs
26 (including facility and landscape restoration costs) are estimated at \$86 million.

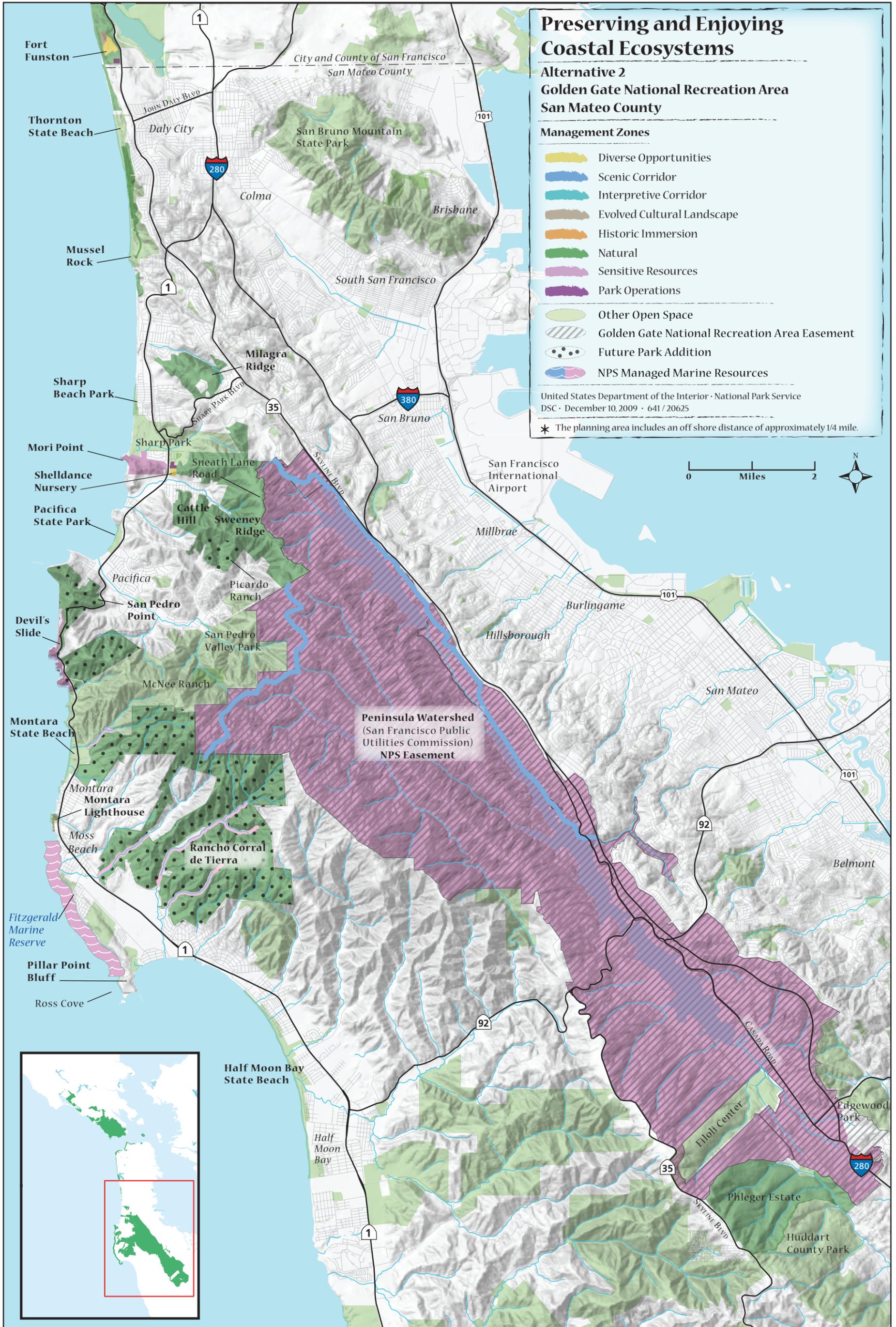
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PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

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PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

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PARK LANDS IN MARIN, SAN FRANCISCO, AND SAN MATEO COUNTIES: ALTERNATIVE 3, FOCUSING ON NATIONAL TREASURES

4

5 **PARK LANDS IN MARIN COUNTY**

6 **Overview**

7 This alternative would welcome visitors to a vast network of open space that protects
8 natural and cultural resources and offers many forms of recreation in a setting of national
9 importance. Much of the area's undeveloped land is a legacy of the U.S. Army, whose
10 coastal defense systems remain anchored in the landscape.

11 The park would highlight several nationally important sites, including Muir Woods, the
12 Golden Gate, the coastal setting of the Highway 1 National Scenic Byway, and the Marin
13 Headlands' historic Army posts.

14 Although this alternative shares many characteristics of alternatives 1 and 2, the
15 management of the Marin Headlands' historic core would be very different. Sheltering
16 the best-preserved collection of seacoast fortifications in the country, the Marin
17 Headlands tell the story of two centuries of evolving weapons technology and the
18 nation's unwavering efforts to protect the Golden Gate. As a result, this alternative would
19 focus on immersing visitors in its compelling sites and history, using and interpreting
20 preserved structures and landscapes ranging from Battery Spencer to the Nike Missile
21 Launch Site.

22 Other important landmarks, such as the Point Bonita Lighthouse, established in 1855,
23 also would be preserved and interpreted for visitors from around the world.

24

25 **Stinson Beach north to Bolinas–Fairfax Road**

26 **Diverse Opportunities Zone** (beach, dunes, and developed area)

27 Same as alternative 1.

28

29 **Natural Zone** (Easkoot Creek corridor and surrounding park lands north to Bolinas– 30 Fairfax Road)

31 The natural ecosystem of Easkoot Creek riparian corridor and the uplands east of
32 Highway 1 would be restored. The coastal defense structures in the vicinity of Highway 1
33 near Red Rock Beach would be preserved and interpreted.

34 As in alternative 1, other park lands and waters in the vicinity of Stinson Beach,
35 including the uplands, would be managed to protect and restore the coastal ecosystems,
36 and contribute to the restoration of natural processes that affect Bolinas Lagoon.
37 Partnerships with neighboring land managers would be strengthened to achieve these
38 goals across the broader landscape.

1 **Highway 1 and Panoramic Highway**

2 **Scenic Corridor Zone**

3 Same as alternative 1.

4

5 **Slide Ranch**

6 **Natural Zone**

7 Same as alternative 2.

8

9 **Lower Redwood Creek (former Banducci flower farm and**
10 **surrounding area)**

11 **Natural Zone**

12 Same as alternative 2.

13

14 **Muir Beach**

15 **Natural Zone**

16 Same as alternative 1.

17

18 **Golden Gate Dairy and Vicinity**

19 **Evolved Cultural Landscape Zone** (developed area only)

20 The area would be managed to preserve the pastoral landscape and historic structures and
21 stories associated with past dairy ranching.

22 The historic structures could be adapted for use to support equestrian and other
23 recreational uses, park operations, and local community services that are consistent with
24 park goals. The rest of this park site could be restored to its natural coastal conditions.

25

26 **Natural Zone** (surrounding uplands)

27 Same as alternative 1.

28

29 **Tennessee Valley (from Oakwood Valley to the ocean)**

30 **Scenic Corridor Zone** (Tennessee Valley trailhead and the Miwok Stables area,
31 including the trail to the beach)

32 The area would be managed to establish a visitor facility that provides orientation and
33 services to support the recreational and educational opportunities available in this region
34 of large undeveloped open spaces. Equestrian, environmental education, and stewardship
35 uses would be retained in improved sustainable facilities.

1 The trail and ocean beaches would also be managed to promote hiking, biking, and
2 equestrian touring on a “trail to the sea.” Modest and rustic facilities could be provided
3 that support these recreational activities including overnight accommodations that
4 complement the scenic touring experience.

5
6 **Natural Zone** (surrounding uplands including Oakwood Valley)

7 Outside the trail corridor, the area would be managed to protect undeveloped coastal
8 habitat and outstanding natural features that are backdrops to the scenic corridor
9 experience.

10

11 **Marin Headlands: Marin City Ridge and Gerbode Valley**

12 **Natural Zone**

13 Same as alternative 1.

14

15 **Marin Headlands: Fort Barry and Fort Cronkhite**

16 **Historic Immersion Zone** (Rodeo Valley, Fort Barry and Fort Cronkhite)

17 These areas would be managed to showcase the stories and structures of military history
18 and the transition from Army post to national park. Infrastructure and landscapes within
19 this area would be restored (at varying levels of historic preservation treatment) to be
20 evocative of the military era, while protecting threatened and endangered species habitat.
21 Structures could continue to be used for a diversity of purposes, including use by park
22 partners, but partners would be encouraged to incorporate into their programming an
23 association with military history and conservation of open space. Equestrian facilities
24 would be accommodated in this zone.

25 Much of the visitor immersion would be interpretive, incorporating the latest
26 technological and multimedia advances to bring history alive in new and nontraditional
27 ways. Interpretive themes would address the various military periods. Preservation of the
28 historic military resources would be consistent with natural resource protection.

29

30 **Historic Immersion Zone** (Nike Missile Site)

31 Same as alternative 1.

32

33 **Capehart Housing Area**

34 **Diverse Opportunities Zone**

35 Some Capehart residences would be replaced with a new visitor center and facilities on
36 the south side of the Bunker Road to serve other park uses and operational needs.

37

38

1 **Conzelman, Bunker, and McCullough Roads (including Battery**
2 **Spencer and Hawk Hill)**

3 **Historic Immersion Zone**

4 The roads and adjacent parklands would be managed to focus visitors on the coastal
5 geology and the military fortifications, and to engage them in the exploration of these
6 stories. Deteriorated military sites and features would be restored. New or improved trails
7 throughout the area, including the California Coastal Trail, would help connect the visitor
8 to the geologic and military resources and to follow a historic route while protecting
9 habitat for threatened and endangered species.

10

11 **Kirby Cove**

12 **Historic Immersion Zone**

13 The park resources and stories associated with coastal fortifications would be highlighted
14 and overnight accommodations would promote appreciation of views of the Golden Gate
15 Bridge and the wild-urban interface between the park and city of San Francisco. Facilities
16 would provide visitors with access to the beach and new San Francisco Bay Water Trail.

17 Habitat restoration would continue outside of the historic forest with removal of invasive
18 nonnative vegetation and expansion of mission blue butterfly habitat.

19

20 **Point Bonita Lighthouse Complex**

21 **Historic Immersion Zone**

22 Same as alternative 1.

23

24 **Offshore Ocean and Bay Environment**

25 **Scenic Corridor Zone** (all offshore areas)

26 Park managers would work to preserve the ocean and bay environment and accommodate
27 public uses including water recreation, boating, and noncommercial fishing.

28

29

30 **PARK LANDS IN SAN FRANCISCO COUNTY**

31 **Overview**

32 This alternative would focus on the collection of historic sites and the dynamic coastal
33 landscape that defines San Francisco's edge, from Fort Mason to Fort Funston. Visitors
34 would be welcomed to the "National Park Next Door" as in alternative 1, with a focus on
35 the nationally important sites that are connected by the San Francisco Bay Trail and
36 California Coastal Trail, thus creating a scenic and historic corridor.

37 Golden Gate National Recreation Area park lands in San Francisco encompass a
38 significant collection of historic sites, ranging from the Civil War-era Black Point at Fort

1 Mason to the military coastal fortifications at Fort Funston. These sites are located amid a
2 windswept coastal environment, featuring rocky bluffs, acres of dunes, sandy beaches,
3 and fragile native habitat.

4 Today, these offerings are an array of popular destinations for park lovers. Under this
5 alternative, the National Park Service would expand interpretive programs and visitor
6 services to enable residents and visitors to further appreciate the significant landmarks
7 and landscapes at the Golden Gate.

8

9 **Upper Fort Mason**

10 **Diverse Opportunities Zone** (majority of the site)

11 More of the structures at Fort Mason would be dedicated to visitor services to expand the
12 range of opportunities. Fort Mason would serve as the primary visitor entrance to the
13 Golden Gate National Recreation Area with an orientation and information center that
14 would introduce visitors to all San Francisco Bay Area national parks, as well as to the
15 programs offered by the park’s extensive partners, thus enabling visitors to better plan
16 their national park visit. Visitor circulation and wayfinding improvements would be
17 implemented in response to new adjacent transit and ferry connections.

18 Park managers would preserve historic structures and landscapes that tell the story of
19 continuous military and civilian use of the fort. Expanded overnight accommodations
20 would provide a base for day-trips to explore other areas of the park. The “Great
21 Meadow” could have sustainable infrastructure to support special events.

22

23 **Historic Immersion Zone** (Building 201—Park Headquarters and Pier 4)

24 Golden Gate National Recreation Area headquarters would share space with a museum
25 that would showcase the military history of Fort Mason and the 20th-century port of
26 embarkation that is the centerpiece of the historic district.

27 In this alternative, historic program tours to Alcatraz Island would leave from a restored
28 Pier 4 at the foot of Van Ness Avenue. The facility would include interpretive and
29 educational exhibits.

30 McDowell Road would continue to facilitate pedestrian and bicycle travel through Fort
31 Mason and highlight scenic views of the Golden Gate and San Francisco Bay.

32 As in alternative 1, these proposals would require close collaboration with San Francisco
33 Maritime National Historical Park and the City of San Francisco.

34

35 **Sensitive Resources Zone** (shoreline at Black Point)

36 Same as in alternative 1.

37

38

39

1 **China Beach**

2 **Diverse Opportunities Zone**

3 Same as alternative 1.

4

5 **Lands End**

6 **Evolved Cultural Landscape Zone**

7 Same as alternative 1.

8

9 **Fort Miley**

10 **Historic Immersion Zone** (West Fort Miley, the USS San Francisco Memorial, and
11 Marine Exchange Lookout Building)

12 The park would preserve these structures and sites and showcase military and maritime
13 history.

14

15 **Park Operations Zone** (East Fort Miley)

16 Park managers would focus on providing park maintenance and public safety operations
17 needed to support the surrounding park lands. Safer and more direct vehicle and trail
18 access to East Fort Miley would be developed to better support this use.

19

20 **Ocean Beach**

21 **Diverse Opportunities Zone** (along the O'Shaughnessey seawall)

22 Same as alternative 2.

23

24 **Natural Zone** (south of the O'Shaughnessey seawall)

25 Same as alternative 2.

26

27 **Fort Funston**

28 **Natural Zone** (majority of the site)

29 This area would be managed to provide recreational activities in a more natural setting
30 with limited support facilities. Access and parking would be at the edge of the site,
31 allowing restoration of the natural dune ecosystem and providing for trail access.

32 Nonhistoric structures would be removed; existing park operation functions and the
33 environmental education program would be relocated to suitable locations elsewhere in
34 the park.

35 The historic Battery Davis would be preserved within the context of the natural setting.
36 The coastal bluffs would be preserved for their unique geology and to allow natural
37 processes to continue unimpeded.

38

1 **Diverse Opportunities Zone** (uplands, away from the edge of the Dune)

2 This zone would be managed to provide for continued high levels of visitor use and
3 current opportunities such as hang gliding and dog walking, to the extent the area remains
4 safe from bluff erosion.

5

6 **Offshore Ocean and Bay Environment**

7 **Natural Zone** (all offshore areas in San Francisco)

8 Same as alternative 1.

9

10

11 **PARK LANDS IN SAN MATEO COUNTY**

12 **Overview**

13 As in the other alternatives, park lands and ocean environments in San Mateo County
14 would be managed as part of a vast network of protected lands and waters. This
15 alternative, however, would highlight how this “quilt” of undeveloped land has been
16 protected by numerous organizations. Over the past 20 years, the National Park Service,
17 local governments, private land trusts, and dedicated individuals have worked hand in
18 hand to acquire and preserve this “wilderness” next door.

19 Today, these lands are a national treasure of recreational, natural, and cultural resources.
20 Several nationally significant historic sites are in San Mateo County, along with habitat
21 for numerous endangered species. Many of these important resources are managed by
22 other agencies on nearby sites. This alternative would focus on protecting resources in the
23 park while developing recreational and thematic connections between sites managed by
24 other land managers.

25 This alternative also looks beyond the immediate park lands to explore the potential to
26 stimulate regional landscape management and enhance heritage tourism. To do so, park
27 managers would work with communities between Pacifica and Santa Cruz to support the
28 National Scenic Byway designation of the Pacific Coast Highway (Highway 1). The
29 highway is one of the unifying features of the rural coast, and is characterized by forested
30 hills, small-scale agriculture, and seaside communities.

31

32 **Thornton State Beach to South of Mussel Rock**

33 **Natural Zone**

34 Same as alternative 1.

35

36 **Milagra Ridge**

37 **Natural Zone**

38 Same as alternative 2.

1 **Shelldance Nursery Area**

2 **Diverse Opportunities Zone and Park Operations Zone**

3 Same as alternative 1.

4

5 **Sweeney Ridge (including Cattle Hill and Picardo Ranch)**

6 **Natural Zone** (majority of the area)

7 The area would be managed to protect endangered species and the large contiguous
8 natural landscape extending into the SFPUC watershed. Visitors could experience the
9 area through stewardship activities, improved trails, and primitive camping. The area
10 would connect visitors to the Bay Area Ridge Trail. The San Francisco Bay Discovery
11 Site National Historical Landmark would be preserved, enhanced, and interpreted.

12

13 **Diverse Opportunities Zone** (developed portion of Picardo Ranch)

14 Same as alternative 1.

15

16 **Mori Point**

17 **Natural Zone**

18 Same as alternative 1.

19

20 **Pedro Point, Devil's Slide, and San Pedro Mountain**

21 **Natural Zone**

22 Same as alternative 1.

23

24 **Rancho Corral de Tierra**

25 **Natural Zone** (majority of the area)

26 Same as alternative 1.

27

28 **Diverse Opportunities Zone** (existing developed areas)

29 Same as alternative 1.

30

31 **Montara Lighthouse**

32 **Historic Immersion Zone**

33 As the most intact lighthouse complex in the park, the site offers an opportunity for
34 immersion in the life of lighthouse keepers. This alternative would restore historic
35 structures and landscape features, remove contemporary structures, and develop new
36 visitor programs. Overnight stays would be part of the immersion experience.

1 **Phleger Estate**

2 **Natural Zone**

3 Same as alternative 1. Interpretation would explore the estate’s similarities with and
4 differences from Muir Woods National Monument.

5

6 **San Francisco Public Utilities Commission Watershed Easements**

7 **Natural Zone** (majority of the area corresponding with the Scenic Easement)

8 Same as alternative 1.

9

10 **Scenic Corridor Zone** (eastern edge, adjacent to Highway 280)

11 Same as alternative 1, but with an emphasis on promoting enhanced interpretation to
12 highlight the scope of the water system with its origins in Yosemite National Park.

13

14 **Offshore Ocean Environment**

15 **Sensitive Resources Zone** (Fitzgerald Marine Reserve)

16 In areas where the park boundary coincides with the Fitzgerald Marine Reserve (FMR),
17 the two organizations would continue to cooperate in the implementation of the
18 provisions of the California State Marine Life Protection Act. The FMR area between
19 Montara State Beach and Ross Cove has been designated as the Montara State Marine
20 Reserve: no fishing, harvesting, or collecting would be allowed in this area. The FMR
21 area between Ross Cove and Pillar Point Harbor has been designated as the Pillar Point
22 Marine Conservation Area; some fishing would be allowed in this area.

23

24

25 **COST ESTIMATES**

26 The costs of this alternative reflect the effort to focus the management of the park’s
27 resources, visitor experiences, and partnerships on the park’s most significant sites.

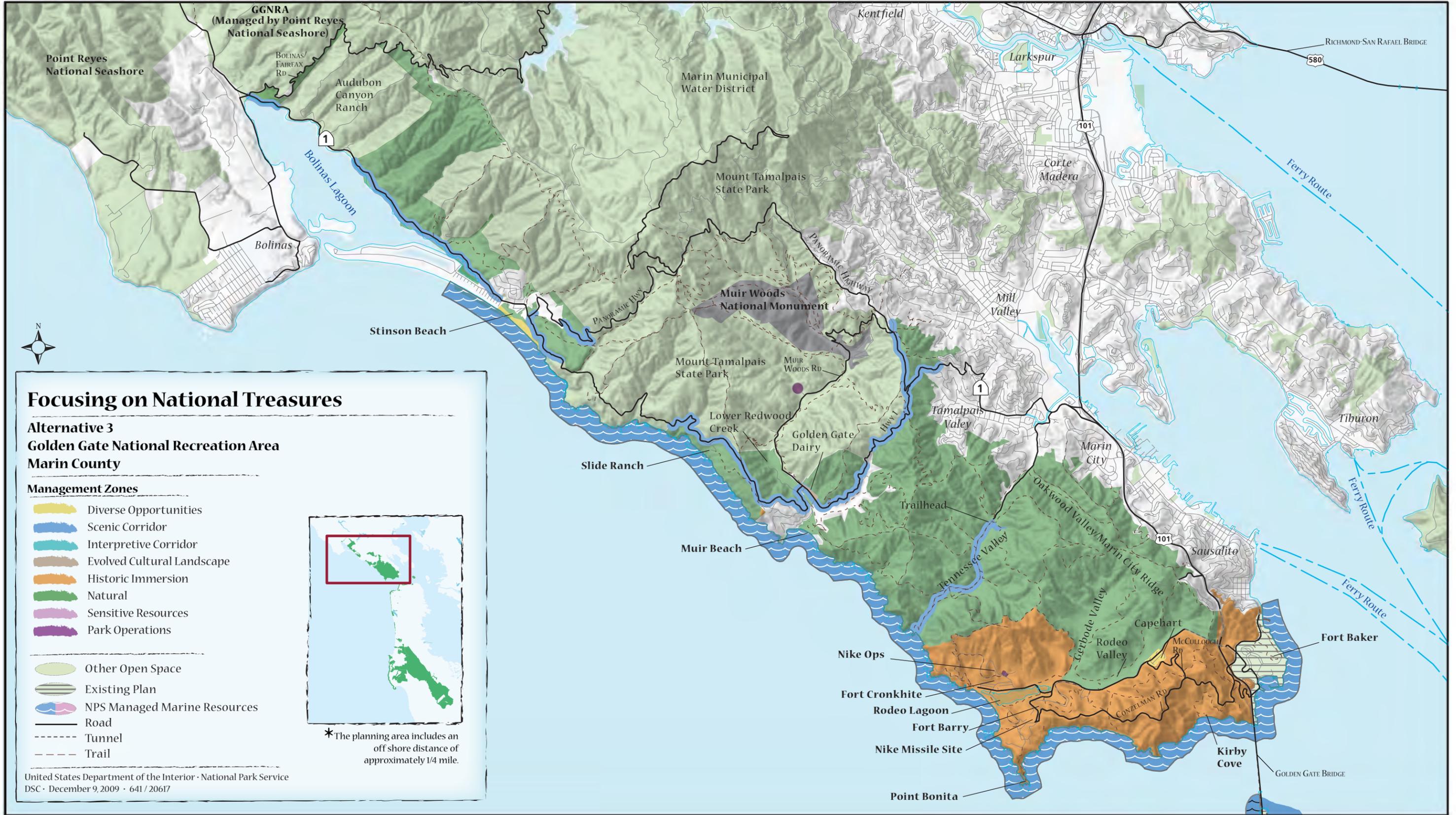
28 The annual operating costs for alternative 3 are made up of the current annual operating
29 costs, with changes made to reflect additional staffing needs. The annual operating costs
30 of alternative 3 are estimated at \$35 million.

31 Additional staffing needs were estimated to support alternative 3. While some divisions
32 would not require changes in staff, total additional staff needed to support alternative 3 is
33 estimated at 84 FTE. Most divisions would require additional staff to support the newly
34 acquired lands in San Mateo County.

35 Other additional staff would be needed to carry out new uses of the park lands. An
36 increase in interpretive staff would support expanded interpretive programs throughout
37 the park. A greater number of law enforcement officers would allow for evening
38 coverage, marine patrol, and response to increased visitor recreational activities. With the

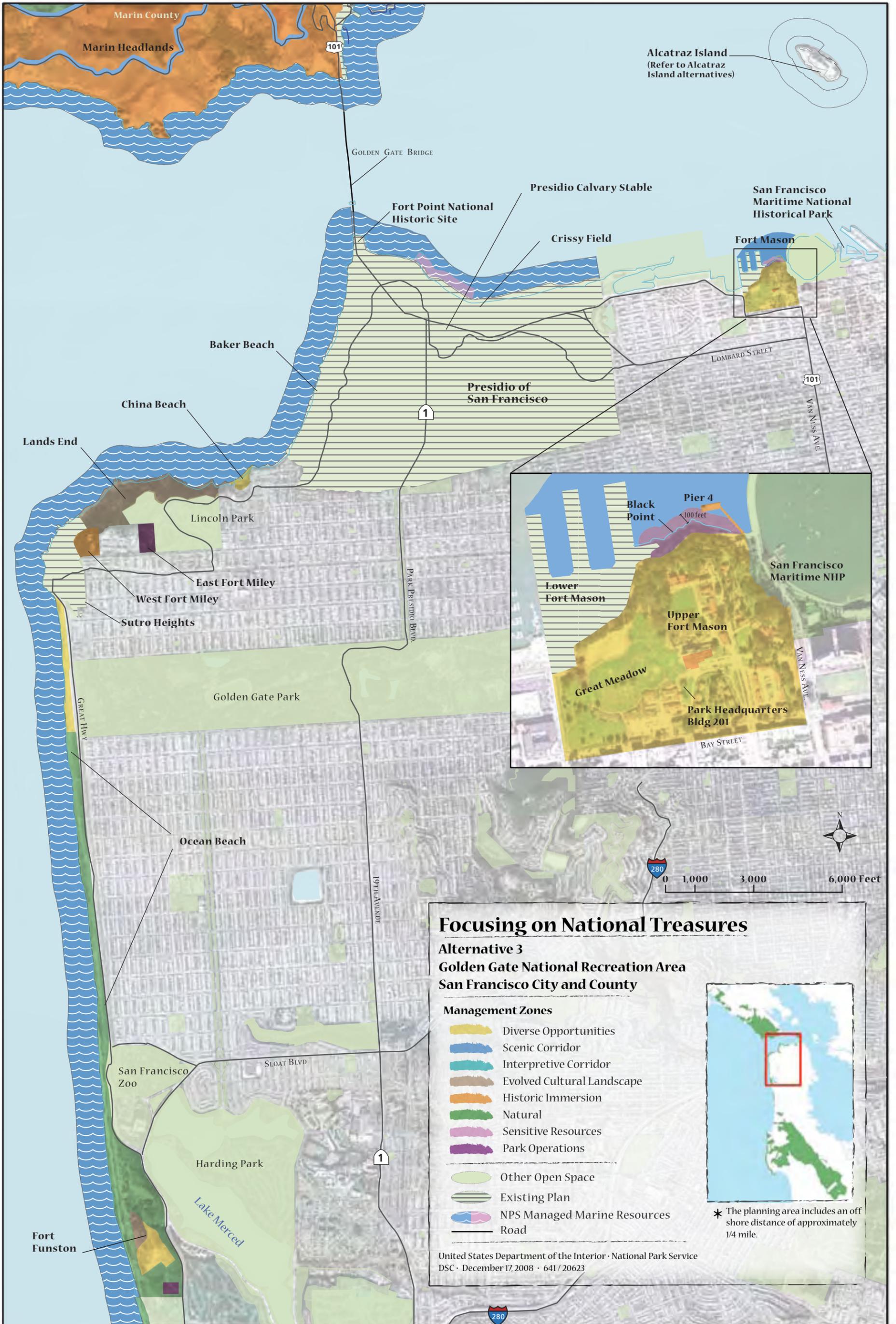
PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

- 1 addition of new trails and facilities and rehabilitation of other facilities, maintenance
2 responsibilities would increase, also requiring additional staff.
- 3 The natural resources division would have additional responsibilities related to the
4 inventory, monitoring, and restoration of natural areas and habitats.
- 5 The cultural resources division would have additional work associated with expanded
6 stewardship centers throughout the park, museum collection program and outreach, and
7 restoration of historic structures and landscapes. The responsibilities of the planning
8 division for project coordination, compliance, and public involvement would also
9 expand, requiring additional staff.
- 10 Other divisions, including business and administration, environmental and safety, and
11 public affairs would each require a few additional staff members to manage new areas
12 and uses of the park lands. New staff would also manage the rigorous user capacity
13 program at Alcatraz Island and Muir Woods National Monument.
- 14 Alternative 3 proposes a high level of restoration and rehabilitation of historic resources.
15 The largest one-time costs include the funding needed for the rehabilitation of Fort
16 Mason for visitor services, the development of the Capehart area for a visitor center and
17 operational hub, and parkwide restoration of historic military features. Total one-time
18 costs are estimated at \$107 million.
- 19



PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

- 1 Back of map
- 2



PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

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PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

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SUMMARY COSTS ESTIMATES FOR GOLDEN GATE NATIONAL RECREATION AREA

3

4 INTRODUCTION

5 The cost figures shown here and throughout the plan are intended only to provide
6 conceptual costs for general comparison of alternatives. National Park Service and
7 industry cost estimating guidelines were used to develop the costs (in 2009 dollars) to the
8 extent possible, but the estimates should not be used for budgeting purposes. Specific
9 costs will be determined in subsequent, more detailed planning and design exercises, and
10 considering the design of facilities, identification of detailed resource protection needs,
11 and changing visitor expectations. Actual costs to the National Park Service will vary
12 depending on if and when the actions are implemented, and on contributions by partners
13 and volunteers.

14 The implementation of the approved plan, no matter which alternative is selected, will
15 depend on future NPS funding levels and servicewide priorities, and on partnership
16 funds, time, and effort. The approval of a general management plan does not guarantee
17 that funding and staffing needed to implement the plan will be forthcoming. Full
18 implementation of the plan could be many years in the future.

19

20

21 DEFERRED MAINTENANCE

22 The “Actions Common to All Alternatives” section, earlier in this document, contained a
23 discussion of facilities that could be removed to reduce maintenance funding needs.
24 However, in addition to removing facilities, expending one-time costs on park facilities
25 would reduce the deferred maintenance by bringing the facilities up to a sustainably
26 condition. Currently, the deferred maintenance—or work needed to bring park assets into
27 good condition—exceeds \$198.1 million at Golden Gate National Recreation Area.

28 Each alternative contains proposals that would reduce total deferred maintenance.
29 Although the reductions in deferred maintenance are similar in amount for each
30 alternative; the alternatives do not all contain the same proposals for reducing deferred
31 maintenance; each alternative has different structures proposed for rehabilitation or
32 removal.

33 Alternative 1 would have potential deferred maintenance reductions of \$60.8 million
34 (31% of the current total deferred maintenance). This includes \$39.3 million at Alcatraz
35 Island, \$18.4 million on other Golden Gate National Recreation Area lands, and \$1.6
36 million at Muir Woods National Monument. Rehabilitation of facilities at Alcatraz Island
37 would contribute more than half of these reductions. Rehabilitation elsewhere throughout
38 the park lands also would contribute to deferred maintenance savings.

39 Alternative 2 proposals include potential deferred maintenance reductions of \$60.6
40 million (31% of current total). This includes \$36.3 million at Alcatraz Island, \$20.8

PART 4: ALTERNATIVES APPLIED TO GOLDEN GATE NATIONAL RECREATION AREA

41 million on other Golden Gate National Recreation Area lands, and \$2.0 million at Muir
42 Woods National Monument. Proposed removal of facilities, at Muir Woods National
43 Monument and throughout Golden Gate National Recreation Area lands, would
44 contribute to these savings. Rehabilitation of structures on Alcatraz Island would
45 contribute to nearly half of this alternative's deferred maintenance savings.

46 Potential reductions in deferred maintenance in alternative 3 comes to \$61.8 million
47 (31% of current total). This includes \$39.3 million at Alcatraz Island, \$20.1 million at
48 other Golden Gate National Recreation Area lands, and \$900,000 at Muir Woods
49 National Monument. The focused balance between rehabilitation and preservation of
50 structures on Alcatraz Island would contribute to a large portion of this reduction in
51 deferred maintenance. A mixture of removal and rehabilitation throughout the rest of the
52 park lands also would contribute to deferred maintenance savings.

53 Park staff continue to seek out additional measures to reduce deferred maintenance at the
54 park. One successful approach is the leasing program, in which park facilities are
55 maintained by partner organizations through leasing agreements. Fort Baker is an
56 example, and there are several other examples of partner organizations taking on the
57 continued maintenance of the facilities they occupy.

58

59

60

61

62 **Table 5: Costs Associated with the Implementation of the Alternatives for Park Lands in**
 63 **Marin, San Francisco, and San Mateo Counties**

	No Action Alternative	Alternative 1 (NPS Preferred)	Alternative 2	Alternative 3
Annual Operating Costs (ONPS) ¹	\$28,034,000	\$36,002,000	\$34,085,000	\$35,625,000
Staffing (Total FTE) ²	0 (335)	90 (425)	68 (403)	84 (419)
Total One-Time Costs ³	25,050,000	95,450,000	86,960,000	107,340,000
Facility Costs ⁴	3,500,000	72,210,000	47,970,000	83,040,000
Non-Facility Costs ⁵	0	1,690,000	17,440,000	2,750,000
Other Costs				
Public Lands Highway	2,790,000	2,790,000	2,790,000	2,790,000
FLHP	18,560,000	18,560,000	18,560,000	18,560,000
FLHP – Alternative Transportation Program	200,000	200,000	200,000	200,000

64

65

66 TABLE 5 NOTES:

67 ¹ Annual operating costs are the total costs per year for maintenance and operations associated
 68 with each alternative, including utilities, supplies, staff salaries and benefits, and leasing. Costs and
 69 staffing estimates assume that the alternative is fully implemented as described in the narrative. All
 70 annual operating costs for Muir Woods National Monument and Alcatraz Island were included in
 71 the above table, as those costs are administered by Golden Gate National Recreation Area and not
 72 separated out).

73 ² The total number of FTEs is the number of person-years of staff required to maintain the assets of
 74 the park at a good level, provide acceptable visitor services, protect resources, and generally
 75 support the park's operations. The FTE number indicates ONPS-funded NPS staff only, not
 76 volunteer positions or positions funded by partners.

77 ³ One-time facility and non-facility costs for the no action alternative include costs associated with
 78 projects already approved and fully funded. For all alternatives, these costs are the total of the
 79 facility costs and non-facility costs.

80 ⁴ Facility costs include design, construction, and restoration costs.

81 ⁵ Non-facility costs include, for example, native plant restoration and management studies.

82

83

84

**ENVIRONMENTALLY PREFERABLE ALTERNATIVES
FOR PARK AREAS IN MARIN COUNTY,
SAN FRANCISCO, AND SAN MATEO COUNTIES**

Will be completed following regional review.

SUMMARY TABLES OF THE ALTERNATIVES FOR PARK LANDS IN MARIN, SAN FRANCISCO, AND SAN MATEO COUNTIES

Table 6: Comparison of Alternatives for Park Lands in Marin, San Francisco, and San Mateo Counties

NO ACTION	ALTERNATE 1 - PREFERRED	ALTERNATE 2	ALTERNATE 3
Park Lands in Marin County			
Vision			
<ul style="list-style-type: none"> Reflects current conditions and activities: NPS would continue to manage these areas under existing management plans. 	<ul style="list-style-type: none"> Further the founding idea of “parks to the people,” and engage the community and other potential visitors in the enjoyment, understanding, and stewardship of the park’s resources and values. Focus park management on ways to attract and welcome people, connect people with the resources, and promote understanding, enjoyment, preservation, and health. 	<ul style="list-style-type: none"> Place an emphasis on preserving, enhancing, and promoting the dynamic and interconnected coastal ecosystems. Through recreational and educational opportunities, allow visitors to learn about and enjoy the ocean and bay environments, and gain a better understanding of the region’s international significance and history. 	<ul style="list-style-type: none"> Place an emphasis on the park’s nationally important natural and cultural resources. Manage the nationally significant fundamental resources at the highest level of preservation to promote appreciation, understanding, and enjoyment of those resources.
Stinson Beach North to Bolinas-Fairfax Road			
<ul style="list-style-type: none"> Manage the developed areas to support intensive use as a scenic recreational beach. Preserve habitat at Easkoot Creek and dunes. Manage area east of Bolinas Lagoon to protect natural resources 	<ul style="list-style-type: none"> Improve facilities to support beach recreation, expand creek buffer and enhance dunes. Build sustainable new facilities to replace deteriorated restrooms, showers, picnic areas, and parking lots Work with the community to improve access to Stinson beach through transit and congestion management. Continue to work on flooding and water issues with local community and authorities. Manage natural areas to protect and restore coastal ecosystems. 	<ul style="list-style-type: none"> Replace central facilities with sustainable new facilities and transit support. Remove south parking lot and restore wetlands and sand dunes. Manage natural areas to protect and restore coastal ecosystems. Restore the sand dunes and wetlands and contribute to restoration of natural processes at Bolinas Lagoon. 	<ul style="list-style-type: none"> Manage beach, dunes and developed areas same as Alternative 1. In Easkoot Creek corridor and lands north to Bolinas-Fairfax Road, restore natural ecosystem and riparian corridor. Preserve and interpret coastal defense structures along Highway 1 near Red Rock Beach. As in Alternative 1, manage other lands and waters outside Stinson Beach to protect and restore coastal ecosystems, and contribute to restoration of natural processes at Bolinas Lagoon.
Highway 1 and Panoramic Highway			
<ul style="list-style-type: none"> Manage park lands in this area to enhance resources and offer access to park sites and recreational activities and to preserve the scenic rural character 	<ul style="list-style-type: none"> Manage this area to enable visitors to enjoy spectacular views of the Pacific coast. Work with other governmental and nongovernmental groups to improve roadways and trail crossings. 	<ul style="list-style-type: none"> Manage this area in a way similar to that in Alternative 1, but with greater emphasis on collaboration with Caltrans and other agencies to protect the ecosystem. Encourage the abandonment of Highway 1 if a catastrophic landslide occurs. 	<ul style="list-style-type: none"> Same as Alternative 1.
Slide Ranch			
<ul style="list-style-type: none"> Manage the area through a park partner to operate an environmental farm and education center in a natural landscape with public access to trails and the shoreline. 	<ul style="list-style-type: none"> Manage the area to enhance the environmental and farm education center and provide improved facilities for public day use including picnic area, trail access, and scenic overlook. Manage surrounding natural zone to enhance natural and scenic values and provide public access to trails and the shoreline. 	<ul style="list-style-type: none"> Manage the area to promote restoration of coastal resources. Provide modest trailhead at Highway 1 for coastal access. Remove structures from farm and relocate environmental education center and farm education program to a less remote and more geologically stable location. 	<ul style="list-style-type: none"> Same as Alternative 2.

NO ACTION	ALTERNATE 1 - PREFERRED	ALTERNATE 2	ALTERNATE 3
Lower Redwood Creek (former Banducci flower farm and surrounding area)			
<ul style="list-style-type: none"> • Manage this area to preserve and enhance natural processes in the creek, floodplain, and surrounding landscape, and to protect threatened and endangered species. • Retain the rural character, existing buildings to support park programs and operations. • To protect salmon, collaborate with community to increase water storage capacity for use in dry season. 	<ul style="list-style-type: none"> • Manage the majority of the area to restore natural coastal ecosystem and riparian habitat and provide trail connections. • Manage developed area to preserve rural pastoral character; existing buildings would support park programs and stewardship opportunities. • To protect salmon, collaborate with community to increase water storage capacity for use in dry season. • This location could accommodate equestrian uses. 	<ul style="list-style-type: none"> • Manage area, including Redwood Creek, to restore coastal ecosystem and endangered salmon habitat. Visitors would have opportunities to participate in these stewardship activities. • Remove all facilities not needed for stewardship, restoration, or trail use; With partners, explore realignment of Muir Woods Road to reduce impacts to Redwood Creek. • To protect salmon, collaborate with community to increase water storage capacity for use in dry season. 	<ul style="list-style-type: none"> • Same as Alternative 2.
Muir Beach			
<ul style="list-style-type: none"> • Manage the beach, creek, parking lot and picnic area as planned in the wetland and creek restoration plan. 	<ul style="list-style-type: none"> • Manage the area to restore and sustain wetlands and creek. • Improve beach and trail access and preserve natural setting. • Collaborate with community to address water quality issues impacting park resources. 	<ul style="list-style-type: none"> • Same as Alternative 1. 	<ul style="list-style-type: none"> • Same as Alternative 1.
Golden Gate Dairy			
<ul style="list-style-type: none"> • Manage area to support equestrian facility and Muir Beach Volunteer Fire Department within historic ranch buildings. 	<ul style="list-style-type: none"> • Manage the developed area to preserve historic structures and pastoral landscape and to protect coastal prairie and scrub habitat. • Manage surrounding uplands to preserve and enhance the natural setting and provide trail connections. • Create site improvements including trailhead. • Continue to work with Caltrans to improve the safety of Highway 1. • Relocate equestrian facilities to Lower Redwood Creek. 	<ul style="list-style-type: none"> • Manage develop area and surrounding uplands to preserve historic structures and pastoral landscape and to protect coastal prairie and scrub habitat. • Reuse historic structures for science and stewardship center or local community services consistent with park goals; Remove nearby nonhistoric residences if not contributing to community services. • Provide equestrian use on designated trails. 	<ul style="list-style-type: none"> • Manage developed area to preserve pastoral landscape and historic structures and stories associated with past dairy ranching. • Manage surrounding uplands same as Alternative 1. • Adaptively reuse historic structures to support equestrian and other recreational uses, park operations, and local community services consistent with park goals.
Tennessee Valley (from Oakwood Valley to the ocean)			
<ul style="list-style-type: none"> • Manage the area to accommodate a variety of uses including trailhead, multiple trails, hike-in campground, equestrian center, nursery, volunteer horse patrol, environmental education, and campground 	<ul style="list-style-type: none"> • Provide improvements at Tennessee Valley trailhead, such as potable water, restrooms, and possibly a food kiosk. • Retain equestrian facilities and possibly expand them. • Could retain walk-on group camping. • Remove dams and artificial ponds and restore wetland and riparian habitat. 	<ul style="list-style-type: none"> • Manage Tennessee Valley trailhead and Miwok stable area to retain equestrian use and provide minimal visitor facilities; improve trailhead to support visitor access to trails. Provide modest facilities to support stewardship and restoration activities. • Remove nonhistoric structures and convert unneeded roads to trails. • Remove dams and artificial ponds and restore wetland and riparian habitat. 	<ul style="list-style-type: none"> • Manage Tennessee Valley trailhead and Miwok stable area to establish a visitor facility providing orientation and services to support area recreational and educational opportunities. • Retain equestrian, environmental and stewardship uses with improved sustainable facilities. • Modest facilities could be provided to support recreational activities and could include rustic overnight accommodations.
Marin Headlands: Marin City Ridge, and Gerbode Valley			
<ul style="list-style-type: none"> • Manage area to preserve natural resources and processes, restore habitats, protect sensitive species and habitats and allow trail use • Provide primitive camping and a trail network with access to local communities. 	<ul style="list-style-type: none"> • Manage area to preserve undeveloped wilderness-like character. • Could expand primitive camping opportunities that are accessible. • Continue habitat restoration, protect sensitive species. • Improve sustainability of trail system and explore opportunities to provide trail connections to local communities. 	<ul style="list-style-type: none"> • Manage area to restore and preserve coastal corridor of contiguous habitat and natural resources. • Remove nonhistoric buildings and infrastructure and restore lands. • Convert unnecessary roads to trails. Explore opportunities to provide trail connections to local communities. 	<ul style="list-style-type: none"> • Same as Alternative 1

NO ACTION	ALTERNATE 1 - PREFERRED	ALTERNATE 2	ALTERNATE 3
Marin Headlands: Fort Barry and Fort Cronkite			
<ul style="list-style-type: none"> Continue to utilize historic structures for a variety of education, recreation, conservation, and park operations for the park and our partners. Some visitor facilities are provided such as waysides, parking, and a small visitor center. Equestrian programs exist but provide limited opportunities for the park visitor. 	<ul style="list-style-type: none"> Manage for a variety of recreational, educational and stewardship activities. Expand visitor amenities at lower elevations and at Fort Baker and Fort Cronkhite. Rehabilitate structures and limited new construction for programs. Visitor amenities could be expanded to include trailheads, accessible trails, camping, picnicking, and park orientation. Build on existing programs with focus on environmental education, science, history, culture, recreation, healthy lifestyle activities, and special events. Some housing for staff, interns, and volunteers of the park and its partners would be provided. Add a warming hut near the beach to replace the chapel visitor center at Fort Barry. Equestrian programs would be supported in this area. Manage upland areas to protect and restore of habitat for endangered species. Continue to maintain restored Nike Missile site to provide experience evocative of its historic use. 	<ul style="list-style-type: none"> Manage Rodeo Beach, Fort Cronkhite and Fort Barry to maintain military identity; provide higher levels of visitor use, educational programs and recreation. Manage forts to interpret national register historic district; allow reuse of buildings for park programming. Manage Rodeo Lagoon and uplands south of Bunker Road to preserve and restore coastal habitat for threatened/endangered species. Limit visitor access to designated trails. Accommodate equestrian use and restore habitat consistent with military landscape. Manage Nike Missile Site as in Alternative 1. 	<ul style="list-style-type: none"> Manage Rodeo Valley, Fort Barry, and Fort Cronkhite to showcase stories and structures of military history and transition to a national park. Restore infrastructure and landscapes to military era; protect threatened/endangered species habitat. Continue to use structures for a variety of purposes, and encourage park partners to incorporate programming with military history and conservation of open space. Incorporate technology and multimedia to enhance interpretation and visitor immersion. Accommodate equestrian facilities. Manage Nike Missile Site same as in Alternative 1.
Capehart Housing Area			
<ul style="list-style-type: none"> Manage area to provide workforce housing for park and partner staff 	<ul style="list-style-type: none"> Construct sustainable housing and park operational facility on south side of Bunker Road. Remove residences on north side of Bunker Road to provide for creek restoration. 	<ul style="list-style-type: none"> Remove all structures; restore riparian an upland habitats and reconnect fragmented habitat where possible. 	<ul style="list-style-type: none"> Replace some residences with new visitor center and facilities on south side of Bunker Road.
Conzelman, Bunker, and McCullough Roads (including Battery Spencer and Hawk Hill)			
<ul style="list-style-type: none"> Manage to preserve historic and natural resources and scenic views as well as protecting sensitive species and habitats. Implement planned road, trail, and transit projects to improve access and reduce congestion at scenic overlooks. 	<ul style="list-style-type: none"> Highlight fundamental coastal resources, military fortifications, and scenic views. Provide safe pedestrian, bike, and motor vehicle access to overlooks and to interpretive and recreational opportunities. Add Interpretive signs, restrooms, and benches to some overlooks. 	<ul style="list-style-type: none"> Same as Alternative 1, except that area outside immediate road corridor would be managed to protect and restore coastal habitat to support mission blue butterfly. Limit visitor access to designated trails in area outside immediate road corridor. 	<ul style="list-style-type: none"> Manage roads and adjacent parklands to focus visitors on coastal geology and military fortifications. Restore military structures and fortifications. Provide new and improved trails following historic routes and connecting visitors to geologic and military resources. Protect habitat for threatened/endangered species.
Offshore Ocean and Bay Environment			
<ul style="list-style-type: none"> Maintain 1000-foot-wide buffer in coastal waters. Manage area to accommodate public uses including water recreation and noncommercial fishing. Support research and cooperation with other resource managing agencies. 	<ul style="list-style-type: none"> Preserve integrity of ocean and bay environment; Accommodate appropriate public uses including water recreation, boating and noncommercial fishing. Protect marine habitat in coordination with Monterey Bay and Gulf of Farallones National Marine Sanctuaries. At Point Bonita Cove and Bird Rock, Limit access in order to preserve sensitive resources; primary use would be research. 	<ul style="list-style-type: none"> Offshore areas except Muir Beach and Point Bonita would be managed the same as in Alternative 1. At offshore areas around Muir Beach and Point Bonita, preserve sensitive marine resources including intertidal resources, Redwood Creek salmonids, seabirds, and marine animals. Restrict visitation to protect resources, primary use would be research. 	<ul style="list-style-type: none"> Work to preserve ocean and bay environment and accommodate public uses including water recreation, boating and noncommercial fishing.

No Action	Alternate 1 - Preferred	Alternate 2	Preferred Alternate 3
Park Lands in San Francisco County			
Upper Fort Mason			
<ul style="list-style-type: none"> • Manage the area to preserve historic district and to adaptively reuse historic structures for park and park partner uses. • Provide public use through hostel and leasing of historic residences. • Provide a range of uses in the Great Meadow 	<ul style="list-style-type: none"> • Manage this district as a portal to the park; use selected historic structures for orientation and visitor services. Restore historic landscape. • Maintain residential uses where compatible with preservation goals. • Develop an expanded stewardship program. • Maintain park operations in current location. • Provide modest improvements at the Great Meadow. • Manage Black Point to protect natural rocky shoreline and provide a scenic overlook. 	<ul style="list-style-type: none"> • Manage this area similar to Alternative 1, but selected historic structures would be used for new park partners to engage visitors, communities and others in participatory science, education, and stewardship focused on coastal environment. • Develop a stewardship “hub” at Fort Mason to transport volunteers arriving by transit to other work sites in the park. • Improve visitor circulation and wayfinding, especially from transit arrival areas. • Manage Great Meadow and shoreline at Black Point same as in Alternative 1. 	<ul style="list-style-type: none"> • Manage Fort Mason as primary visitor entrance to the park, with an orientation and information center. • Preserve historic structures and landscapes. • Expand overnight accommodations. • Develop historic Pier 4 as an additional embarkation point to Alcatraz Island. • Manage Great Meadow and shoreline at Black Point same as in Alternative 1.
China Beach			
<ul style="list-style-type: none"> • Manage the area to provide a facility for enjoyment of a secluded beach and bird watching. 	<ul style="list-style-type: none"> • Improve visitor facilities and access to support current uses. 	<ul style="list-style-type: none"> • Same as Alternative 1. 	<ul style="list-style-type: none"> • Same as Alternative 1
Lands End (Northern area)			
<ul style="list-style-type: none"> • Manage the area to preserve and enhance the rugged coastal landscape. 	<ul style="list-style-type: none"> • Enhance the landscape, integrating natural habitat restoration and cultural landscape preservation. • Enhance scenic viewpoints and opportunities for bird watching. • Improve trail system, including connections to community and adjacent park lands. 	<ul style="list-style-type: none"> • Restore native habitat and natural processes within the coastal corridor from Eagle’s Point south to area of recent restoration. • Improve trail system to provide access to shoreline and vistas and to connect to communities. 	<ul style="list-style-type: none"> • Same as Alternative 1
Fort Miley			
<ul style="list-style-type: none"> • Manage this area to preserve the historic structures and landscapes and provide public and park operations uses. 	<ul style="list-style-type: none"> • Preserve and enhance historic structures and cultural landscapes. Rehabilitate Marine Exchange Lookout Station (Octagon House). • Focus site improvements on appearance and connection to community and VA hospital campus. • Provide improved picnicking and group camping facilities and improved opportunities for outdoor learning and leadership programs. • Park operations would remain at East Fort Miley. 	<ul style="list-style-type: none"> • Same as Alternative 1, with restoration of more natural landscape. Adaptively reuse Marine Exchange Lookout Building (Octagon House) to engage the public in natural and human history of the ocean environment. • Park operations would remain at East Fort Miley. 	<ul style="list-style-type: none"> • Preserve and enhance USS San Francisco Memorial, Marine Exchange Lookout Building, and structures and sites showcasing military and maritime history at West Fort Miley. • Continue to use East Fort Miley for park operations, and provide safer and more direct vehicle and trail access.

No Action	Alternate 1 - Preferred	Alternate 2	Preferred Alternate 3
Ocean Beach			
<ul style="list-style-type: none"> Manage to provide a recreational beach accommodating high levels of use while preserving natural values, including habitat for shorebirds such as the threatened western snowy plover 	<ul style="list-style-type: none"> Maintain current uses and collaborate with City of San Francisco to enhance the corridor. Improve California Coastal trail and other connections. Manage area south of seawall to protect shorebirds and allow natural coastal processes. Relocate facilities out of areas vulnerable to coastal erosion. 	<ul style="list-style-type: none"> As in Alternative 1, support City's efforts to redesign Ocean Beach corridor and relocate facilities out of areas vulnerable to coastal erosion. Manage northern end of beach to provide a variety of recreational opportunities. Manage area south of seawall to protect shorebirds and allow natural coastal processes while allowing compatible recreational uses. 	<ul style="list-style-type: none"> Same as Alternative 2
Fort Funston			
<ul style="list-style-type: none"> Provide trail and beach access for recreational uses including dog walking and hang gliding. Preserve natural and cultural resources including historic fortifications. Maintain park operations and environmental education center. 	<ul style="list-style-type: none"> Continue existing uses. Provide new visitor facilities. Preserve and interpret Battery Davis. Expand islands of native habitat to form continuous native dune habitat corridor. Along northern stretch, protect shorebirds, including threatened western snowy plover. 	<ul style="list-style-type: none"> Expand islands of native habitat to form continuous native dune habitat corridor. Manage southern area to protect shorebird habitat and provide new trails. In developed area, manage to provide continued levels of high use and variety of recreational activities and support facilities. Preserve Battery Davis. 	<ul style="list-style-type: none"> For the majority of the site, manage to provide recreational activities with limited support facilities. Restore natural dune ecosystem and trail access, locate parking at edge of site. Remove nonhistoric buildings; relocate park operation functions and environmental education programs to suitable locations. Preserve historic Battery Davis within natural setting. Manage uplands for continued high levels of recreational use.
Offshore Ocean and Bay Environment			
<ul style="list-style-type: none"> Maintain 1000-foot-wide buffer in coastal waters: Manage this area to accommodate public uses including water recreation and noncommercial fishing. Support research and cooperation with other resource managing agencies. 	<ul style="list-style-type: none"> Same as No-action Alternative. 	<ul style="list-style-type: none"> Designate eagle's Point near China Beach to Seal Rocks and West Crissy Field as marine reserves to protect seabirds and marine mammals. Remainder of area would be managed as in the No-action alternative. 	<ul style="list-style-type: none"> Same as the No-action alternative

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NO ACTION	ALTERNATE 1 - PREFERRED	ALTERNATE 2	PREFERRED ALTERNATE 3
Park Lands in San Mateo County			
Thornton State Beach to South of Mussel Rock			
<ul style="list-style-type: none"> Limited management would continue. 	<ul style="list-style-type: none"> Preserve and enhance natural and scenic values; allow for coastal geologic processes; Provide modest visitor access facilities; protect shorebird habitat. 	<ul style="list-style-type: none"> Same as Alternative 1 	<ul style="list-style-type: none"> Same as Alternative 1
Milagra Ridge			
<ul style="list-style-type: none"> Manage to protect and restore natural habitat, to protect historic coastline defenses. Maintain limited trail access. 	<ul style="list-style-type: none"> Manage area to preserve wild character and protect habitat for endangered species. Restore heavily disturbed areas. Improve trails and trail connections in coordination with other land managers. At center of ridge, improve access and add additional visitor amenities. 	<ul style="list-style-type: none"> Same as Alternative 1 without additional amenities and improved access at center of ridge. 	<ul style="list-style-type: none"> Same as Alternative 2
Shelldance Nursery Area			
<ul style="list-style-type: none"> Manage area for multiple uses including commercial nursery, trailhead, and park maintenance storage 	<ul style="list-style-type: none"> Transition area to provide visitor services including trailhead parking, restrooms, orientation, and community stewardship/education center. Designate some portion for park operations. 	<ul style="list-style-type: none"> Same as Alternative 1 	<ul style="list-style-type: none"> Same as Alternative 1
Sweeney Ridge (including Cattle Hill and Picardo Ranch)			
<ul style="list-style-type: none"> Manage for natural values and protection of historic resources. Cattle Hill to be transferred to NPS in the near future, with trail improvements underway. Picardo Ranch is a priority for land and conservation easements for the park 	<ul style="list-style-type: none"> Manage to protect endangered species and large contiguous natural landscape. Visitor experience would include stewardship activities, trail use and primitive camping. Coordinate improvements in regional trail system connections, develop trail amenities. Preserve, enhance and interpret San Francisco Bay Discovery Site National Historic Landmark. If acquired, locate trailhead at Picardo Ranch with visitor use improvements. 	<ul style="list-style-type: none"> Majority of area managed similar to Alternative 1. Convert Sneath Lane to a trail to connect Bay Area Ridge Trail. Remove unnecessary fire roads or convert to trails. If acquired, locate trailhead at Picardo Ranch with modest improvements. Preserve and interpret San Francisco Bay Discovery Site National Historic Landmark. 	<ul style="list-style-type: none"> Manage majority of area to protect endangered species and the large contiguous landscape extending to SFPUC watershed. Visitor experience could include stewardship activities, improved trails and primitive camping. Connect to Bay Area Ridge Trail. Preserve, enhance, and interpret San Francisco Bay Discovery Site National Historic Landmark. Developed portions of Picardo Ranch, same as Alternative 1.
Mori Point			
<ul style="list-style-type: none"> Manage to preserve and enhance habitat for threatened and endangered species and to restore natural functions. Develop hiking trails network. 	<ul style="list-style-type: none"> Manage land for ongoing restoration of natural habitats and to protect endangered species. Improve trail system and its connections and improve access. 	<ul style="list-style-type: none"> Control visitor use to protect threatened and endangered species on site. Continue community stewardship to restore ecosystem. 	<ul style="list-style-type: none"> Same as Alternative 1
Pedro Point, Devil's Slide, and San Pedro Mountain			
<ul style="list-style-type: none"> Not currently managed by NPS, but likely to be added to the park after construction of the Highway 1 tunnel 	<ul style="list-style-type: none"> If acquired, manage to maintain natural features and scenic views, and restore habitat; Improve trails and trailheads; control access to protect nesting seabirds 	<ul style="list-style-type: none"> Same as Alternative 1 	<ul style="list-style-type: none"> Same as Alternative 1

NO ACTION	ALTERNATE 1 - PREFERRED	ALTERNATE 2	PREFERRED ALTERNATE 3
Rancho Corral de Tierra			
<ul style="list-style-type: none"> • Non-agricultural portions of this open space managed by Peninsula Open Space Trust (POST) are in the process of being transferred to NPS. • Manage for limited public access for recreation such as hiking and horseback riding 	<ul style="list-style-type: none"> • Create “portals” and trailheads and other visitor facilities that provide for the enjoyment of this area. • Manage areas outside equestrian centers to preserve wild, open character and offer trail-based recreation • Equestrian facilities and uses would be retained at although the exact location, type, and scale will be subject to future planning efforts. • Restore natural habitats with community stewards. 	<ul style="list-style-type: none"> • Same as Alternative 1, with fewer amenities. • Remove unnecessary roads or convert to trails. • Remove or relocate equestrian facilities away from creek corridors. • Partner with surrounding land owners to restore creek corridors supporting fish passage. 	<ul style="list-style-type: none"> • Same as Alternative 1
Montara Lighthouse			
<ul style="list-style-type: none"> • Currently managed by the US Coast Guard; current uses include a hostel. Potential to be transferred to NPS. 	<ul style="list-style-type: none"> • Preserve and interpret historic structures and associated resources. • Enhance hostel and day use programming. Encourage multi-agency visitor center. • Improve trail connections. 	<ul style="list-style-type: none"> • Similar to Alternative 1, but dedicate the site to stewardship and environmental education including education related to coastal resources. • Maintain hostel and overnight accommodations for use by program participants and staff. 	<ul style="list-style-type: none"> • Restore and interpret historic structures and landscape features to support immersion in life of lighthouse keepers, remove contemporary structures and develop new visitor programs. • Continue overnight stays as part of immersion experience.
Phleger Estate			
<ul style="list-style-type: none"> • Manage this area to preserve cultural and natural resources of second-growth redwood forest and to provide access to regional trail system 	<ul style="list-style-type: none"> • Manage this area to provide recreation in natural setting. • Restore redwood forest ecosystem and manage for trail-based recreation. • Interpret logging history. 	<ul style="list-style-type: none"> • Same as Alternative 1 	<ul style="list-style-type: none"> • Same as Alternative 1
San Francisco Public Utilities Commission Watershed Easements			
<ul style="list-style-type: none"> • Manage by SFPUC to protect water supply and ecological and cultural resources. The NPS manages a scenic easement and a recreational easement to protect natural values and limited recreational uses compatible with ongoing water operations 	<ul style="list-style-type: none"> • Continue to cooperate with SFPUC on land management for preservation of natural, cultural, scenic and recreational features of the watershed. • In scenic and recreation easement, promote preservation while providing improved public trail access. • Collaborate with SFPUC on a watershed visitor education center. 	<ul style="list-style-type: none"> • Similar to Alternative 1, with emphasis on promoting natural resources preservation and supporting biodiversity values. • Promote access and visitor services along existing multiuse trail and implement trail improvements proposed in San Francisco Watershed Management Plan (2002) including north-south corridor in areas of low sensitivity. 	<ul style="list-style-type: none"> • Manage majority of area, corresponding to scenic and recreational easement, same as in Alternative 1. • Manage eastern edge, adjacent to Highway 280 same as Alternative 1, but with emphasis on promoting enhanced interpretation to highlight the scope of the water system with its origins in Yosemite National Park.
Offshore Ocean Environments			
<ul style="list-style-type: none"> • Where park boundary coincides with Fitzgerald Marine Reserve (FMR), continue to cooperate on management. The FMR area between Montara State Beach and Ross' Cove has been designated as the Montara State Marine Reserve: no fishing, harvesting, or collecting would be allowed in this area. The FMR area between Ross Cove and Pillar Point Harbor has been designated as the Pillar Point Marine Conservation Area; some fishing would be allowed in this area. 	<ul style="list-style-type: none"> • Same as No-action alternative. 	<ul style="list-style-type: none"> • Same as No-action alternative. 	<ul style="list-style-type: none"> • Same as No-action alternative.

Table 7: Summary of Key Impacts of Implementing the Alternatives for Park Lands in Marin, San Francisco, and San Mateo Counties

This will be completed after the regional review is completed.

The Alternatives Applied to Muir Woods National Monument



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MUIR WOODS NATIONAL MONUMENT: NO-ACTION ALTERNATIVE

3

4 OVERVIEW

5 Under the no-action alternative, Muir Woods National Monument would continue to be
6 managed to protect the primeval redwood forest in the larger Redwood Creek watershed,
7 and to interpret the monument's natural history, as well as the establishment of the
8 monument, which had a major role in the early American conservation movement.

9 Muir Woods National Monument would remain an international destination and
10 ecological treasure. With trees over 1,000 years old, it preserves a small yet towering
11 vestige of the vast forests of *Sequoia sempervirens* that once graced the slopes and
12 valleys surrounding San Francisco Bay. The monument also supports a diversity of flora
13 and fauna.

14 The park staff would continue to balance preservation of the redwood ecosystem with
15 providing access to hundreds of thousands of visitors annually. For many visitors, it is an
16 initial experience with the national park system. Key park objectives would include
17 fostering a conservation ethic among visitors, preserving and restoring habitat for
18 threatened and endangered species, supporting public transportation as a way to reduce
19 congestion, and promoting a watershed perspective in land management that includes
20 Mount Tamalpais State Park, two water districts, an organic farm, equestrian stables, and
21 local communities. These are objectives for the entire watershed as well. Overall
22 management of the monument would continue to be guided by the 1980 general
23 management plan.

24

25

26 ARRIVAL

27 Today, most visitors arrive by personal vehicles and commercial tour buses. Since 2005,
28 a pilot shuttle service has been used during the summer to help reduce traffic congestion.
29 In the no-action alternative, parking areas would continue to be provided adjacent to
30 Redwood Creek and very near the main concentration of redwoods.

31 The entrance area would continue to be located at the edge of the redwood forest adjacent
32 to Redwood Creek. It includes a parking area, restrooms, and a small visitor information
33 station with a bookstore and fee collection booth. This area is a hub of activity with a mix
34 of pedestrians, automobiles, and buses. Additional parking areas would continue to exist
35 farther down along Redwood Creek and would continue to be used during periods of
36 peak demand. Maintenance and some other operational functions would continue to be
37 located in the Old Inn on the east side of Muir Woods Road.

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39

1 **REDWOOD FOREST AND REDWOOD CREEK**

2 The main trail system would continue to exist as a series of loops running along
3 Redwood Creek, crossing the creek four times on footbridges. Visitors would continue to
4 have opportunities to stroll among the groves of ancient redwoods. A variety of
5 interpretive waysides and scheduled interpretive programs would continue in order to
6 support the visitor's discovery of the monument's resources. Intersecting with the main
7 trail are other trails that would provide visitors with extended hiking opportunities to
8 adjacent public lands. The Administration-Concession Building would continue to
9 provide food, retail services, restrooms, and park offices. The current use of the nearby
10 historic Superintendent's Residence and associated structures would remain.

11 Since the monument was established, the National Park Service has increased its
12 understanding of a healthy redwood forest ecosystem. Past practices of allowing visitors
13 to drive, picnic, and camp within the forest have long been phased out. Natural fires have
14 been suppressed throughout most of the 20th century, but have been slowly reintroduced
15 through the use of prescribed fire to restore more natural conditions, reduce fuel loading,
16 and to enhance the health of the ecosystem. This land management practice would
17 continue. In the 1930s, the Civilian Conservation Corp lined portions of Redwood Creek
18 with rocks as a means to stabilize and contain the flow of water within the existing
19 channel. These actions may have protected selected redwood trees on the banks, but have
20 also eliminated the natural meandering of the creek across a wider floodplain,
21 constraining its role in sustaining a healthy ecosystem.

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24 **MUIR WOODS ADDITION (ALSO KNOWN AS CAMINO DEL CAÑON,
25 CONLON AVENUE, AND DRUID HEIGHTS)**

26 Over time, additional tracts of land have been acquired to support the administrative
27 functions and visitor use of the monument. Properties in the area referred to as the Muir
28 Woods Addition were acquired by the National Park Service between 1974 and 1984.
29 These properties include the rustic buildings of historic Camp Hillwood (located up
30 Conlon Avenue), Druid Heights (located at the end of Camino del Cañon), and other
31 structures.

32 Some structures are used for park operations and a native plants nursery, while others are
33 under special use permits, reservation of use and occupancy, or have been vacated and
34 are scheduled for removal. These uses and planned actions would continue under the no-
35 action alternative. The valuable wildlife habitat in this area, including habitat for
36 Northern Spotted Owl and salmonids, would continue to be protected.

37

38

39 **COST ESTIMATES**

40 The estimated costs of the no-action alternative reflect the continuation of current
41 management. One-time costs for the no-action alternative are the costs for those projects

1 that are currently approved and funded—any requested but unfunded projects are not
2 considered in this analysis. Therefore, while the action alternatives contain estimates for
3 20 years of proposed projects, the no-action alternative assumes no new projects would
4 take place except those projects funded in 2009. Examples of currently funded projects
5 include the contract for the visitor shuttle and the remodeling of the concession facilities.
6 Total funded one-time costs are \$920,000.

7 Operating costs and staff numbers for Muir Woods National Monument are included in
8 the Golden Gate National Recreation Area analysis (see table 5).

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MUIR WOODS NATIONAL MONUMENT: ALTERNATIVE 1, CONNECTING PEOPLE WITH THE PARKS

4

5 **OVERVIEW**

6 In this alternative, the park would offer visitors the opportunity to experience and enjoy
7 the primeval forest ecosystem and understand the monument's place in American
8 conservation history through a variety of enhanced programs, facilities, and trails that
9 access the forest and connect local communities to the park and surrounding open space.

10 Although retaining much of the present system of trails through the forest, existing
11 facilities and uses would be modified or relocated to reduce their impacts on the
12 ecosystem and improve the park experience.

13 The monument would continue to welcome a diversity of visitors and support a range of
14 experiences, better serving as a gateway or stepping stone to understanding the national
15 park system.

16 A shuttle system, with parking and visitor services in an off-site location, would be an
17 important first point for orientation and key to providing sustainable access to the
18 monument.

19 Collaboration with other public land managers would continue to address watershed
20 restoration and stewardship.

21

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23 **ARRIVAL**

24 **Off-site Welcome Center**

25 To enhance the visitor experience and address congestion problems, permanent shuttle
26 service to Muir Woods National Monument would be provided during peak periods
27 throughout the year, supported by a new welcome center in the vicinity of Highway 1 and
28 US 101, created in collaboration with Marin County, California State Parks, and Caltrans.
29 Shuttles would travel a distance of about six miles to the monument. Express transit
30 service from downtown San Francisco and improved connections with the regional ferry
31 services would also be pursued. The welcome facility would provide necessary visitor
32 services that could include parking, sheltered waiting areas, restrooms, and orientation to
33 the monument and other regional park destinations. The facility would also connect
34 visitors to other regional and local transportation systems.

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1 **Diverse Opportunities Zone**

2 The monument’s existing entry area would be redesigned to enhance the visitor’s arrival
3 experience, protect resources, and improve safety. Parking at the monument would be
4 reconfigured or relocated using sustainable design practices to reduce impacts to the
5 creek and other sensitive resources. Capacity would meet demand during off-peak
6 periods. Pedestrian access would be improved to offer visitors a more natural experience
7 transitioning into the redwood forest separated from roads and parking.

8 A modest facility would be provided to receive visitors arriving by different modes of
9 transportation. The services provided could include shuttle drop-off, sheltered waiting
10 areas, orientation, restrooms, food service, and a bookstore. The existing separate
11 structures for fee collection, a bookstore, and restrooms could be replaced as part of the
12 new facility. The goal of the design process would be to accommodate visitor’s needs
13 while simultaneously minimizing the overall footprint of development within the old
14 growth forest.

15 Future use or removal of the Old Inn would be determined through more detailed site
16 planning that would consider its utility for visitor services or operational needs in the
17 redesigned entry area. To allow visitor parking to be reconfigured, the native plant
18 nursery would be relocated to Lower Redwood Creek as part of a stewardship center.
19 Realignment of portions of county-maintained Muir Woods Road would also be explored
20 to improve operational safety and visitor access.

21 In order to improve pedestrian safety and protect Redwood Creek, the park would
22 collaborate with Marin County to restrict shoulder parking along Muir Woods Road in
23 nontrailhead areas when alternative transportation becomes more readily available.

24

25

26 **REDWOOD FOREST AND REDWOOD CREEK**

27 **Scenic Corridor Zone** (Redwood Creek corridor including the existing wooden arch,
28 several existing buildings, and the main loop trails)

29

30 This area would be managed to provide a national park experience within the primeval
31 redwood forest setting. The Administration-Concession Building would transition to
32 support interpretive, educational, and stewardship activities, providing a flexible
33 classroom and program space in the woods. Experiences would immerse visitors in
34 nature (the sights, sounds, smells of the forest) where quiet would be encouraged.
35 Improved accessibility would ensure that all visitors could have these experiences. New
36 restrooms and drinking water would be provided near Bridge 4 to protect resources and
37 enhance visitor comfort.

38 The historic Superintendent’s Residence and nearby structures would be used for
39 administrative purposes. Other structures needed to support visitor uses or park
40 operations would be rehabilitated. Nonhistoric or nonessential structures would be
41 removed.

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1 **Natural Zone** (all areas beyond the Redwood Creek corridor)

2 The majority of the monument would be managed to preserve and restore natural systems
3 and contribute to the primeval forest setting. Visitors within this zone would have
4 opportunities for self-discovery and challenge on trails in a more dispersed and wild park
5 setting.

6 To provide a diverse continuum of experiences, visitors would be introduced to ways of
7 accessing the adjacent landscapes and the recreational opportunities of Mount Tamalpais
8 State Park, Marin Municipal Water District, and Golden Gate National Recreation Area.
9 The Ben Johnson, Fern Creek, Redwood Creek, and Dipsea trails would provide access to
10 a variety of day and overnight recreational experiences.

11

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13 **MUIR WOODS ADDITION (ALSO KNOWN AS CAMINO DEL CAÑON,
14 CONLON AVENUE, AND DRUID HEIGHTS)**

15 **Diverse Opportunities Zone** (Conlon Avenue)

16 Camp Hillwood and its immediate surroundings would be adaptively used for day use or
17 overnight educational opportunities. The historic values of the camp would be preserved
18 while the facilities would be adapted to contemporary uses.

19 All existing operational functions within this zone (maintenance and native plants
20 nursery) would be relocated to the Lower Redwood Creek site (former Banducci flower
21 farm) or in potential shared facilities with Mount Tamalpais State Park nearby at Kent
22 Canyon.

23

24 **Natural Zone** (other areas in Camino del Cañon and Druid Heights)

25 The majority of the area would be managed to preserve the natural environment. The
26 landscape and streams would be restored to an intact habitat. All nonhistoric structures
27 would be removed and Camino del Cañon road would be downgraded to a trail.

28

29

30 **KENT CANYON, MOUNT TAMALPAIS STATE PARK**

31 The park would work with California State Parks to achieve common objectives for this
32 area. Collaboration would focus on maintenance, parking, and trails. Most maintenance
33 functions in the monument would be relocated to facilities potentially shared with Mount
34 Tamalpais State Park.

35

36

37 **COST ESTIMATES**

38 This alternative proposes a variety of enhanced programs, facilities, and trails to welcome
39 a diversity of visitors and support a range of experiences. Many of the facilities would be

1 relocated or modified to reduce impacts on the ecosystem and improve the park
2 experience.

3 One-time costs include facility costs (such as construction, rehabilitation, and demolition)
4 and non-facility costs (such as landscape restoration and management planning).
5 Examples of one-time costs for alternative 1 include two welcome centers and trail
6 rerouting to promote enjoyment of the monument by a diversity of visitors. Total one-
7 time costs are estimated at \$17 million.

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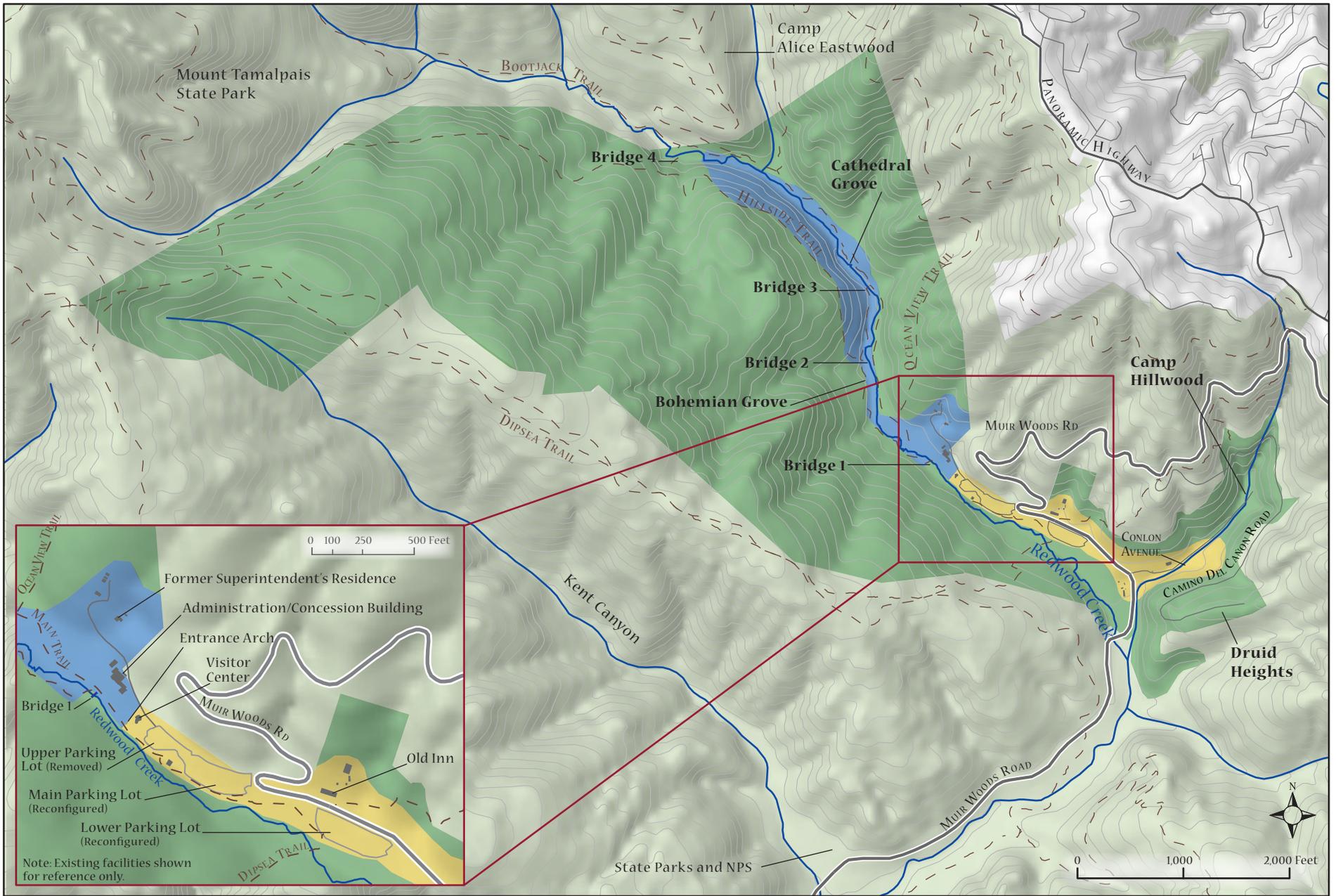
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Management Zones

- | | |
|--|---|
|  Diverse Opportunities |  Historic Immersion |
|  Scenic Corridor |  Natural |
|  Interpretive Corridor |  Sensitive Resources |
|  Evolved Cultural Landscape |  Park Operations |

Connecting People with the Parks

Alternative 1

Muir Woods National Monument

Back of map

MUIR WOODS NATIONAL MONUMENT: ALTERNATIVE 2, PRESERVING AND ENJOYING COASTAL ECOSYSTEMS

4

5 OVERVIEW

6 Muir Woods National Monument and the Redwood Creek watershed are part of the
7 UNESCO Golden Gate Biosphere Reserve—one of the world’s richest reservoirs of plant
8 and animal life. This alternative would restore the primeval character of the old-growth
9 redwood forest. Visitors would be immersed in the forest, and could experience the
10 natural sounds, smells, light, and darkness of the forest.

11 The experience would be more primitive than it is today; the majority of the built
12 environment—buildings, parking lots, paved trails—would be removed, and all visitors
13 would arrive by shuttle, bicycle, or on foot. The landscape would be “messier” than it is
14 today, but the forest would function more naturally: Redwood Creek would be allowed to
15 meander across the floodplain, flooding the valley bottom, uprooting trees, and opening
16 gaps in the canopy.

17 Where not in conflict with natural resource goals, historic trails and structures would be
18 adapted for contemporary uses. A light-on-the-land, accessible trail would reach into the
19 heart of the forest. Visitors would engage in participatory stewardship, education, and
20 science that further the preservation of the forest and all its parts—the creek, salmon,
21 spotted owls, bats, natural sounds—as part of the continuing history and evolution of the
22 land preservation and conservation movement.

23 Restoration of the Redwood Creek watershed would be accelerated in collaboration with
24 other land managers. Actions would include the removal of unneeded management roads,
25 stabilization of sediment sources, and removal of invasive vegetation, as well as removal
26 of streambank stabilization structures in Redwood Creek, removal and possible relocation
27 of some pedestrian bridges, and restoration of natural floodplain function.

28

29

30 ARRIVAL

31 Off-site Welcome Center

32 This area would be the same as in alternative 1, except that the shuttle service would run
33 year-round. To the extent feasible, all visitors would come to Muir Woods National
34 Monument either by shuttle service from the new welcome center, or under their own
35 power.

36

37 Park Operations Zone (Old Inn area)

38 The Old Inn and adjacent areas would be used for administration and limited
39 maintenance operations. Only a small parking area would be available for special needs.

1 The park entrance would be relocated to the current lower parking lot and designed to
2 accommodate a modest transit stop for the shuttle. It would also provide basic visitor
3 services.

4
5 **Sensitive Resources Zone** (along Redwood Creek)

6 The existing main entrance area, including the entire upper parking area, restrooms, and
7 visitor center, as well as a major portion of the lower parking lot, would be removed to
8 restore natural conditions, including seasonal flooding.

9
10

11 **REDWOOD FOREST AND REDWOOD CREEK**

12 **Sensitive Resources Zone** (majority of the monument)

13 The old-growth redwood forest would be managed to achieve the highest level of natural
14 resource integrity. The visitor experience would promote an intimate relationship with the
15 natural resources of the primeval redwood forest. Visitor access would be highly
16 controlled and limited to designated areas and activities. The visitor would have the
17 opportunity to engage in participatory stewardship, and educational and science activities.

18 The natural conditions of the redwood forest and Redwood Creek would be restored and
19 allowed to continue unimpeded. Floodplain processes and riparian habitat would be
20 restored by removing, re-aligning, or redesigning trails, bridges, and other impediments
21 to natural processes. Woody debris would accumulate in the creek and on the forest floor.

22 Visitor services in the forest would be relocated to the transit stop. In consultation with
23 the state historic preservation office and other stakeholders, the existing buildings and
24 other major infrastructure would be removed and the sites restored to their natural
25 conditions. All buildings, except the Old Inn, would be removed, including the former
26 Superintendent's Residence and the Administration-Concession Building.

27 The trail system would be redesigned to accommodate fewer visitors in a more intimate
28 and appropriate setting. A simple accessible trail would reach into a portion of the old-
29 growth forest. The existing main trail along the creek would be relocated out of the
30 floodplain, and other trails and bridges could be removed, relocated, or redesigned to
31 allow and promote natural processes. Paved surfaces would be removed.

32 The trail system throughout the monument would be designed to connect to other trails
33 that would allow it to extend from the redwood forest to the ocean, highlighting the
34 connection between the uplands and the ocean and the role that watershed restoration
35 plays in maintaining healthy ecosystems. A reroute of the Redwood Creek crossing of the
36 Dipsea Trail will be explored to find a more appropriate location with less impact to the
37 natural functions of the creek; the rest of the Dipsea Trail would be maintained along its
38 historic alignment.

39
40

1 **MUIR WOODS ADDITION (ALSO KNOWN AS CAMINO DEL CAÑON,**
2 **CONLON AVENUE, AND DRUID HEIGHTS)**

3 **Natural Zone**

4 The area would be managed to restore native habitat and natural processes with emphasis
5 on removal of unneeded roads and development, stabilization of sediment sources, re-
6 establishment of natural drainage patterns, restoration of the tributary creek, and removal
7 of invasive vegetation that has escaped from developed areas.

8 All existing operational functions within this zone (maintenance and native plants
9 nursery) would be relocated to the Lower Redwood Creek site (former Banducci flower
10 farm) or in potential shared facilities with Mount Tamalpais State Park nearby at Kent
11 Canyon. Water and sewer systems could be relocated to appropriate sites using
12 sustainable technologies and practices.

13

14

15 **KENT CANYON, MOUNT TAMALPAIS STATE PARK**

16 Same as alternative 1.

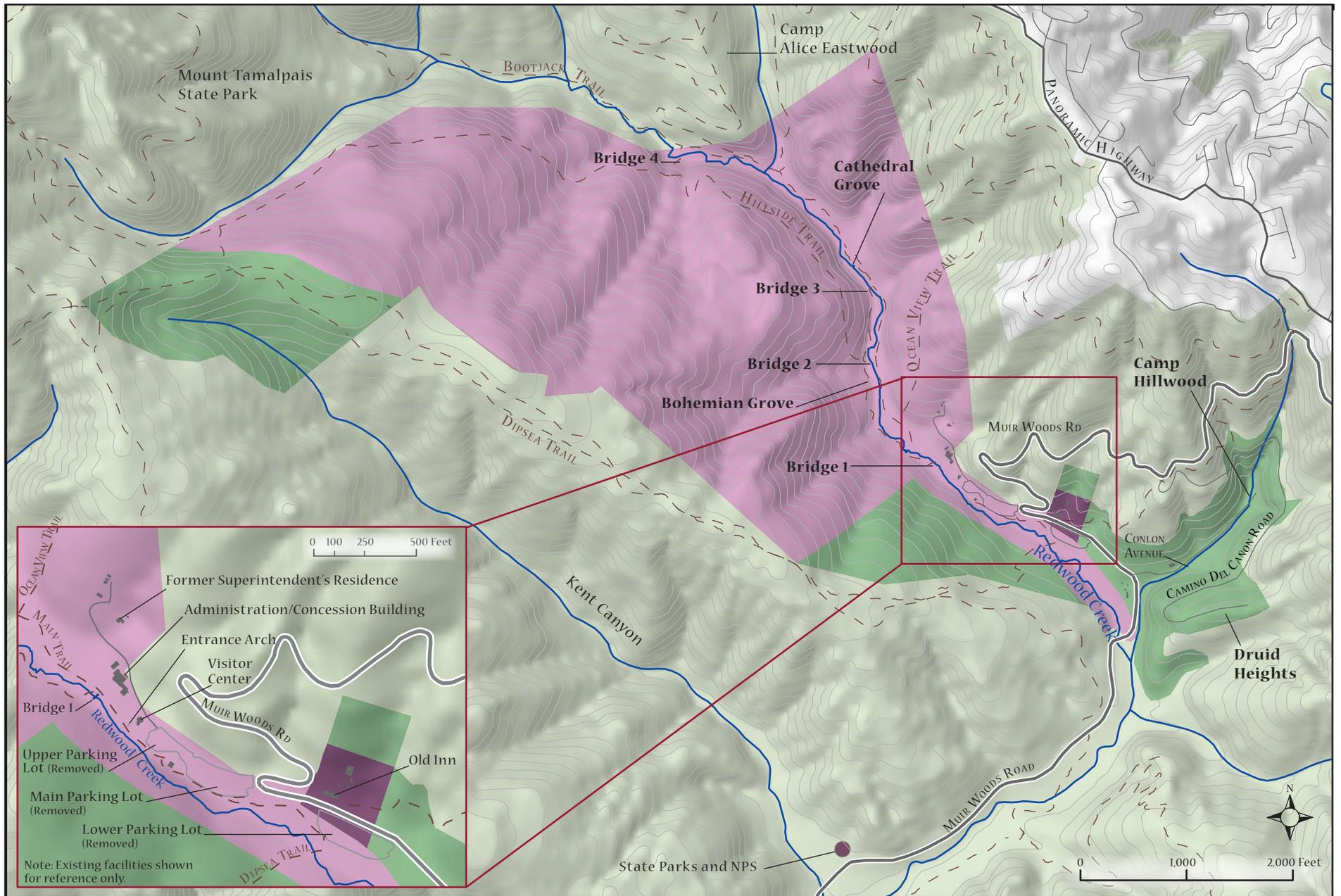
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19 **COST ESTIMATES**

20 In order to achieve the goals of alternative 2, a majority of the built environment would
21 be removed from the monument; however, some trails and structures would be adapted
22 for contemporary uses. Many of the costs of this alternative are attributable to the
23 proposed year-round shuttle service and extensive landscape restoration. Other costs are
24 related to proposed facility removal and relocation. Total one-time costs are estimated at
25 \$19 million.

26



Management Zones

- | | |
|--|---|
|  Diverse Opportunities |  Historic Immersion |
|  Scenic Corridor |  Natural |
|  Interpretive Corridor |  Sensitive Resources |
|  Evolved Cultural Landscape |  Park Operations |

Preserving and Enjoying Coastal Ecosystems

Alternative 2

Muir Woods National Monument

Back of map

MUIR WOODS NATIONAL MONUMENT: ALTERNATIVE 3, FOCUSING ON NATIONAL TREASURES (THE NPS PREFERRED ALTERNATIVE)

4

5 OVERVIEW

6 Muir Woods National Monument is a window into the complex world of nature and
7 conservation. This alternative would present the monument as a contemplative outdoor
8 museum where visitors would discover the primeval redwood forest and the monument's
9 place in the early United States conservation movement.

10 A system of trails would lead visitors into the forest to feel, see, and learn, in different
11 ways, about the essential qualities of the forest. These include its giant trees, the ecology
12 of Redwood Creek, and William Kent's generous donation of the forest to the American
13 public. Rather than continue to concentrate visitation along a main trail, visitors would be
14 encouraged to take different thematic interpretive trails, some new and some existing, to
15 experience the different parts of the park. Other trails would link the monument with the
16 surrounding Mount Tamalpais State Park.

17 Visitors would continue to be drawn to the monument to see the trees, but they would
18 leave with a richer understanding of this precious ecosystem and how these few acres
19 helped spark conservation across the United States. They would be motivated to return
20 and learn more of the story.

21 Building on the interagency "Redwood Creek Watershed: Vision for the Future" (2003),
22 and a cooperative management agreement with California State Parks, the National Park
23 Service would continue to collaborate with the public and other land managers to address
24 watershed restoration, stewardship, and recreation.

25

26

27 ARRIVAL

28 Off-site Welcome Center

29 To enhance the visitor experience and address congestion problems, permanent shuttle
30 service to Muir Woods National Monument would be provided during peak periods
31 throughout the year, supported by a new welcome center in the vicinity of Highway 1 and
32 US 101, created in collaboration with Marin County, State Parks, and Caltrans. Shuttles
33 would travel a distance of about six miles to the monument. Express transit service from
34 downtown San Francisco and improved connections with the regional ferry services
35 would also be pursued. The welcome facility would provide necessary visitor services
36 that could include parking, sheltered waiting areas, restrooms, and orientation to the
37 monument and other regional park destinations. The facility would also connect visitors
38 to other regional and local transportation systems.

39

1 **Diverse Opportunities Zone**

2 The monument's existing entry area would be redesigned to enhance the visitor's arrival
3 experience, protect resources, and improve safety. Parking at the monument would be
4 reconfigured or relocated using sustainable design practices to reduce impacts to the
5 creek and other sensitive resources. Capacity would meet demand during off-peak
6 periods. Pedestrian access would be improved to offer visitors a more natural experience
7 transitioning into the redwood forest separated from roads and parking.

8 A modest facility would be provided to receive visitors arriving by different modes of
9 transportation. The services provided could include shuttle drop-off, sheltered waiting
10 areas, orientation, restrooms, food service, and a bookstore. The existing separate
11 structures for fee collection, a bookstore, and restrooms could be replaced as part of the
12 new facility. The goal of the design process would be to accommodate visitor's needs
13 while simultaneously minimizing the overall footprint of development in the park.

14 Future use or removal of the Old Inn would be determined through more detailed site
15 planning that would consider its utility for visitor services or operational needs in the
16 redesigned entry area. To allow visitor parking to be reconfigured, the native plant
17 nursery would be relocated to Lower Redwood Creek as part of a stewardship center.
18 Realignment of portions of county-maintained Muir Woods Road would also be explored
19 to improve operational safety and visitor access.

20 In order to improve pedestrian safety and protect Redwood Creek, the park would
21 collaborate with Marin County to restrict shoulder parking along Muir Woods Road in
22 areas without trailheads when alternative transportation becomes more readily available.

23

24

25 **REDWOOD FOREST AND REDWOOD CREEK**

26 **Interpretive Corridor Zone** (large corridor around Redwood Creek)

27 This area would be managed as a setting where visitors discover and interact with the
28 features of the primeval redwood forest. Each trail within the monument would unveil a
29 different story and experience using creative interpretive approaches that are appropriate
30 to the majestic old-growth forest. The trails would be designed and managed to provide
31 visitors with opportunities to learn, explore, and become immersed in the resources that
32 illustrate a particular theme. Examples of thematic trails could include an ecology-themed
33 trail that leads visitors to examine the forest structure and the dynamic habitats of the
34 creek. Another trail would highlight a century of conservation history and quietly usher
35 visitors into Cathedral Grove. Some trails would start at the main entrance and highlight
36 the main redwood groves along the creek. Others would bring visitors down into the
37 woods from higher in the canyon.

38 The Dipsea Trail and other trails from Mount Tamalpais State Park also would be
39 highlighted, offering opportunities for self-discovery. The experience would be further
40 reinforced through ranger-led activities that engage the visitor with the monument's
41 natural and cultural resources.

1 Portions of the main trail and bridges could be relocated to allow for creek and floodplain
2 restoration and improvements to the integrity of the redwood forest ecosystem.

3 The Administration-Concession Building would transition to support interpretive and
4 educational activities, providing flexible classroom and program space in the woods.
5 Nonhistoric and nonessential additions made to this structure and its surroundings would
6 be removed to reduce development in Muir Woods National Monument. The adjacent
7 restroom building would be retained.

8 The historic structures and features that represent the conservation movement would be
9 preserved and rehabilitated, and used to support visitor programming and services. These
10 include the former Superintendent's Residence, equipment shed, garage, trails,
11 monuments, and named groves. The historic creek stabilization rock work could be
12 removed in targeted areas to restore natural creek functions important to forest health.

13
14 **Sensitive Resources Zone** (upper north-facing slopes of the canyon)

15 These areas would be managed to preserve the redwood forest and natural sounds that
16 provide a backdrop to the adjacent interpretive corridor zone. Visitor access to this area
17 would be carefully managed and limited to retain the pristine setting and protect its
18 resources.

19
20 **Natural Zone** (western portion of the national monument)

21 This area of the monument would be managed to preserve natural systems and contribute
22 to the primeval forest setting. Visitors within this zone would have opportunities for self-
23 discovery and challenge on the Ben Johnson and Dipsea trails in a more dispersed and
24 wild park setting.

25

26

27 **MUIR WOODS ADDITION (ALSO KNOWN AS CAMINO DEL CAÑON,
28 CONLON AVENUE, AND DRUID HEIGHTS)**

29 **Natural Zone**

30 The area would be managed to provide low impact trail-based day uses and restore native
31 habitat and natural processes with emphasis on removal of roads, nonhistoric structures,
32 stabilization of sediment sources, re-establishment of natural drainage patterns,
33 restoration of the tributary creek, and removal of invasive vegetation that has escaped
34 from developed areas.

35 Some historic structures and landscape associated with the bohemian community at Druid
36 Heights would be preserved. Camino del Cañon would be converted to a trail with access
37 by foot or light service vehicle. The structures at Camp Hillwood would be preserved to
38 the extent that this would not compromise natural resource values. Use of the camp
39 would be for educational and interpretive programs consistent with the natural zone. The
40 segment of Conlon Avenue extending from the lift station to the camp would be
41 downgraded and realigned to restore natural processes and conditions in the tributary to
42 Redwood Creek.

1 **Diverse Opportunities Zone** (lower Conlon Avenue from Muir Woods Road to the lift
2 station)

3 A modest parking area and trailhead would be located in this zone. The National Park
4 Service would continue to explore a sustainable wastewater treatment process to replace
5 the existing lift station. Other existing operational functions (maintenance and native
6 plant nursery) would be relocated to the Lower Redwood Creek site (former Banducci
7 flower farm) or in potential shared facilities with Mount Tamalpais State Park nearby at
8 Kent Canyon.

9

10

11 **KENT CANYON, MOUNT TAMALPAIS STATE PARK**

12 Same as alternative 1.

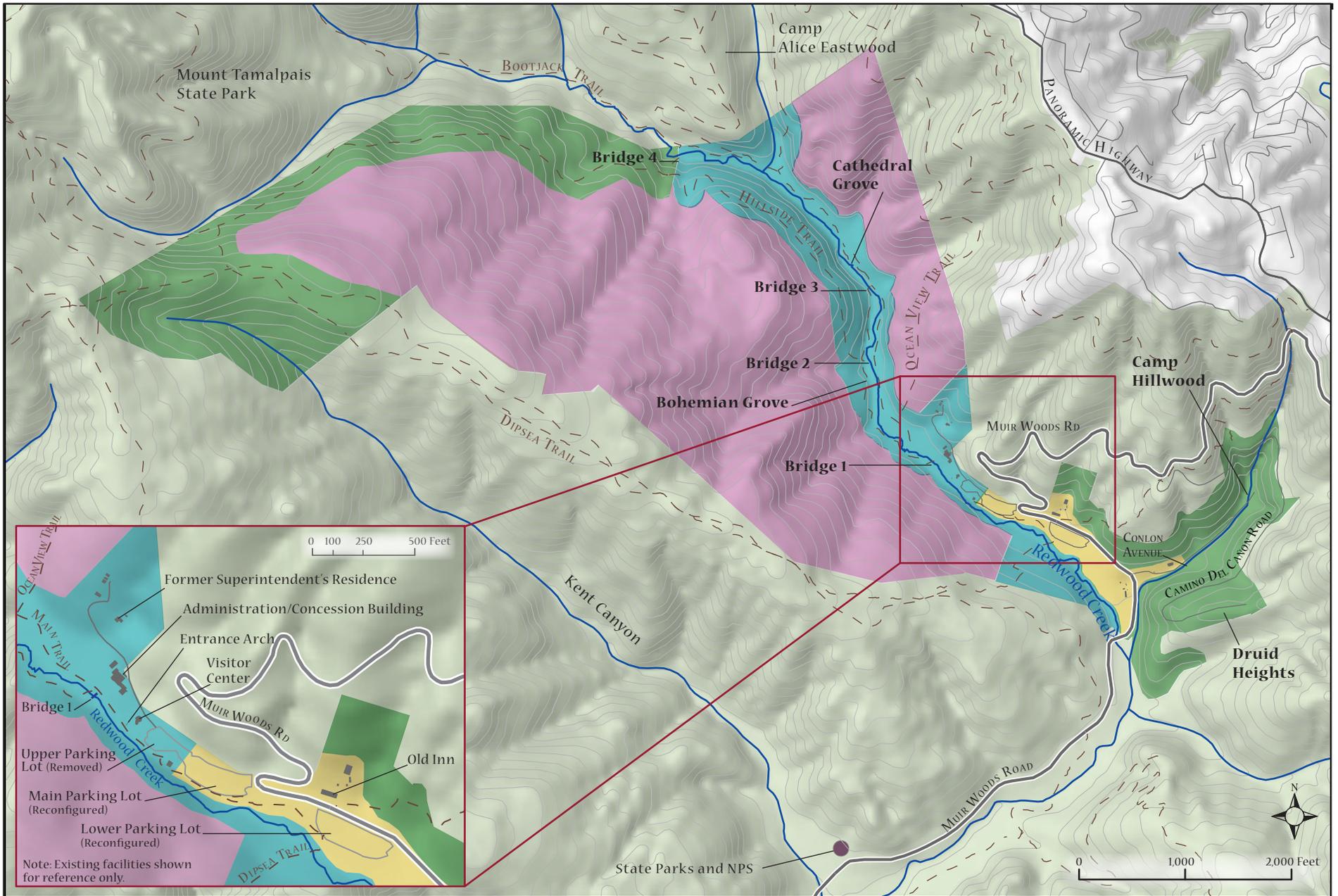
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15 **COST ESTIMATES**

16 In alternative 3, Muir Woods National Monument would be presented as an outdoor
17 museum where visitors discover the primeval forest and conservation history. Costs are
18 largely attributable to the proposed shuttle system, welcome centers, restoration
19 activities, and trail system enhancements. Total one-time costs are estimated at \$17
20 million.

21



Management Zones

- | | |
|--|---|
|  Diverse Opportunities |  Historic Immersion |
|  Scenic Corridor |  Natural |
|  Interpretive Corridor |  Sensitive Resources |
|  Evolved Cultural Landscape |  Park Operations |

Focusing on National Treasures

Alternative 3 – Preferred Alternative Muir Woods National Monument

United States Department of the Interior · National Park Service
DSC · December 14, 2009 · 112 / 20012

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SUMMARY OF COSTS ESTIMATES FOR MUIR WOODS NATIONAL MONUMENT

3 The cost figures shown here and throughout the plan are intended only to provide
4 conceptual costs for general comparison of alternatives. National Park Service and
5 industry cost estimating guidelines were used to develop the costs (in 2009 dollars) to the
6 extent possible, but the estimates should not be used for budgeting purposes. Specific
7 costs will be determined in subsequent, more detailed planning and design exercises, and
8 considering the design of facilities, identification of detailed resource protection needs,
9 and changing visitor expectations. Actual costs to the National Park Service will vary
10 depending on if and when the actions are implemented, and on contributions by partners
11 and volunteers.

12 The implementation of the approved plan, no matter which alternative is selected, will
13 depend on future NPS funding levels and servicewide priorities, and on partnership
14 funds, time, and effort. The approval of a general management plan does not guarantee
15 that funding and staffing needed to implement the plan will be forthcoming. Full
16 implementation of the plan could be many years in the future.

17

18

PART 5: ALTERNATIVES APPLIED TO MUIR WOODS NATIONAL MONUMENT

1 **Table 8: Costs Associated with the Implementation of the Alternative for Muir Woods**
 2 **National Monument**

	No Action Alternative	Alternative 1	Alternative 2	Alternative 3 (NPS Preferred)
Annual Operating Costs (ONPS) ¹	See table 5; costs associated with the operation of Muir Woods National Monument are included in the costs for Golden Gate National Recreation Area			
Staffing (FTE) ²	See table 5; staffing levels needed for Muir Woods National Monument are included in the staffing levels for Golden Gate National Recreation Area			
Shuttle Operations (annual cost) ³	340,000	600,000 – 1,400,000	4,000,000 – 9,500,000	600,000 – 1,400,000
Total One-Time Costs ⁴	920,000	17,590,000	19,650,000	17,730,000
Facility Costs ⁵	400,000	14,030,000	14,380,000	13,030,000
Non-Facility Costs ⁶	520,000	3,560,000	5,270,000	4,700,000

3

4 TABLE 8 NOTES:

5 1 Annual operating costs of Muir Woods National Monument are included in the analysis for Golden
 6 Gate National Recreation Area.

7 2 Staff numbers for Muir Woods National Monument are included in the analysis for Golden Gate
 8 National Recreation Area.

9 3 The cost of operating the shuttle was estimated by Nelson and Nygaard in 2009 dollars. This is
 10 the full cost to operate the shuttle, although historically, the shuttle operations have been a shared
 11 cost with local transportation agencies. Marin County and NPS share costs for this as a joint
 12 solution to alleviating traffic congestion on the Highway 1 corridor.

13 4 One-time facility and non-facility costs for the no action alternative include costs associated with
 14 projects already approved and fully funded. For all alternatives, one-time costs are the sum of
 15 facility costs and non-facility costs.

16 5 Facility Costs include the design, construction, restoration and demolition of facilities.

17 6 Non-Facility Costs include projects such as such as landscape restoration and management
 18 planning.

19

MUIR WOODS NATIONAL MONUMENT ENVIRONMENTALLY PREFERABLE ALTERNATIVE

To be completed after regional review.

SUMMARY TABLES FOR MUIR WOODS NATIONAL MONUMENT

Table 9: Summary of the Alternatives for Muir Woods National Monument

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
VISION			
<p>Management of the monument would continue to provide visitors with self-guided opportunities to explore the primeval forest. Schedule interpretive opportunities would continue to be provided.</p> <p>Existing facilities would remain in their current locations.</p>	<p>Alternative 1 would offer visitors the opportunity to experience and enjoy the primeval forest ecosystem and understand the monument's place in American conservation history through a variety of enhanced programs, facilities, and trails that access the forest and connect local communities to the park and surrounding open space.</p> <p>The monument would continue to welcome a diversity of visitors and support a range of experiences, better serving as a gateway or stepping stone to understanding the national park system.</p> <p>Existing facilities and uses would be modified or relocated to reduce their impacts on the ecosystem and improve the park experience.</p>	<p>Alternative 2 would restore the primeval character of the old-growth redwood forest. Visitors would immerse themselves in the forest to experience the natural sounds, smells, light, and darkness of the forest.</p> <p>The experience would be primitive; buildings, parking lots, and paved trails would be removed, and all visitors would arrive by shuttle, bicycle, or on foot.</p> <p>The landscape would be less controlled, and the forest would function more naturally. Redwood Creek would meander across the floodplain, flooding the valley bottom, uprooting trees, and opening gaps in the canopy.</p>	<p>Alternative 3 would present the monument as a contemplative outdoor museum so visitors could discover and learn about the primeval redwood forest and the monument's place in the U.S. conservation movement.</p> <p>A system of interpretive trails would lead visitors into the forest to touch, see, and learn, about the essential qualities of the forest, including the monument's place in American conservation history.</p> <p>Existing facilities would be modified or relocated to reduce their impacts on redwood forest ecosystem.</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
ARRIVAL			
<p>The monument entrance would remain at the edge of the redwood forest near Redwood Creek and continue to include parking, restrooms, and a small visitor information station. Parking lots further down Redwood Creek would remain.</p> <p>Visitors would continue to arrive by personal vehicle or tour bus, with a shuttle service provided in the summer.</p> <p>Maintenance and operational functions would remain at the Old Inn.</p>	<p>The existing monument entry area would be redesigned to enhance visitor experience, protect resources, and improve safety. The parking lot would be reconfigured using sustainable design practices.</p> <p>A welcome center in would be provided in the vicinity of Highway 1 and US 101 with visitor services including parking, shelter, restrooms, and orientation to the monument and regional park destinations.</p> <p>Shuttle service would be provided during peak periods. Express transit and connections with regional ferries would be explore.</p>	<p>The park entrance would be relocated to lower parking lot and designed to accommodate a year-round shuttle service. The majority of parking would be removed.</p> <p>Along Redwood Creek, the main entrance, upper parking lot, restrooms, and visitor center would be removed to restore the area to natural conditions.</p> <p>The Old Inn and adjacent area would be used for administration and limited maintenance.</p>	<p>Same as Alternative 1.</p>
REDWOOD FOREST AND REDWOOD CREEK			
<p>The main trail system would continue as a series of loops running along Redwood Creek with connections to other trails. Visitors would have opportunities to stroll among the groves of ancient redwoods. Interpretive waysides</p>	<p>The Redwood Creek corridor and main loop trails would be managed to provide a national park experience within a primeval redwood forest setting.</p> <p>The Administration-Concessions Building</p>	<p>The old-growth forest would be managed to achieve highest level of natural resource integrity.</p> <p>The majority of the built environment would be removed including the Administration-</p>	<p>The corridor around Redwood Creek would be managed to allow visitors to discover and interact with the primeval redwood forest.</p> <p>Portions of trails and bridges would be relocated to allow for</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
<p>and scheduled interpretive programs would support the visitor's discovery of the monument's resources.</p> <p>The Administration-Concession Building would continue to provide food, retail services, restrooms, and park offices. The current use of the nearby historic Superintendent's Residence and associated structures would remain. While many past practices have already been phased out, others would continue to affect the healthy functioning of ecosystem.</p>	<p>would be used to support interpretive, educational, and stewardship activities.</p> <p>Improve accessibility; add new restrooms and drinking water near bridge 4.</p> <p>Use historic Superintendent's Residence for administrative purposes. Rehabilitate other structures for park uses and remove non-historic nonessential structures.</p> <p>Area beyond Redwood Creek corridor would be managed to preserve and restore natural systems. Dispersed trails in a wild park setting would provide opportunities for self-discovery and challenge.</p>	<p>Concession Building.</p> <p>Visitor access to designated areas and activities would be controlled. Visitors would be encouraged to engage in stewardship, education, and science activities.</p> <p>Floodplain processes would be restored by removing, re-aligning, or redesigning trails, bridges, and other impediments to natural processes.</p> <p>The trail system would be redesigned to accommodate fewer visitors in a more intimate setting; an accessible trail would provide access to a portion of the old-growth forest. Trails would connect to other trails from ocean to uplands and highlight watershed restoration.</p>	<p>creek and floodplain restoration and ecosystem improvements.</p> <p>Administration-Concession Building would be used for interpretive and educational activities.</p> <p>Non-historic and non-essential additions to structure and surroundings would be removed. Structures representing the conservation movement would be preserved and rehabilitated.</p> <p>The upper north-facing slopes of the canyon would be preserved and rehabilitated to protect redwood forest and natural sounds. Visitor access would be carefully managed to protect pristine setting and resources.</p> <p>The western portion would be managed to preserve natural systems and contribute to primeval forest setting. Ben Johnson and Dipsea trails would allow self-discovery in a more dispersed and wild park setting.</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
MUIR WOODS ADDITION (CAMINO DEL CANYON, CONLON AVENUE, AND DRUID HEIGHTS)			
<p>Structures on these lands would continue to be are used for park operations and a native plants nursery; others are under special use permits, reservation of use and occupancy, or have been vacated and are scheduled for removal. These uses and planned actions would continue.</p> <p>The valuable wildlife habitat in this area would continue to be protected.</p>	<p>Camp Hillwood would be adaptively used for day use or overnight educational programs.</p> <p>Operational functions at Conlon Avenue would be relocated to other areas.</p> <p>The majority of Camino Del Cañon and Druid Heights would be managed to preserve the natural setting. The natural landscape and streams would be restored and all nonhistoric structures would be removed.</p>	<p>These areas would be managed to restore native habitat and natural processes.</p> <p>All operational functions would be relocated.</p> <p>Water and sewer systems would be relocated.</p>	<p>Structures of Camp Hillwood would be preserved to the extent that this would not compromise natural resource values. Use of the camp would be for educational and interpretive programs consistent with the Natural Zone designation.</p> <p>Conlon Avenue would have a modest parking area and trailhead.</p> <p>The Park Service would continue to explore a sustainable wastewater treatment solution to replace the existing lift station. Other operational functions would be relocated.</p> <p>The historic structures and landscapes associated with Alan Watts at Druid Heights would be preserved. Access would be by foot or light service vehicle.</p> <p>Camino Del Cañon and Druid Heights would be managed to provide trails and restore native habitat and natural processes.</p>

No Action	Alternate 1	Alternate 2	Alternate 3 (Preferred Alternative)
KENT CANYON, MOUNT TAMALPAIS STATE PARK			
	<p>Collaboration with California State Parks would focus on maintenance, parking, and trails.</p> <p>Maintenance functions would be relocated to shared facilities.</p>	Same as alternative 1.	Same as alternative 1



Table 10: Summary of Key Impacts of Implementing the Alternatives for Muir Woods National Monument

To be completed following regional review.

User Capacity



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INTRODUCTION

2

3 General management plans for national park units are required by law to identify and
4 address implementation commitments for user capacity, also known as carrying capacity.
5 The National Park Service defines user capacity as the types and levels of visitor use that
6 can be accommodated while sustaining the quality of park resources and visitor
7 experiences consistent with the purpose of the park. Managing user capacity in national
8 parks is inherently complex and depends not only on the number of visitors, but also on
9 where the visitors go, what they do, and the “footprints” they leave behind. In managing
10 for user capacity, the park staff and partners rely on a variety of management tools and
11 strategies, rather than relying solely on regulating the number of people in a park area. In
12 addition, the ever-changing nature of visitor use in parks requires a deliberate and
13 adaptive approach to user capacity management.

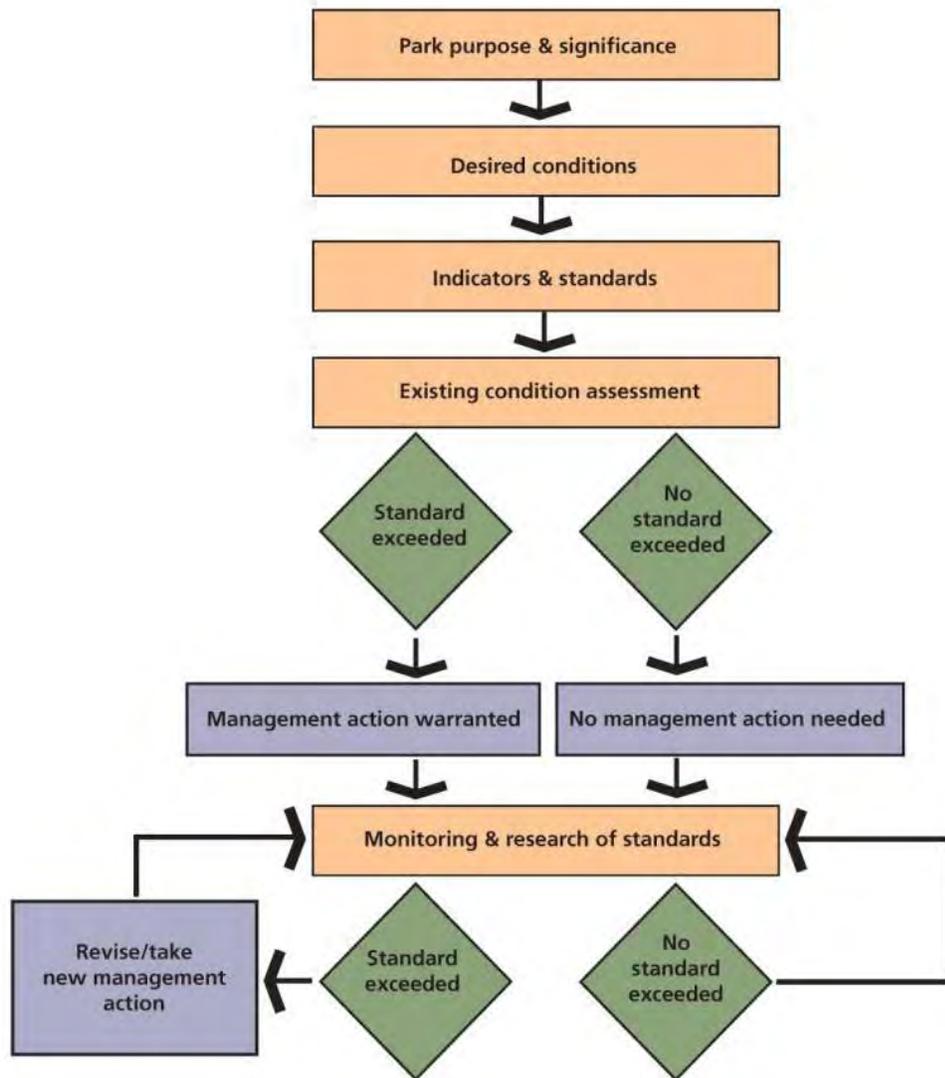
14 The foundations for making user capacity decisions in this general management plan are
15 the purpose, significance, special mandates, and management zones associated with the
16 park and monument. The purpose, significance, and special mandates define why the
17 park was established and identify the most important resources and values—including
18 visitor opportunities—that are to be protected and provided. The management zones in
19 each alternative describe the desired resource conditions and visitor experiences,
20 including appropriate types of activities and general use levels, for different locations
21 throughout the two parks, Golden Gate National Recreation Area and Muir Woods
22 National Monument. The zones, as applied in the alternatives, are consistent with, and
23 help achieve, the specific purpose, significance, and special mandates for each park. As
24 part of the National Park Service’s commitment to the implementation of user capacity,
25 the park staff will use these directives to guide the types and levels of visitor use that will
26 be accommodated while sustaining the quality of park resources and visitor experiences
27 consistent with the purposes of both parks.

28 In addition to these directives, this plan also includes indicators and standards for
29 Alcatraz Island in Golden Gate National Recreation Area and for Muir Woods National
30 Monument. Indicators and standards are measurable variables that will be monitored to
31 track changes in resource conditions and visitor experiences. The indicators and standards
32 help the National Park Service ensure that desired conditions are being attained,
33 supporting the fulfillment both the park’s and the monument’s legislative and policy
34 mandates. The general management plan also identifies the types of management actions
35 that would be taken to achieve desired conditions and related legislative and policy
36 mandates.

37 Tables 11 and 12 include the indicators, standards, and potential future management
38 strategies, allocated by management zones for Alcatraz Island and Muir Woods National
39 Monument, that would be implemented as a result of this planning effort. The planning
40 team considered many potential issues and related indicators that would identify impacts
41 of concern, but those described below were considered the most salient and feasible given
42 the importance and vulnerability of the resource or visitor experience affected by visitor
43 use. Standards that represent the minimum acceptable condition for each indicator were
44 then assigned taking into consideration the qualitative descriptions of the desired

1 conditions, data on existing conditions, relevant research studies, staff management
 2 experience, and scoping on public preferences.
 3
 4 User capacity decision-making is a form of adaptive management (see figure below). It is
 5 an iterative process in which management decisions are continuously informed and
 6 improved by monitoring the indicators and standards. Adjustments are made as
 7 appropriate. As monitoring of the park’s conditions continues, managers may decide to
 8 modify or add indicators if better ways are found to measure important changes in
 9 resource and social conditions. Information on the NPS monitoring efforts, related visitor
 10 use management actions, and any changes to the indicators and standards would be
 11 available to the public.

12
 13 **Figure 21: User Capacity Framework**



14

GOLDEN GATE NATIONAL RECREATION AREA

2

3 Golden Gate National Recreation Area is a popular, heavily visited national park with
4 extensive and diverse visitor opportunities that are in great demand. In addition, the park
5 contains unique resources, some of which are highly vulnerable to visitor use impacts.
6 Further, visitor use opportunities occur over an extensive area with many access points
7 and use areas that make regulating use levels, activities, and patterns complex. Managing
8 user capacity in this unique setting is highly challenging.

9 Given these challenges and limited staff and budgets, user capacity management must be
10 strategic through the efficient use of staff time and funding, targeted focus on areas of
11 most concern within the park, and creative approaches to monitoring and developing
12 management strategies. For all areas of Golden Gate National Recreation Area, the
13 management zones provide the most important implementation commitment for user
14 capacity, because they describe the desired resource conditions and visitor experiences—
15 including appropriate types and levels of use, visitor services, and development—for all
16 sites within the planning area. These management zones are consistent with and help
17 achieve Golden Gate National Recreation Area’s purpose, significance, and special
18 mandates. Further, there are many existing visitor use management strategies already in
19 use that will continue to be implemented to help the park staff achieve these desired
20 conditions. Examples of some of these existing management strategies include the
21 following:

- 22 • providing visitor education materials on low impact practices (e.g., informational
23 signs about off-trail impacts)
- 24 • establishing maximum group size limits (e.g., the number of bicyclists in a
25 group)
- 26 • site management (e.g., closure of informal trails and active restoration)
- 27 • closure of sensitive resource areas (e.g., no visitor access to the tide pools at
28 Point Bonita)
- 29 • establishing regulations on visitor activities (e.g., hiking restricted to on-trail
30 travel on the Coastal Trail)
- 31 • requiring permits (e.g., all special events require a special use permit)

32
33 The management strategies for some specific visitor use activities have recently been the
34 focus of separate public planning processes. These activities include the management of
35 beach fires at Ocean Beach, equestrian activities in the Marin Headlands, dog walking
36 throughout Golden Gate National Recreation Area, and transportation within and outside
37 park boundaries. The decisions that have been made or are being considered in these
38 efforts on appropriate visitor use management strategies for these activities are consistent
39 with desired conditions outlined in this plan, and will help the National Park Service
40 achieve these conditions.

41 In addition to the implementation commitments for the desired conditions (identified in
42 the zone descriptions), the park staff selected user capacity indicators and standards for

1 Alcatraz Island, given the popularity of the site, the specialized visitor experience
2 objectives, and the sensitivity of some natural and cultural resources. In the future, as the
3 need presents itself and other planning opportunities arise, indicators and standards will
4 be identified for other areas within Golden Gate National Recreation Area. Some of the
5 topics for future consideration will likely include traffic congestion, parking in locations
6 not designated for parking, informal trails, invasive plants, and encounter rates on trails.
7 The park staff considered many potential resource and social indicators that would
8 represent visitor use influences on resource and social conditions at Alcatraz. The
9 indicators selected for inclusion in the general management plan were those that were
10 considered to be the most important, as well as feasible, for long-term evaluation.

11

12

13 **PRIORITY RESOURCE INDICATORS**

14 The priority resource indicators for Alcatraz are associated with the issues of disturbance
15 to birds, vandalism, and disturbance and wear on cultural resources. The conditions of
16 these resources are already being monitored in various forms, but the indicators identified
17 below will help the park staff track specific influences to these resources as a result of
18 visitor use.

19 Impacts to bird populations from visitor activities can include unintentional disturbance,
20 harassment, and feeding. These types of impacts can have significant effects on the
21 health, abundance, and diversity of targeted bird species. Alcatraz serves as one of the
22 few estuarine breeding sites for many marine birds (Saenz, et al. 2006). Disturbance to
23 Brandt's Cormorants was selected as the user capacity indicator, since the island is home
24 to San Francisco Bay's only Brandt's Cormorant colony. The populations of Brandt's
25 Cormorants on Alcatraz have been the focus of study by the Point Reyes Bird
26 Observatory since 1996, as part of their annual seabird monitoring program. The bird
27 disturbance trend data collected by the observatory, along with the long-term desired
28 conditions for marine bird habitat on Alcatraz, served as the basis for selection of the
29 standards for this indicator. Some of the existing management activities the National Park
30 Service has already been employing in relation to this issue include visitor education via
31 signs, staff, and docents; barriers in specific areas; and area and seasonal closures.

32 Visitor use impacts to cultural resources include general wear on historic structures and
33 some occurrences of unintentional disturbance and vandalism to archeological resources,
34 historic structures, and the recently restored historical gardens. Cultural resources are
35 nonrenewable, so impacts, especially those that represent depreciative behavior, must be
36 minimized to the extent possible. These impacts can disturb significant features of these
37 resources, which may cause a loss of site integrity over time. Some of the existing
38 management activities the National Park Service has already been employing in relation
39 to this issue include visitor education via signage, interpretive programs and roving
40 patrols, barriers in specific areas, and area closures.

41

42

1 **PRIORITY SOCIAL INDICATORS**

2 The priority social indicators selected for Alcatraz Island are associated with the issues of
3 crowding and congestion. Given the popularity of Alcatraz Island as a tourist destination
4 within San Francisco, the issues of crowding and congestion have been the focus of
5 management efforts. In addition, these topics have been addressed in long-term visitor
6 use studies conducted by the Park Studies Laboratory at the University of Vermont in
7 cooperation with the National Park Service (Manning et al. 2007). The visitor activities
8 within the cellhouse have been, and will continue to be, the highest priority area for some
9 of these issues. Crowding and congestion problems may affect visitors' ability to
10 experience high quality educational opportunities and could on occasion, affect visitor
11 health and safety. The importance of the indicators selected, which include people at one
12 time in the cellhouse and the wait times for the ferry, are supported by the visitor survey
13 research (Manning et al. 2007) along with on-going feedback provided to park staff by
14 the visiting public. Many of these concerns are already tracked to some degree through
15 periodic monitoring of visitor use levels in the cellhouse, tracking of wait times for the
16 ferry, the recording of visitor complaints, and law enforcement incident reporting. The
17 indicators below will increase the degree of systematic monitoring and assessment of
18 these issues. Some of the management activities the National Park Service has already
19 been employing in relation to these issues include pre-trip planning information to
20 encourage voluntary redistribution of use, reservation systems, and onsite education and
21 programming to direct the flow of visitor use once on the island.

22

23

24 **MANAGING USE LEVELS**

25 Currently, Alcatraz Island receives about 4,400 visitors per day during the peak season
26 and up to 5,000 visitors per day if evening programs are being offered. This level of use
27 is—and will continue to be—closely regulated through the number of tickets that are
28 offered each day for ferry access to the island. Given the National Park Service's existing
29 knowledge of resource and social conditions on the island, this amount of use allows the
30 National Park Service and its partners to protect resources and provide high quality
31 visitor experiences, including meeting the standards outlined below. In this plan, all of
32 the alternatives for Alcatraz Island provide for new visitor opportunities that will allow
33 the National Park Service and its partners to better distribute and manage use on the
34 island. In the future, incremental increases in the levels of visitor use may be considered.
35 However, increases in use levels would be approached very carefully, and in an
36 incremental and experimental way using monitoring data and related research, to ensure
37 that the National Park Service's implementation commitments to the park's legislative
38 and policy mandates, desired conditions, and related standards are always being achieved.

39

MUIR WOODS NATIONAL MONUMENT

2 Similar to Golden Gate National Recreation Area, the management zones provide the
3 most important implementation commitment for user capacity for Muir Woods National
4 Monument because they describe the desired resource conditions and visitor
5 experiences—including appropriate types and levels of use, visitor services, and
6 development—for all sites within the monument. These zones are consistent with and
7 help achieve the monument’s purpose, significance, and special mandates. Further, there
8 are many existing visitor use management strategies already in use that will continue to
9 be implemented to help the park staff achieve these desired conditions. Examples of some
10 of these existing management strategies include visitor education on low impact practices
11 (e.g., quiet zones and quiet days); management of visitor access (e.g., dedicated park
12 shuttle access during peak season); closure of sensitive resource areas (e.g., no fishing or
13 swimming in Redwood Creek); regulations on visitor activities (e.g., hiking restricted to
14 on-trail travel on the main trail through the woods); and permit requirements (e.g., all
15 special events require a special use permit).

16 In addition to the implementation commitments for the desired conditions, the park staff
17 has selected user capacity indicators and standards for Muir Woods National Monument.
18 The park staff considered many potential resource and social indicators that would
19 represent visitor use influences on resource and social conditions within the monument.
20 Similar to Alcatraz, the indicators selected for inclusion in the general management plan
21 were those that were considered to be the most important, as well as feasible, for long-
22 term evaluation.

23

24

25 PRIORITY RESOURCE INDICATORS

26 The priority resource indicators for Muir Woods National Monument are associated with
27 the issues of informal trails (i.e., trails created by visitors leaving designated trails),
28 impacts to soundscapes from human-caused noise, evidence of visitor-caused wear or
29 disturbance to the redwood trees, and the amount and distribution of invasive species.

30 The proliferation of informal trails in Muir Woods National Monument is not currently a
31 serious problem because the NPS staff has greatly increased efforts to clearly delineate
32 designated trails and to educate visitors to stay on trails. Although conditions have
33 improved and informal trails are not a significant concern currently, any future expansion
34 of informal trails was still considered a high priority issue given the related impacts of
35 vegetation loss, soil erosion, fragmentation of wildlife habitats, and disturbance to rare
36 flora, fauna and archeological sites (Marion, 2008). The indicator for informal trails is
37 based on a modified version of a trail condition classification system developed by Jeff
38 Marion of the United States Geological Survey (Marion 2008). As mentioned, some of
39 the existing management activities the National Park Service has been employing in
40 relation to this issue include educating visitors to stay on trails and clearly marking
41 designated trails. Further, the National Park Service has placed barriers and actively
42 restored informal trails to minimize their continued use. Roving patrols and other
43 education and enforcement techniques have also been used.

1 Given the high levels of use in the woods, including use by families and groups, noise
2 levels and the frequency of human introduced sound can affect the natural soundscape,
3 disrupting wildlife and impacting visitor experiences. These changes can sometimes
4 influence normal wildlife activities, leading to altered behavior and productivity in
5 individuals, and possible modifications in the abundance and distribution of populations
6 (Knight and Gutzwiller 1995). Baseline conditions for much of the monument’s
7 soundscape were established through comprehensive noise monitoring in 2006 and 2007
8 (citation). These data, along with visitor surveys, were used to identify the best metrics
9 for the soundscape indicators and establish associated standards. There is more discussion
10 below on the studies conducted and how they were used in the planning process. Some of
11 the existing management activities the National Park Service has been employing in
12 relation to this issue have focused on education regarding low impact practices, including
13 introducing “quiet days” and “quiet zones” within the woods to encourage visitors to
14 voluntarily modify their behavior and better protect the natural soundscape.

15 Although visitor use is not the only or even the primary source of invasive species, these
16 species can be introduced and spread through visitor and vehicle activity within the
17 monument. The NPS Inventory and Monitoring program has been monitoring the number
18 of detections and the extent of cover of invasive species as part of the Vital Signs
19 Program. The goal of the program is to target new or expanding infestations (NPS 2006).
20 The indicators and standards included in Table 12 are consistent with those being pursued
21 by the NPS Inventory and Monitoring program. If monitoring detects a change in the
22 number or extent of invasive species, then a problem analysis would be needed to isolate
23 the causal factors. If visitor use were determined to be a contributor to the observed
24 change in conditions, then the necessary visitor use management strategies would be
25 implemented. Some of the existing management activities the National Park Service has
26 already been employing in relation to this issue include educating visitors to stay on
27 trails, clearly marking designated trails, and restricting activities that may increase the
28 introduction of invasive species.

29

30

31 **PRIORITY SOCIAL INDICATORS**

32 The priority social indicators for Muir Woods National Monument are associated with the
33 issues of crowding and use conflicts. The Park Studies Laboratory at the University of
34 Vermont has conducted a program of social science research at the monument from 2003
35 to the present (Manning et al. n.d.). These studies collected baseline data on visitor use
36 and users (including detailed travel patterns throughout the park), potential indicators of
37 quality of the visitor experience, potential standards of quality for specific types of
38 crowding and use conflicts, and visitor attitudes toward alternative management
39 practices. The research resulted in recommended potential indicators that included the
40 number of visitors within a person’s view, noise impacts, and arrival delays, which
41 contributed to visitors’ perception of crowding and conflict while visiting the woods
42 (Manning et al. n.d.).

43 Additional visitor studies were targeted to collect data on visitor preference and
44 acceptability of various use densities (people per view) along trails in the woods, which

1 contributed to selection of the standards for this indicator by zone (Manning et al. n.d.).
2 In addition, visitor reactions to visitor-caused noise were studied using a series of audio
3 clips simulating a range of visitor-caused noise in the park, which contributed to the
4 standards selected for this indicator. The indicators of the percentage of time human
5 sounds are audible and sound pressure level were considered the most meaningful and
6 measurable indicators related to visitor-caused noise (Newman and McCusker 2009).
7 Finally, the visitor studies evaluated visitor perceptions on acceptable waiting times to
8 find parking and walking times from the parking area. This information in combination
9 with other national standards for wait times at high-use areas and attraction sites
10 contributed to the selection of a standard for this indicator for both auto and shuttle
11 visitors (Manning et al. n.d.; Orca Consulting 2008). Some of the existing management
12 activities the National Park Service has been employing in relation to these issues include
13 educating visitors regarding low impact practices, providing pre-trip planning
14 information to encourage voluntary redistribution of use to less busy times, and
15 employing the park shuttle system during peak periods to help modify the flow of visitor
16 use to the woods.

17

18

19 **MANAGING USE LEVELS**

20 The level of use at Muir Woods National Monument is not as regulated as it is at Alcatraz
21 Island, but it is currently constrained during the peak season through the amount of
22 parking available and the frequency and size of shuttle buses. All of the alternatives for
23 Muir Woods National Monument call for visitation to be better distributed and managed.
24 However, it is uncertain at this time whether the amount of use per day, or at any one
25 time, would need to be further regulated in order to achieve the desired conditions and
26 related standards identified for the monument. In order to better assess those needs, the
27 National Park Service will conduct further analysis of current and potential visitor use
28 patterns as part of the planning for the redesign of the monument's entrance and parking
29 areas, which is proposed in this plan's action alternatives. The implementation plan will
30 closely examine the need for further regulation of the amount and timing of use as part of
31 the alternatives for reduced parking and an increased emphasis on shuttle access.

32

33

34 **MONITORING**

35 Some of the issues and related indicators noted for both Golden Gate National Recreation
36 Area and Muir Woods National Monument, such as impacts to bird populations, invasive
37 species, and wear on cultural resources, are also highly influenced by regional and global
38 threats such as pollution, disease, and climate change. Isolating visitor use impacts to
39 these resources is not easy and may seem less significant than these other serious threats.
40 However, there are visitor management actions that can help minimize these impacts and
41 reduce the stress on park resources, providing tangible resource and social benefits.

1 The park staff will continue general monitoring of use levels and patterns throughout the
2 park and monument. In addition, the park staff will monitor these user capacity
3 indicators. The rigor of monitoring the indicators (e.g., frequency of monitoring cycles,
4 amount of geographic area monitored) may vary considerably depending on how close
5 existing conditions are to the standards. If the existing conditions are far from exceeding
6 the standard, the rigor of monitoring may be less than if the existing conditions are close
7 to or trending towards the standard.

8 In addition, the initial phases of monitoring for the indicators and standards defined
9 above will help the National Park Service determine if any revisions are needed. The
10 initial testing of the indicators and standards will determine if the indicators are
11 accurately measuring the conditions of concern and if the standards truly represent the
12 minimally acceptable condition of the indicator. Park staff may decide to modify the
13 indicators or standards and revise the monitoring program if better ways are found to
14 measure changes caused by visitor use. If use levels and patterns change appreciably, the
15 park may need to initiate additional monitoring of new indicators to ensure that desired
16 conditions are protected. This iterative learning and refining process is the strength of the
17 NPS user capacity management program, in that it can be adapted and improved as
18 knowledge grows.

19

1

Table 11: Alcatraz Island: User Capacity Indicators, Standards, Monitoring Strategies, and Management Strategies

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
TOPIC: VISITOR CAUSED BIRD DISTURBANCE				
Number of incidents of visitor disturbance to Brandt's Cormorants that result in impacts to individual birds during nesting season	Evolved Cultural Landscape Zone	No more than "X" major/moderate/minor island-based visitor induced disturbances to Brandt's Cormorants during nesting season Under Development - Possibly different standards for the north vs. south end of the Island within this zone.	Continue monitoring per PRBO protocol	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Increase in staff patrols and use of docents • Increase signage • Increase fencing, barricades, visual barriers, vegetative buffers • Restrict access to ranger/docent led only • Restrict visitor access to targeted areas • Relocate visitor activities • Alter gull management areas
Number of incidents of visitor disturbance to Brandt's Cormorants that result in subcolony abandonment	Evolved Cultural Landscape Zone	No visitor-induced disturbances to Brandt's Cormorants that result in subcolony abandonment	Continue monitoring per PRBO protocol	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Increase in staff patrols and use of docents • Increase signage • Increase fencing, barricades, visual barriers, vegetative buffers • Restrict access to ranger/docent led only • Restrict visitor access to targeted areas • Relocate visitor activities • Alter gull management areas

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
Number of incidents of visitor disturbance to Brandt's Cormorants that result in impacts to individual birds during nesting season	Sensitive Resource Zone (after marine-protected area is designated)	No more than "X" major/moderate/minor water-based visitor induced disturbances to Brandt's Cormorants during nesting season Under Development	Continue monitoring per PRBO protocol	<ul style="list-style-type: none"> Boat patrols in collaboration with other agencies Targeted outreach to user groups Increased signage visible from water Use of buoys Collaborate with the Seabird Protection Network for coordinated outreach, education, enforcement
Number of incidents of visitor disturbance to Brandt's Cormorants that result in subcolony abandonment	Sensitive Resource Zone (after marine-protected area is designated)	No visitor-induced disturbances to Brandt's Cormorants that result in subcolony abandonment	Continue monitoring per PRBO protocol	<ul style="list-style-type: none"> Boat patrols in collaboration with other agencies Targeted outreach to user groups Increased signage visible from water Use of buoys Collaborate with the Seabird Protection Network for coordinated outreach, education, enforcement
TOPIC: VANDALISM OF CULTURAL RESOURCES				
Number of incidents of graffiti/vandalism	Historic Immersion Zone (cellhouse tour route, areas open to public)	No more than 1 minor incident* per month No major incidents** * Minor Incident: Small, easily repairable damage (ex: new ink/paint graffiti over paintable surface) ** Major Incident: Irreparable damage resulting in major resource loss and significant recovery cost (ex: new graffiti over historic graffiti)	On-going monitoring as part of regularly scheduled staff and volunteer patrols and collection of visitor comments. More rigorous comparison of existing conditions to the baseline on a periodic basis.	<ul style="list-style-type: none"> Increase in visitor education on low impact practices and park regulations Increase staff presence Increase monitoring Temporarily close area while undergoing conservation treatment Close problem area, except under supervision

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
Topic: Visitor Caused Disturbance to Cultural Resources				
Number of trampled/removed plants in restored gardens	All zones with restored gardens	No more than a 20% loss/major disturbance to the plants in areas that are open to the public	On-going monitoring as part of regularly scheduled staff and volunteer patrols and collection of visitor comments. More rigorous comparison of existing conditions to the baseline on a periodic basis.	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Increase fences and barriers • Increase staff presence • Regulate or restrict access • Increase monitoring
Disturbance of rock walls, brickwork, exposed cultural resources	All zones	No more than a 5% loss/major disturbance of the feature (rock wall, brickwork, exposed cultural resources)	On-going monitoring as part of regularly scheduled staff and volunteer patrols and collection of visitor comments. More rigorous comparison of existing conditions to the baseline on a periodic basis.	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Increase fences or barriers • Increase staff presence • Regulate or restrict access • Increase monitoring
Disturbance/loss of ground cover on known archeological sites	All unpaved areas	No trampling on known archeological sites, as evidenced by footprints and compaction of soil compared to similar and immediately adjacent soils	On-going monitoring as part of regularly scheduled staff and volunteer patrols and collection of visitor comments. More rigorous comparison of existing conditions to the baseline on a periodic basis.	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Create or widen existing paths • Install temporary or permanent signs • Increase fences/barriers
Topic: Visitor Caused Wear on Cultural Resources				
Number of incidents regarding wear, tear, or damage on cultural resources from special events	Historic Immersion Zone (cellhouse, VIP tours, SPUG)	<p>No more than 2 minor incidents per event</p> <p>No major incidents</p>	Continue existing assessment protocols of conditions after each special event.	<ul style="list-style-type: none"> • Revise Standard Operating Procedure for VIPs/SPUG events • Increase in visitor education on low impact practices and park regulations • Increase staffing ratio • Increase physical barriers • Restrict or reduce access

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
Topic: Crowding and Congestion				
People at one time (PAOT) on Michigan Avenue	Historic Immersion Zone	No more than 90* people at one time on Michigan Avenue *Standard will be evaluated upon completion of summer 2009 data collection effort	Periodic photo monitoring and/or observations and visitor surveys	<ul style="list-style-type: none"> • Adjust flow of visitors (for example: timed audio tickets, reconfiguration of tour flow, or scheduling dockside programming) • Adjust boat ticket distribution (for example: more in the AM or PM) • Reduce the number of visitors to the island • Increase monitoring to determine and readjust to standard
Number of times a vessel departs Alcatraz leaving visitors in line for more than 15 minutes	Evolved Cultural Landscape Zone	No more than 2 times per month or 12 times annually, excluding emergencies	Continue existing monitoring and documentation of wait times and visitor comments regarding ferry access	<ul style="list-style-type: none"> • Increase education on the timing of ferries • Add more boats and/or higher capacity boats • Adjust programming (for example: close facilities early or cancel programs at certain times) • Limit the number of island visitors (limit tickets sold)

Table 12: Muir Woods National Monument: User Capacity Indicators, Standards, Monitoring Strategies, and Management Strategies

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
Topic: Visitor-Created Informal Trails				
<p>Increase in the number of informal trails and change in the condition class of existing informal trails in the redwood forest*</p> <p>*Problem analysis would be needed to isolate visitor-caused impacts</p>	<p>Interpretive Corridor Zone – surrounding Redwood Creek</p> <p>Sensitive Resources Zone – the upper slopes</p> <p>Natural Zone – western end of the monument at Mount Tamalpais State Park</p>	<p>No increase in the number of informal trails, and no increase in the condition class* of existing informal trails from the previously monitored baseline. No Class III trails.</p> <p>* Trail Condition Classification System: <i>Adapted from descriptive system by Jeff Marion, USGS</i></p> <p>Class I Trail is barely visible. Minimal disturbance of organic litter or vegetation. Very little bare soil is evident along the tread.</p> <p>Class II Trail is obvious. Organic litter is disturbed or diminished in places. Slight loss or damage to vegetation. Bare soil is evident along the center of the tread.</p>	<p>Periodic assessments would be conducted inside the monument boundaries and possibly beyond if they are critical to forest health, e.g. areas in Mount Tamalpais State Park adjacent to Redwood Creek. Assessments would take place at the point where the informal trail begins; where it departs from an existing authorized trail.</p>	<ul style="list-style-type: none"> • Formal review of possible causes (including determining whether the informal trail is visitor use or animal related) and to determine most appropriate management response • Increase in visitor education on low impact practices and park regulations • Place border logs or other barriers along formal trails at the junction with informal trails • Restore informal trails by decompacting soils and moving organic debris onto the visible portion of the informal trails to hide them (for Class II and III trails, natural topography would be restored prior to any addition of organic matter/litter) • Add formal trail trailhead signs explaining the problem and asking visitors to remain on formal trails • Enhance marking of the official trail and/or improve adjacent designated trails

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
		<p>Class III Serious erosion is obvious. Nearly complete loss of organic litter and/or vegetative cover. Bare soil is widespread in a widening tread.</p>		<ul style="list-style-type: none"> • Formalize an informal trail, possibly on a new alignment, to accommodate visitor interest • Install temporary or permanent signs • Consider more substantial restoration work (after all foot traffic has been removed from the informal trail) • Increase enforcement or presence of rangers or volunteers • Area closures • Reduce use levels
TOPIC: IMPACTS TO SOUNDSCAPE FROM HUMAN NOISE				
<p>Sound pressure level</p> <p>Percent time human sounds are audible</p>	<p>Interpretive Corridor Zone</p>	<p>Daytime (0700-1900) L50 dBA: 34 (note: L50 is the sound level that is exceeded 50% of the time)</p> <p>% time human sounds audible: 45%</p>	<p>Monitoring would be conducted on a periodic basis using digital recordings and/or on-site listening protocol as appropriate. If a standard is exceeded, the type and location of each contributing noise source would be identified.</p>	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Designate more quiet zones and days • Redistribute visitor flow and/or reduce use levels • Increased education for organized groups • Change in the regulations of organized groups (e.g., group size limits)

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
Difference between Lnat and existing ambient L50	Natural and Sensitive Resources Zones	Difference between Lnat (Add definition) and existing ambient (L50) is 2 dBA or less during the daytime (0700-1900)	Monitoring would be conducted on a periodic basis using digital recordings and/or on-site listening protocol as appropriate. If a standard is exceeded, the type and location of each contributing noise source would be identified.	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Designate more quiet zones and days • Redistribute visitor flow and/or reduce use levels
TOPIC: INVASIVE PLANT SPECIES				
<p>Number of priority invasive plant species detections*</p> <p>Extent of invasive plant cover*</p> <p>*Problem analysis would be needed to isolate visitor-caused impacts.</p>	All zones	<p>No increase in the number of new priority invasive plant species*</p> <p>No increase in the % cover*</p>	Continue monitoring per the Inventory and Monitoring Program	<ul style="list-style-type: none"> • Increase in visitor education on low impact practices and park regulations • Require the cleaning of gear that is capable of transferring plant material • Temporarily or permanently close areas • Reduce use levels • Removal of invasives and restoration of disturbed areas
Topic: Crowding and Congestion				
People within a person's view	Interpretive Corridor Zone	Under Development	Under Development	<ul style="list-style-type: none"> • Encourage voluntary redistribution of use • Change the timing and amount of shuttle access • Redistribute visitor flow and/or reduce use levels
People within a person's view	Natural Zone	Under Development	Under Development	<ul style="list-style-type: none"> • Encourage voluntary redistribution of use

Indicator	Assigned Zone/Area	Standard	Monitoring Strategy	Potential Management Strategies
				<ul style="list-style-type: none"> • Change the timing and amount of shuttle access • Redistribute visitor flow and/or reduce use levels
People within a person's view	Sensitive Resources Zone	Under Development	Under Development	<ul style="list-style-type: none"> • Encourage voluntary redistribution of use • Change the timing and amount of shuttle access • Redistribute visitor flow and/or reduce use levels
<p>Approximate arrival experience time (from arrival* to entrance fee purchase)</p> <p>*Arrival for auto visitors begins when vehicles turn off Muir Woods Road and into a parking lot at the monument</p> <p>*Arrival for shuttle visitors begins when the shuttle bus pulls into the designated bus loading/unloading zone at the monument</p>	Diverse Opportunities Zone	Maximum arrival time 20-30 minutes per individual or group	Regular observations of the arrival experience time would be conducted. This indicator and standard will be further tested and adjusted as part of implementation planning for increased shuttle access and the redesigned entrance to the monument.	<ul style="list-style-type: none"> • Encourage voluntary redistribution of use • Redesign the arrival experience • Institutionalize Intelligent Transportation Systems with Caltrans • Increase efficiencies at fee station • Improve shuttle service

Implementation Planning and Mitigative Measures



Back of divider

IMPLEMENTATION PLANNING

2
3 After the approval of this general management plan, the park staff would complete other
4 more detailed studies before specific actions would be implemented. These studies would
5 investigate the baseline condition of resources and visitor use in the park as required by
6 NPS management policies and fulfill the requirements of the National Environmental
7 Policy Act, National Historic Preservation Act, and other relevant laws and policies.
8 These would inform the detailed site-specific improvement plans that would be prepared
9 for different parts of the park. Where appropriate, these studies and plans would be
10 completed with substantial public involvement and environmental compliance. The
11 additional studies and improvement plans could include the following:

12

13 Detailed Site Improvement Plans

- 14 • Stinson Beach
- 15 • Muir Woods
- 16 • Muir Woods Off-site Welcome Center
- 17 • Lower Redwood Creek
- 18 • Tennessee Valley
- 19 • Fort Cronkhite/ Rodeo Valley
- 20 • Alcatraz
- 21 • Ocean Beach
- 22 • Fort Funston
- 23 • Picardo Ranch
- 24 • Rancho Corral de Tierra

25

26 Natural Resources

- 27 • Resource Stewardship Strategy
- 28 • Ocean stewardship action plan
- 29 • Vegetation management plans, including exotic species
- 30 • Forest inventories and condition assessments
- 31 • Water resources availability studies
- 32 • Earth materials management plans
- 33 • Geotechnical evaluations of shorelines
- 34 • Field surveys for presence of threatened and endangered species
- 35 • Regional studies of wildlife species of special interest
- 36 • Pest control and eradication plans

37

38

- 1 **Cultural Resources**
- 2 • Resource Stewardship Strategy
- 3 • Historic Resource Studies
- 4 • Archaeological surveys and investigations
- 5 • Cultural Landscape Inventories and Reports
- 6 • Historic Structures Reports
- 7 • Historic American Buildings Survey records
- 8 • Fortification preservation and management plans
- 9 • Lighthouse preservation and management plans
- 10 • Updates to National Historic Landmark nominations
- 11 • Determinations of Eligibility for the National Register
- 12 • Updates to National Register nominations
- 13
- 14 **Visitor Use**
- 15 • Educational and interpretive program plans
- 16 • Visitor satisfaction surveys
- 17 • Trails development and management plans
- 18 • Social trail inventories and management plans
- 19 • Transportation and transit plans
- 20 • Equestrian facilities management plans
- 21
- 22 **General**
- 23 • Climate change action plan
- 24 • Land protection plan
- 25 • Business plans
- 26 • Visual impact assessments
- 27 • Topographic surveys

MITIGATIVE MEASURES

2

3 Congress charged the National Park Service with managing the lands under its
4 stewardship “in such manner and by such means as will leave them unimpaired for the
5 enjoyment of future generations” (NPS Organic Act, 16 USC 1). As a result, NPS staff
6 routinely evaluate and implement mitigative measures whenever conditions occur that
7 could adversely affect the sustainability of national park system resources.

8 To ensure that implementation of the action alternatives leaves natural and cultural
9 resources unimpaired and provides quality visitor experiences, a consistent set of
10 mitigative measures would be applied to actions proposed in this plan. The National Park
11 Service would prepare implementation plans with appropriate environmental compliance
12 [i.e., those required by the National Environmental Policy Act (NEPA) and the National
13 Historic Preservation Act (NHPA), as amended, and other relevant legislation] for these
14 future actions. These implementation plans would include more-detailed mitigative
15 measures for specific projects. As part of the environmental compliance, the National
16 Park Service would avoid, minimize, and mitigate adverse impacts when practicable. The
17 implementation of a compliance-monitoring program would be within the parameters of
18 NEPA and NHPA compliance documents, U.S. Army Corps of Engineers Section 404
19 permits, and other compliance requirements. The compliance-monitoring program would
20 oversee these mitigative measures and would include reporting protocols.

21 The following mitigative measures and best management practices would be applied to
22 avoid or minimize potential impacts from implementation of the action alternatives
23 included in this general management plan.

24

25

26 NATURAL RESOURCES

27 General

28 The park and monument resources, including air, water, soils, vegetation, and wildlife,
29 would be periodically inventoried and monitored to provide information needed to avoid
30 or minimize impacts of future development. Any museum collections related to natural
31 resources generated by such activities would be managed according to NPS policies.

32 Whenever possible, new facilities would be built in previously disturbed areas or in care-
33 fully selected sites with as small a construction footprint as possible and with sustainable
34 design. During design and construction periods, NPS natural and cultural resource staff
35 would identify areas to be avoided and would monitor activities.

36 Fencing or other means would be used to protect sensitive resources adjacent to
37 construction areas.

38 Construction materials would be kept in work areas, especially if the construction takes
39 place near streams, springs, natural drainages, or other water bodies.

1 Visitors would be informed of the importance of protecting the natural resources and
2 leaving these undisturbed for the enjoyment of future generations.

3

4 **Air Quality**

5 A dust abatement program would be implemented. Standard dust abatement measures
6 could include watering or otherwise stabilizing soils, covering haul trucks, employing
7 speed limits on unpaved roads, minimizing vegetation clearing, and revegetating after
8 construction.

9

10 **Lightscape**

11 Mitigative measures to preserve natural ambient lightscares would include the following:

- 12 • Limiting the use of artificial outdoor lighting to that which is necessary for basic
13 safety requirements.
- 14 • Shielding all outdoor lighting to the maximum extent possible, keeping light on
15 the intended subject and out of the night sky to the greatest degree possible.
- 16 • Working with park partners and visitors on education and best management
17 practices to minimize their impacts on lightscares.

18

19 **Nonnative Species**

20 Special attention would be devoted to preventing the spread of exotic and invasive plants.
21 Standard measures could include the following elements: ensure that construction-related
22 equipment arrives at the work site free of mud or seed-bearing material, certify all seeds
23 and straw material as weed-free, identify areas of nonnative plants before construction,
24 treat exotic plants or exotic infested topsoil before construction (e.g., topsoil segregation,
25 storage, herbicide treatment), and revegetate areas with appropriate native species.

26

27 **Scenic Resources**

28 Mitigative measures that would be used to minimize visual intrusions could include the
29 following:

- 30 • Where appropriate, facilities such as boardwalks and fences would be used to
31 route people away from sensitive natural and cultural resources while still
32 permitting access to important viewpoints.
- 33 • Facilities would be designed, sited, and constructed to avoid or minimize visual
34 intrusion into the natural environment or landscape.
- 35 • Vegetative screening would be provided, where appropriate.

36

37

1 **Soils**

2 New facilities would be built on soils suitable for development. Soil erosion would be
3 minimized by limiting the time soil is left exposed and by applying other erosion control
4 measures such as erosion matting, silt fencing, and sedimentation basins in construction
5 areas to reduce erosion, surface scouring, and discharge to water bodies. Once work was
6 completed, construction areas would be revegetated with native plants in a timely period.

7 To minimize soil erosion on new trails, best management practices for trail construction
8 would be used. Examples of best management practices could include installing water
9 bars, check dams, and retaining walls; contouring to avoid erosion; and minimizing soil
10 disturbance.

11

12 **Soundscape**

13 Mitigative measures to preserve natural ambient soundscapes would include:

- 14 • Facilities would be located and designed to minimize objectionable noise.
- 15 • Standard noise abatement measures would be followed during construction,
16 including: a schedule that minimizes impacts on adjacent noise-sensitive
17 resources, the use of the best available noise control techniques wherever
18 feasible, the use of hydraulically or electrically powered tools when feasible, and
19 the location of stationary noise sources as far from sensitive resources as
20 possible.

21

22 **Threatened and Endangered Species and Species of Concern**

23 Conservation measures would occur during normal operations as well as before, during,
24 and after construction to minimize long-term, immediate impacts on rare species, and
25 threatened and endangered species where they are identified in the two parks. These
26 measures would vary by specific project and the affected area of the two parks. Many of
27 the measures listed above for vegetation and wildlife would also benefit rare, threatened,
28 and endangered species by helping to preserve habitat. Conservation measures specific to
29 rare, threatened, and endangered species would include the following actions:

- 30 • Surveys would be conducted for special status species, including rare, threatened,
31 and endangered species, before deciding to take any action that might cause
32 harm. In consultation with the U.S. Fish and Wildlife Service and National
33 Marine Fisheries Service, appropriate measures would be taken to protect any
34 sensitive species, whether identified through surveys or presumed to occur. Any
35 actions expected to impact threatened and endangered species would be subject
36 to consultation with the U.S. Fish and Wildlife Service, leading to the
37 development of necessary protective measures.
- 38 • If breeding or nesting areas for threatened and endangered species were observed
39 in the park or monument, these areas would be protected from human
40 disturbance.
- 41 • New facilities and management actions would be located and designed to avoid
42 adverse effects on rare, threatened, and endangered species. If avoidance of
43 adverse effects on rare, threatened, and endangered species were infeasible,

- 1 appropriate conservation measures would be taken in consultation with the
2 appropriate resource agencies.
- 3 • Restoration or monitoring plans would be developed as warranted. Plans should
4 include methods for implementation, performance standards, monitoring criteria,
5 and adaptive management techniques.
- 6
- 7 Measures would be taken to reduce adverse effects of nonnative plants and wildlife on
8 rare, threatened, and endangered species.
- 9

10 **Vegetation**

11 Areas used by visitors (e.g., trails) would be monitored for signs of native vegetation
12 disturbance. Public education, revegetation of disturbed areas with native plants, erosion
13 control measures, and barriers would be used to control potential impacts on plants from
14 trail erosion or social trailing.

15 Proposed sites for new trails and other facilities would be surveyed for sensitive species
16 before construction. If sensitive species were present, new developments would be
17 relocated to avoid impacts.

18 Revegetation plans would be developed for disturbed areas. Revegetation plans should
19 specify such features as seed/plant source, seed/plant mixes, soil preparation, fertilizers,
20 and mulching. Salvage vegetation, rather than new planting or seeding, would be used to
21 the greatest extent possible. To maintain genetic integrity, native plants that grow in the
22 project area or the region would be used in restoration efforts, whenever possible. Use of
23 nonnative species or genetic materials would be considered only where deemed necessary
24 to maintain a cultural landscape or to prevent severe resource damage, and would be
25 approved by the NPS resource management staff. Restoration activities would be
26 instituted immediately after construction was completed. Monitoring would occur to
27 ensure that revegetation was successful, plantings were maintained, and unsuccessful
28 plant materials were replaced.

29

30 **Water Resources**

31 To prevent water pollution during construction, erosion control measures would be used,
32 discharges to water bodies would be minimized, and construction equipment would be
33 regularly inspected for leaks of petroleum and other chemicals.

34 Best management practices, such as the use of silt fences, would be followed to ensure
35 that construction-related effects were minimal and to prevent long-term impacts on water
36 quality, wetlands, and aquatic species.

37 Caution would be exercised to protect water resources from activities with the potential
38 to damage water resources, including damage caused by construction equipment, erosion,
39 and siltation. Measures would be taken to keep fill material from escaping work areas,
40 especially near streams, springs, natural drainages, and wetlands.

41 For new facilities, and to the extent practicable for existing facilities, stormwater manage-
42 ment measures would be implemented to reduce nonpoint source pollution discharge

1 from parking lots and other impervious surfaces. Such actions could include use of
2 oil/sediment separators, street sweeping, infiltration beds, permeable surfaces, and
3 vegetated or natural filters to trap or filter stormwater runoff. As directed by the Clean
4 Water Act, all projects disturbing more than five acres require a storm water discharge
5 permit and specific mitigative measures would be developed as needed.

6 The NPS spill prevention and pollution control program for hazardous materials would be
7 followed and updated on a regular basis. Standard measures could include (1) procedures
8 for hazardous materials storage and handling, spill containment, cleanup, and reporting,
9 and (2) limitation of refueling and other hazardous activities to upland/nonsensitive sites.

10 Wetlands would be avoided if possible, and protection measures would be applied during
11 construction. Wetlands would be delineated by qualified NPS staff or certified wetland
12 specialists and clearly marked before construction work. Construction activities would be
13 performed in a cautious manner to prevent damage caused by equipment, erosion,
14 siltation, or other construction-related effects.

15

16 **Wildlife**

17 To the extent possible, new or rehabilitated facilities would be sited to avoid sensitive
18 wildlife habitats, including feeding and resting areas, major travel corridors, nesting
19 areas, and other sensitive habitats.

20 Construction activities would be timed to avoid sensitive periods, such as nesting or
21 spawning seasons. Ongoing visitor use and NPS operational activities could be restricted
22 if their potential level of damage or disturbance warranted doing so.

23 Measures would be taken to reduce the potential for wildlife to get food from humans.
24 Wildlife-proof garbage containers would be required in developed areas (including visitor
25 centers, picnic areas, trails, and interpretive waysides). Signs would continue to educate
26 visitors about the need to refrain from feeding wildlife.

27 Other visitor impacts on wildlife would be addressed through such techniques as visitor
28 education programs, restrictions on visitor activities, and ranger patrols.

29

30

31 **CULTURAL RESOURCES**

32 All projects with the potential to affect historic properties and cultural landscapes would
33 be carried out in compliance with Section 106 of the National Historic Preservation Act,
34 as amended, to ensure that the effects are adequately addressed. All reasonable measures
35 would be taken to avoid, minimize, or mitigate adverse effects in consultation with the
36 California state historic preservation office and, as necessary, the Advisory Council on
37 Historic Preservation and other concerned parties, including American Indian tribal
38 officials. In addition to adhering to the legal and policy requirements for cultural
39 resources protection and preservation, the National Park Service would also undertake the
40 measures listed below to further protect the park and monument resources.

1 All areas selected for construction (including any trail improvements) would be surveyed
2 to ensure that cultural resources (i.e., archeological, historic, ethnographic, and cultural
3 landscape resources) in the area of potential effects are adequately identified and
4 protected by avoidance or, if necessary, mitigation.

5 Compliance with the Native American Graves Protection and Repatriation Act of 1990
6 would occur in the unlikely event that human remains believed to be Native American
7 were discovered inadvertently during construction. Prompt notification and consultation
8 with the tribes traditionally associated with Golden Gate National Recreation Area and
9 Muir Woods National Monument would occur in accordance with the act. If such human
10 remains were believed to be non-Indian, standard reporting procedures to the proper
11 authorities would be followed, as would all applicable federal, state, and local laws.

12 Archeological documentation would be done in accordance with the *Secretary of the*
13 *Interior's Standards for Archeology and Historic Preservation* (1983, as amended and
14 annotated).

15 If during construction, previously unknown archeological resources were discovered, all
16 work in the immediate vicinity of the discovery would be halted until the resources could
17 be identified and documented and, if the resources could not be preserved *in situ*, an
18 appropriate mitigative strategy would be developed in consultation with the state historic
19 preservation officer and, if necessary, associated Indian tribes.

20 The National Park Service would consult with tribal officials before taking actions that
21 could affect ethnographic resources. The National Park Service would continue to abide
22 by existing cooperative agreements and would pursue additional agreements with
23 culturally affiliated tribes to avoid resource impacts, allow access for traditional gathering
24 and other approved activities, and minimize potential use conflicts in culturally sensitive
25 areas. The National Park Service would develop and accomplish their programs in a
26 manner respectful of the beliefs, traditions, and other cultural values of the affiliated
27 tribes.

28 Further background research, resource inventories, and National Register of Historic
29 Places evaluation of historic properties would be carried out where management
30 information is lacking. The surveys and research necessary to determine the eligibility of
31 a structure, district, or landscape for listing in the national register are a prerequisite for
32 understanding the resource's significance, as well as the basis of informed decision-
33 making in the future regarding how the resource should be managed. The results of these
34 efforts would be incorporated into site-specific planning and compliance documents.

35 No property listed in or eligible for listing in the National Register of Historic Places
36 would be removed or allowed to decay naturally ("molder") without prior review by NPS
37 cultural resource specialists and consultation with the state historic preservation office,
38 and, if necessary, associated American Indian tribal officials. Before such a property is
39 removed or allowed to molder, appropriate documentation recording the property would
40 be prepared in accordance with Section 110 (b) of the National Historic Preservation Act,
41 as amended, and the documentation submitted, as appropriate, to the Historic American
42 Buildings Survey/Historic American Engineering Record/ Historic American Landscapes
43 Survey program and associated American Indian tribal officials.

44 Prior to demolition of any structure listed in or eligible for listing in the national register,
45 a survey for archeological resources in the general vicinity of the affected structure would

1 be conducted. The excavation, recordation, and mapping of any significant cultural
2 remains, if present, would be completed prior to demolition, to ensure that important
3 archeological data that otherwise would be lost is recovered and documented.

4 To appropriately preserve and protect national register listed or national register-eligible
5 historic structures, all stabilization, preservation, rehabilitation, and restoration efforts
6 would be undertaken in accordance with the *Secretary of the Interior's Standards for the*
7 *Treatment of Historic Properties* (1995). Any materials removed during rehabilitation
8 efforts would be evaluated to determine their value to the park's museum collections
9 and/or for their comparative use in future preservation work at the sites.

10 Design guidelines for new construction would be prepared by the National Park Service
11 and would be reviewed for compatibility with the cultural landscape or historic setting
12 and for compliance with the *Secretary of the Interior's Standards for the Treatment of*
13 *Historic Properties*. Additional coordination and consultation would be carried out with
14 the California state historic preservation office, the Advisory Council on Historic
15 Preservation, and, if necessary, American Indian tribal officials to assess and mitigate any
16 adverse effects of new construction on designated or potential national historic landmark
17 districts. All new buildings, additions, and landscape features would be designed and
18 sited to harmonize with their historic settings.

19 Visitors would be educated on the importance of protecting the historic properties of the
20 park and monument and leaving these undisturbed for the enjoyment of future visitors.

21
22

23 **VISITOR SAFETY AND EXPERIENCES**

24 Measures to reduce adverse effects of construction on visitor safety and experience would
25 be implemented, including project scheduling and best management practices.

26 Visitor safety concerns would be integrated into NPS educational programs. Directional
27 signs would continue to orient visitors, and education programs would continue to
28 promote understanding among visitors.

29 Every reasonable effort would be made to make the facilities, programs, and services of
30 the National Park Service and its park partners accessible to and usable by all people,
31 including those who are disabled. This policy is based on the commitment to provide
32 access to the widest cross section of the public and to ensure compliance with the intent
33 of the Architectural Barriers Act (42 USC 4151 et seq.) and the Rehabilitation Act (29
34 USC 701 et seq.). Specific guidance for implementing these two laws is found in the
35 secretary of the interior's regulations regarding "Nondiscrimination in Federally Assisted
36 Programs" (43 CFR 17). Special, separate, or alternative facilities, programs, or services
37 would be provided only when existing ones cannot reasonably be made accessible. The
38 determination of what is reasonable would be made after consultation with disabled
39 persons or their representatives.

40
41

1 **PARK OPERATIONS**

2 In order to provide facilities that are functional, code compliant, and sustainable, the
3 following strategies would be used:

- 4 • Energy efficient strategies would be applied to new and rehabilitated structures
5 through the establishment of performance standards to address the building
6 envelope, mechanical systems, electrical systems, and lighting systems.
- 7 • Water conservation strategies for use in buildings and for irrigation would be
8 implemented through performance standards designed to meet or exceed
9 requirements of the Energy Policy Act and [redacted].
- 10 • Alternative strategies for energy production would be evaluated and incorporated
11 into the final design as appropriate, including photovoltaic systems for generating
12 peak electrical energy demand. Photovoltaic systems, if determined to be feasible
13 based on further evaluation, would be subject to design review and establishment
14 of design guidelines to ensure compatibility with natural or historic settings.
15 Guidelines would identify appropriate locations, such as flat plate modules on
16 rear roofs of historic structures or parking carports and/or pole-mounted tracking
17 arrays located in visually unobtrusive locations within the developed footprint of
18 the site.

19

20

21 **SOCIAL AND ECONOMIC ENVIRONMENT**

22 During the future planning and implementation of the approved management plan for the
23 two parks, NPS staff would work with local communities and county governments to
24 further identify potential impacts and mitigative measures that would best serve the
25 interests and concerns of both the National Park Service and the local communities.
26 Partnerships would be pursued to improve the quality and diversity of community
27 amenities and services.

28

29

30 **TRANSPORTATION**

31 To determine the success of measures implemented to encourage alternative modes of
32 travel, the National Park Service would periodically collect data on traffic volumes and
33 vehicle occupancy; use of transit services; and amount of pedestrian and bicyclist use to,
34 from, and within the park and monument. Based on this data, the National Park Service
35 would expand or modify existing facilities and services for alternative transportation
36 modes or implement other measures to increase the use of those modes.

37

Appendixes, Glossary, References



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APPENDIX A: LEGISLATION

NATIONAL PARK SERVICE

In 1916, the National Park Service was established through the passage of the National Park Service Organic Act. The mission of the agency is contained in the following words of that act:

The National Park Service] shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified ... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Congress supplemented and clarified these provisions through enactment of the General Authorities Act in 1970, and again through enactment of a 1978 amendment to that act (the “Redwood amendment,” contained in a bill expanding Redwood National Park), which added the last two sentences in the following provision. The key part of that act, as amended, is as follows:

Congress declares that the national park system, which began with establishment of Yellowstone National Park in 1872, has since grown to include superlative natural, historic, and recreation areas in every major region of the United States, its territories and island possessions; that these areas, though distinct in character, are united through their inter-related purposes and resources into one national park system as cumulative expressions of a single national heritage; that, individually and collectively, these areas derive increased national dignity and recognition of their superlative environmental quality through their inclusion jointly with each other in one national park system preserved and managed for the benefit and inspiration of all the people of the United States; and that it is the purpose of this Act to include all such areas in the System and to clarify the authorities applicable to the system. Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System, as defined in section 1c of this title, shall be consistent with and founded in the purpose established by section 1 of this title [the Organic Act provision quoted above], to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.

GOLDEN GATE NATIONAL RECREATION AREA

Public Law 92-589

An Act

To establish the Golden Gate National Recreation Area in the State of California, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

ESTABLISHMENT

Section 1. In order to preserve for the public use and enjoyment certain areas of Marin and San Francisco Counties, California, possessing outstanding natural, historic, scenic, and recreational values, and in order to provide for the maintenance of needed recreational open space necessary to urban environment and planning, the Golden Gate National Recreation Area (hereinafter referred to as the "recreation area") is hereby established. In the management of the recreation area, the Secretary of the Interior (hereinafter referred to as the "Secretary") 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. In carrying out the provisions of this Act, 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.

COMPOSITION AND BOUNDARIES

Sec. 2 (a) the recreation area shall comprise the lands, waters, and submerged lands generally depicted on the map entitled "Boundary Map, Golden Gate National Recreation Area", numbered NRA-GG-80,003A, sheets 1 through 3, and dated July, 1972.

(b) The map referred to in this section shall be on file and available for public inspection in the Offices of the National Park Service, Department of the Interior, Washington, District of Columbia. After advising the Committees on Interior and Insular Affairs of the United States House of Representatives and the United States Senate (hereinafter referred to as the "committees") in writing, the Secretary may make minor revisions of the boundaries of the recreation area when necessary by publication of a revised drawing or other boundary description in the Federal Register.

ACQUISITION POLICY

Sec. 3 (a) within the boundaries of the recreation area, the Secretary may acquire lands, improvements, waters, or interests therein, by donation, purchase, exchange or transfer. Any lands, or interests therein, owned by the State of California or any political subdivision thereof, may be acquired only by donation. When any tract of land is only partly within such boundaries, the Secretary may acquire all or any portion of the land outside of such boundaries in order to minimize the payment of severance costs. Lands so acquired outside of the boundaries may be exchanged by the Secretary for non-Federal lands within the boundaries. Any portion of land acquired outside of the boundaries and not utilized for exchange shall be reported to the General Services Administrative for disposal under the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), as amended: *Provided*, That no disposal shall be for

less than fair market value. Except as herein after provided, Federal property within the boundaries of the recreation area is hereby transferred without consideration to the administrative jurisdiction of the Secretary for the purpose of this Act, subject to the continuation of such existing uses as may be agreed upon between the Secretary and the head of the agency formerly having jurisdiction over the property. Notwithstanding any other provisions of law, the Secretary may develop and administer for the purposes of this Act structures or other improvements and facilities on lands for which he receives a permit of use and occupancy from the Secretary of the Army.

(b) Fort Cronkhite, Fort Barry, and the westerly one-half of Fort Baker, in Marin County, California, as depicted on the map entitled "Golden Gate Military Properties" numbered NRAGG-20,002 and dated January 1972, which shall be on file and available for public inspection in the offices of the National Park Service, are hereby transferred to the jurisdiction of the Secretary for purposes of this Act, subject to continued use and occupancy by the Secretary of the Army of those lands needed for existing air defense missions, reserve activities and family housing, until he determines that such requirements no longer exist. The Coast Guard Radio Receiver Station, shall remain under the jurisdiction of the Secretary of the Department in which the Coast Guard is operating. When this station is determined to be excess to the needs of the Coast Guard, it shall be transferred to the jurisdiction of the Secretary for purposes of this Act.

(c) The easterly one-half of Fort Baker in Marin County, California, shall remain under the jurisdiction of the Department of the Army. When this property is determined by the Department of Defense to be excess to its needs, it shall be transferred to the jurisdiction of the Secretary for purposes of this Act. The Secretary of the Army shall grant to the Secretary reasonable public access through such property to Horseshoe Bay, together with the right to construct and maintain such public service facilities as are necessary for the purposes of this Act. The precise facilities and location thereof shall be determined between the Secretary and the Secretary of the Army.

(d) Upon enactment, the Secretary of the Army shall grant to the Secretary of the Army shall grant to the Secretary the irrevocable use and occupancy of one hundred acres of the Baker Beach area of the Presidio of San Francisco, as depicted on the map referred to in subsection (b).

(e) The Secretary of the Army shall grant to the Secretary within a reasonable time, the irrevocable use and occupancy of forty-five acres of the Crissy Army Airfield of the Presidio as depicted on the map referred to in subsection (b)

(f) When all or any substantial portion of the remainder of the Presidio is determined by the Department of Defense to be excess to its needs, such lands shall be transferred to the jurisdiction of the Secretary for purposes of this Act. The Secretary shall grant a permit for continued use and occupancy for that portion of said Fort Point Coast Guard Station necessary for activities of the Coast Guard.

(g) Point Bonita, Point Diablo, and Lime Point shall remain under the jurisdiction of the Secretary of the Department in which the Coast Guard is operating. When this property is determined to be excess to the needs of the Coast Guard, it shall be transferred to the jurisdiction of the Secretary for purposes of this Act. The Coast Guard may continue to maintain and operate existing navigational aids: *Provided*, That access to such navigational aids and the installation of necessary new navigational aids within the recreation area shall be undertaken in accordance with plans which are mutually acceptable to the Secretary and the Secretary of the Department in which the Coast Guard is operating and which are consistent with both the purpose of this Act and the purpose of existing statutes dealing with establishment, maintenance, and operation of navigational aids.

(h) That portion of Fort Miley comprising approximately one and seven-tenths acres of land presently used and required by the Secretary of the Navy for its inshore, undersea warfare installations

APPENDIXES, GLOSSARY, REFERENCES

shall remain under the administrative jurisdiction of the Department of the Navy until such time as all or any portion thereof is determined by the Department of Defense to be excess to its needs, at which time such excess portion shall be transferred to the administrative jurisdiction of the Secretary for purposes of this Act.

(i) New construction and development within the recreation area on property remaining under the administrative jurisdiction of the Department of the Army and not subject to the provisions of subsection (d) or (e) hereof shall be limited to that which is required to accommodate facilities being relocated from property being transferred under this Act to the administrative jurisdiction of the Secretary or which is directly related to the essential missions of the Sixth United States Army: *Provided, however,* That any construction on presently undeveloped open space may be undertaken only after prior consultation with the Secretary. The foregoing limitation on construction and development shall not apply to expansion of those facilities known as Letterman General Hospital or the Western Medical Institute of Research.

(j) The owner of improved property on the date of its acquisition by the Secretary under the Act may, as a condition of such acquisition, retain for himself and his heirs and assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term of not more than twenty-five years, or, in lieu thereof, for a term ending at the death of the owner or the death of his spouse, whichever is later. The owner shall elect the term to be reserved. Unless the property is wholly or partially donated to the United States, the Secretary shall pay to the owner the fair market value of the property on the date of acquisition minus the fair market value on that date of the right retained by the owner. A right retained pursuant to this section shall be subject to termination by the Secretary upon his determination that it is being exercised in a manner inconsistent with the purpose of this Act, and it shall terminate by operation of law upon the Secretary's notifying the holder of the right of such determination and tendering to him an amount equal to the fair market value of that portion of the right which remains unexpired.

(k) The term "improved property", as used in subsection (j), means a detached, noncommercial residential dwelling, the construction of which was begun before June 1, 1971, together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

(l) Whenever an owner of property elects to retain a right of use and occupancy as provided for in the Act, such owner shall be deemed to have waived any benefits or rights accruing under sections 203, 204, 205, and 206 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (84 Stat. 1894), and for the purposes of those sections such owner shall not be considered a displaced person as defined in section 101 (6) of that Act.

(m) Notwithstanding any other provisions of law, the Secretary shall have the same authority with respect to contracts for the acquisition of land and interests in land for the purposes of this Act as was given the Secretary of the Treasury for other land acquisitions by section 34 of the Act of May 30, 1908, relating to purchase of sites for public buildings (35 Stat. 545), and the Secretary and the owner of land to be acquired under this Act may agree that the purchase price will be paid in periodic installments over a period that does not exceed ten years, with interest on the unpaid balance thereof at a rate which is not in excess of the current average market yield on outstanding marketable obligations of the United States with remaining periods to maturity comparable to the average maturities on the installments. Judgments against the United States for amounts in excess of the deposit in court made in condemnation actions shall be subject to the provisions of the Act of July 27, 1956 (70 Stat. 624) and sections 2414 and 2517 of title 28, United States Code.

ADMINISTRATION

Sec.4. (a) The Secretary shall administer the lands, waters and interests therein acquired for the recreation area in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1, 2-4), as amended and supplemented, and the Secretary may utilize such statutory authority available to him for the conservation and management of wildlife and natural resources as he deems appropriate to carry out the purposes of this Act. Notwithstanding their inclusion within the boundaries of the recreation area, the Muir Woods National Monument and Fort Point National Historic Site shall continue to be administered as distinct and identifiable units of the national park system in accordance with the law applicable to such monument and historic site.

(b) The Secretary may enter into cooperative agreements with any Federal agency, the State of California, or any political subdivision thereof, for the rendering, on a reimbursable basis, of rescue, firefighting, and law enforcement and fire preventive assistance.

(c) The authority of the Army to undertake or contribute to water resource developments, including shore erosion control, beach protection, and navigation improvements on land and/or water within the recreation area shall be exercised in accordance with plans which are mutually acceptable to the Secretary and the Secretary of the Army and which are consistent with both the purpose of this Act and the purpose of existing statutes dealing with water and related resource developments.

(d) The Secretary, in cooperation with the State of California and affected political subdivisions thereof, local and regional transit agencies, and the Secretaries of Transportation and of the Army, shall make a study for a coordinated public and private transportation system to and within the recreation area and other units of the national park system in Marin and San Francisco Counties.

ADVISORY COMMISSION

Sec.5. (a) There is hereby established the Golden Gate National Recreation Area Advisory Commission (hereinafter referred to as the "Commission").

(b) The Commission shall be composed of fifteen members appointed by the Secretary for terms of three years each.

(c) Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.

(d) Members of the Commissions shall serve without compensation, as such, but the Secretary may pay, upon vouchers signed by the Chairman, the expenses reasonably incurred by the Commission and its members in carrying out their responsibilities under this Act.

(e) The Secretary, or his designee, shall from time to time, but at least annually, meet and consult with the Commission on general policies and specific matters related to planning, administration and development affecting the recreation area and other units of the national park system in Marin and San Francisco Counties.

(f) The Commission shall act and advise by affirmative vote of a majority of the members thereof.

(g) The Commission shall cease to exist ten years after the enactments of this Act.

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APPROPRIATION LIMITATION

Sec.6. There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this of this Act, but not more than \$61,610,000 shall be appropriated for the acquisition of lands and interests in lands. There are authorized to be appropriated not more than \$58,000,000 (May 1971 prices) for the development of the recreation area, plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicted by engineering cost indices applicable to the type of construction involved herein.

Approved October 27, 1972.

**LEGISLATION SUMMARY
GOLDEN GATE NATIONAL RECREATION AREA**

Public Law #	Title	Summary	Date
92-589	Golden Gate National Recreation Area, Calif.	This act establishes the purpose of the GGNRA, delineates the composition and boundaries, describes the acquisition policy and administration, creates an advisory committee, and discusses appropriations.	10/27/1972
93-544	Golden Gate National Recreation Area, Calif., additional land	Amended the act of 10/27/72 to include the acquisition of contiguous lands in southern Marin, Muir, and Stinson Beaches. (Oakwood Valley, Tennessee Valley, Wolfback Ridge, and Haslett Warehouse)	12/26/1974
95-625	National Parks and Recreation Act of 1978	Expanded boundaries in Marin and San Francisco (Lagunitas Creek watershed, Devils Gulch, Cheda, McIsaac, Zanardi, and Rogers ranches). Strengthened continued use and occupancy provisions for agriculture, and limited new construction. It also established the ability to obtain proceeds from rental space in the warehouse, Cliffhouse, and Louis' restaurant. It increased the park's advisory commission from fifteen to seventeen.	11/10/1978
96-344	Historic Sites, Buildings and Antiquities Act, administration improvement	Added the acreage of the McFadden, Genazzi and Martinelli ranches. Extended the terms of the advisory committee from three to five years. Recommended Sweeney Ridge for addition to GGNRA	9/8/1980
96-607	National Park System, amendment	Adds Sweeney Ridge and increased membership of the advisory committee from seventeen to eighteen.	12/28/1980
98-28	Golden Gate National Recreation Area, dedication to Congressman Phillip Burton	Dedicates GGNRA to Congressman Burton	5/10/1983
102-299	Golden Gate National Recreation Area Addition Act of 1992	Addition of the Phleger Estate	6/9/1992

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Public Law #	Title	Summary	Date
106-113	Consolidated Appropriations for FY ending 9/30/2000	Exemption of all taxes and special assessments, except sales tax. Such areas of Fort Baker shall remain under exclusive Federal jurisdiction.	11/29/1999
106-291	Dept of Interior appropriation	Authority for fee-based education, interpretive and visitor service functions within the Crissy Field and Fort Point areas of the Presidio.	10/11/200
106-350	Golden Gate National Recreation Area Boundary Adjustment Act of 2000	Additions as depicted on map "numbered NPS-80,076, and dated July 2000/PWR-PLRPC"	10/24/2000

MUIR WOODS NATIONAL MONUMENT

January 9, 1908

By The President of The United States of America

A PROCLAMATION

WHEREAS. William Kent and his wife, Elizabeth Thatcher Kent, of the City of Chicago, in County of Cook in the State of Illinois, did, on December 26, 1907, pursuant to the Act of Congress entitled, "An Act for the preservation of American Antiquities," approved June 8, 1906, by their certain deed of relinquishment and conveyance, properly executed in writing and acknowledged, relinquish, remise, convey and forever quitclaim to the United States of America the following mentioned lands at that time held by them in private ownership and lying and being in township One North, of Range Six West, Mt. Diablo Meridian, in the County of Marin, in the State of California, and bounded and particularly described as follows, to-wit:

Beginning at a stake "A.7" driven in the center of the road in Redwood Canon and located by the following courses and distances from the point of commencement of the tract of land, which was conveyed by the Tamalpais Land and Water Company to William Kent by a deed dated August 29th, 1905, and recorded in the office of the County Recorder of Marin County, California, Book 95 of Deeds at page 58, to-wit: North eighteen degrees thirty-two minutes East two hundred thirty two and sixty-four hundredths feet, North sixty-six degrees thirty minutes West one hundred sixty-seven and thirty-four hundredths feet, North eighty-six degrees twenty-five minutes West ninety-eight and sixty-two hundredths feet, North seventy degrees no minutes, West two hundred forty-one and seven hundredths feet, North fifty-seven degrees twenty-nine minutes West one hundred seventy-eight and three hundredths feet; North forty-six degrees twenty-two minutes West two hundred thirty-five and thirty-nine hundredths feet and North twenty-four degrees twenty-five minutes West two hundred twenty-five and fifty-six hundredths feet; thence from said stake "A.7", the point of beginning, South fifty-four degrees nineteen minutes West fourteen hundred eighty-two and seven tenths feet to Station A.8 from which Station 4 of the survey of the tract of land conveyed to William Kent as aforesaid bears south fifty-four degrees nineteen minutes west three hundred ten feet distant; thence from said Station A.8 North forty-seven degrees thirty minutes West twenty-six hundred eighty feet; thence due West six hundred fifty and eight tenths feet; thence North fifty-two degrees thirty minutes West eleven hundred feet; thence North nineteen degrees forty-five minutes West ten hundred fifty-eight and four tenths feet to Station A.12. from which Station 16 of the Survey of the tract of land conveyed to William Kent as aforesaid bears South eighty-three degrees forty-two minutes West three hundred ten feet distant; thence North eighty-three degrees forty-two minutes East thirty-one hundred nine and two tenths feet; thence north fifty-five degrees twenty-eight minutes East fifteen hundred fifty feet to an iron bolt, three-quarters of an inch in diameter and thirty inches long, Station 14; thence South seventeen degrees eighteen minutes East twenty-eight hundred twenty and nine tenths feet; thence South four degrees ten minutes East nine hundred thirty feet to a stake "A.16" driven in the center of a graded road; and thence South forty-five degrees seventeen minutes West two hundred ninety-eight and five tenths feet to said stake A.7. the place of beginning. Containing an area of two hundred ninety-five acres a little more or less, and,

WHEREAS, said relinquishment and conveyance has been accepted by the Secretary of the Interior in the manner and for the purposes prescribed in said Act of Congress, and

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WHEREAS, and extensive growth of redwood trees (*Sequoia sempervirens*) embraced in said land is of extraordinary scientific interest and importance because of the primeval character of the forest in which it is located, and if the character, age and size of the trees,

Now, therefore, I, Theodore Roosevelt, President of United States of America, by virtue of the power and authority in me vested by Section 2 of said Act of Congress, do hereby declare and proclaim that said grove and all of the land hereinbefore described and fully delineated in the diagram hereto attached and made a part hereof, are hereby reserved from appropriation and use of all kinds under all the public land laws of the United States and set apart as a National Monument, to be known and recognized as the Muir Woods National Monument.

Warning is hereby expressly given to all unauthorized persons not to appropriate, cut, injure, destroy or take away any trees on said land and not to locate or settle upon any of said land.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this 9th day of January in the year of our Lord one thousand nine hundred and eight, and of the Independence of the United States the one hundred and thirty-second.

THEODORE ROOSEVELT

By the President:

ELIHU ROOT

Secretary of State

APPENDIX B: DESCRIPTION OF MANAGEMENT PLANS RELATED TO THIS PLAN

Appendix B provides an overall description of management plans from federal, state, regional and local government agencies along with their relationship to this management plan.

In addition to the overall vision and management plans described in the text of the general management plan, the NPS develop detailed project and program implementation plans in order to implement the goals and objectives of those broader plans. These implementation plans cover topics such as natural and cultural resource restoration and preservation, visitor use, transportation, and park operations.

FEDERAL PLANS

NPS PLANS CURRENTLY BEING PREPARED

Dog Management Plan for Golden Gate National Recreation Area (draft)

Golden Gate National Recreation Area is involved in a planning and public involvement process to decide how best to manage dog walking in the park. This process will result in a Dog Management Plan/Environmental Impact Statement (EIS). This planning process will develop a range of alternatives with clear, enforceable guidelines for the manner and extent of dog walking in appropriate areas of the park. The alternatives will specify which of the Golden Gate National Recreation Area-managed lands would be open to on-leash dog walking and off-leash dog walking, and which are closed to dog walking. The goal of the process is to allow dogwalking while

- protecting park resources;
- providing a variety of visitor experiences;
- reducing visitor use conflicts;
- ensuring that park resources and values are available for future generations;
- increasing the safety of staff and visitors.

The park will evaluate the impacts of the range of alternatives and identify a preferred alternative for the draft Dog Management Plan/EIS (DEIS). The actions of the general management plan alternatives have been continuously reviewed as the Dog Management Plan evolves in order to ensure consistency between the two planning efforts.

Golden Gate National Recreation Area – Long-Range Transportation Plan

The Long-range Transportation Plan is being developed to guide the park's transportation program. The plan ties to the general management plan's vision for transportation and outline the strategies for implementing the park's transportation goals for the next twenty years. This plan will reflect the vision as described in the general management plan.

1 **Southern Marin Equestrian Plan (draft)**

2 The Golden Gate National Recreation Area has is in the process of developing a the Southern Marin
3 Equestrian Plan. The plan is focused on options for the future use of three Marin County stables located
4 within the park and will address site and facility needs, improvements, and protection of important
5 resources at and surrounding these facilities. The plan will also identify and enhance the public outreach
6 and equestrian program, identify Best Management Practices and sustainable programs, increase
7 protection of natural resources, and preserve the cultural resources that surround the stables. The actions
8 of the general management plan alternatives have been continuously reviewed as the Southern Marin
9 Equestrian Plan evolves in order to ensure consistency between the two planning efforts.

10

11 **NPS TRAILS AND TRANSPORTATION PLANS AND PROGRAMS**

12 **South Access to the Golden Gate Bridge - Doyle Drive FEIS/R**

13 Doyle Drive is a portion of Route 101 that winds one and a half miles along the northern edge of San
14 Francisco and connects the San Francisco peninsula to the Golden Gate Bridge and the North Bay. It is
15 located within the Presidio of San Francisco and provides access to historic and cultural landmarks
16 including the Golden Gate National Recreation Area, the Presidio, the Golden Gate Bridge and the Palace
17 of Fine Arts. Originally constructed in 1936 with narrow lanes, no median, and no shoulders, Doyle Drive
18 is approaching the end of its useful life.

19 The purpose of the proposed project is to improve the seismic, structural, and traffic safety of Doyle
20 Drive within the setting and context of the Presidio of San Francisco and its purpose as a National Park.
21 Specific objectives of the Doyle Drive Project are

- 22 • to improve the seismic, structural and traffic safety on Doyle Drive;
- 23 • to maintain the functions that the Doyle Drive corridor serves as part of the regional and city
24 transportation network;
- 25 • to improve the functionality of Doyle Drive as an approach to the Golden Gate Bridge;
- 26 • to preserve the natural, cultural, scenic and recreational values of affected portions of the
27 Presidio, a national historic landmark district;
- 28 • to be consistent with the San Francisco General Plan and the General Management Plan
29 Amendment Final Environmental Impact Statement, Presidio of San Francisco, Golden Gate
30 National Recreation Area (NPS 1994a and 1994b) for Area A of the Presidio and the Presidio
31 Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco (Presidio
32 Trust 2002);
- 33 • to minimize the effects of noise and other pollution from the Doyle Drive corridor on natural
34 areas and recreational qualities at Crissy Field and other areas adjacent to the project area;
- 35 • to minimize the traffic impacts of Doyle Drive on the Presidio and local roadways;
- 36 • to improve intermodal and vehicular access to the Presidio; and
- 37 • to redesign the Doyle Drive corridor using the parkway concept described within the Doyle Drive
38 Intermodal Study (1996).

39 The alternatives of the general management plan are consistent with this plan.

1 **Marin Headlands and Fort Baker Transportation Infrastructure and Management Plan**
2 **Final Environmental Impact Statement (2009)**

3 The purpose of the plan is to provide improved access to and within the Marin Headlands and Fort Baker
4 for a variety of users, and to initiate these improvements in a way that minimizes impacts to the rich
5 natural and cultural resources of the Marin Headlands and Fort Baker study area. The Marin Headlands
6 and Fort Baker are in the San Francisco Bay area at the north end of the Golden Gate Bridge, across the
7 bay from San Francisco. The Marin Headlands span the southern tip of the Marin Peninsula, from U.S.
8 Highway 101 to the western coastline, a 2,500-acre area. Fort Baker is a 335-acre site directly adjacent to
9 the Headlands on the east side of U.S. 101.

10 Implementation of this plan would provide infrastructure and access improvements in the park to meet the
11 following plan goals:

- 12 • Promote public transit, pedestrian, and bicycle travel to and within the park to improve visitor
13 experience and enhance environmental quality;
- 14 • Rehabilitate the Marin Headlands and Fort Baker road and trail infrastructure in a manner that
15 protects resources and improves safety and circulation;
- 16 • Reduce traffic congestion and improve safety at key park locations and connecting roads.

17 To accomplish these goals the roadways would be rehabilitated or reconstructed/widened without altering
18 their character defining features, and parking facilities would be improved. A greater number of transit
19 options would be provided to and within the study area. Parking fees would be collected to fund improved
20 transit services. Extensive pedestrian facility enhancements would be implemented, including closing and
21 rerouting existing trails and constructing new trails. Bicycle facilities would be improved with a few new
22 paths and bike lanes. Car-free days would be implemented on a trial basis for a maximum of seven days
23 per year.

24 The goals and actions of the *Marin Headlands and Fort Baker Transportation Infrastructure and*
25 *Management Plan Final Environmental Impact Statement* are appropriate for all general management
26 plan alternatives.

27
28 **Trails Forever**

29 The mission of Trails Forever is to improve the quality of trails in the Golden Gate National Parks,
30 enhance the experiences of park users, support resources preservation, and engage the community in
31 sustaining the parks trail system in perpetuity. Trails Forever is an initiative of the Golden Gate National
32 Parks Conservancy in partnership with the National Park Service and Presidio Trust. The signature
33 project is to complete the California Coastal Trail corridor within the Golden Gate national Parks with
34 trail connections to communities in Marin, San Francisco, and San Mateo. The actions of the general
35 management plan alternatives are consistent with the goals and projects of trails forever.

1 **NPS RESTORATION PLANS**

2 **Alcatraz Island Historic Preservation and Safety Construction Program Environmental**
3 **Impact Statement (2001)**

4 The implementation of this plan works to protect human health and safety, stabilize deteriorating historic
5 structures to protect the National Historic Landmark, and implement needed repairs in a manner that
6 minimizes adverse biological effects. The repairs include replacement of badly deteriorated poles
7 underneath the dock, seismic retrofit of the Cellhouse, repair and stabilization of other historic structures
8 to provide for public safety and historic preservation. The project is a construction program addressing
9 critically needed repairs on Alcatraz Island. The actions in the general management plan alternatives are
10 consistent with the direction of this environmental impact statement.

11

12 **Easkoot Creek Restoration at Stinson Beach Environmental Assessment (2003)**

13 The Easkoot Creek restoration addressed two important limiting factors for salmonid fish production:
14 1)the absence of pool habitats with associated large woody debris; and 2) the lack of natural riparian
15 habitat. This project contributes to the other restoration effort upstream and downstream of the Golden
16 Gate National Recreation Area lands, will yield long-term beneficial effects on the steelhead trout and
17 coho salmon habitat of Easkoot Creek. The actions in the general management plan alternatives are
18 consistent with the goals and projects associated with Easkoot Creek restoration.

19

20 **Lower Redwood Creek Floodplain and Salmonid Habitat Restoration, Banducci Site –**
21 **Environmental Assessment (2007)**

22 The purpose of this project is to substantially restore natural floodplain and creek processes on lower
23 Redwood Creek for the benefit of aquatic and terrestrial fauna and long-term natural resources conditions
24 in the Redwood Creek Watershed. The plan guided the implementation of restoration projects such as
25 levee removal, floodplain enhancements, and protection areas for threatened and endangered species. The
26 plan contributes to the implementation of the Redwood Creek Watershed vision. The actions in the
27 general management plan alternatives are consistent with the goals and projects associated with the lower
28 Redwood Creek floodplain and salmonid habitat restoration.

29

30 **Lower Redwood Creek Interim Flood Reduction Measures and Floodplain / Channel**
31 **Restoration Environmental Assessment (2003)**

32 This project takes actions at two locations in lower Redwood Creek near Muir Beach. The purpose of the
33 project is to improve hydrologic and geomorphic functions at the Pacific Way site and thus reduce the
34 magnitude, frequency, and duration of flooding on Pacific Way and to reduce the risk of channel avulsion
35 at the Pacific Way site. (Pacific Way is the access road to Muir Beach and to several residences in the
36 adjacent community). The project also reconnects lower Redwood Creek to its floodplain and expands
37 riparian vegetation at the Banducci. In addition, the project increased in-channel habitat complexity and
38 reestablish geomorphic processes at the Banducci site. These actions work to improve habitat for coho
39 salmon and steelhead. The actions in the general management plan alternatives are consistent with the
40 goals and projects associated with the lower Redwood Creek flood reduction measures and
41 floodplain/channel restoration.

42

1 **Mori Point Restoration and Trail Plan – Environmental Assessment (2006)**

2 The staff of Golden Gate National Recreation Area and the Golden Gate Parks Conservancy are working
3 to restore habitat and to develop a safe and sustainable trail system at Mori Point. The goals of this project
4 are to

- 5 • protect and enhance habitat for the federally endangered San Francisco garter snake and the
6 federally threatened California red-legged frog at Mori Point;
- 7 • preserve and restore the ecological integrity of Mori Point habitats by reducing threats to native
8 plant communities and natural processes;
- 9 • develop a safe and sustainable trail system, incorporating the California Coastal Trail, that
10 improves recreational experiences and reduces impacts to park resources.

11 Restoration activities include actions such as

- 12 • improving hydrologic and habitat connectivity between upland and wetland areas;
- 13 • creation of San Francisco garter snake foraging habitat;
- 14 • reduction and repair of coastal erosion;
- 15 • restoration of native plant communities;
- 16 • removal of trash, and debris.

17 The project develops a variety of trail experiences for different user groups and meets management
18 objectives to protect and enhance natural resource values and provide public access. Hiker-only
19 designations will be in effect on all segments through, or leading to, steep and erosion-prone areas.
20 Multiple-use opportunities (hiking, bicycling, and equestrian uses) were identified on the California
21 Coastal Trail and its main connector routes. The actions of the general management plan alternatives are
22 consistent with the goals and project work associated with this plan.

23

24 **Ocean Park Stewardship Action Plan, 2007-2008 National Park Service**

25 The National Park Service developed a strategy to increase its emphasis on ocean resource management
26 and conservation. The Ocean Park Stewardship Action Plan identifies critical issues and ways to address
27 them cooperatively with federal, state, tribal and private partners. The National Park Service will work
28 with partners under existing funding levels to implement this Action Plan. In doing so, the Park Service
29 has developed specific actions relating to the following four major topics:

- 30 • Create a seamless network of ocean national parks, national marine sanctuaries, national wildlife
31 refuges, and national estuarine research reserves
- 32 • Discover, map and protect ocean parks
- 33 • Engage visitors in ocean park stewardship
- 34 • Increase NPS technical capacity for ocean exploration and stewardship

35 The general management plan provides specific management guidance and objectives for addressing
36 these topics.

37

1 **Pacific Ocean Park Strategic Plan, National Park Service**

2 The concerns regarding the dramatic declines in the health of the marine ecosystems has the National
3 Park Service focusing more attention on stewardship and protection of ocean resources in the National
4 Park System. The Pacific Ocean Park Strategic Plan serves to lead the Pacific West and Alaska Region's
5 coastal national parks toward implementation and achievement of the overall goal of the Ocean Park
6 Stewardship Action Plan (described above). The plan provides action items specific to the following
7 goals:

8 **Strategy 1: Establish a seamless network of ocean parks, sanctuaries, refuges, and reserves**

- 9 • Facilitate partnership opportunities among federal, state and local agencies and non-government
10 organizations toward enhanced marine resource conservation and education.
- 11 • Facilitate partnership opportunities with neighboring countries (specifically Canada, Mexico, and
12 neighboring Pacific Islands), and build sister park relationships throughout the Pacific and Arctic
13 Oceans to enhance marine resource conservation and education.
- 14 • Explore means to facilitate international travel to other countries in order to communicate and
15 cooperate on an informal and routine basis.

16
17 **Strategy 2: Inventory, Map, and Protect Ocean Parks**

- 18 • Inventory and map natural and cultural resources within the submerged (includes the intertidal
19 zone) boundaries of ocean parks.
- 20 • Expand the natural resource vital signs monitoring program to more fully address ocean and
21 estuarine resources.
- 22 • Understand and quantify threats to natural, cultural, and subsistence resources, including those
23 associated with climate change and land- and water-based activities and develop mitigation or
24 restoration strategies.
- 25 • Expand understanding of ocean park boundaries, jurisdictions, and authorities.
- 26 • Increase the National Park Service's and other agencies' ocean and marine presence.
- 27 • Proactively inform park management and the public of emerging issues that could impact the
28 status and function of marine resources. Identify strategies to address these issues.
- 29 • Ensure that park-specific ocean stewardship issues and knowledge (both natural and cultural
30 resources) are available and synthesized for planning teams.

31
32 **Strategy 3: Engage Visitors and the Public in Ocean Park Stewardship**

- 33 • Create a communication strategy for PW/AK Region ocean parks to better inform the public on
34 topics of ocean stewardship.
- 35 • Enhance awareness and understanding of ocean stewardship issues through the development of
36 interpretive materials and recreational opportunities.
- 37 • Explore approaches to engage visitors, teachers, and students in the practice of ocean stewardship
38 through experiential learning.

- 1 • Demonstrate a commitment to ocean stewardship through adoption of sustainable operations and
2 practices at ocean parks.
- 3 • Demonstrate a commitment to ocean stewardship through adoption of sustainable tourism and
4 recreational opportunities, operations, and practices at ocean parks.
- 5 • Maximize the existing capacity of the PW/AK Region and ocean park units to engage in
6 stewardship activities.

7

8 **Strategy 4: Increase Technical Capacity for Ocean Exploration and Stewardship**

- 9 • Increase the technical capacity for ocean exploration and stewardship.
- 10 • Evaluate the effectiveness of the PW/AK Ocean Park Stewardship Strategy in conserving coastal
11 and marine resources.
- 12 • Generate awareness among park managers of the significance of marine resources and protection
13 responsibilities.
- 14 • Understand and anticipate the role of ocean park stewardship within the urban corridor, given
15 changing demography, development patterns, economies, and societal preferences.
- 16 • Pursue funding opportunities to increase the technical capacity for ocean exploration and
17 stewardship.

18 The general management plan provides specific management guidance and objectives for addressing the
19 four major strategies identified in the *Ocean Park Stewardship Action Plan*.

20

21 **Redwood Creek Watershed: Vision for the Future (2003)**

22 The *Redwood Creek Watershed Vision for the Future*, while not a binding document, was jointly prepared
23 and agreed to in 2003 by public agencies and stakeholders in the Redwood Creek Watershed. The Vision
24 provides guiding principles and desired future conditions to serve as guidelines for planning and projects
25 in the watershed. The Vision identifies desired future conditions for natural resources, cultural resources,
26 visitor experience, resident community, and infrastructure and facilities. The goals of this project help
27 achieve numerous desired future conditions for intact watershed health, protection of natural processes
28 such as flooding, native plant communities, a full range of hydraulic and geomorphic functions, habitat
29 for special-status species, reduction of human-caused erosion that could impact fish or aquatic habitat,
30 and reduction of invasion by non-native plant species. The vision does not alter or override existing
31 policies of the participating agencies. Rather, it serves as guidelines to support future planning and
32 projects in the watershed, ensuring that planning and projects within the scope of this vision strive to meet
33 the common shared goals. The vision and goals for Redwood Creek Watershed were incorporated into the
34 alternatives for the general management plan.

35

36 **Wetland and Creek Restoration at Big Lagoon, Muir Beach Final Environmental Impact 37 Statement (2008)**

38 The focus of this project is the restoration of the lower Redwood Creek watershed at Muir Beach in Marin
39 County. The Big Lagoon site includes the wetlands, floodplain, and lagoon at the mouth of Redwood
40 Creek at Muir Beach. The project works to restore/enhance ecological conditions and processes, reducing

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1 flooding of local infrastructure, and providing public access to the beach and restored wetland and creek.
2 Key issues that were addressed include habitat for fish and wildlife, ecosystem conditions and processes,
3 effects on special status plant and animal species, hydrology, flood hazards, traffic, visitor access, and
4 visitor experience. The actions of the general management plan alternatives are consistent with the goals
5 and project work associated with this plan.

6

7 **NPS PROGRAM IMPLEMENTATION PLANS**

8 **Alcatraz Development Concept Plan and Environmental Assessment 1993**

9 The development concept plan provides direction in management of the entire island, works to balance
10 expansion of visitor access with habitat enhancement, wildlife protection and cultural resource protection,
11 and hazard remediation. The development concept plan will need to be revised or amended to incorporate
12 the changes proposed by the selected alternative in the general management plan.

13

14 **Fire Management Plan/Final Environmental Impact Statement (FEIS) for Golden Gate**
15 **National Recreation Area (2006)**

16 An update to the 1993 *Fire Management Plan* (FMP), this plan reflects the importance of a more
17 concerted effort to effectively reduce wildfire risk to park resources and to private property along the
18 wildland urban interface. The plan examines the feasibility of facilitating the role of fire where it is safe to
19 do so and more fully addresses cultural resource concerns. The plan includes all lands within Golden Gate
20 National Recreation Area, Muir Woods National Monument, and Fort Point National Historic Site. The
21 plan is a strategic, operational plan intended to guide the fire management program and was prepared to
22 meet the requirements of NPS Director's Order 18. The plan includes procedures for managing the full
23 range of fire management activities, including wildland fire suppression and fuel reduction projects. The
24 plan identifies areas of the park where fuel reduction actions will occur during the first five years of
25 implementation; the five-year program will be reviewed and updated annually to reflect areas that have
26 been treated and add other areas where treatment is needed. As park managers implement the actions of
27 the general management plan selected alternative, the fire management plan will require a review and
28 possible refinement as resource and public issues change overtime.

29

30 **Golden Gate National Recreation Area – Park Asset Management Plan**

31 The major goal of the *Park Asset Management Plan* is to articulate how the park currently maintains its
32 assets and intends to in the future. This is accomplished through a review of how the park priorities its
33 assets, bundles work orders into logical projects, estimates operating and maintenance (O&M)
34 requirement, demonstrates funding gaps, and identifies techniques to manage these funding gaps. The
35 plan was used to help guide the development of the alternatives in the general management plan. Once the
36 general management plan is approved, the *Park Asset Management Plan* will be updated to reflect the
37 new management direction.

38

39

40

1 **NPS PARK PARTNER PLANS**

2 **Headlands Center for the Arts Master Plan 1990**

3 The plan provides guidance for the rehabilitation and use of the historic Fort Barry for an art center. The
4 alternatives in the general management plan are consistent with this plan.

5

6 **Marine Mammal Center Site and Facilities Improvements Project Environmental**
7 **Assessment and Finding of No Significant Impact (2004)**

8 The environmental assessment presents and analyzes alternatives for the upgrade and expansion of the
9 Marine Mammal Center's facilities. These improvements will better serve The Center's existing programs
10 for the treatment and rehabilitation of injured, ill, or orphaned marine mammals that strand in coastal
11 waters every year.

12 Based on the analysis provided in the environmental assessment, the implementation of mitigation
13 measures, and with due consideration of the nature of public and agency comments, the National Park
14 Service has determined that the selected alternative would not have the potential to significantly adversely
15 affect the quality of the environment. A Finding of No Significant Impact was issued in October 2004.
16 The actions of the general management plan alternatives are consistent with the decisions and actions of
17 the Marine Mammal Center Site and Facilities Improvements Project.

18 **Slide Ranch Master Plan and EA (1996)**

19 **?????**

20

21 **OTHER FEDERAL PLANS**

22 **San Francisco Maritime National Historical Park General Management Plan,**
23 **1997**

24 The *General Management Plan for San Francisco Maritime National Historical Park* guides the
25 management of resources, visitor use, and general development at the park over the next 15 to 20 years.
26 The national historical park shares a boundary with Golden Gate National Recreation Area and the
27 actions of one park will influence the visitor and management activities of the other. In preparing the
28 alternatives for this general management plan, the planning team coordinated with the staff of the national
29 historical park to ensure consistencies with current management direction.

30

31 **National Oceanic and Atmospheric Administration (NOAA) — Joint Management Plan for**
32 **Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries**
33 **(2004)**

34 After nearly three years of public input, issue prioritization, and recommendations from each site's
35 Sanctuary Advisory Council, the National Marine Sanctuary Program is preparing draft management
36 plans and an environmental impact statement for the Cordell Bank, Gulf of the Farallones, and Monterey
37 Bay national marine sanctuaries. The plans include a review of resource protection, education and
38 research programs, the program's resource and staffing needs, regulatory goals, and sanctuary boundaries.

APPENDIXES, GLOSSARY, REFERENCES

1 The three sanctuaries include Pacific Ocean waters that extend from Bodega Bay in the north to Cambria
2 in the south and thus could impact or be affected by the *Golden Gate National Recreation Area General*
3 *Management Plan*. The three management plans have been prepared jointly because the sanctuaries are
4 adjacent to one another, managed by the same program, and share many of the same resources and issues
5 as well as many overlapping interest and user groups. The alternatives in the general management plan
6 are consistent with these plans and articulate additional NPS actions that strengthen ocean stewardship
7 within the area of influence.

8
9
10 **STATE AND REGIONAL PLANS**

11 **Association of Bay Area Governments: Bay Trail Plan**

12 The Association of Bay Area Governments developed the *Bay Trail Plan* pursuant to California Senate
13 Bill 100. The Bay Trail is to be a regional hiking and bicycling trail around the perimeter of the San
14 Francisco and San Pablo bays. Senate Bill 100 mandates that the Bay Trail provide connections to
15 existing park and recreation facilities, create links to existing and proposed transportation facilities, and
16 avoid adverse effects on environmentally sensitive areas. All the alternatives in this general management
17 plan are consistent with the purposes and objectives of the Bay Trail.

18
19 **California Department of Parks and Recreation — Angel Island State Park Resource**
20 **Management Plan/General Development Plan/Environmental Impact Report (1979)**

21 This plan guides the responsible use and management of resources at Angel Island State Park. It outlines
22 recommended actions to improve opportunities for passive recreation, boating experiences, and other
23 appropriate forms of recreation. The alternatives in the general management plan are consistent with this
24 plan.

25
26 **California Department of Parks and Recreation — California Outdoor Recreation Plan**
27 **(2002)**

28 The *California Outdoor Recreation Plan* (CORP) is the statewide master plan for parks, outdoor
29 recreation, and open space for all recreation providers. The CORP provides policy guidance to all public
30 agencies – federal, state, local, and special districts – engaged in providing outdoor recreational lands,
31 facilities and services throughout the state. The plan includes five major goals: to provide a source of
32 information; serve as an action guide; provide leadership; maintain funding eligibility for the Land &
33 Water Conservation Fund (LWCF); and provide project selection criteria for administering the LWCF
34 grant program. A separate report, entitled *Public Opinions and Attitudes on Outdoor Recreation in*
35 *California 2002*, which is considered part of the CORP, establishes baseline information on outdoor
36 recreation supply and demand. The alternatives in the general management plan are consistent with this
37 plan.

1 **California Department of Parks and Recreation — Gray Whale Cove State Beach General**
2 **Plan Amendment (1984)**

3 This amendment to the San Mateo Coast Area General Plan was approved to change the location of the
4 proposed 200-car parking area for public beach access to Gray Whale Cove. The alternatives in the
5 general management plan are consistent with this plan.

6
7 **California Department of Parks and Recreation — Pacifica State Beach General Plan**
8 **(1990)**

9 This plan provides long-range development, management, and operational guidelines for Pacifica State
10 Beach. The plan is comprised of seven elements: resource, land use, facilities, Interpretive, operations,
11 concessions, and environmental impact. The alternatives in the general management plan are consistent
12 with this plan.

13
14 **California Department of Parks and Recreation — Mount Tamalpais State Park General**
15 **Plan (1980)**

16 The purpose of this general plan is to provide general guidelines for the park's management and
17 development in accordance with the unit's classification as a state park. Because the natural resources of
18 Mt. Tamalpais State Park make it unique, development and management should focus on the
19 preservation, interpretation, and public use of its natural and scenic values. The specific goals of the plan
20 are as follows:

- 21 • Identify the park's natural, cultural, and recreational resources.
- 22 • Establish policies for the management, protection, use, and interpretation of these resources.
- 23 • Identify existing and future problems and provide solutions.
- 24 • Determine visitor activities and land uses that are compatible with the purpose of the park, the
25 preservation of resources, and the surrounding land uses.
- 26 • Determine the potential environmental impact of visitor activities, land use, and related
27 development.
- 28 • Establish guidelines for the sequence of park development.
- 29 • Provide an informational document for the public, the legislature, park personnel, and other
30 government agencies.

31
32 **Caltrans District 4 Devil's Slide Project**

33 Carved out of the steep cliff sides, Route 1 hugs the coastline for much of the distance between Pacifica
34 and Montara. In one part, the road crosses the aptly named Devil's Slide region, a steep, unstable
35 geological formation. This section of road has a long history of closure due to rockslides and land
36 slippage. Following many years of public input and careful evaluation of alternatives, Devil's Slide will
37 be bypassed by two inland tunnels, providing a safe, dependable highway between Pacifica and Montara.
38 This is Caltrans' Devil's Slide Tunnel project. The bypassed section of Route 1, together with 70 acres of
39 State right of way, will be closed to motor vehicles and made available as a multi-use Coastal Trail
40 segment for public access and recreational use following the planned tunnel opening in 2011, with small
41 trailhead parking lots at the north and south ends. This land was included in the 2005 boundary

1 expansion. Acquisition and management of this site has not been determined but has been integrated into
2 the planning process for the general management plan.

3
4 **Coastal Conservancy — Completing the California Coastal Trail (2003)**

5 SB908, passed in 2001 by the California State Legislature, directed the Coastal Conservancy to report on
6 a proposed trail that would stretch 1,300 miles along the entire California coast. The report, completed in
7 January 2003, analyzes the costs/benefits & opportunities and constraints of completing the trail, discusses
8 signage and graphics standards, and outlines recommendations for statewide policy initiatives and local
9 implementation projects.

10 The California Coastal Trail is a network of public trails for walkers, bikers, equestrians, wheelchair
11 riders and others along the entire California coastline. It is currently more than half complete. Coastwalk
12 is a volunteer organization that advocates for completion of the Trail. The California Coastal Trail is
13 intended to provide "a continuous public right-of-way along the California coastline designed to foster
14 appreciation and stewardship of the scenic and natural resources of the coast through hiking and other
15 complementary modes of non-motorized transportation." The Coastal Trail runs through parts of the
16 Golden Gate National Recreation Area and provides opportunities for connections to other trails within
17 the study area. It is focused on enhancing public access to the coastal region and providing education to
18 visitors. These goals are completely compatible with those of the Golden Gate National Recreation Area,
19 so working together there may be opportunities for efficiencies in providing access to national recreation
20 area lands along the coastline. The alternatives in the general management plan are consistent with this
21 plan.

22
23 **Golden Lands, Golden Opportunity: Preserving vital Bay Area Lands for all Californians**
24 **(Greenbelt Alliance, Bay Area Open Space Council, Association of Bay Area**
25 **Governments 2008)**

26 The initiative provides a statement of regional principles to ensure a healthy future for vital Bay Area
27 lands and residents. The initiative identifies unprotected landscapes with significant value to the Bay Area
28 and the state. It works to coordinate priorities among a variety of organizations working together. The
29 park staff at Golden Gate National Recreation Area participated in the identification of unprotected
30 landscapes. The alternatives in the general management plan incorporate potential actions that contribute
31 to this regional effort and are consistent with this initiative.

32
33 **San Francisco Bay Conservation and Development Commission (BCDC)**

34 The San Francisco Bay Conservation and Development Commission is the regional planning authority in
35 the San Francisco Bay area. The commission is authorized to control Bay filling and dredging and Bay-
36 related shoreline development. Areas within BCDC jurisdiction include the San Francisco Bay, a
37 shoreline band 100 feet inland of the Bay, and several other distinct features in the Bay area such as salt
38 ponds and managed wetlands. Several BCDC plans affect development efforts along the Golden Gate
39 National Recreation Area shoreline. The commission is the agency responsible for reviewing and
40 approving Coastal Consistency Determinations under the Coastal Zone Management Act in the San
41 Francisco Bay area.

1 **San Francisco Bay Plan (2003)**

2 This plan quantifies how the Bay Conservation and Development Commission proposes to reach its
3 primary goal of developing the Bay and associated shoreline to its highest potential. The plan identifies
4 priority use areas in the Bay, including ports, water-related industry, water-oriented recreation, airports,
5 and wildlife refuges. The plan outlines the permitting policies and procedures for activities within priority
6 and non-priority use areas and how they will be granted.

7 **San Francisco Bay Area Seaport Plan (2003)**

8 The *Seaport Plan* is a second-tier document to Bay Conservation Development Commission's *San*
9 *Francisco Bay Plan*. It provides specific details about facilities identified as port priority use areas in the
10 *Bay Plan*. The data includes exact boundaries of port priority use area, cargo forecasts, policies, and
11 planned improvements, and the plan recommends changes/upgrades at specific ports and their terminals.

12 The alternatives are consistent with the above plans and the planning team will seek a determination from
13 the agency for the general management plan.

14

15 **San Francisco Bay Area Water Transit Authority (2003) Final Program EIR: Expansion of**
16 **Ferry Transit Service in the San Francisco Bay Area**

17 This document outlines a comprehensive strategy for expanding water transportation services in San
18 Francisco Bay. The San Francisco Bay Area Water Transit Authority (Water Transit Authority) is a
19 regional agency authorized by the state of California to operate a comprehensive San Francisco Bay Area
20 public water transit system. The Water Transit Authority's goal over the next 20 years is to develop a
21 reliable, convenient, flexible, and cost-effective water-transit system that will help reduce vehicle
22 congestion and pollution in the Bay Area. In 2003 the Water Transit Authority plan was approved, and
23 when fully implemented the Water Transit Authority estimates that by 2025 commuter-based ferry
24 ridership will triple existing ridership and grow to approximately 12 million riders annually. The primary
25 objectives of the Water Transit Authority plan include:

- 26 • eight new ferry routes plus improved service on the existing ferry systems
- 27 • an additional 31 new passenger ferries over the next 10 years
- 28 • acquisition of clean emission vessels
- 29 • provision of convenient landside connections to terminals
- 30 • expansion of facilities at the San Francisco Ferry Building
- 31 • construction of two spare vessels
- 32 • partnering with Redwood City, Treasure Island, Antioch, Martinez, Hercules, and Moffett
- 33 Field to continue planning their respective waterfronts
- 34 • pursuing funding from federal and local sources

35

36 **COUNTY AND LOCAL PLANS**

37

38 **Central Marin Ferry Connection Project (2004)**

39 The Central Marin Ferry Connection (CMFC) project calls for a new bicycle and pedestrian connection
40 between East Sir Francis Drake Boulevard to the north and to the Redwood Highway and access roads in

1 Corte Madera at Wornum Street and Redwood Highway to the south, thus connecting a gap in bicycle and
2 pedestrian access in Central Marin County. Such a bike and pedestrian crossing would strengthen the
3 interconnected bike network in Marin County, much of which leads to Golden Gate National Recreation
4 Area sites. With such a connection, other weak points could be strengthened. With more bicycle access
5 opportunities to Golden Gate National Recreation Area sites, more bicyclists will have an opportunity to
6 visit. Increased bike access could also reduce vehicle traffic trying to access national recreation area sites.

7
8 **Extension of San Francisco Municipal Railway’s Historic Streetcar Environmental Impact**
9 **Statement (draft)**

10 The Municipal Railway (MUNI) currently operates historic streetcar service on Market Street and along
11 the San Francisco waterfront (F-Line) to the line's existing terminus at Jones Street and Beach (in the
12 Fisherman's Wharf area). The proposed extension (E-Line) would begin at the terminus of the F-line and
13 extend west to San Francisco Maritime National Historical Park and on to Fort Mason. The exact route
14 has yet to be determined but would utilize either existing rail right-of-way routes confined to city streets
15 or pass through San Francisco Maritime National Historical Park’s Aquatic Park (at the core of the
16 National Historic Landmark District) in order to reach the Fort Mason tunnel. It is anticipated that under
17 all alternatives the railway line would extend through the tunnel and end in the area of lower Fort Mason.

18
19 **Fitzgerald Marine Reserve Master Plan, 2002**

20 The James V. Fitzgerald Marine Reserve (the Reserve) is a 402-acre natural resource area on the north
21 coast of San Mateo County. The Reserve is under joint custodianship of the County of San Mateo Parks
22 and Recreation Division and the California Department of Fish and Game. The Reserve extends 3 miles
23 south from Point Montara to the south end of Pillar Point and 1,000 feet west into the ocean from the
24 mean high tide line. Part of the Monterey Bay National Marine Sanctuary, the Reserve includes 370 acres
25 of intertidal and subtidal marine habitat below the high tide line and 32 acres of upland coastal bluffs with
26 elevations up to 100 feet. The intertidal zone, which contains rocky reefs at sea level and pocket beaches,
27 is one of the most biodiverse intertidal regions in the state, renowned for its richness and diversity.
28 Accessible at low tide, the reefs receive high levels of use because of their close proximity to the San
29 Francisco Bay Area’s dense population centers. The reefs within the Reserve form ten distinct areas, but
30 are generally referred to as Moss Beach Reef to the north and Frenchman’s Reef to the south.

31 The Reserve is both a “Marine Life Refuge” and an “Area of Special Biological Significance” (ASBS),
32 designated by the State of California. The concept of “special biological significance” recognizes that
33 certain biological communities, because of their value or fragility, deserve very special protection,
34 consisting of preservation and maintenance of natural water quality conditions to the extent practicable.

35 The Master Plan has three main components: 1) Natural Resource Management Program, 2) Visitor
36 Management Program; 3) Uses and Facilities Program. The following goals provide the foundation for
37 the Master Plan Concept:

- 38 • Preserve and Enhance Natural Resources
- 39 • Provide Educational and Interpretive Opportunities
- 40 • Ensure Adequate and Well-Trained Staff
- 41 • Improve Baseline Information

- 1 • Improve Visitor Management
- 2 • Improve Visitor Facilities
- 3 • Minimize Impacts to Neighbors
- 4 • Protect Cultural Resources
- 5 • Provide Recreation Opportunities
- 6 • Seek Funding Opportunities

7 The alternatives in the general management plan are consistent with the Fitzgerald Marine Reserve
8 Master Plan.

9

10 **Huddart and Wunderlich Parks Master Plan (2006)**

11 This Master Plan presents a 20-year vision for the development, operation, and maintenance of Huddart
12 and Wunderlich Parks. More specifically, the Master Plan is intended to achieve the following goals:

- 13 • Continue to provide multiple recreational opportunities that are consistent with the regional
14 nature of the parks and with protection of the environmental, cultural, and historic resources of
15 the land.
- 16 • Concentrate development of new facilities in the already-developed portions of the parks. Protect
17 the wild character of the undeveloped portions of the parks.
- 18 • Increase the revenue generation capability of each park.
- 19 • Identify physical improvements that will decrease ongoing operation and maintenance costs.
- 20 • Make public safety a top priority in ongoing park operations and maintenance, and in new
21 improvement projects.
- 22 • Ensure the continued equestrian use of the parks.

23 Improve vehicular and pedestrian circulation within each park.

24 The alternatives in the general management plan are consistent with the Huddart and Wunderlich Parks
25 Master Plan.

26

27 **Marin County Bicycle and Pedestrian Master Plan (2003)**

28 The Marin County Congestion Management Agency commissioned a bicycle and pedestrian master plan
29 to embrace both incorporated and unincorporated jurisdictions within the county. Key recommendations
30 of this plan include a north-south bikeway, an east-west bikeway, potential use of abandoned railroad
31 tunnels and rights-of-way, and locating vital infrastructure improvements to promote and encourage
32 increased bicycle and pedestrian activity. **How has Golden Gate National Recreation Area used this
33 report?**

34

35 **Marin County Local Coastal Program Unit 1 (1979)**

36 This document was prepared pursuant to the Coastal Act of 1976, which required all coastal jurisdictions
37 to prepare a Local Coastal Program. A Local Coastal Program is “a local government’s land use plans,

1 zoning ordinances, zoning district maps, and implementing actions which , when taken together, meet the
2 requirement of, and implement the provisions and policies” of the Coastal Act at the local level. (Is this
3 plan still valid, have we supported any of the goals?)
4

5 **Marin Countywide Plan (2007) and amended (2009)**

6 The Marin Countywide Plan guides the conservation and development of Marin County. The countywide
7 goals reflect core community values and identify what fundamental outcomes are desired.

- 8 • **A Preserved and Restored Natural Environment.** Marin watersheds, natural habitats, wildlife
9 corridors, and open space will be protected, restored, and enhanced.
- 10 • **A Sustainable Agricultural Community.** Marin’s working agricultural landscapes will be
11 protected, and the agricultural community will remain viable and successfully produce and
12 market a variety of healthy foods and products.
- 13 • **A High-Quality Built Environment.** Marin’s community character, the architectural heritage of
14 its downtowns and residential neighborhoods, and the vibrancy of its business and commercial
15 centers will be preserved and enhanced.
- 16 • **More-Affordable Housing.** Marin’s members of the workforce, the elderly, and special needs
17 groups will have increased opportunities to live in well-designed, socially and economically
18 diverse affordable housing strategically located in mixed-use sites near employment or public
19 transportation.
- 20 • **Less Traffic Congestion.** Marin community members will have access to flexible work
21 schedules, carpools, and additional transportation choices for pedestrians, bicyclists, and transit
22 users that reduce traffic congestion.
- 23 • **A Vibrant Economy.** Marin’s targeted businesses will be clean, be prosperous, meet local
24 residents’ and regional needs, and provide equal access to meaningful employment, fair
25 compensation, and a safe, decent workplace.
- 26 • **A Reduced Ecological Footprint.** Marin residents and businesses will increasingly use
27 renewable energy, fuel efficient transportation choices, and green building and business practices
28 similar to the level of Western Europe.
- 29 • **Collaboration and Partnerships.** Marin public agencies, private organizations, and regional
30 partners will reach across jurisdictional boundaries to collaboratively plan for and meet
31 community needs.
- 32 • **A Healthy and Safe Lifestyle.** Marin residents will have access to a proper diet, health care, and
33 opportunities to exercise, and the community will maintain very low tobacco, alcohol, drug
34 abuse, and crime rates.

35 The alternatives in this general management plan work to address many of the goals listed above
36 including preserved natural environments, less traffic congestion, vibrant economy, reduced ecological
37 footprint, collaboration, and healthy and safe lifestyles.
38
39
40

1 **Midcoast Action Plan for Parks and Recreation: Planning Team Report 2007**

2 This report, prepared by the Midcoast Recreation Planning Team, is an Action Plan for providing
3 neighborhood and community recreation services and facilities on the Midcoast. The Action Plan outlines
4 near and long term objectives and a strategy for implementation. This plan focuses on actions that finally
5 implement recommendations from three assessments conducted over the past 30 years beginning with the
6 adopted *Midcoast Community Plan* from 1978. Preparation of this plan for a Midcoast park and recreation
7 system also meets the *Shared Vision 2010 The Promise of the Peninsula* prepared by the County Board of
8 Supervisors. Six commitments and eleven goals outlined in the County's shared vision are directly
9 applicable to implementing a Midcoast park system. The alternatives in the general management plan are
10 consistent with the planning team report.

11
12 **City of Pacifica Pedro Point Headlands Coastal Trail Connection**

13 The City of Pacifica proposes to construct a multi-use Coastal Trail connection west of Highway 1
14 through this site prior to its transfer to Golden Gate National Recreation Area. This trail segment would
15 connect with the future north trailhead and Coastal Trail on the abandoned Highway 1 segment that will
16 become a multi-use trail when the Devil's Slide Tunnel Project is complete. The City of Pacifica has
17 constructed paved multi-use paths along Highway 1, connecting or with potential to expand and connect
18 to national recreation area sites.

19
20 **Peninsula Watershed Management Plan — San Francisco Public Utilities Commission
21 (SFPUC) (2002)**

22 The plan provides a comprehensive set of goals, policies, and management actions which integrate all
23 watershed resources and reflect the unique qualities of the watersheds. In addition to serving as a long-
24 term regulatory framework for decision-making by the SFPUC, the plan is also intended to be used as an
25 implementation guide by the SFPUC's Land and Resource Management Section (LRMS) staff. The plan
26 provide the LRMS manager and staff with management actions designed to implement the established
27 goals and policies for water quality, water supply, ecological and cultural resource protection, fire and
28 safety management, watershed activities, public awareness, and revenue enhancement.

29
30 **PG&E Jefferson-Martin 230kV Transmission Line Proposed Settlement and
31 Environmental Assessment (EA) (2004)**

32 The project includes an assessment of construction of 24 miles of new 230 kV transmission line in San
33 Mateo County (Jefferson-Martin 230kV Line). The project includes both overhead (3.3 miles) and
34 underground segments (20 miles) within the Golden Gate National Recreation Area (GGNRA) boundary
35 and within easements managed by NPS to protect the natural and scenic values. The approximately 24-
36 mile route selected by the California Public Utilities Commission includes replacement of the existing
37 double circuit 60kV line with a double circuit 60kV/230kV line along the same Right-of-Way, with minor
38 modifications to reduce visibility of the rebuilt line. A final route for the line was approved by the
39 California Public Utilities Commission in August 2004, which the National Park Service appealed. PG&E
40 has proposed a settlement to the NPS, which is the subject of the EA. Construction would begin on the
41 underground segments in January 2005 and the overhead rebuild segment is scheduled for Summer 2005.
42 The alternatives in the general management plan are consistent with this plan.

1 **Regional Bicycle Plan for the San Francisco Bay Area (2001)**

2 The Metropolitan Transportation Commission’s *2001 Regional Bicycle Plan* is a component of the *2001*
3 *Regional Transportation Plan for the San Francisco Bay Area*, which establishes the region’s 25-year
4 transportation investment plan. The commission sought to develop a regional bicycle plan with the
5 following five main objectives:

- 6 • Define a network of regionally significant bicycle routes, facilities, and necessary support
7 programs and facilities.
- 8 • Identify gaps in the network and recommend specific improvements needed to fill these gaps in
9 the system.
- 10 • Develop cost estimates for build-out of the entire regional network.
- 11 • Develop a funding strategy to implement the regional bike network.
- 12 • Identify programs to help local jurisdictions to become more bicycle-friendly.

13 The goal of the plan is to “ensure that bicycling is a convenient, safe, and practical means of
14 transportation throughout the Bay Area for all Bay Area residents.” The alternatives in the general
15 management plan are consistent with this plan.

16

17 **San Francisco General Plan (2004)**

18 The city’s *General Plan* guides change and growth within the city to ensure that the qualities that make
19 San Francisco unique are preserved and enhanced. The plan is the embodiment of the community’s vision
20 for the future of San Francisco.

21 The *General Plan* is designed as a guide to the attainment of the following general goals:

- 22 • Protection, preservation, and enhancement of the economic, social, cultural, and aesthetic values
23 that establish the desirable quality and unique character of the city.
- 24 • Help make the city more healthful, safe, pleasant, and satisfying, with housing representing good
25 standards for all residents and adequate open spaces and appropriate community facilities.
- 26 • Improvement of the city as a place for commerce and industry by making it more efficient,
27 orderly, and satisfactory for the production, exchange, and distribution of goods and services,
28 with adequate space for each type of economic activity and improved facilities for the loading
29 and movement of goods.
- 30 • Coordination of the varied pattern of land use with public and semipublic service facilities
31 required for efficient functioning of the city, and for the convenience and well-being of its
32 residents, workers, and visitors.
- 33 • Coordination of the varied pattern of land use with circulation routes and facilities required for
34 the efficient movement of people and goods within the city and to and from the city.
- 35 • Coordination of the growth and development of the city with the growth and development of
36 adjoining cities and counties and of the San Francisco Bay Region.

37

38 In addition, the *SUBAREA 3: Bay Street To The Municipal Pier* identifies Objective 3 to transform the
39 area into an attractive gateway to the residential boulevard and a transition from Fisherman’s Wharf and

1 the Golden Gate National Recreation Area. The following are the policies associated with this objective:
2

3 ***POLICY 3.1: Create a tree-lined and landscaped median strip within the Van Ness street space***
4 ***and plant rows of trees in the sidewalk space.*** This greenspace element, which would realign some
5 existing parking spaces, should be designed to "announce" the area's attractive shoreline open space
6 resources and visually direct the visitor to them.

7
8 ***POLICY 3.2: Support National Park Service plans for improvements of the area within the***
9 ***boundaries of the Golden Gate National Recreation Area (GGNRA) boundaries.*** The *Golden Gate*
10 *National Recreation Area General Management Plan* calls for the following improvements:

11 *"All of the Van Ness Avenue (asphalt paving) inside the park boundary will be removed and*
12 *replaced with landscaping. The Sea Scout clubhouse and maintenance docks will also be*
13 *removed. The Sea Scouts' boats will be moved to the east side of the lagoon, and their programs*
14 *and meetings will be held in the aquatic center. The food concession at the foot of Van Ness will*
15 *receive a good sprucing-up. The Municipal Pier will also get a substantial cleanup and minor*
16 *improvements such as fish-cleaning stations and restrooms. (It may also require structural*
17 *renovation). Night lighting throughout the area will be upgraded."*
18

19 **San Mateo County Comprehensive Bicycle Route Plan (2000)**

20 The plan addresses issues of safety, access, quality of life, and the effective implementation of bikeways.
21 Outlined in the plan are a detailed set of policies, goals, and objectives designed to be in concert with the
22 county's and cities' general plans, the cities' bicycle plans, as well as other relevant regional plans. These
23 policies address important issues related to San Mateo County's bikeways, such as planning, community
24 involvement, use of existing resources, facility design, multimodal integration, safety and education,
25 support facilities and programs, funding, implementation, and maintenance.

26 The short- to mid-term top recommended projects in the plan include the North-South Bikeway Project,
27 the Colma-Millbrae Bikeway, the Ralston Bikeway, the North-South Bikeway (southern segment), the
28 San Mateo County Bay Trail, the Recreational Route improvements, the North Coast Bikeway, the North-
29 South Bikeway (Old County Road section), the Coastside Bicycle Projects, the U.S. 101/Willow Road
30 Interchange, the North-South Bikeway (Bayshore section), the U.S. 101/Broadway Interchange, the
31 North-South Bikeway (Delaware/California section), the Crystal Springs/3rd/4th Avenue Bikeway, and the
32 SFIA Bay Trail/Commuter Bikeway. The alternatives in the general management plan are consistent with
33 this plan.

34 **San Mateo County Trails Plan (2001)**

35 This document is the 2001 update of the *San Mateo County Trails Plan*. Trails planning on a countywide
36 level dates back nearly 25 years. The 2001 update is the third iteration of the *Trails Plan*. The *Trails Plan*
37 is intended to fulfill the following objectives:

- 38 • Provide an updated *Trails Plan* with the latest desired alignments.
- 39 • Link trails among existing and proposed trails in San Mateo County cities and parks, and to
40 adjacent counties.
- 41 • Develop a set of policies and guidelines that can be used during detailed trail planning to ensure
42 that adequate trails are constructed within constraints presented by the environment.

APPENDIXES, GLOSSARY, REFERENCES

- 1 • Provide a plan for access for recreational and educational purposes to portions of the county
2 where no access currently is available.
- 3 • Improve access to and along the coast.
- 4 • Provide recreational opportunities to area residents.
- 5 • Provide commuter routes for alternative types of transportation (e.g., bicycles).

6 Some of the projected trails, such as the Bay Area Ridge Trail, could pass through or connect with trails
7 in Golden Gate National Recreation Area. The alternatives in the general management plan are consistent
8 with this plan.

9

10 **San Mateo Countywide Transportation 2010 Plan (2001)**

11 This transportation plan serves as a plan

- 12 • for all modes (roads, Caltrain, SamTrans, BART, bicycles) and that looks at all modes as
13 systems
- 14 • that advocates policy, not projects; it is not a capital improvement program
- 15 • whose policy is derived from understanding the relational interaction between the modes
- 16 • that strives for synergy among the parts of the transportation system — the whole is greater than
17 the sum of the parts
- 18 • that seeks to develop the parts of the system to the optimal size, rather than the maximum
- 19 • that provides critical information to help make informed decisions
- 20 • that recognizes the decentralized, fragmented, and complex decision-making structures of
21 transportation planning in the county
- 22 • that seeks to coordinate decision making, relying on cooperation and not enforcement

23

24 The goals of this plan are to reduce traffic congestion in San Mateo County, improve mobility, reduce
25 congestion, increase access, improve air quality, increase economic vitality, improve the coordination of
26 land use and transportation planning, increase reliability, and increase safety. The objectives are to
27 increase capacity and performance (safety, reliability, convenience) of all transportation systems, increase
28 demand for transit travel, and decrease demand for automobile travel, especially single-occupant.

29 The strategy is to attack congestion on the following five fronts:

- 30 • Roads – Increase the efficiency of the existing highway system.
- 31 • Transit – Increase capacity, service levels, and safety of transit systems.
- 32 • Land Use – Increase supply and density of housing and employment in transit corridors.
- 33 • Transportation Systems Management – Increase programs to reduce the demand for single-
34 occupant automobile travel.
- 35 • Pricing – Initiate modest pricing programs that cause a shift from automobile to transit travel.

36

1 The alternatives in the general management plan are mindful of the goals and objectives of this plan. As
2 more specific implementation plans are developed for park sites in San Mateo, the park staff will
3 coordinate with the county to help achieve the transportation plan's goals and objectives.

4

5 **Sausalito General Plan (1995)**

6 The following ten broad goals serve as the basis for more specific policies and implementation strategies.
7 The overriding theme of the *Sausalito General Plan* is to protect the existing character, unique features,
8 and quality of life in Sausalito.

9 Goals of the Plan

- 10 1. Protect and enhance Sausalito as a residential community.
- 11 2. Protect the present character of Sausalito's residential neighborhoods.
- 12 3. Encourage commercial services that serve city residents.
- 13 4. Recognize the importance of the downtown commercial district to the economic viability of
14 the community and provide amenities for Sausalito's visitors.
- 15 5. Preserve the open waterfront as a natural resource and promote maritime uses in the
16 Marinship.
- 17 6. Preserve the historical character of Sausalito and its architectural and cultural diversity.
- 18 7. Protect the scenic qualities and the natural environment of the city.
- 19 8. Protect residents from natural and manmade hazards and avoid exposure to unnecessary risks
20 to community safety.
- 21 9. Preserve and provide a variety of housing opportunities in keeping with Sausalito's tradition
22 of diversity.
- 23 10. Maintain an appropriate level of public services.

24 The alternatives in the general management plan are consistent with this plan.

25

APPENDIX C: NPS POLICIES: DESIRED CONDITIONS AND STRATEGIES

This section focuses on desired conditions and strategies to guide management of Golden Gate National Recreation Area and Muir Woods National Monument in all alternatives, including the no-action alternative. They guide actions taken by NPS staff on such topics as natural and cultural resource management, park facilities, and visitor use management. Each topic discussed below has two parts: (a) desired conditions for that topic (in italics), and (b) broad strategies that may be used to achieve those desired conditions.

Desired conditions articulate the ideal conditions the National Park Service is striving to attain. The term “desired conditions” is used interchangeably with goals. Desired conditions provide guidance for fulfilling the park’s purpose and for protecting the park’s fundamental resources and values on a park-wide basis.

The strategies describe actions that could be used by the National Park Service (or its partners) to achieve the desired conditions. Many of these strategies are already being implemented. Those not already being implemented are consistent with NPS policy, are not believed to be controversial, and require no analysis and documentation under the National Environmental Policy Act of 1969 (or analysis and documentation would be completed separately from this *General Management Plan / Environmental Impact Statement*). This is not an exhaustive list of strategies. As new ideas, technologies, and opportunities arise, they will be considered if they further support the desired condition.

The park-wide desired conditions and strategies in this section, combined with the management actions that are specific to the management alternative ultimately selected for implementation will form the complete general management plan for Golden Gate National Recreation Area and Muir Woods National Monument.

ECOSYSTEM MANAGEMENT

The park staff demonstrates leadership in resource stewardship and conservation of ecosystem values. The marine, forests, and aquatic systems are managed from an ecosystem perspective, considering both internal and external factors affecting visitor use, environmental quality, and resource stewardship. Management decisions about ecosystems are based on scholarly and scientific information. Resources and visitation are managed in consideration of the ecological and social conditions of Golden Gate National Recreation Area, Muir Woods National Monument, and surrounding area. NPS managers adapt management strategies to changing ecological and social conditions and are partners in regional land planning and management.

Strategies

- Continue to participate in and encourage ongoing partnerships with local, state, and federal agencies, and nongovernmental organizations in programs that have importance within and beyond park boundaries. Partnerships important to the long-term viability of critical natural resources include the following:
 - Monitoring water quality of local water bodies.

- 1 ○ Managing wildlife across human-created boundaries (such as jurisdictions, property lines,
2 and fences).
- 3 ○ Managing nonnative invasive species.
- 4 ○ Managing wildland fire
- 5 ● Central to ecosystem management is long-term monitoring of changes in the condition of
6 cultural and natural resources and related human influences. Improvement or degradation of
7 resources and visitor experience cannot be determined with any certainty without a monitoring
8 program. To protect, restore, and enhance park resources and to sustain visitor use and
9 enjoyment within and around the park, NPS staff would do the following:
 - 10 ○ Initiate or continue long-term monitoring of resources and visitor use, including use of
11 the visitor experience and resource protection framework or other user capacity process,
12 as appropriate.
 - 13 ○ Promote research to increase understanding of park resources, natural processes, and
14 human interactions with the environment, with emphasis on fundamental resources and
15 values.
 - 16 ○ Practice science-based decision-making and adaptive management, incorporating the
17 results of resource monitoring and research into NPS operations.
 - 18 ○ Identify lands/waters outside the park where ecological processes and human use affect
19 park resources or are closely related to park resource management considerations; initiate
20 joint research, monitoring, management actions, agreements, or partnerships to promote
21 resource conservation.
 - 22 ○ Provide education and outreach programs to highlight conservation and management
23 issues facing the park and related lands and encourage partners who are able to assist
24 with ecosystem stewardship.
- 25 ● Continue the disturbed site restoration program.
- 26 ● Strive to control invasive nonnative species in coordination with adjacent landowners, other
27 agencies, and NPS staff specialists; consider control of native species that threaten ecosystem
28 health.

29

30 **NATURAL RESOURCES**

31 The resources and processes of Golden Gate National Recreation Area and Muir Woods National
32 Monument retain a significant degree of ecological integrity. Natural wind and water processes function
33 as unimpeded as possible. Management decisions about natural resources are based on scholarly and
34 scientific information and on the park's identified fundamental resources and values. Park resources and
35 values are protected through collaborative efforts with neighbors and partners. Visitors and employees
36 recognize and understand the value of the park's natural resources. Human impacts on resources are
37 monitored, and harmful effects are minimized, mitigated, or eliminated.

38 Biologically diverse native communities are protected and restored when possible. Particularly sensitive
39 communities are closely monitored and protected. Endemic species and habitats are fully protected;
40 nonnative species are controlled, and native species are reintroduced when conditions allow. Genetic
41 integrity of native species is protected. Threatened and endangered species are protected to the greatest

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1 extent possible and are generally stable or improving. Natural fire regimes are investigated *and supported*
2 *where possible.*

3 ***Strategies***

- 4 • Continue to inventory biotic and abiotic resources in the park and assess their status and trends.
- 5 • Continue long-term systematic monitoring of resources and processes to detect natural and
6 human-caused trends, document changes in species or communities, evaluate the effectiveness of
7 management plans and restoration projects, and mitigate impacts where possible.
- 8 • Implement and keep current a cooperative wildland fire management plan that includes
9 interagency participation to maintain conditions within the natural range as much as possible.
- 10 • Work in consultation with American Indian tribes to identify, evaluate, and determine
11 appropriate treatment for natural resources used by American Indian throughout Golden Gate
12 National Recreation Area.
- 13 • Provide information to adjacent homeowners and private landowners on natural processes,
14 wildlife, critical habitats, and threats to resources.
- 15 • Conserve and restore habitats for threatened and endangered species and species of special
16 concern.
- 17 • In conjunction with other NPS offices, continue to expand the park's data management systems
18 for analyzing, modeling, predicting, and testing trends in resource conditions.
- 19 • Continue to regularly update the park's resource stewardship strategy.
- 20 • Apply mitigation techniques to minimize impacts of construction and other activities on park
21 resources.
- 22 • Continue to educate staff, visitors, and the public about the significance of natural resources and
23 major threats to these resources.

24

25 **AIR QUALITY**

26 Golden Gate National Recreation Area and Muir Woods National Monument are in a Class II Air Quality
27 Area under the Clean Air Act (this designation allows for limited amounts of new air emissions). The air
28 quality of the park is enhanced as the park staff continues to pursue actions that provide for reduction of
29 emissions caused by park operations and visitors.

30 ***Strategies***

- 31 • Continue to monitor and record air pollution levels and analyze changes over time.
- 32 • Monitor and reduce emissions, when possible, from activities within the park's boundaries.
- 33 • Continue to participate in regional air quality planning, research, and implementation of air
34 quality standards.

35

36 **WATER QUALITY AND QUANTITY**

37 Water quality is a key resource at Golden Gate National Recreation Area and Muir Woods National
38 Monument. The need for adequate freshwater flows and water quality are important in the preservation of

1 the numerous rare and endangered species. The water resources have many beneficial uses including
2 water contact and non-water contact recreation, fish migration and spawning, and municipal water supply.
3 Groundwater is important for recharge of surface water systems, including wetlands, supporting rare and
4 endangered species habitat and as a source for municipal and agricultural water supplies. Wetlands
5 provide water quality protection, flood and drought mitigation, erosion control, and groundwater recharge
6 function. Wetlands support complex food webs, housing a rich biodiversity of wetland-endemic species,
7 providing habitat functions for many aquatic and terrestrial species. The intertidal and subtidal zone of
8 Golden Gate National Recreation Area's littoral environments are some of the most diverse and
9 productive ecosystems in the world. Coastal habitats are important for the preservation of several rare and
10 endangered species.

11 *Strategies*

- 12 • Continue to monitor water quality and quantity within a local and regional context, and expand
13 monitoring as needed to more fully understand the status and trends of ground and surface water.
- 14 • Participate in local, state, and national water quality remediation and watershed planning
15 programs.
- 16 • Update strategies for water resources management as needed to reflect changing resources and
17 management issues.
- 18 • Continue to inventory wetlands so that important wetland communities can be identified and
19 protected.
- 20 • Continue to identify and address threats to wetlands, such as purple loosestrife and other exotic
21 species.
- 22 • Continue to assess human-related threats to water quality and quantity. Continue to monitor *E.*
23 *coli* at designated recreational beaches.

24

25 **WILDLIFE MANAGEMENT**

26 Natural wildlife populations and systems are understood and perpetuated. Natural fluctuations in
27 populations are permitted to occur to the greatest extent possible. Natural influences are mimicked if
28 necessary. The park staff would work with neighbors and partners to achieve mutually beneficial goals
29 related to wildlife.

30 *Strategies*

- 31 • Continue cooperative management of threatened or endangered within the park to stabilize or
32 improve the status of these species.
- 33 • Strive to identify species that have occupied the park in the past, and evaluate the feasibility and
34 advisability of reintroducing extirpated species.
- 35 • Continue to cooperate with the federal and state agencies to better understand populations and
36 determine appropriate management actions for wildlife species.

37

38 **CULTURAL RESOURCES**

39 Cultural resources are identified, evaluated, managed, and protected within their broader context.
40 Management decisions about cultural resources are based on scholarly research and scientific

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1 information, fundamental resources and values, and consultation with the California state historic
2 preservation officer and with American Indian, as appropriate. The historic integrity of properties listed in
3 (or eligible for listing in) the National Register of Historic Places is protected. Visitors and employees
4 recognize and understand the value of the park's cultural resources. Human and natural impacts on
5 cultural resources are monitored, and adverse effects are minimized or eliminated.

6 *Strategies*

- 7 • Continue to collect information to fill gaps in the knowledge and understanding of the park's
8 cultural resource, to assess status and trends, and to effectively protect and manage cultural
9 resources.
- 10 • In accordance with the National Historic Preservation Act of 1966, as amended, continue to
11 locate, identify, and evaluate cultural resources to determine if they are eligible for listing in the
12 National Register of Historic Places (national register).
- 13 • Prepare and update national register nominations as appropriate.
- 14 • Update and keep current the park's cultural landscape inventory and List of Classified Structures
15 (the NPS inventory of evaluated historic and prehistoric structures that have historical,
16 architectural, and/or engineering significance)
- 17 • Work in consultation with the California state historic preservation officer, American Indian
18 tribes as appropriate, and other interested parties to identify, evaluate, and determine appropriate
19 treatment for historic structures, sites, and cultural landscapes throughout the park.
- 20 • Conduct scholarly research and use the best available scientific information and technology for
21 making decisions about management of the park's cultural resources.
- 22 • Build a partnership program that considers appropriate adaptive use to assist in maintaining
23 historic buildings and cultural landscapes throughout the park.
- 24 • Continue to initiate and regularly update plans and prioritize actions needed to protect cultural
25 resources.
- 26 • Continue to research, document, catalogue, exhibit, and store the park's museum collection
27 according to NPS standards.
- 28 • Continue to educate staff, visitors, and the public about cultural and historic issues relating to the
29 park.
- 30 • Treat all cultural resources as eligible for the national register pending formal determination.

31

32 **HISTORIC STRUCTURES**

33 The character of historic structures is preserved in good condition to retain a high degree of integrity.
34 Whenever possible, adaptive use of historic structures for park needs is considered before building new
35 infrastructure.

36 *Strategies*

- 37 • Prepare historic structure inventories and reports, and amend them as needed. Implement actions
38 identified in historic structure reports and add a record of treatment to the reports.
- 39 • Prepare and update national register nominations as appropriate.

- 1 • Monitor, inspect, and manage identified and evaluated historic structures to enable long-term
2 preservation of historic features, qualities, and materials.
- 3 • Use historic structures as they were historically used, or adaptively use them in ways that are
4 compatible with park purpose and that maximize retention of historic materials, features, spaces,
5 and spatial relationships.
- 6 • Consider historic buildings for appropriate adaptive use by other public and private entities to
7 assist in preservation of the structures.
- 8 • Create design guidelines and/or historic structure reports for specific areas in the park to preserve
9 architectural and character-defining features. Include provisions for design review to ensure the
10 compatibility of new planning, design, and construction.
- 11 • Aggressively pursue basic preservation maintenance activities to maintain historic materials in
12 good condition.
- 13 • Monitor and regulate use impacts to minimize both immediate and long-term damage to
14 structures.
- 15 • Involve historical architects and other professionals in work that could affect historic structures.

16

17 **CULTURAL LANDSCAPES**

18 The park's cultural landscapes are preserved in good condition to retain a high degree of integrity.
19 (Cultural landscapes reflect human adaptation and use of natural resources and are often expressed in the
20 way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types
21 of structures that are built.)

22 *Strategies*

- 23 • Prepare cultural landscape inventories and reports, and amend existing reports as needed.
- 24 • Monitor, inspect, and manage identified and evaluated cultural landscapes to enable long-term
25 preservation of historic features, qualities, and materials.
- 26 • Implement actions identified in cultural landscape reports, and add a record of treatment to the
27 reports.
- 28 • Create design guidelines and/or cultural landscape reports for specific developed areas in the
29 park to preserve landscape-defining features. Include provisions in the guidelines for design
30 review to ensure the compatibility of new planning, design, and construction.
- 31 • Have cultural landscape specialists (e.g., historical landscape architects) prepare plans and
32 specifications for preservation, rehabilitation, and restoration, in consultation with the park's
33 Natural Resources Division staff.

34

35 **ARCHEOLOGICAL RESOURCES**

36 Archeological resources in the park are identified and preserved. (Archeological resources are the remains
37 of past human activity and records documenting the scientific analysis of these remains. Archeological
38 features are typically buried, but may extend above ground. Although archeological resources are
39 commonly associated with prehistoric peoples, they may be products of more contemporary society.)

1 ***Strategies***

- 2 • Conduct sufficient research to identify and evaluate park archeological resources and assess
3 condition and potential threats.
- 4 • Continue long-term monitoring of archeological sites to measure deterioration from natural and
5 human sources and to evaluate the effectiveness of management actions to protect resources and
6 mitigate impacts.
- 7 • Preserve and protect archeological resources by eliminating and avoiding natural and human
8 impacts, stabilizing sites and structures, monitoring conditions, and enforcing protective laws
9 and regulations.
- 10 • Carry out required consultation and legal compliance, and consider concerns raised.
- 11 • Include information about archeological resources, as appropriate, in interpretive and educational
12 programs for the public.

13

14 **ETHNOGRAPHIC RESOURCES**

15 Ethnographic resources, the cultural and natural features of a park that are of traditional significance to
16 traditionally associated peoples, are identified and protected to the fullest extent possible. These resources
17 may be objects, beliefs, or places, and may have attributes that are of great importance to the group but
18 not necessarily associated with the reason the park was established or appropriate as a topic of park
19 interpretation.

20 ***Strategies***

- 21 • Identify and document, through studies and consultations, ethnographic resources, traditionally
22 associated people and other affected groups, and such groups' cultural affiliations to park
23 resources.
- 24 • Recognize the sensitivity of ethnographic resources and associated data and provide
25 confidentiality to the extent possible under the law.
- 26 • Have researchers formally collaborate with traditional cultural experts to develop a park strategy
27 for dealing with ethnographic resources
- 28 • Monitor effects of use on ethnographic resources and effects of park plans on authorized uses
29 and traditional users.

30

31 **VISITOR USE AND EXPERIENCE**

32 Visitors from diverse backgrounds can experience a range of opportunities consistent with the purpose,
33 significance, and fundamental resources and values of Golden Gate National Recreation Area and Muir
34 Woods National Monument. Most visitors understand and appreciate the purpose and significance of the
35 park and value their stewardship role in preserving natural and cultural features. They actively contribute
36 to the park's preservation through appropriate use and behavior. Park programs and services are
37 accessible to all, and conflicts between different user groups are minimized.

38 Visitor use levels and activities are consistent with preserving park purpose, significance, and
39 fundamental resources and values, and with providing opportunities for recreation, education, and
40 inspiration. Management decisions are based on scholarly and scientific information. When such

1 information is lacking, managers make decisions based on the best available information, adapting as new
2 information becomes available. Regional recreational opportunities continue to be coordinated among
3 agencies for public benefit and ease of use.

4 *Strategies*

- 5 • Work towards providing programs and facilities that are effective in reaching and serving
6 diverse communities.
- 7 • Collect data over time to monitor visitor experiences as part of an overall effort to protect desired
8 resource conditions and visitor experiences.
- 9 • Address threats to resources and the visitor experience by means other than limiting or restricting
10 use (e.g., through education programs). If necessary, however, implement more restrictive
11 methods.
- 12 • Base restrictions on visitor use on a determination by the park superintendent that such measures
13 are consistent with the park's enabling legislation and NPS policies, are necessary to prevent
14 degradation of the purposes and values for which the park was established, will minimize visitor
15 use conflicts, or will provide opportunities for quality visitor experiences.

16

17 **VISITOR INFORMATION, INTERPRETATION, AND EDUCATION**

18 Interpretive and educational services/programs at the park facilitate intellectual and emotional
19 connections between visitors and park resources, foster understanding of park resources and resource
20 stewardship, and build a local and national constituency. Outreach programs through schools,
21 organizations, and partnerships build connections to the park. Curriculum and place-based education
22 inspire student understanding and resource stewardship. Visitors receive adequate information to orient
23 themselves to the park and possible opportunities for a safe and enjoyable visit.

24 *Strategies*

- 25 • Develop and implement a comprehensive interpretive plan, with emphasis on providing
26 information, orientation, and interpretive services in the most effective manner possible. Use
27 both personal (involving authorized staff) and nonpersonal (not involving staff) services
28 (including state-of-the-art technologies) as appropriate.
- 29 • Stay informed of changing visitor demographics and preferences to effectively tailor programs
30 for visitors. Develop interpretive media supportive of park purpose, significance, interpretive
31 themes, and fundamental resources and values.
- 32 • Continue to promote improved pre-trip planning information and orientation for park visitors
33 through the park's website and other media. Work with local communities and other entities to
34 provide services outside park boundaries, where appropriate.
- 35 • Cooperate with partners, other governmental agencies, educational institutions, and other
36 organizations to enrich interpretive and educational opportunities locally, regionally, and
37 nationally.
- 38 • Create and implement an education strategy plan, which outlines goals and actions for providing
39 curriculum and place-based education programs.

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- 1 • Continue to regularly update plans and prioritize actions needed to serve visitors and provide
2 effective interpretation.
- 3 • Continue to educate staff, visitors, and the public about park interpretation/education programs.
4

5 **NIGHT SKY**

6 The naturally dark night sky is preserved. Artificial light sources in and outside the park do not hinder
7 opportunities to see the moon, stars, planets, and other celestial features. Park staff and partners continue
8 to work with local communities to encourage protection of the night sky. To the greatest extent possible,
9 NPS staff work within a regional context to protect the quality of the night sky and the experience thereof.

10 *Strategies*

- 11 • Establish baseline data for the dark night sky through NPS programs.
- 12 • Determine if light sources in the park exceed appropriate levels. Study and implement ways to
13 reduce or minimize artificial and unnecessary light.

15 **NATURAL SOUNDS**

16 Natural soundscapes are preserved, and sounds of modern society are minimized. Visitors to the Golden
17 Gate National Recreation Area and Muir Woods National Monument have opportunities in most parts of
18 the park to hear natural sounds.

19 *Strategies*

- 20 • Strive to collect baseline data on park soundscapes to understand characteristics and trends in
21 natural soundscapes.
- 22 • Continue to control existing and potential land-based noise sources:
- 23 • Enforce existing noise regulations.
- 24 • Require bus tour companies to comply with regulations that reduce noise levels (e.g., turning off
25 engines when buses are parked).
- 26 • Limit use of generators.
- 27 • Work with the Federal Aviation Administration, commercial businesses, and general aviation
28 entities to minimize noise and visual impacts of aircraft on the park. Continue to discourage
29 pilots of conventional aircraft from flying low along the park. If demand for commercial air tours
30 develops, develop a commercial air tour management plan to address tours and their effects on
31 the park.
- 32 • Minimize noise generated by NPS use of noise-producing machinery such as motorized
33 equipment. Consider noise potential when procuring and using park equipment.

35 **FACILITIES AND SERVICES**

36 Park facilities and related development are the minimum necessary to serve visitor needs and protect park
37 resources. Visitor and administrative facilities are as compatible as possible with natural processes and
38 surrounding landscapes, aesthetically pleasing, and functional. Historic structures and properties are
39 adaptively used when practicable and appropriate. Staff housing is sufficient to ensure an adequate level

1 of protection for park resources, visitors, employees, and government property, and to provide necessary
 2 services. Adequate response (equipment and people) for visitor, resource, and facility protection; search-
 3 and-rescue; fire management; and safety is available. Decisions regarding park operations, facilities
 4 management, and development at the park—from initial concept through design and construction—reflect
 5 principles of resource conservation and sustainability.

6 ***Strategies***

- 7 • Build, locate, and/or modify facilities according to the Guiding Principles of Sustainable Design
 8 (NPS 1993) or similar guidelines. Establish architectural guidelines to ensure sustainability and
 9 compatibility with the natural and cultural environment. Properly maintain and upgrade existing
 10 facilities using sustainability principles, where possible, to serve the park mission.
- 11 • Consider the availability of existing or planned facilities in nearby communities and on adjacent
 12 lands, as well as the possibility of joint facilities with other agencies, when deciding whether to
 13 pursue new developments in the park. This will ensure that any additional facilities in the park
 14 are necessary, appropriate, and cost-effective.
- 15 • Integrate NPS asset management practices into decision-making and planning. Build, modify,
 16 and/or maintain facilities according to projected funding levels and defined park priorities.
 17 Consider removal of facilities that do not meet minimum NPS criteria and/ or are not cost-
 18 effective to maintain.
- 19 • Continue to strive to provide affordable housing within the park for emergency response staff,
 20 seasonal and entry-level employees, volunteers, and to support other park needs (housing for
 21 researchers, etc.).
- 22 • Provide commercial visitor services (for example services provided through concessioners) that
 23 are necessary and appropriate for visitor use and enjoyment through the use of concession
 24 contracts and commercial use authorizations. Ensure that concession operations are consistent
 25 with the protection of park resources and values and demonstrate sound environmental
 26 management and stewardship.

27
 28 **ACCESSIBILITY**

29 New and renovated facilities are designed and constructed to be universally accessible in accordance with
 30 the Americans with Disabilities Act of 1990 and the Architectural Barriers Act Accessibility Standards
 31 (2006). Visitors with limited mobility have opportunities to experience the park open spaces, waters,
 32 historic structures and cultural landscapes and to enjoy representative portions of the backcountry.

33 ***Strategies***

- 34 • Identify and modify existing facilities to meet accessibility standards as funding permits, or as
 35 facilities are replaced or rehabilitated. Design new facilities to meet accessibility standards.
- 36 • Consider providing public information about ease of access for various facilities and trails
- 37 • Periodically consult with disabled persons or their representatives to increase awareness of the
 38 needs of the disabled and to determine how to make the park more accessible.
- 39 • Develop park interpretive programs per accessibility standards and needs.

1 **RELATIONS WITH PRIVATE AND PUBLIC ORGANIZATIONS, ADJACENT LANDOWNERS,**
2 **AND GOVERNMENTAL AGENCIES**

3 The park is managed holistically, as part of a greater ecological, social, economic, and cultural system.
4 Positive relations are maintained with inholders (those owning property within the park boundary),
5 adjacent landowners, surrounding communities, and private and public groups that affect, and are affected
6 by the park. The park is managed proactively to ensure that NPS values are effectively communicated and
7 understood.

8 *Strategies*

- 9
- Continue to establish and foster partnerships with public and private.
 - 10 • Foster a spirit of cooperation with neighbors, and encourage compatible uses of adjacent lands.
11 Keep landowners, land managers, tribes, local governments, nongovernmental organizations, and
12 the public informed about park management activities and issues. Consult periodically with
13 landowners and communities that are affected by or potentially affected by park visitors and
14 management actions.
 - 15 • Work closely with local, state, and federal agencies and tribal governments whose programs
16 affect or are affected by activities in the park.
 - 17 • Continue to support and encourage volunteers who contribute to park programs.
- 18

19 **RELATIONS WITH AMERICAN INDIAN TRIBES**

20 Park staff work to ensure that traditional American Indian ties to the park are recognized; park staff also
21 strive to maintain positive, productive, government-to-government relationships with tribes culturally
22 affiliated with the park. The rights, viewpoints, and needs of tribes are respected, and issues that arise are
23 promptly addressed. American Indian values are considered in the management and operation of the park.

24 *Strategies*

- 25
- To ensure productive, collaborative working relationships, consult regularly and maintain
26 government-to-government relations with federally recognized tribes that have traditional ties to
27 resources in the park.
 - 28 • Continue to identify and deepen the understanding of the significance of the park's resources and
29 landscapes to American Indian people through collaborative research.
 - 30 • Protect and preserve sites and resources that are significant to federally recognized tribes.
 - 31 • Create opportunities for and invite the participation of tribes in protecting natural and cultural
32 resources of interest within the park.
 - 33 • Support the continuation of traditional American Indian activities in the park to the extent
34 allowed by law and policy.
 - 35 • Work with tribes to conduct ethnographic studies that identify culturally significant resources.
 - 36 • Seek input from tribes during development of interpretive programs that relate to American
37 Indians.

- Consult with American Indians under the Native American Graves Protection and Repatriation Act for actions that affect or have the potential to affect burial remains or items of sacred or ceremonial significance.

LAND PROTECTION

Park staff work with government agencies and nongovernmental organizations to support efforts to protect adjacent lands that are important to preserving the resources within the park.

Strategies

- Use various techniques to protect park values, including general agreements, acquisition of conservation and access easements, land exchanges, donations, and fee-simple acquisition.
- Carefully site any new telecommunication structures so as to not jeopardize the park's purpose, significance, and fundamental resources and values; also consider the park's management zones. Permit new rights-of-way only with specific statutory authority and approval by NPS managers, and only if there is no practicable alternative to such use of NPS lands.
- Continue to support the efforts of others to protect adjacent lands that are important to preserving park resources through appropriate planning, zoning, and other protection methods.

RESEARCH

The National Park Service works with partners to learn about natural and cultural resources and associated values. Research priorities for the national recreation area are aligned with its purpose, significance, and fundamental resources and values.

Strategies

- Encourage and support basic and applied research through various partnerships and agreements to enhance understanding of resources and processes or to answer specific management questions.
- Mitigate impacts of research conducted on natural and cultural resources, as needed to preserve those resources for future generations to enjoy and study.
- Develop and implement criteria to determine whether requested research supports park purpose and significance, or other park goals.
- Develop/update list of research issues that are important to the Golden Gate National Recreation Area and Muir Woods National Monument.

GLOSSARY

accessibility: Occurs when individuals with disabilities are able to reach, use, understand, or appreciate NPS programs, facilities, and services, or to enjoy the same benefits that are available to persons without disabilities.

adaptive management: A system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or are re-evaluated as conditions change. Adaptive management recognizes that knowledge about natural resource systems is sometimes uncertain and is the preferred method of management in these cases. (Source: *Departmental Manual 516 DM 4.16*)

American Indian tribe: Any band, nation, or other organized group or community of Indians, including any Alaska Native Village, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

appropriate use: A use that is suitable, proper, or fitting for a particular park, or to a particular location within a park.

archeology: The scientific study, interpretation, and reconstruction of past human cultures from an anthropological perspective based on the investigation of the surviving physical evidence of human activity and the reconstruction of related past environments. Historic archeology uses historic documents as additional sources of information.

Archeological resource: Any material remains or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. They are capable of revealing scientific or humanistic information through archeological research.

asset: A physical structure or grouping of structures, land features, or other tangible property which has a specific service or function.

asset management: A systematic process of maintaining, upgrading, and operating assets cost-effectively by combining engineering principles with sound business practices and economic theory.

backcountry: Primitive, undeveloped portions of parks.

best management practices (BMPs): Practices that apply the most current means and technologies available to not only comply with mandatory environmental regulations, but also maintain a superior level of environmental performance. See also, “sustainable practices/principles.”

civic engagement: As a philosophy, a discipline, and a practice, it can be viewed as a continuous, dynamic conversation with the public on many levels that reinforces the commitment of the National Park Service and the public to the preservation of park resources and strengthens understanding of the full meaning and contemporary relevance of these resources. Civic engagement is the philosophy of welcoming people into the parks and building relationships around a shared stewardship mission, whereas public involvement (also called public participation) is the specific, active involvement of the public in NPS planning and other decision-making processes.

conserve: To protect from loss or harm; preserve. Historically, the terms conserve, protect, and preserve have come collectively to embody the fundamental purpose of the National Park Service—preserving, protecting and conserving the national park system.

consultation (cultural resources): A discussion, conference, or forum in which advice or information is sought or given, or information or ideas are exchanged. Consultation generally takes place on an informal basis; formal consultation requirements for compliance with section 106 of the NHPA are published in 36 CFR Part 800. Consultation with recognized tribes is done on a government-to-government basis.

cultural landscape: A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. There are four general kinds of cultural landscape, not mutually exclusive: historic site, historic designed landscape, historic vernacular landscape, ethnographic landscape.

cultural resource: An aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

cumulative actions: Actions that, when viewed with other actions in the past, the present, or the reasonably foreseeable future regardless of who has undertaken or will undertake them, have an additive impact on the resource the proposal would affect.

decision maker: The managerial-level employee who has been delegated authority to make decisions or to otherwise take an action that would affect park resources or values. Most often it refers to the park superintendent or regional director, but may at times include, for example, a resource manager, facility manager, or chief ranger to whom authority has been re-delegated.

Deferred Maintenance (DM): Maintenance that was not performed when it should have been, and therefore, is delayed. Continued deferment of maintenance results in deficiencies. DM is the cost to repair an asset's deficiencies.

desired condition: A park's natural and cultural resource conditions that the National Park Service aspires to achieve and maintain over time, and the conditions necessary for visitors to understand, enjoy, and appreciate those resources.

developed area: An area managed to provide and maintain facilities (e.g., roads, campgrounds, housing) serving visitors and park management functions. Includes areas where park development or intensive use may have substantially altered the natural environment or the setting for culturally significant resources.

economic multiplier effect: An effect in economics in which an increase in spending produces an increase in income and consumption greater than the initial amount spent. For example, if a park builds a new visitor center, it will employ construction workers and their suppliers as well as those who work in the visitor center. Indirectly, the new visitor center will stimulate employment in restaurants, dry cleaners and service industries in the factory's vicinity.

ecosystem: A system formed by the interaction of a community of organisms with their physical and biological environment, considered as a unit.

ecosystem management: A collaborative approach to natural and cultural resource management that integrates scientific knowledge of ecological relationships with resource stewardship practices for the goal of sustainable ecological, cultural, and socioeconomic systems.

enabling legislation: The law(s) that establish a park as a unit within the national park system.

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environmental assessment (EA): A brief NEPA document that is prepared, with public involvement, (a) to help determine whether the impact of a proposed action or its alternatives could be significant; (b) to aid the Park Service in compliance with NEPA by evaluating a proposal that will have no significant impacts, but may have measurable adverse impacts; or (c) as an evaluation of a proposal that is either not described on the list of categorically excluded actions, or is on the list, but exceptional circumstances apply.

environmental impact statement (EIS): A detailed NEPA analysis document that is prepared, with extensive public involvement, when a proposed action or alternatives have the potential for significant impact on the human environment.

environmentally preferred alternative (or environmentally preferable alternative): Of the action alternatives analyzed, the one that would best promote the policies in section 101 of the National Environmental Policy Act. This is usually selected by the planning team members. The Council on Environmental Quality encourages agencies to identify an environmentally preferable alternative in the draft EIS or EA, but only requires that it be named in the ROD.

ethnographic resource: A site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.

existing infrastructure: The systems, services, and facilities currently in a park unit, including buildings, roads, trails, power equipment, water supply, etc.

final plan: A final plan, or final GMP, is a document that usually includes a discussion of the purpose and need for the GMP, a description of NPS mandates and policies that affect the park, a description of the preferred alternative (the actual plan), a description of appropriate mitigation measures, and relevant appendixes (e.g., references, preparers, index). A final GMP is prepared after the ROD or FONSI is approved and a notice is published in the *Federal Register*. It describes only the selected alternative without all the accompanying compliance parts included in the EIS or EA.

Finding of No Significant Impact (FONSI): A determination based on an EA and other factors in the public planning record for a proposal that, if implemented, would have no significant impact on the human environment.

facility costs: one-time costs related to a facility, such as the cost associated with building or trail.

fiscal year: from October 1 of one calendar year to September 30 of the following calendar year.

foundation statement (Foundation): A statement that begins a park's planning process and sets the stage for all future planning and decision making by identifying the park's mission, purpose, significance, special mandates and the broad, parkwide mission goals. This are incorporated into a park's general management plan, but a foundation statement may also be produced as a stand-alone document for a park.

FTE (Full time equivalent): A computed number of employees, representing the number of full-time employees that could have been employed if the reported number of hours worked by part time employees had been worked by full-time employees. For example, two half-time employees equal one FTE.

fundamental resources and values: Those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management because they are critical to achieving the park's purpose and maintaining its significance. A fundamental value, unlike a tangible resource, refers to a process, force, story, or experience, such as such as an island experience, the ancestral homeland, wilderness values, or oral histories.

gateway community: A community that exists in close proximity to a unit of the national park system whose residents and elected officials are often affected by the decisions made in the course of managing the park, and whose decisions may affect the resources of the park. Because of this, there are shared interests and concerns regarding decisions. Gateway communities usually offer food, lodging, and other services to park visitors. They also provide opportunities for employee housing, and a convenient location to purchase goods and services essential to park administration.

general management plan (GMP): A plan that clearly defines direction for resource preservation and visitor use in a park, and serves as the basic foundation for decision making. General management plans are developed with broad public involvement.

geologic resources: Features produced from the physical history of the earth, or processes such as exfoliation, erosion and sedimentation, glaciation, karst or shoreline processes, seismic, and volcanic activities.

golden gate: A strait in western California located between the Marin Headland as and Fort Point, which connects the Pacific Ocean and San Francisco Bay. Discovered in 1579 by Sir Francis Drake, it was known as the Golden Gate long before the name gained popularity during the gold rush of 1849. The Golden Gate Bridge, which spans the strait, was completed in 1937.

historic property: A district, site, structure, or landscape significant in American history, architecture, engineering, archeology, or culture; an umbrella term for all entries eligible for or included in the National Register of Historic Places.

human environment: Defined by CEQ as the natural and physical environment, and the relationship of people with that environment (1508.14). Although the socioeconomic environment receives less emphasis than the physical or natural environment in the CEQ regulations, the National Park Service considers it to be an integral part of the human environment.

impact: The likely effect of an action or proposed action upon specific natural, cultural or socioeconomic resources. Impacts may be direct, indirect, individual, cumulative, beneficial, or adverse.

impact topics: Specific natural, cultural, or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration, and timing of the effect to each of these resources are evaluated in the impact section of an environmental assessment (EA) or an environmental impact statement (EIS).

impairment: An impact that, in the professional judgment of a responsible NPS manager, would harm the integrity of park resources or values and violate the 1916 NPS Organic Act's mandate that park resources and values remain unimpaired.

implementation plan: A plan that focuses on how to implement an activity or project needed to achieve a long-term goal. An implementation plan may direct a specific project or an ongoing activity.

indicators of user capacity: Specific, measurable physical, ecological, or social variables that can be measured to track changes in conditions caused by public use, so that progress toward attaining the desired conditions can be assessed .

issue: Some point of debate that needs to be decided. For GMP planning purposes issues can be divided into "major questions to be answered by the GMP" (also referred to as the decision points of the GMP) and the "NEPA issues" (usually environmental problems related to one or more of the planning alternatives).

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management concept: A brief, statement of the kind of place the park should be (a “vision” statement).

management zone: A geographical area for which management directions have been developed to determine what can and cannot occur in terms of resource management, visitor use, access, facilities or development, and park operations. Each zone has a unique combination of resource and social conditions and a consistent management direction. Different actions are taken by the National Park Service in different zones.

management zoning: The application of management zones to a park unit. The application of different type of zones and/or size of zones will likely vary in different alternatives.

mitigation: A modification of a proposal to lessen the intensity of its impact on a particular resource. Actions can be taken to avoid, reduce, or compensate for the effects of environmental damage.

mobile combustion: A source of greenhouse gases generated by combustion of fossil fuels in highway (cars, trucks, buses), off-road (construction, agricultural), water-borne, rail and air vehicles.

manager: The managerial-level employee who has authority to make decisions or to otherwise take an action that would affect park resources or values. Most often, it refers to the park superintendent or regional director, but may at times include, for example, a resource manager, facility manager, or chief ranger to whom authority has been re-delegated.

museum object: A material thing possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include prehistoric and historic objects, artifacts, works of art, archival material, and natural history specimens that are part of a museum collection. Structural components may be designated museum objects when removed from their associated structures.

National Park Service Organic Act: The 1916 law (and subsequent amendments) that created the National Park Service and assigned it responsibility for management of the national parks.

national park system: The sum total of the land and water now or hereafter administered by the secretary of the interior through the National Park Service for park, monument, historic, parkway, recreational or other purposes.

Native American: Pertaining to American Indian tribes or groups, Eskimos and Aleuts, and Native Hawaiians, Samoans, Chamorros, and Carolinians of the Pacific Islands. Groups recognized by the federal and state governments and named groups with long-term social and political identities who are defined by themselves and others as Indian are included.

NEPA: National Environmental Policy Act of 1969

NEPA process: The objective analysis of a proposed action to determine the degree of its impact on the natural, physical, and human environment; alternatives and mitigation that reduce that impact; and the full and candid presentation of the analysis to, and involvement of, the interested and affected public—as required of federal agencies by the National Environmental Policy Act of 1969.

non-facility costs: one-time costs not related to a facility, such as the cost of restoration of a landscape.

one-time costs: This term refers to the costs to perform a one-time action, such as construct, rehabilitate, or demolish a facility; and can include other project costs. One-time costs can also include non-facility costs, such as restoring a landscape.

ONPS (Operations of the National Park Service) Funds: funding that is provided for the day-to-day operations of parks including Golden Gate National Recreation Area and Muir Woods National Monument.

park partner: any state or local government (or subdivision thereof), public or private agency, organization, institution, corporation, individual, or other entity which is engaged in helping to ensure the protection, enhancement and enjoyment of the park's natural, cultural and recreation heritage.

Planning, Environment, and Public Comment (PEPC) System: An online database designed to facilitate the project management process in conservation planning and environmental impact analysis. It assists NPS employees in making informed decisions with regard to a number of compliance issues throughout the planning, design, and construction process.

policy level issues: The potential for some resources or values to be detrimentally affected by discretionary management decisions intended to achieve conditions consistent with the park's purpose.

potential boundary modifications: The description of areas or resources that meet criteria for boundary adjustments, along with the rationale for an adjustment.

preferred alternative: The alternative an NPS decision maker has identified as preferred at the draft EIS stage. It is identified to show the public which alternative is likely to be selected to help focus its comments.

preserve: To protect from loss or harm; conserve. Historically, the terms preserve, protect and conserve have come collectively to embody the fundamental purpose of the NPS—preserving, protecting and conserving the national park system.

preservation (cultural resources): The act or process of applying measures to sustain the existing form, integrity, and material of a historic structure, landscape or object. Work may include preliminary measures to protect and stabilize the property, but generally focuses upon the ongoing preservation maintenance and repair of historic materials and features rather than extensive replacement and new work.

primary interpretive themes: The most important ideas or concepts to be communicated to the public about a park.

professional judgment: A decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account

- the decision maker's education, training, and experience
- advice or insights offered by subject matter experts and others who have relevant knowledge and experience
- good science and scholarship; and, whenever appropriate,
- the results of civic engagement and public involvement activities relating to the decision.

public involvement (also called public participation): The active involvement of the public in NPS planning and decision-making processes. Public involvement occurs on a continuum that ranges from providing information and building awareness, to partnering in decision making.

projected implementation costs: A projection of the probable range of recurring annual costs, initial one-time costs, and life-cycle costs of plan implementation.

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purpose: The specific reason(s) for establishing a particular park.

Record of Decision (ROD): The document that is prepared to substantiate a decision based on an EIS. It includes a statement of the decision made, a detailed discussion of decision rationale, and the reasons for not adopting all mitigation measures analyzed, if applicable.

scoping : Internal National Park Service decision-making on issues, alternatives, mitigative measures, the analysis boundary, appropriate level of documentation, lead and cooperating agency roles, available references and guidance, defining purpose and need, and so forth. External scoping is the early involvement of the stakeholders, interested individuals and organizations, local societies, environmental groups, park visitors, etc.

significance: Statements of why, within a national, regional, and systemwide context, the park's resources and values are important enough to warrant national park designation.

soundscape (natural): The aggregate of all the natural, nonhuman-caused sounds that occur in parks, together with the physical capacity for transmitting natural sounds.

special mandates: Legal mandates specific to the park that expand upon or contradict a park's legislated purpose.

stakeholders: Individuals and organizations that are actively involved in the project, or whose interests may be positively or negatively affected as a result of the project execution /completion. They may also exert influence over the project and its results. For GMP planning purposes, the term stakeholder includes NPS offices/staff as well as public and private sector partners and the public, which may have varying levels of involvement.

standards: The minimum acceptable condition for an indicator of a desired condition.

superintendent: The senior onsite NPS official in a park. Used interchangeably with "park superintendent," "park manager," or "unit manager."

sustainable design: Design that applies the principles of ecology, economics, and ethics to the business of creating necessary and appropriate places for people to visit, live in, and work. Development that has a sustainable design sits lightly upon the land, demonstrates resource efficiency, and promotes ecological restoration and integrity, thus improving the environment, the economy, and society.

sustainable practices/principles(also sustainability): Those choices, decisions, actions and ethics that will best achieve ecological/ biological integrity; protect qualities and functions of air, water, soil, and other aspects of the natural environment; and preserve human cultures. Sustainable practices allow for use and enjoyment by the current generation, while ensuring that future generations will have the same opportunities.

visitor: Anyone who physically visits a park for recreational, educational or scientific purposes, or who otherwise uses a park's interpretive and educational services, regardless of where such use occurs (e.g., via Internet access, library, etc.).

user capacity (also called carrying capacity): The types and levels of visitor and other public use that can be accommodated while sustaining the desired resource conditions and visitor experiences that complement the purpose of the park. The NPS has adopted this term in preference of the term *visitor capacity*, which does not include all public use.

visitor experience: The perceptions, feelings, and reactions a person has while visiting a park. Examples of visitor experiences include a sense of being immersed in a natural landscape; a feeling of being

crowded; a feeling of being in an area where the sights and sounds of people and vehicles are predominant; having a sense of challenge and adventure; or a perception of solitude and privacy.

warming hut: Local term for a visitor facility that was pioneered at Crissy Field. Used in this general management plan to indicate a modest structure providing comfortable shelter and a range of services which may include park orientation, light food service, a park store, and restrooms.

zone: See “management zone.”

REFERENCES

To be completed when volume 2 is finalized.

Golden Gate National Recreation Area • Muir Woods National Monument
Draft General Management Plan/ Environmental Impact Statement

U.S. Department of the Interior • National Park Service • Denver Service Center
