



# Golden Gate National Recreation Area California

Draft Dog Management Plan /  
Environmental Impact Statement - Volume 1



JANUARY 2011



**UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
DRAFT DOG MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT**

**GOLDEN GATE NATIONAL RECREATION AREA, SAN FRANCISCO, CA**

Lead Agency: National Park Service (NPS), U.S. Department of the Interior

This *Draft Dog Management Plan / Environmental Impact Statement* (plan/EIS) was prepared for the Golden Gate National Recreation Area (GGNRA), which is comprised of multiple sites distributed across San Francisco, Marin, and San Mateo counties. This plan/EIS describes six alternatives at 21 sites, including the preferred alternative (chosen from alternatives A-E), for the management of dog walking activities at GGNRA, and details the resources that would be affected by the alternatives and the environmental consequences of implementing these alternatives. Because of the diversity of resources and the variety of use patterns across these park sites, a site-specific approach to analyzing the alternatives was adopted, resulting in a preferred alternative for each site.

The purpose of this action is to provide a clear, enforceable policy to determine the manner and extent of dog use in appropriate areas of the park. Action is needed because under current conditions, park resources and values could be compromised to the extent that, without action, these resources and values in some areas of the park might not be available for enjoyment by future generations. Additionally, a dog management policy inconsistent with NPS regulations and increased public expectations for use of the park for dog recreation have resulted in controversy, litigation, and compromised visitor and employee safety, affecting visitor experience and resulting in resource degradation. These conflicts will likely escalate if not addressed in a comprehensive plan/EIS.

Under alternative A (no action), current dog walking practices would continue. Alternative B would bring the park into alignment with the NPS-wide leash regulation (on-leash dog walking only). Alternative C would emphasize multiple use, and balance use by county (no dogs, on-leash dog walking, and dog walking under voice and sight control in regulated off-leash areas [ROLAs]). Alternative D would be the most protective of resources and visitor safety. Alternative E would provide dog walkers the greatest level of access per area (no dogs, on-leash dog walking, and dog walking under voice and sight control in regulated off-leash areas [ROLAs]). Alternative D is the ***environmentally preferred alternative*** for all areas (including new lands) except for Upper and Lower Fort Mason where alternative B is the environmentally preferable alternative. Alternative C is the ***NPS preferred alternative*** for all sites in Marin County except for Muir Beach where alternative D is the preferred alternative. For sites in San Francisco County, alternative B is the preferred alternative for Upper and Lower Fort Mason, Fort Point, and Lands End; alternative D is the preferred alternative for Baker Beach; alternative E is the preferred alternative for Sutro Heights Park; and alternative C is the preferred alternative for the remaining sites in San Francisco County. Alternative C is the preferred alternative for all sites in San Mateo County.

The plan/EIS is available for public and agency review and comment beginning with publication of the U.S. Environmental Protection Agency Notice of Availability in the Federal Register. Comments will be accepted during the 90-day public comment period electronically through the NPS Planning, Environment and Public Comment web site listed below or by hard copy sent to the name and address listed below by U.S. Postal Service, other mail delivery service, or hand delivery. Comments will also be accepted during public meetings on the plan/EIS. Comments will not be accepted by fax, email, or in any other way than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others will not be accepted. After public review, this document will be revised in response to public comments, and a notice of proposed rulemaking will be published for additional public notice and comment. A final version of this document will then be released, and a 30-day no-action period will follow. Following the 30-day period, the alternative or actions constituting the approved plan will be documented in a record of decision that will be signed by the Pacific West Regional Director. A final rule will then be issued. For further information regarding this document, please visit <http://parkplanning.nps.gov/goga> or contact

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## **GOLDEN GATE NATIONAL RECREATION AREA**

# **DRAFT DOG MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT**

**January 2011**



# EXECUTIVE SUMMARY

## PURPOSE AND NEED FOR ACTION

The *National Environmental Policy Act of 1969* (NEPA) requires an environmental impact statement (EIS) to briefly provide a statement of purpose and need for the action the agency is proposing. The purpose states the goal the park must achieve by taking action and the need for action summarizes why action is required.

### Purpose for Taking Action

The purpose of the *Draft Dog Management Plan / Environmental Impact Statement* (plan/EIS) is to provide a clear, enforceable policy to determine the manner and extent of dog use in appropriate areas of the park. This plan/EIS would promote the following objectives:

- Preserve and protect natural and cultural resources and natural processes
- Provide a variety of visitor experiences
- Improve visitor and employee safety
- Reduce user conflicts
- Maintain park resources and values for future generations

### Need for Action

A plan/EIS is needed because Golden Gate National Recreation Area (GGNRA or the park) resources and values, as defined by the park's enabling legislation and the NPS *Organic Act*, could be compromised to the extent that, without action, those resources and values in some areas of the park might not be available for enjoyment by future generations. Additionally, a dog management policy inconsistent with NPS regulations and increased public expectations for use of the park for dog recreation have resulted in controversy, litigation, and compromised visitor and employee safety, affecting visitor experience and resulting in resource degradation. The conflicts will likely escalate if not addressed in a comprehensive plan/EIS.

## PURPOSE OF GOLDEN GATE NATIONAL RECREATION AREA

The purpose of GGNRA is to offer national park experiences to a large and diverse urban population while preserving and interpreting its outstanding natural, historic, scenic, and recreational values.

## OBJECTIVES

Objectives are specific goals that describe what GGNRA intends to accomplish by preparing a plan/EIS. These objectives come from a variety of sources, including NPS management policies, laws, and regulations. The objectives help develop alternatives for evaluation and public review. The internal scoping process yielded the following specific objectives for this planning process:

### Visitor Experience and Safety

- Minimize conflicts related to dog use by providing a variety of safe, high-quality visitor use experiences, including areas where dogs are allowed.

## **Law Enforcement / Compliance with Dog Rules, and Park Operations**

- Maximize dog walker compliance with clear, enforceable parameters in order to improve park operations and use of staff resources in managing dog walking.

## **Park Operations**

- Provide adaptability and flexibility so that information gathered from monitoring can be used in future decision making based on estimated outcomes, including in new park areas.
- Ensure a safe and healthy working environment for park staff.
- Evaluate commercial dog-walking, and if allowed, create and implement an enforceable policy.

## **Natural Resources**

- Protect native wildlife and their habitat (including sensitive species and their habitat, and federally or state listed, unique, or rare species) from detrimental effects of dog use, including harassment or disturbance by dogs.
- Minimize degradation of soil and water resources by dog use.
- Preserve opportunities for future natural resource restoration and enhancement.

## **Cultural Resources**

- Preserve opportunities for future cultural resource restoration and enhancement.
- Protect cultural resources from the detrimental effects of dog use.

## **Education**

- Build community support for the plan to maximize management of dog walking use.
- Increase public understanding of NPS policies.

## **BACKGROUND OF DOG MANAGEMENT AT GGNRA**

The history of dog walking in some areas of GGNRA began prior to the establishment of the park, when dog walking, including off-leash dog walking, occurred informally at sites under varied jurisdictions in San Francisco and Marin counties. Some of the lands designated as part of the new national recreation area had been formerly owned and managed by other public entities, and practices prohibited in national park system units, such as allowing dogs off-leash, had been sanctioned or allowed on those lands. In the first years after GGNRA was established in 1972, those practices continued largely uninterrupted, although park staff recognized and documented issues arising from the practice during the early years of the park's existence.

In 1978, due to public requests from dog walkers, the Commission developed a pet policy for the park. In 1979, they formally recommended the policy, which has since been known as the "1979 Pet Policy" (appendix A), to the park Superintendent. The 1979 Pet Policy, developed with input from park staff, provided general guidance for dog walking and recommended locations for both on-leash dog walking and off-leash or "voice-control" dog walking in lands owned and managed by GGNRA, although this

recommendation did not abide by the federal regulation regarding dog walking in national parks (36 CFR 2.15).

Since the 1990s, the San Francisco Bay Area population and overall use of GGNRA park sites have increased, as have the number of private and commercial dog walkers. At the same time, the number of conflicts between park users with and without dogs began to rise, as did the fear of dogs and dog bites or attacks. The hours devoted by park staff to manage these conflicts, rescue dogs and owners, dispose of dog waste, educate the public on dog walking policies and regulations at each park site, and enforce regulations also increased. In addition, since the establishment of the park, several species with habitat in GGNRA areas used by dog walkers have been listed as threatened, endangered, or special-status species requiring special protection.

Underscoring the increasing conflict over off-leash dog use, dog walking groups filed a lawsuit against the NPS in March 2000 when GGNRA closed part of Fort Funston to the public to provide resource protection and restoration. The federal district court held that the NPS had not adequately obtained public input on the proposed closure as required by 36 CFR 1.5. Upon completion of public involvement efforts, the court agreed that GGNRA had fully complied with required sections of 36 CFR 1.5 and that the need for “prompt protective action” was “genuine.” The park closed the original 12 acres in February 2001, per the GGNRA Compendium. During this period, it was clarified by the Department of Justice, U.S. Attorney, and the Department of the Interior Solicitor Offices that the voice-control policy then in effect at Fort Funston and other locations in the park was contrary to NPS regulations.

In a public meeting in January 2001, the Commission acknowledged that the voice-control policy was contrary to 36 CFR 2.15(a)(2), prohibiting off-leash dogs in national parks, and therefore illegal and unenforceable. In the year following the Commission meeting, park staff attempted to facilitate the transition into compliance with 36 CFR 2.15(a)(2) through educational outreach, new signs, and law enforcement actions including verbal and written warnings. When these measures failed to bring about compliance with the regulation, law enforcement staff issued citations in addition to warnings. During this time, conflicts between dog walkers and park staff increased significantly.

The June 2, 2005, decision by U.S. District Court for Northern California Judge Alsup (*U.S. vs. Barley* 405 F.Supp.2d 1121 (N.D. Cal. 2005)) held that GGNRA cannot enforce the NPS-wide regulation requiring on-leash walking of pets (36 CFR 2.15(a)(2)) in areas that were included in the 1979 Pet Policy until notice and comment rulemaking under section 1.5(b) is completed. In response, GGNRA revised its enforcement position to reflect that court decision, limiting enforcement of the NPS leash regulation to areas that were not included in the 1979 Pet Policy or that were identified as on-leash dog walking areas in the 1979 Pet Policy. In addition to the 2005 court decision, current dog management at GGNRA is guided by the GGNRA Compendium and the special regulation for protection of western snowy plovers (*Charadrius alexandrinus nivosus*).

## **CURRENT DOG MANAGEMENT ISSUES**

At the internal scoping session of NPS staff and NEPA consultants held in January 2005, observations of current issues surrounding the dog walking controversy generally fell into the following categories:

- Expectations and views of dog walkers and other visitors
- Impacts of dogs on cultural and natural resources in the park
- Visitor use and experience
- Employee, visitor, and dog health and safety



## Executive Summary

- Needs of urban area residents
- Public confusion over NPS-wide dog regulation, GGNRA-specific rules, NPS mission and policies
- Public lack of understanding and confusion over regulations for dogs at GGNRA park sites, including why some park areas are completely closed to dogs while other areas allow on-leash dog walking
- Visitor noncompliance with regulations
- Ability of law enforcement staff to enforce rules

## **ALTERNATIVES CONSIDERED**

This plan/EIS considers the alternatives based on their impacts in individual areas, due to the complex nature of GGNRA and the various existing visitor use patterns and resource conditions. The plan/EIS therefore defines dog management actions for 21 specific sites within the park as well as new lands to be acquired by the park. A summary of alternative elements at the 21 sites and new lands is listed below in table ES-1.

**TABLE ES-1. SUMMARY OF ALTERNATIVE ELEMENTS BY COUNTY, NORTH TO SOUTH**

(Shading Represents the Preferred Alternative)

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county.</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive</b>
<b>Marin County Sites</b>					
<b>Stinson Beach</b> (parking lots and picnic areas only)	On-leash	On-leash	On-leash	No dogs	On-leash
<b>Homestead Valley</b>	Entire site on-leash or under voice-control	Homestead Fire Road, and neighborhood connector trails that may be designated in the future: On-leash	Same as alternative B	Homestead Fire Road: On-leash	Same as alternative B
<b>Alta Trail, Orchard Fire Road, and Pacheco Fire Road</b>	On-leash or under voice-control from Marin City to Oakwood Valley	Alta Trail: On-leash to Orchard Fire Road Orchard and Pacheco fire roads: On-leash	Same as alternative B	No dogs	Same as alternative B
<b>Oakwood Valley</b>	Oakwood Valley Fire Road and Oakwood Valley Trail from junction with Fire Road to junction with Alta Avenue: On-leash or under voice-control Oakwood Valley Trail from trailhead to junction with Oakwood Valley Fire Road: On-leash	Oakwood Valley Fire Road and Trail: On-leash to junction of the trail and fire road	Oakwood Valley Fire Road: ROLA to junction with Oakwood Valley Trail. Double gates at both ends and with continuous fencing to protect sensitive habitat Oakwood Valley Trail: On-leash from junction with Fire Road to new gate at Alta Avenue	Oakwood Valley Fire Road: On-leash to junction with Oakwood Valley Trail	Oakwood Valley Fire Road: ROLA to junction with Oakwood Valley Trail. Double gates at both with non-continuous fencing where needed to protect sensitive habitat Oakwood Valley Trail: On-leash from junction with Fire Road to new gate at Alta Avenue
<b>Muir Beach</b>	Beach only: On-leash or under voice-control	Beach, path to beach, boardwalk, Pacific Way Trail (trail to be built as part of Muir Beach Wetland and Creek Restoration Project): On-leash	Same as alternative B	Pacific Way Trail: On-leash	Beach South Of Entrance Path from parking lot: ROLA Pacific Way Trail, boardwalk and path to beach: On-leash

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county.	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive
<b>Rodeo Beach/ South Rodeo Beach</b>	All beach areas: On-leash or under voice-control	All beach areas, access trails and footbridge to beach: On-leash	Rodeo Beach- ROLA Footbridge to beach: On-leash	Rodeo Beach North of Foot Bridge: On-leash Footbridge to Beach: On-leash	Rodeo Beach: <ul style="list-style-type: none"> <li>-ROLA to crest of the beach</li> <li>-On leash from Crest of Beach to Fence along Rodeo Lagoon</li> </ul> Footbridge to Beach: On-leash South Rodeo Beach and Trail to Beach: On-leash
<b>Marin Headlands Trails</b> Trails previously opened to dog walking open to consideration of on-leash or no dogs, including but not limited to: <ul style="list-style-type: none"> <li>Coastal Trail from McCullough Road to Muir Beach</li> <li>Miwok Trail from Tennessee Valley to Highway 1</li> <li>County View Trail off the Miwok Trail</li> <li>Miwok Trail to Wolf Ridge to Hill 88</li> <li>Lagoon Trail</li> <li>South Rodeo Beach Trail</li> </ul>	On-leash or Voice-control: <u>Coastal Trail</u> : Golden Gate Bridge to Hill 88- includes Lagoon Trail <u>Coastal, Wolf Ridge, Miwok Loop</u> <u>Old Bunker Fire Road Loop</u> On-leash only: <u>Coastal Trail</u> : Hill 88 to Muir Beach <u>Battery Smith-Guthrie Fire Road Loop</u> <u>South Rodeo Beach Trail</u> <u>North Miwok Trail</u> : from Tennessee Valley to Highway 1 <u>County View Trail</u>	No dogs	On-leash: <u>Lower Rodeo Valley Trail Corridor</u> : Rodeo Beach parking lot to the intersection of Bunker and McCullough Roads via Lagoon Trail, Miwok Trail and Rodeo Valley Trail <u>Old Bunker Fire Road Loop</u> <u>Battery Smith-Guthrie Fire Road Loop</u>	Same as alternative B	On-leash: <u>Old Bunker Fire Road Loop</u> <u>Battery Smith-Guthrie Fire Road Loop</u> <u>Lower Rodeo Valley trail corridor</u> <u>Coastal Trail Bike Route</u> : including Julian Fire Road 101 to Rodeo Beach parking lot

Table ES-1. Summary of Alternative Elements by County, North to South

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county.</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive</b>
<b>Fort Baker</b>	On-leash in areas where dogs allowed.	Drown Fire Road, Bay Trail (not including Battery Yates loop), Lodge/Conference Center grounds, and Parade Ground: On-leash.	Drown Fire Road, Bay Trail including Battery Yates loop road, Lodge/Conference Center grounds, and Parade Ground: On-leash.	Lodge/Conference Center grounds and Bay Trail (not including Battery Yates loop): On-leash	Same as alternative C
<b>San Francisco County Sites</b>					
<b>Upper and Lower Fort Mason</b>	On-leash.	On leash in all areas where allowed (Great Meadow, Laguna Green, lawns, sidewalks, paved trails parking lots and housing areas)	Inner Great Meadow and Laguna Green: ROLAs with barriers to separate ROLAs from other uses. Lawn below Laguna Street path: On-leash All sidewalks/paved trails/housing areas: On-leash	Great Meadow: On-leash Laguna Green: ROLA Lawn below Laguna Street path: On-leash All sidewalks/paved trails/parking lots/housing areas: On-leash	Great Meadow and Laguna Green: ROLA Lawn below Laguna Street path: On-leash All sidewalks/paved trails/parking lots/housing areas: On-leash
<b>Crissy Field Wildlife Protection Area</b>	Voice-control except for seasonal leash restriction.	No dogs	Same as alternative B	Same as alternative B	On-leash

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county.</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive</b>
<b>Crissy Field</b>	Promenade (East Beach to the Warming Hut): Voice-control	Promenade: On-leash	Promenade: Same as alternative B	Promenade: Same as alternative B	Promenade: Same as alternative B
	Airfield: voice-control	Airfield: On-leash	Airfield – middle section: ROLA between the easternmost and westernmost n/s paths. Reduce or preclude ROLA as dictated by special event. Airfield-eastern and western section: On-leash east of easternmost n/s path and west of westernmost n/s/ path.	Airfield-western section: ROLA west of easternmost n/s path. Reduce or preclude ROLA as dictated by special event. Airfield-eastern section: On-leash east of easternmost north-south path.	Airfield: ROLA. Reduce or preclude ROLA as dictated by special event.
	East and Central Beaches: voice-control	East and Central Beaches: On-leash Paths to Central Beach: On-leash	Central Beach: ROLA Paths to Central Beach: On-leash	No dogs	Central Beach: ROLA East Beach: On-leash. Paths to Central Beach: On-leash
	Trails and grassy areas near East Beach: voice-control	Trails and grassy areas near East Beach, multi-use trail along Mason Street: On-leash	Same as alternative B	Same as alternative B except no dogs in the West Bluff picnic area	Same as alternative B
<b>Fort Point Promenade/Fort Point NHS Trails</b>	Fort Point Promenade, Bay Trail, Andrews Road and Battery East Trail: On-leash	Same as alternative A	Same as alternative A	Bay Trail: On-leash	Same as alternative A

Table ES-1. Summary of Alternative Elements by County, North to South

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county.</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive</b>
<b>Baker Beach and bluffs to Golden Gate Bridge</b>	Beach North of Lobos Creek: voice-control. All trails except Batteries to Bluffs Trail: On-leash	Beach: On-leash All Trails except Batteries to Bluffs Trail and Battery Crosby Trail: On-leash	Same as alternative B	Beach South of North End of North Parking Lot: On-leash Trails To Beach South of North End of North Parking Lot and Multi-Use Coastal Trail: On-leash	Beach South of North End of North Parking Lot: ROLA Beach North of North End of North Parking Lot: On-leash All Trails except Batteries to Bluffs Trail and Battery Crosby Trail: On-leash
<b>Fort Miley</b>	East and West Fort Miley: Voice-control	No dogs	East Fort Miley: On-leash in east side trail corridor	Same as alternative B	East Fort Miley: ROLA in east side trail corridor West Fort Miley: On-leash on road only.
<b>Lands End</b>	Voice control	El Camino Del Mar, Coastal Trail: On-leash	El Camino Del Mar Trail: ROLA Coastal Trail and steps to El Camino Del Mar Trail: On-leash	El Camino Del Mar Trail: On-leash Coastal Trail: On-leash to, and on, connector trail/steps leading to El Camino Del Mar Trail	Same as alternative C
<b>Sutro Heights Park</b>	On-leash	Paths and parapet: On-leash	Same as alternative B	No dogs	Paths, parapet, and lawns: On-leash
<b>Ocean Beach Snowy Plover Protection Area</b> (Stairwell 21 to Sloat Boulevard)	Voice control with seasonal leash restriction	Adjacent trail along Great Highway: On-leash	Same as alternative B	Same as alternative B	On-leash Adjacent trail along Great Highway: On-leash
<b>Ocean Beach</b> • North of Stairwell 21 • South of Sloat Boulevard	North of Stairwell 21: Voice-control South of Sloat Boulevard: Voice-control	North of Stairwell 21: On-leash South of Sloat Boulevard: On-leash	North of Stairwell 21: ROLA South of Sloat Boulevard: No dogs	North of Stairwell 21: On-leash South of Sloat Boulevard: No dogs	North of Stairwell 21: ROLA South of Sloat Boulevard: On-leash

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county.	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive
<b>Fort Funston</b> (excluding areas closed by fence or signs)	Beach: Voice-control,	Beach: On-leash with voluntary seasonal closure at the foot of northernmost bluffs when bank swallows are nesting	South of Beach Access Trail: ROLA North of Beach Access Trail: No dogs	South of Beach Access Trail: On-leash North of Beach Access Trail: No dogs	South of Beach Access Trail: ROLA North of Beach Access Trail: On-leash with voluntary seasonal closure at the foot of northernmost bluffs when bank swallows are nesting
	South of Main Parking Lot, including all trails: Voice-control	South of Main Parking Lot: On-leash on all trails not closed to dogs	South of Main Parking Lot: On-leash on sand ladder and ADA Accessible Trail	South of Main Parking Lot: Same as alternative C	South of Main Parking Lot: Same as alternative C
	North of Main Parking Lot, including all trails: Voice-control except for fenced wildlife/habitat protection area	North of Main Parking Lot: On-leash on all trails not closed to dogs	North of Main Parking Lot: ROLA between (and not including) Chip Trail, Sunset Trail, and parking lot On-leash on all trails except no dogs on Sunset, Battery Davis and Horse Trails	North of Main Parking Lot: ROLA with fencing in disturbed area north of the water fountain All designated trails on-leash except no dogs on northern end of Coastal Trail and Horse Trail.	North of Main Parking Lot: Create north-south corridors for on-leash and ROLA <u>ROLA corridor</u> between Chip Trail, Coastal Trail, and the western boundary of Habitat Corridor and Horse Trail. ROLA includes Chip Trail to junction with Sunset Trail <u>On-leash corridor</u> between cliffs and western edge of Chip Trail. Battery Davis – dogs on-leash on designated trails only. All other trails on-leash except Horse Trail which is closed to dogs.
<b>San Mateo County Sites</b>					
<b>Mori Point</b>	On-leash on all trails	Coastal Trail and beach within GGNRA boundary: On-leash	Coastal Trail, Old Mori Road, and beach within GGNRA boundary: On-leash	No dogs	Coastal Trail, Old Mori Road, Pollywog Path and beach within GGNRA boundary: On-leash

Table ES-1. Summary of Alternative Elements by County, North to South

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county.	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive
<b>Milagra Ridge</b>	On-leash on trails	Fire road, trail to overlook and WWII bunker, and Milagra Battery Trail – (future connector to lower Milagra): On-leash	Same as alternative B	No dogs	Same as alternative B with addition of loop to top of hill.
<b>Sweeney Ridge and Cattle Hill</b> – Combined (adjacent properties that share a trail system)	Sweeney Ridge: On-leash on all trails except the Notch Trail, which is closed to dogs. Cattle Hill: not currently managed by GGNRA	Sweeney Ridge and Cattle Hill: No dogs	Sweeney Ridge: No dogs <u>Cattle Hill:</u> Baquiano Trail from Fassler Avenue to, and including, Farallones View Trail: on leash	Same as alternative B	<u>Sweeney Ridge:</u> Sneath Lane, Sweeney Ridge Trail from Portola Discovery site to Notch Trail, and Mori Ridge Trail: On-leash <u>Cattle Hill</u> Baquiano Trail from Fassler Avenue to, and including, Farallones View Trail: On-leash
<b>Pedro Point Headlands</b>	Not yet part of GGNRA	Coastal Trail: On-leash	Coastal Trail: On-leash	No dogs	Coastal Trail: On-leash
<b>New Lands</b>					
New Lands	Dog walking allowed per 36 CFR 2.15	Dog walking allowed per 36 CFR 2.15. An area may be closed to on-leash dog walking.	Same as B	No dog walking allowed unless opened by GGNRA Compendium. Only on-leash dog walking would be considered. Once open to on-leash, compliance-based management strategies apply. Areas could be opened to dog walking.	New lands begin as 36 CFR 2.15 and new lands with <i>existing</i> off-leash use before acquisition may also be considered for voice and sight control in the future, per criteria established in the plan and rule. An area may be closed to on-leash dog walking. New lands may be opened to voice and sight control.



## DESCRIPTION OF THE ALTERNATIVES

### Alternative A: No Action (Continuation of Existing Management)

The no-action alternative is defined in the NEPA guidelines as no change from current management and current conditions. In the impact analysis of no action, the plan/EIS assumes current management would continue as it is now over the lifetime of the plan, which is approximately 20 years. Under the no-action alternative, current dog walking management and conditions would remain the same, which would include 36 CFR 2.15 (36 CFR 2.15(a)(2) applicable only in areas not part of 1979 Pet Policy—see below), 36 CFR 7.97(d), the Commission’s 1979 Pet Policy (appendix A), and the GGNRA Compendium (NPS 2001b; appendix B). The 1979 Pet Policy allows voice-control dog walking in a number of areas of GGNRA. The 1979 Pet Policy described voice or leash control as a flexible system wherein success is dependent upon the willingness of visitors and local residents to cooperate with GGNRA personnel and the willingness of GGNRA personnel to manage dogs, people, and wildlife situations; to enforce regulations; and to cite visitors (1979 Pet Policy). As a result of the 2005 federal court decision (*U.S. v. Barley*, 405 F.Supp.2d 1121 (N.D. Cal. 2005)), the NPS currently cannot enforce the NPS-wide regulation requiring pets to be on-leash (36 CFR 2.15(a)(2)) or designating an area “no dogs” for park sites that were included in the 1979 Pet Policy and where 36 CFR 1.5 was not followed (allowing for public comment). However, regulations that address disturbance to wildlife, removal of pet waste, and disturbance of other park visitors remain in effect in all areas open to dog walking in GGNRA. The GGNRA Compendium also includes provisions for the closure of park areas to dog and human use for resource or safety reasons. Under the current conditions commercial dog walkers use park lands and no permit is required.

### Alternative B: NPS Leash Regulation

Alternative B realigns GGNRA dog management to the policy governing dogs at the other 391 units of the national park system, as defined by 36 CFR 2.15(a)(2). Areas closed to dogs would be further defined by a special regulation or the GGNRA Compendium. All dog walkers, including commercial dog walkers, would be allowed up to three dogs per person. All dogs would have to be on leash and no permits would be needed for dog walking.

### Alternative C: Emphasis on Multiple Use—Balanced by County

Alternative C emphasizes the diversity of users of GGNRA sites and apportions dog walking geographically across Marin, San Francisco, and San Mateo counties by allowing a variety of options in each county. In Marin and San Francisco counties, there are options for on-leash areas, regulated off-leash areas (ROLAs) (“off leash” is assumed to mean “under voice and sight control” throughout the description of the action alternatives, per the definition outlined in “Guidelines for ROLAs” (NPS 2009c, 1) in appendix E of this plan/EIS), and areas where dogs would be prohibited. In San Mateo, there are options for on-leash areas and areas where dogs would be prohibited. GGNRA is used by visitors for a multitude of purposes and alternative C would minimize potential conflicts, reduce potential health and safety issues, and protect natural and cultural resources, while providing dog walkers with recreational options. Alternative C also includes the consensus agreements resulting from the Negotiated Rulemaking Committee meetings. All dog walkers, including commercial dog walkers, would be allowed to walk one to three dogs without a permit. Any dog walker, commercial or private, would be able to obtain a permit to walk four to six dogs, whether on leash or in a ROLA, as allowed by the regulation. Permits could restrict dog walking use by time and area.

### **Alternative D: Most Protective Based on Resource Protection/Visitor Safety**

Alternative D would provide the highest overall level of protection for natural and cultural resources and the highest overall level of visitor safety. Dog management practices listed in alternative D would allow options for dogs to be exercised on leash and in ROLAs but would be more protective in areas where natural resources (plant and wildlife species) and cultural resources are located. The more protective dog management elements offered in alternative D would also provide a stronger measure of visitor protection for both dog walkers and other park visitors by reducing circumstances that would cause conflicts among users and interactions among dogs, thereby minimizing direct and indirect effects of dogs on visitors. Dog walkers would be allowed to walk one to three dogs without a permit. No commercial dog walking would be allowed under this alternative.

### **Alternative E: Most Dog Walking Access/Most Management Intensive**

Alternative E would provide the greatest level of access for dog walkers throughout GGNRA. Alternative E would also require the most intensive long-term management to ensure that greater access for dog walkers did not impact natural and cultural resources, visitor safety, and visitor experience. Alternative E would also include the consensus agreements resulting from the Negotiated Rulemaking Committee meetings. All dog walkers, including commercial dog walkers, would be allowed to walk one to three dogs without a permit. Any dog walker, commercial or private, could obtain a permit to walk four to six dogs. In a ROLA, permit holders could have up to six dogs under voice and sight control. Permits could restrict dog walking use by time and area.

### **COMMERCIAL DOG WALKING**

Commercial dog walking is allowed under alternatives B, C, and E. Under alternative B, commercial dog walking would be regulated under the same guidelines and regulations that apply to recreational dog walkers, including the three-dog maximum. Because alternative B does not allow for dog walking under voice-control, commercial dog walking would be on-leash only. Under alternatives C and E, commercial dog walking would be allowed under the same guidelines and regulations that apply to recreational dog walkers, including the three-dog minimum. However, under these two alternatives, both commercial and recreational dog walkers could apply for a permit to walk up to six dogs. In a ROLA, permit holders may have up to six dogs under voice and sight control. Permits would restrict use by time and area. Permits would be issued for the following sites: Alta Trail, Rodeo Beach, Fort Baker, Fort Mason, Crissy Field, Baker Beach, and Fort Funston. Alternative D would not allow commercial dog walking, due to the emphasis on resource protection and visitor safety. The guidelines for professional dog walkers on GGNRA lands is presented in chapter 2.

### **COMPLIANCE-BASED MANAGEMENT STRATEGY**

In order to ensure protection of resources from dog walking activities, the dog walking regulations defined in action alternatives B, C, D, and E would be regularly enforced by park law enforcement, and compliance monitored by park staff. A compliance-based management strategy would be implemented to address noncompliance and would apply to all action alternatives. Noncompliance would include dog walking within restricted areas, dog walking under voice and sight control in designated on-leash dog walking areas, and dog walking under voice and sight control outside of established ROLAs. If noncompliance occurs, impacts to resources have the potential to increase and become short-term minor to major adverse. To prevent these impacts from increasing or occurring outside of the designated dog walking areas the NPS would regularly monitor all sites. When noncompliance is observed in an area, park staff would focus on enforcing the regulations, educating dog walkers, and establishing buffer zones, time and use restrictions, and SUP restrictions. If compliance falls below 75 percent (measured as the

percentage of total dogs / dog walkers observed during the previous 12 months not in compliance with the regulations) the area's management would be changed to the next more restrictive level of dog management. In this case, ROLAs would be changed to on-leash dog walking areas and on-leash dog walking areas would be changed to no dog walking areas. This change would be permanent. Impacts from noncompliance could reach short-term minor to major adverse, but the compliance-based management strategy is designed to return impacts to a level that assumes compliance, as described in the overall impacts analysis, or provide beneficial impacts where dog walking is reduced or eliminated.

## **PREFERRED ALTERNATIVE**

A preferred alternative was selected for each of the 21 sites identified in this plan/EIS (the preferred alternative for each site is identified on table ES-1). Due to the high number of sites and alternatives, a modified Choosing by Advantages process was used for choosing the preferred alternative for each site. For each site, team members from GGNRA selected the alternative that best met the objectives of the plan (defined in chapter 1). Six main objectives were used to identify the preferred alternative. Each objective included more than one subtopic for the resource. Not all of the subtopics for each objective were compatible, requiring team members to balance competing needs. After evaluating each alternative against each objective, a preferred alternative was selected that best met the objectives for the dog management plan.

## **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The environmentally preferred alternative was selected for each of the 21 sites including new lands during the Choosing by Advantages meeting. The rationale to support the decision for the selection of the environmentally preferred alternative for each site is presented in detail in chapter 2. Alternative D which is the most protective alternative based on resource protection and visitor safety was selected as the environmentally preferred alternative for all sites (including new lands) except for Upper and Lower Fort Mason where alternative B (NPS leash regulation) was chosen as the environmentally preferable alternative. In the case of Upper and Lower Fort Mason alternative B provides the maximum protection of natural and cultural resources at the site.

## **ENVIRONMENTAL CONSEQUENCES**

The summary of environmental consequences considers the actions being proposed and the cumulative impacts to resources from occurrences inside and outside the park. The potential environmental consequences of the actions are addressed for soils, water quality, vegetation, wildlife, special-status species, and cultural resources; other topics considered in detail include visitor use and experience, park operations, and human health and safety. A brief summary of the environmental consequences for each site is presented below and is discussed in detail in chapter 4.

The environmental consequences analysis for the action alternatives was based on compliance. If noncompliance occurs under the action alternatives, it may result in impacts that could reach short-term minor to major adverse, however the compliance-based management strategy which is discussed in detail in chapter 2 is designed to return impacts to a level that assumes compliance or provide beneficial impacts where dog walking is reduced or eliminated.

## **Marin County**

### **Stinson Beach**

Impacts to physical resources (soils and geology, water quality) at Stinson Beach would generally range from negligible to long-term, minor adverse for all alternatives, including the preferred alternative. However, alternative D would prohibit dogs at Stinson beach, resulting in no impact on physical resources at the site. Impacts from the alternatives to natural resources (vegetation, wildlife, and species of special status) would also be largely no impact, a result of the fact that dogs would be prohibited on the trails, beach, and creek under all action alternatives including the preferred alternative, and prohibited from the site entirely under alternative D. Impacts for visitors who enjoy having dogs at the park would range from negligible to long-term, minor, adverse, while impacts for visitors who did not prefer dogs at the park would be beneficial under all action alternatives including the preferred alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts to health and safety would be long-term, moderate, and adverse under the no action alternative and long-term, minor, adverse under all action alternatives (including the preferred alternative) except for D, which would have no impact as dogs would be prohibited at the site.

### **Homestead Valley**

Impacts to soils at Homestead Valley are negligible for all action alternatives including the preferred alternative, and long-term, minor, adverse for the No-Action alternative. Impacts to natural resources under the action alternatives including the preferred alternative range from negligible for vegetation and the Northern Spotted Owl to negligible to long-term, minor adverse for wildlife. Under the no action alternative, impacts to wildlife would be long-term, minor to moderate, and adverse. Impacts to visitors who enjoy having dogs at the park would be long-term, minor, and adverse under the action alternatives including the preferred alternative, while the impacts to visitors who do not enjoy dogs at the park would be beneficial under the action alternatives including the preferred alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative, and health and safety impacts would be negligible under all alternatives including the preferred alternative.

### **Alta Trail, Orchard Fire Road, and Pacheco Fire Road**

Impacts to soils under the No-Action alternative would be long-term, moderate, and adverse for soils and the action alternatives including the preferred alternative would be long-term, minor, and adverse, with the exception of alternative D, which would have no dogs at the site, resulting in no impact. Impacts to natural resources from the action alternatives including the preferred alternative on vegetation would be negligible with the exception of alternative D, which would have no impact as dogs would not be allowed at the site. The No-Action alternative would result in long-term, minor to moderate, and adverse impacts for wildlife. Impacts to visitors who prefer dogs at the park would be long-term, minor, and adverse for all action alternatives including the preferred alternative except alternative D, which would have a long-term, moderate, and adverse impact on this group of visitors. Visitors who do not prefer dogs at the park would experience beneficial impacts under the action alternatives including the preferred alternative, and long-term, moderate, adverse impacts under the No-Action alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives. The action alternatives including the preferred alternative would generally have a negligible to long-term, minor, adverse impact on health and safety, but alternative D would have no impact.

## **Oakwood Valley**

Impacts to physical resources under the action alternatives including the preferred alternative would range from negligible to long-term, minor, and adverse, but the no action alternative for soils would result in long-term, moderate, adverse impacts. Impacts to the natural resources generally would range from negligible to long-term, minor, and adverse. The no action alternative would result in long-term, minor to moderate and adverse impacts to vegetation, wildlife and the Mission Blue Butterfly. For some of the natural and physical resources, alternatives that have a ROLA would have impacts that were increased from negligible to long-term, minor, and adverse. Alternatives C, E, and the preferred alternative have ROLAs. Impacts to visitors who prefer having dogs at the park would be negligible under alternatives with ROLAs, and long-term, minor, and adverse for alternatives that do not have ROLAs. Visitors who do not prefer dogs at the park would have beneficial impacts from all action alternatives. Impacts to park operations under all the action alternatives including the preferred alternative would be short-term, moderate, and adverse, but alternatives with ROLAs would also have long-term, minor, and adverse impacts. Health and safety would be negligibly impacted by all alternatives including the preferred alternative.

## **Muir Beach**

Impacts to soils would range from negligible to long-term, minor, and adverse for the action alternatives including the preferred alternative, and would be long-term, moderate, and adverse under the no action alternative. Impacts to water quality under all alternatives would range from negligible to long-term, minor and adverse, with the exception of alternative D and the preferred alternative, which would have no impact. Vegetation and wildlife would have negligible to long-term, minor, and adverse impacts under the action alternatives, but alternative D and the preferred alternative would have no impacts on these communities. Impacts under the no action alternative would range from negligible to long-term, minor, and adverse, to long-term, moderate and adverse for natural resources, while impacts from the action alternatives generally would range from negligible to long-term, minor, and adverse. Impacts on cultural resources would be negligible to long-term, minor, and adverse. Visitors who preferred having dogs at the site would experience long-term, minor, and adverse impacts under all action alternatives but alternative D and the preferred alternative, which would have long-term, moderate, and adverse impacts. Impacts to visitors who did not prefer dogs would be beneficial under all action alternatives including the preferred alternative, and long-term, moderate, and adverse under the no action alternative. Impacts to park operations would be short-term, moderate, and adverse, but would also include long-term, minor, and adverse impacts in alternative E due to the presence of a ROLA. Impacts to health and safety would range from negligible to long-term, minor, and adverse.

## **Rodeo Beach/South Rodeo Beach**

Impacts to physical resources would range from negligible to long-term, minor, and adverse under most alternatives including the preferred alternative, but would be long-term, moderate, adverse to soils under the no action alternative and long-term, minor to moderate, adverse to soils under alternative E. Impacts to natural resources would range from negligible to long-term, minor, and adverse under alternatives B and D. The no action alternative would have impacts that ranged from negligible to long-term, moderate, and adverse on natural resources, while alternatives C, E, and the alternative would cause impacts ranging from long-term, minor, and adverse to long-term, moderate, and adverse impacts on some coastal community wildlife and vegetation. Visitors who prefer dogs at the site would experience beneficial impacts under alternatives C, E, and the preferred alternative, long-term, minor, and adverse impacts under alternative B, and long-term, moderate, adverse impacts under alternative D. Visitors who do not prefer dogs would experience beneficial impacts under alternatives B and D, and long-term, minor, and adverse impacts under alternatives C, E, and the preferred alternative. Impacts to park operations would

be short-term, minor, and adverse under all action alternatives, but alternatives C and E would also result in long-term, minor, and adverse impacts due to the ROLAs. Impacts on health and safety would range from negligible to long-term, minor, and adverse for all alternatives.

### **Marin Headlands Trails**

Generally, impacts to physical and natural resources range from negligible to long-term, minor to moderate, and adverse under the no action alternative, and negligible under alternatives C, E, and the preferred alternative. Long-term, minor to long-term, moderate, and adverse impacts under these alternatives would occur for coastal scrub, chaparral, and grassland wildlife and riparian forest and stream corridor wildlife. Alternatives B and D would result in no impacts to physical or natural resources. Cultural resource impacts would range from negligible to long-term, minor, and adverse localized impacts under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who enjoy having dogs at the park would experience long-term, minor, and adverse impacts under alternatives C, E, and the preferred alternative, and long-term, moderate, and adverse impacts under alternatives B and D. Visitors who do not prefer having dogs at the site would experience beneficial impacts under all alternatives, including the preferred alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Alternatives B and D would have no impact on health and safety, while alternatives C, E, and the preferred alternative would have long-term, minor, and adverse impacts. Impacts to health and safety would be long-term, moderate, and adverse under the no action alternative.

### **Fort Baker**

Impacts to physical resources at Fort Baker would be negligible for all action alternatives including the preferred alternative, and long-term, minor, and adverse for the no action alternative. Impacts to natural resources would range from negligible to long-term, minor, and adverse for all alternatives including the preferred alternative, though there would be a long-term, minor, to moderate and adverse impact from the no action alternative to coastal scrub, chaparral, and grassland wildlife. No impacts would occur to the Mission Blue Butterfly under alternative D. Cultural resource impacts would range from negligible to long-term, minor, and adverse localized impacts under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who prefer dogs at the site would experience negligible impacts under all action alternatives including the preferred alternative, with the exception of alternative D, which would result in long-term, minor, and adverse impacts. Visitors who do not enjoy dogs would have negligible impacts under all action alternatives including the preferred alternative except D, which would result in beneficial impacts. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. All alternatives would result in negligible impacts to health and safety.

### **San Francisco County**

#### **Upper and Lower Fort Mason**

Impacts to soils would range from negligible to long-term, minor, and adverse under the action alternatives including the preferred alternative, while the no action alternative would result in long-term, moderate, and adverse impacts. Impacts to water quality and natural resources were not applicable at Upper and Lower Fort Mason. Impacts to cultural resources would range from negligible to long-term, minor, and adverse localized under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who enjoy dogs would experience negligible impacts under alternative B and the preferred alternative, but beneficial

impacts under all other action alternatives. Visitors who do not enjoy dogs would experience long-term, minor, and adverse impacts under alternatives B, D, and the preferred alternative, and long-term, moderate, and adverse impacts under alternatives C, and E. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative, and alternatives C, D, and E would have long-term, minor, and adverse impacts due to the presence of ROLAs. Impacts to health and safety would be long-term, minor, adverse for alternative B and the preferred alternative, long-term, minor to moderate and adverse for alternatives C, D, and E, and long-term, moderate and adverse for the no action alternative.

### **Crissy Field (includes Wildlife Protection Area)**

Impacts to physical resources would range from negligible to long-term, minor, and adverse for alternatives B and D, but range from negligible to long-term, minor to moderate, and adverse for alternatives C, E, and the preferred alternative. Impacts from the no action alternative would be long-term, minor to moderate, and adverse. Impacts to natural resources would generally be negligible to long-term, minor, and adverse, but there would be long-term, moderate adverse impacts to coastal community vegetation and the Western Snowy Plover from the no action alternative. Long-term, minor, to moderate impacts would occur to coastal community wildlife under the no action alternative and alternative E. The California Seablite would experience no impacts under all action alternatives including the preferred alternative, and long-term, minor, and adverse impacts under the no action alternative. Impacts to cultural resources would range from negligible to long-term, minor, and adverse localized under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who enjoy having dogs at the site would experience long-term, minor to moderate, adverse impacts under alternatives B, C, D, and the preferred alternative, and long-term, minor, and adverse impacts under alternative E. Visitors who do not enjoy dogs would have beneficial impacts under all action alternatives including the preferred alternative, but long-term, minor, and adverse impacts under the no action alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative, and alternatives C, D, E and the preferred alternative would have long-term, minor, and adverse impacts due to the presence of ROLAs. Health and safety impacts under the action alternatives would range from no impact to long-term, minor to moderate, and adverse depending on the area within the site. Impacts from the no action alternative would be long-term, moderate, and adverse.

### **Fort Point Promenade/Fort Point NHS Trails**

Impacts to soils would be negligible for all action alternatives including the preferred alternative, and long-term, minor, and adverse for the no action alternative. Water quality and natural resources were not applicable at Fort Point. Impacts to cultural resources would range from negligible to long-term, minor, and adverse localized under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who prefer having dogs at the park would experience negligible impacts under alternatives B, C, E, and the preferred alternative, and long-term, minor, and adverse impacts under alternative D. Visitors who do not prefer having dogs at the site would experience negligible to long-term, minor, and adverse impacts under alternatives B, C, E, and the preferred alternative. These visitors would experience beneficial impacts under alternative D. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts to health and safety would be long-term, minor, and adverse under the action alternatives including the preferred alternative, and long-term, minor to moderate, and adverse under the no action alternative.

### **Baker Beach and Bluffs to Golden Gate Bridge**

Impacts to physical resources would range from negligible to long-term, minor, and adverse for all action alternatives including the preferred alternative, and long-term, minor to moderate, and adverse for the no action alternative. Impacts to natural resources would range from negligible to long-term, minor, and adverse for the action alternatives including the preferred alternative, but long-term, minor to moderate, adverse impacts would occur to coastal community wildlife under alternative E. Impacts from the no action alternative to natural resources would range from negligible to long-term, moderate, and adverse, depending on the resource. Impacts to cultural resources would range from negligible to long-term, minor, and adverse localized under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who enjoy having dogs at the park would experience long-term, minor, adverse impacts under alternatives B and C, long-term, moderate, and adverse impacts under alternative D and the preferred alternative, and negligible impacts under alternative E. Visitors who do not prefer dogs would have beneficial impacts under all action alternatives including the preferred alternative, with the exception of alternative E, which would have long-term, minor, and adverse impacts. The no action alternative would result in long-term, minor to moderate and adverse impacts on these visitors. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative, and alternative E would also have long-term, minor, adverse impacts due to the presence of a ROLA. Impacts on health and safety would be negligible for alternatives B, C, D, and the preferred alternative, long-term, minor, adverse for alternative E, and long-term, minor to moderate, and adverse for the no action alternative.

### **Fort Miley**

Impacts to soils would be long-term, moderate, and adverse under the no action alternative, negligible under alternative C and the preferred alternative, and long-term, minor, and adverse under alternative E. Alternatives B and D would have no impact on soils. Impacts to natural resources would range from negligible to long-term, minor, and adverse for all alternatives including the preferred alternative, but alternatives B and D would have no impact on wildlife in other coniferous communities. Impacts to cultural resources would range from negligible to long-term, minor, and adverse localized under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who prefer having dogs at the park would experience long-term, minor, and adverse impacts under the action alternatives including the preferred alternative, while visitors who do not prefer dogs at the park would experience beneficial impacts under these alternatives. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative, and alternative E would also have long-term, minor, adverse impacts due to the presence of a ROLA. Impacts on health and safety would be negligible for the no action alternative and alternatives C, E, and the preferred alternative. Alternatives B and D would have no impact on health and safety.

### **Lands End**

Impacts to soils under the action alternatives including the preferred alternative would range from negligible to long-term, minor, and adverse, and impacts from the no action alternative would be long-term, moderate, and adverse. Impacts on natural resources from the action alternatives including the preferred alternative would range from negligible to long-term, minor, and adverse. The no action alternative would have impacts that ranged from negligible to long-term, minor to moderate, and adverse on natural resources. Impacts on cultural resource would be negligible for all action alternatives including the preferred alternative, and negligible to long-term, minor, and adverse localized impacts for the no action alternative. Visitors who enjoy dogs at the park would experience negligible to long-term, minor, and adverse impacts under the action alternatives including the preferred alternative, while visitors who



do not enjoy dogs at the site would experience beneficial impacts under these alternatives. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative, and alternatives C and E would also have long-term, minor, adverse impacts due to the presence of a ROLA. Impacts to health and safety would range from negligible to long-term, minor, and adverse for the action alternatives including the preferred alternative, and would be long-term, minor to moderate, and adverse for the no action alternative.

### **Sutro Heights Park**

Impacts to soils would be negligible for alternatives B, C, E, and the preferred alternative, and long-term, moderate, and adverse for the no action alternative. Alternative D would have no impact on soils. Water quality, natural resources, and cultural resources were not applicable at Sutro Heights Park. Impacts on visitors who enjoy having dogs at the park would be long-term, minor, and adverse for alternatives B, C, and D, and negligible for alternative E and the preferred alternative. Visitors who do not enjoy dogs would experience beneficial impacts under alternatives B, C, and D, and negligible to long-term, minor, and adverse impacts under alternative E and the preferred alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts on health and safety would be negligible for all alternatives including the preferred alternative with the exception of alternative D, which would have no impact on health and safety.

### **Ocean Beach (Includes Snowy Plover Protection Area)**

Impacts on physical resources would range from negligible to long-term, minor and adverse under the action alternatives including the preferred alternative, and would be long-term, moderate, and adverse for soils under the no action alternative. Impacts to coastal community vegetation would range from negligible to long-term, minor, and adverse. However, impacts to the wildlife in the Ocean beach SPPA would be long-term, moderate to major, and adverse under the no action alternative, and long-term, minor, and adverse under alternative E. Alternatives B, C, D and the preferred alternative would have no impact coastal community wildlife in the SPPA. Coastal community wildlife outside the SPPA would experience long-term, moderate impacts under the no action alternative, long-term, minor to moderate impacts under alternatives C, E, and the preferred alternative, and long-term, minor, adverse impacts under alternatives B and D. Inside the SPPA, impacts to the Western Snowy would be long-term, moderate, and adverse under the no action alternative, long-term, minor, adverse under alternative E, with alternatives B, C, D, and the preferred alternative having no impact on this species of special status. Outside the SPPA, impacts on the Western Snowy Plover would range from negligible to long-term, minor, and adverse for the action alternatives including the preferred alternative, and would be long-term, minor to moderate, and adverse under the no action alternative. Impacts to visitors who enjoy having dogs at the park would be long-term, minor to moderate and adverse under alternatives B, C, D, and the preferred alternative, and long-term, minor, adverse under alternative E. Impacts to visitors who do not enjoy dogs would be beneficial under the action alternatives including the preferred alternative, and long-term, moderate, and adverse under the no action alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts to health and safety would be long-term, minor to moderate, and adverse under alternatives C, E, and the preferred alternative, long-term, minor, and adverse under alternatives B and D, and long-term, moderate, and adverse under the no action alternative.

### **Fort Funston**

Impacts to soils would be long-term, major, and adverse under the no action alternative, long-term, moderate, adverse under alternative E, and long-term, minor to moderate and adverse under alternatives C, D, and the preferred alternative. Alternative B would have long-term, minor, adverse impacts on soils.

Impacts to water quality ranged from negligible to long-term, minor, and adverse. Impacts to coastal community vegetation would be the same as those to soils, with the exception of alternative B, which would only have negligible impacts. Coastal community wildlife would experience long-term, moderate to major, adverse impacts from the no action alternative, long-term, moderate, and adverse impacts from alternatives C, E, and the preferred alternative, and long-term, minor, adverse impacts from alternatives B and D. Impacts on the Bank Swallow would be long-term, minor to moderate and adverse under the no action alternative, negligible under alternatives B and E. Alternatives C, D, and the preferred alternative would have no impact on the Bank Swallow. Impacts to the San Francisco lessingia would be long-term, minor, and adverse for alternatives C, D, E, and the preferred alternative, negligible for alternative B, and long-term, moderate, and adverse under the no action alternative. Impacts to cultural resources would range from negligible to long-term, minor, and adverse localized under all alternatives including the preferred alternative, with the action alternatives including the preferred alternative also having beneficial impacts. Visitors who enjoy having dogs at the park would experience long-term, moderate to major, adverse impacts under alternative B, long-term, moderate, and adverse impacts under alternative D, long-term, minor, adverse impacts under alternative C and the preferred alternative, and negligible impacts under alternative D. Impacts to visitors who do not prefer dogs would be long-term, moderate to major, and adverse for the no action alternative, long-term, moderate, and adverse under alternative E, long-term, minor to moderate, and adverse for alternative C and the preferred alternative, long-term, minor, adverse for alternative D, and negligible to long-term, minor, and adverse under alternative B. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts to health and safety would be long-term, moderate, and adverse for the no action alternative, long-term, minor to moderate, adverse for alternatives C, D, E, and the preferred alternative, and long-term, minor, and adverse for alternative B.

## **San Mateo County**

### **Mori Point**

Impacts to physical resources would be negligible for all action alternatives including the preferred alternative, with the exception of alternative D, which would have no impact. Impacts to natural resources would generally range from negligible to long-term, minor, and adverse, with alternative D having no impact. The no action alternative would have a long-term, minor to moderate, adverse impact on coastal scrub, chaparral, and grassland wildlife, and a negligible to long-term, moderate, and adverse impact on the California Red-legged Frog. Impacts to visitors who prefer dogs at the park would be long-term, minor, and adverse for alternatives B, C, and the preferred alternative, negligible for alternative E, and long-term, moderate and adverse for alternative D. Visitors who do not prefer dogs would experience beneficial impacts under the action alternatives including the preferred alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts to health and safety would be negligible for all alternatives except alternative D, which would have no impact.

### **Milagra Ridge**

Impacts on soils would be negligible for the action alternatives including the preferred alternative, with the exception of alternative D, which would have no impact. Impacts to natural resources would range from negligible to long-term, minor, and adverse for the action alternatives including the preferred alternative, with alternative D having no impact. The no action alternative would have a long-term, minor to moderate and adverse impact on coastal scrub, chaparral, and grassland wildlife. Impacts on visitors who enjoy dogs would be long-term, minor, and adverse for alternatives B, C, and D, and the preferred alternative, and negligible for alternative E. Visitors who do not enjoy dogs at the park would experience beneficial impacts under all action alternatives, including the preferred alternative. Impacts to park

operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts on health and safety would have no impact under alternative D, and would be negligible for all the other alternatives, including the preferred alternative.

### **Sweeney Ridge/Cattle Hill**

Impacts to soils, vegetation, and the California Red-legged Frog would be negligible for alternative E and for Cattle Hill under alternative C and the preferred alternative. There would be no impact on both sites under alternatives B and D, or for Sweeney Ridge under alternative C and the preferred alternative. Impacts to wildlife would be long-term, minor to moderate, and adverse under the no action alternative, and long-term, minor, and adverse at alternative E. Impacts would be long-term, minor, and adverse at Cattle Hill for alternative C and the preferred alternative. There would be no impact under alternatives B and D, or for Sweeney Ridge under alternative C and the preferred alternative. Impacts to the Mission Blue Butterfly would be negligible at Sweeney Ridge under alternative E, and long-term, minor, and adverse at Sweeney Ridge under the no action alternative. There would be no impacts at Cattle Hill under these two alternatives, and there would be no impacts at either site under alternatives B, C, D, and the preferred alternative. No impacts would occur to the San Francisco Garter Snake under alternatives B or D, or at Sweeney Ridge under alternative C and the preferred alternative. Impacts at Cattle Hill under alternative C and the preferred alternative would be negligible. Impacts under alternative E would be negligible for both sites. Impacts on visitors who enjoy dogs would be long-term, minor to moderate, and adverse for alternatives B and D, long-term, minor, and adverse for alternatives C and the preferred alternative, and negligible for alternative E. Visitors who do not enjoy dogs would experience beneficial impacts under alternatives B, C, and D, as well as the preferred alternative, and long-term, minor, and adverse impacts under alternative E. Impacts on these visitors under the no action alternative would be long-term, minor to moderate, and adverse. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts on health and safety would be negligible at both sites for the no action alternative and alternative E, and negligible for Cattle Hill under alternative C and the preferred alternative. No impacts would occur under alternatives B and D, or under alternative C and the preferred alternative for Sweeney Ridge.

### **Pedro Point Headlands**

Impacts on soils, and all natural resources except wildlife, would be negligible for all action alternatives including the preferred alternative. However, alternative D would have no impact due to the restriction of dogs from the site. Wildlife would have long-term, minor to moderate and adverse impacts from the no action alternative, negligible to long-term, minor and adverse impacts from alternatives B, C, E, and the preferred alternative, and no impacts under alternative D. Visitors who enjoy having dogs at the site would experience negligible impacts under alternatives B, C, E, and the preferred alternative, and long-term, minor, and adverse impacts under alternative D. Visitors who do not enjoy dogs would experience beneficial impacts under all the action alternatives including the preferred alternative. Impacts to park operations would be short-term, moderate, and adverse for all action alternatives including the preferred alternative. Impacts to health and safety would be negligible under alternatives B, C, E, and the preferred alternative. Alternative D would have no impact on health and safety, and the no action alternative would have negligible to long-term, minor, and adverse impacts.

### **New Lands**

Sites that prohibit dogs would have no impacts for any physical, natural, or cultural resources. Impacts to physical resources at sites that allow dogs would range from negligible to long-term, minor, and adverse for the no action alternative, the preferred alternative, and alternatives B, C, and D. Alternative E would have negligible to long-term, moderate, and adverse impacts on soils, and a negligible to long-term,

minor, adverse impact on water quality. Impacts to most vegetation communities would be negligible to long-term, minor, and adverse for the no action alternative, the preferred alternative, and alternatives B, C, and D. Alternative E would have negligible to long-term, moderate, and adverse impacts. The native hardwood forest/Douglas fir-coast redwood community is an exception; the no action alternative and alternative E would have negligible to long-term, minor, adverse impacts, while alternatives B, C, D, and the preferred alternative would have negligible impacts. Impacts to coastal scrub, chaparral, and grassland wildlife and wetland and aquatic wildlife would be negligible to long-term, minor, and adverse for the no action alternative, the preferred alternative, and alternatives B, C, and D. Alternative E would have negligible to long-term, moderate, and adverse impacts under coastal scrub, chaparral, and grassland wildlife, and negligible to long-term, minor, and adverse impacts to wetland and aquatic wildlife. Coastal community wildlife would be the same as the coastal scrub, chaparral, and grassland wildlife community, with the exception that there would be negligible to long-term, moderate, adverse impacts under the no action alternative. Impacts to native hardwood forest/Douglas fir-coast redwood wildlife, riparian wildlife, and coniferous wildlife would be negligible to long-term, minor, and adverse under the no action alternative and alternative E. Impacts under alternatives B, C, D and the preferred alternative would be negligible. Impacts to species of special status would be negligible to long-term, minor, and adverse under all the alternatives.

Impacts to cultural resources at new lands would be negligible to possibly long-term, minor, and adverse for all alternatives, unless dogs are prohibited from the site, which would provide beneficial impacts. Impacts on visitors who enjoy having dogs at the park would be negligible for all alternatives with the exception of alternative E, which would have beneficial impacts. Visitors who do not enjoy having dogs at the park would experience negligible to long-term, minor, and adverse impacts under the no action alternative and alternative E, negligible impacts under alternatives B and C, and negligible to beneficial impacts under alternative D and the preferred alternative. Impacts on park operations would range from negligible to long-term, minor, and adverse for the no action alternative, alternative B, C, and D, and the preferred alternative. Alternative E would have short to long-term, minor to moderate adverse impacts. Impacts on health and safety would be negligible for all alternatives, including the preferred alternative. Under alternative E, long-term, minor, and adverse impacts would occur in the ROLA.



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## Acronyms

ACHP	Advisory Council on Historic Preservation
ADA	<i>Americans with Disabilities Act</i>
ANPR	Advance Notice of Proposed Rulemaking
APE	area of potential effects
CBA	Choosing by Advantages
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH	critical habitat
CNPS	California Native Plant Society
CZMA	<i>Coastal Zone Management Act</i>
DFG	Department of Fish and Game
DO	Director's Order
DOI	U.S. Department of the Interior
EA	environmental assessment
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
EQD	Environmental Quality Division
ESA	<i>Endangered Species Act</i>
ESU	evolutionarily significant unit
FAQ	frequently asked questions
FDA	U.S. Food and Drug Administration
FE	federally endangered
FMP	<i>Fire Management Plan</i>
FT	federally threatened
FY	fiscal year
GDP	gross domestic product
GFNMS	Gulf of the Farallones National Marine Sanctuary
GGNRA	Golden Gate National Recreation Area
GMP	general management plan
GMPA	General Management Plan Amendment
LE	law enforcement
LOD	limit of disturbance
MSA	metropolitan statistical area
NAU	Northern Arizona University
NEPA	<i>National Environmental Policy Act of 1969</i>
NHL	National Historic Landmark
NHP	National Historic Park
NHPA	<i>National Historic Preservation Act</i>
NHS	National Historic Site
NOAA	National Oceanic and Atmospheric Association
NOI	notice of intent

## Acronyms

NPS	National Park Service
NR	natural resources
NRDA	Natural Resource Damage Assessment
NRHP	National Register of Historic Places
ONPS	operation of national park system
OSMP	Open Space and Mountain Parks
OWCN	Oiled Wildlife Care Network
PEPC	Planning, Environment, and Public Comment
PI	prediction interval
PPV	persons per vehicle
PRBO	Point Reyes Bird Observatory
ROLA	regulated off -leash walking area
SAFR	San Francisco Maritime National Historic Park
SBCWD	Stinson Beach County Water District
SE	state endangered
SFPUC	San Francisco Public Utilities Commission
SFVAMC	San Francisco VA Medical Center
SHPO	State Historic Preservation Office (Officer)
SOD	sudden oak death
SPPA	Snowy Plover Protection Area
SR	state rare
ST	state threatened
SUP	special use permit
T&E	threatened and endangered
USACE	U.S. Army Corps of Engineers
USCGS	U.S. Coast Guard Station
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USSR	Union of Soviet Socialist Republics
VA	Veteran's Administration
WPA	Wildlife Protection Area
WW	World War
YMCA	Young Men's Christian Association



**Purpose and  
Need for Action**



# CHAPTER 1: PURPOSE AND NEED FOR ACTION

## INTRODUCTION

This “Purpose and Need for Action” chapter describes the reasons why the National Park Service (NPS) is taking action at this time and provides background information on the Golden Gate National Recreation Area (GGNRA) Draft Dog Management Plan / Environmental Impact Statement (plan/EIS).

The Presidio Trust is a cooperating agency for this plan/EIS. The NPS granted the Presidio Trust cooperating agency status with regard to those lands addressed by the plan/EIS adjacent to the Presidio, Area B.

## PURPOSE AND NEED FOR ACTION

The *National Environmental Policy Act of 1969* (NEPA) requires an EIS to briefly provide a statement of purpose and need for the action the agency is proposing. The purpose states the goal the park must achieve by taking action and the need for action summarizes why action is required. An internal scoping session with park staff and NEPA consultants was held, as required by the NEPA and NPS *Director’s Order #12: Conservation Planning, Impact Analysis, and Decision Making* (NPS 2001a, 1) to define the purpose and need for taking action, and discuss planning objectives and conceptual approaches to alternatives (NPS 2006a, 1). At that internal scoping session, the following statements of purpose and need were developed.

The purpose of GGNRA is to offer national park experiences to a large and diverse urban population while preserving and interpreting its outstanding natural, historic, scenic, and recreational values.

### Purpose for Taking Action

The purpose of the plan/EIS is to provide a clear, enforceable policy to determine the manner and extent of dog use in appropriate areas of the park. This plan/EIS would promote the following objectives:

- Preserve and protect natural and cultural resources and natural processes
- Provide a variety of visitor experiences
- Improve visitor and employee safety
- Reduce user conflicts
- Maintain park resources and values for future generations

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*The purpose of the plan/EIS is to provide a clear, enforceable policy to determine the manner and extent of dog use in appropriate areas of the park.*

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### Need for Action

A plan/EIS is needed because GGNRA (park) resources and values, as defined by the park’s enabling legislation and the NPS *Organic Act*, could be compromised to the extent that, without action, those resources and values in some areas of the park might not be available for enjoyment by future generations. Additionally, a dog management policy inconsistent with NPS regulations and increased public expectations for use of the park for dog recreation have resulted in controversy, litigation, and compromised visitor and employee safety, affecting visitor

experience and resulting in resource degradation. The conflicts will likely escalate if not addressed in a comprehensive plan/EIS.

## **OBJECTIVES**

Objectives are specific goals that describe what GGNRA intends to accomplish by preparing a plan/EIS. These objectives come from a variety of sources, including NPS management policies, laws, and regulations. The objectives help develop alternatives for evaluation and public review. The internal scoping process yielded the following specific objectives for this planning process:

### **VISITOR EXPERIENCE AND SAFETY**

- Minimize conflicts related to dog use by providing a variety of safe, high-quality visitor use experiences, including areas where dogs are allowed.

### **LAW ENFORCEMENT / COMPLIANCE WITH DOG RULES, AND PARK OPERATIONS**

- Maximize dog walker compliance with clear, enforceable parameters in order to improve park operations and use of staff resources in managing dog walking.

### **PARK OPERATIONS**

- Provide adaptability and flexibility so that information gathered from monitoring can be used in future decision making based on estimated outcomes, including in new park areas.
- Ensure a safe and healthy working environment for park staff.
- Evaluate commercial dog walking, and if allowed, create and implement an enforceable policy.

### **NATURAL RESOURCES**

- Protect native wildlife and their habitat (including sensitive species and their habitat, and federally or state listed, unique, or rare species) from detrimental effects of dog use, including harassment or disturbance by dogs.
- Minimize degradation of soil and water resources by dog use.
- Preserve opportunities for future natural resource restoration and enhancement.

### **CULTURAL RESOURCES**

- Preserve opportunities for future cultural resource restoration and enhancement.
- Protect cultural resources from the detrimental effects of dog use.

### **EDUCATION**

- Build community support for the plan to maximize management of dog walking use.
- Increase public understanding of NPS policies.

## BACKGROUND OF DOG MANAGEMENT AT GOLDEN GATE NATIONAL RECREATION AREA

Dogs that are not controlled by caging or a leash no longer than six feet are currently prohibited across the entire national park system (Title 36 of the Code of Federal Regulations [CFR] 2.15 (a)(2)), with the exception of GGNRA. This exception is the result of a 2005 decision by the United States District Court for the Northern District of California but has its roots in earlier policy decisions by the park.

### GOLDEN GATE NATION RECREATION AREA LANDS INCLUDED IN THE PLAN / ENVIRONMENTAL IMPACT STATEMENT

In 1972, GGNRA was established by Congress with a boundary that encompassed 32,000 acres in San Francisco and Marin counties. Today, the park has more than doubled in size and its boundary now encompasses approximately 80,500 acres in San Francisco, Marin, and San Mateo counties.

Within this boundary, GGNRA owns approximately 31,000 acres and manages approximately 14,000 of those acres. This plan/EIS will only address lands directly managed by GGNRA and certain additional lands that will be directly managed by the park in the near future. The plan/EIS also provides a framework and criteria for the treatment of future new lands. GGNRA-owned lands in Olema Valley north of Bolinas-Fairfax Road will not be included, as they are managed by Point Reyes National Seashore through an agreement with GGNRA (see map 1 in the “Maps” section of this document). These areas will continue to be managed under 36 CFR 2.15.

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*This plan/EIS will only address lands directly managed by GGNRA and certain additional lands that will be directly managed by the park in the near future.*

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Alternatives in this plan/EIS include locations in Marin, San Francisco, and San Mateo counties. The selection of sites addressed in this plan/EIS was determined by NPS managers, and was based on information from historical and current dog management in GGNRA, including the 1979 Pet Policy (appendix A); NPS law, policy, and regulations; park resources; and the Federal Panel Recommendations to the General Superintendent (NPS 2002a, 1). The panel concluded that under voice and sight control dog walking in GGNRA may be appropriate in selected locations where resource impacts can be adequately mitigated and public safety incidents and public use conflicts can be appropriately managed.

In addition to lands currently under GGNRA management, the plan/EIS includes two areas within the park’s boundary that will be transferred to GGNRA in the near future: Pedro Point Headlands and Cattle Hill in San Mateo County. When the dog management planning process started, these two new portions were included because it was anticipated that acquisition would occur in the near future. A very recent change is that another San Mateo property, Rancho Coral de Tierra, may be acquired before Pedro Point and Cattle Hill. This property is not directly addressed in this plan/EIS because of timing; however, it will be addressed by the considerations for new lands. Table 2 in chapter 2 lists the sites that were considered under the action alternatives for this plan/EIS. Dog management for other lands that may be acquired and managed by the NPS in the future is discussed under “Elements Common to Action Alternatives” in chapter 2.



**Pedro Point**

Credit: NPS

GGNRA-managed lands not specifically addressed in this plan/EIS, but which are not currently closed to dogs, include (but are not limited to) the following:

- In Marin County: lands north of Stinson Beach and south of Bolinas-Fairfax Road (excluding Audubon Canyon Ranch lands), between Highway 1 and Marin Municipal Water District lands and Mount Tamalpais State Park lands—encompassing land in Morses Gulch and McKennan Gulch and the lands above Audubon Canyon Ranch.
- In Marin County: GGNRA coastal lands north of—and including—Muir Beach Overlook and west of Highway 1, and the former Banducci lands in Franks Valley.
- In San Mateo County: an easement over coastal lands and beach south of Fort Funston and north of Thornton State Beach totaling 31 acres; three parcels of coastal lands, totaling 2.5 miles in length and 120 acres, south of Thornton State Beach.

## **LAND USE PRIOR TO PARK ACQUISITION**

The history of dog walking in some areas of GGNRA began prior to the establishment of the park, when dog walking, including off-leash dog walking, occurred informally at sites under varied jurisdictions in San Francisco and Marin counties. Some of the lands designated as part of the new national recreation area had been formerly owned and managed by other public entities, and practices prohibited in national park system units, such as allowing dogs off-leash, had been sanctioned or allowed on those lands. In the first years after GGNRA was established in 1972, those practices continued largely uninterrupted, although park staff recognized and documented issues arising from the practice during the early years of the park's existence.

## **GOLDEN GATE NATIONAL RECREATION AREA CITIZENS' ADVISORY COMMISSION AND THE 1979 PET POLICY**

The legislation establishing GGNRA in 1972 (PL-92-589) also established the GGNRA Citizens' Advisory Commission (Commission), which coordinated public involvement for the park. Their charter stated that they may advise the park on general policies and specific matters related to planning, administration, and development, and in doing so may seek the views of various citizen groups and members of the public.

In 1978, due to public requests from dog walkers, the Commission developed a pet policy for the park. In 1979, they formally recommended the policy, which has since been known as the 1979 Pet Policy (appendix A), to the park Superintendent. The 1979 Pet Policy, developed with input from park staff, provided general guidance for dog walking and recommended locations for both on-leash dog walking and off-leash or "voice-control" dog walking in lands owned and managed by GGNRA, although this recommendation did not abide by the federal regulation regarding dog walking in national parks (36 CFR 2.15). The CFR, or Code of Federal Regulations, is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

The 1979 Pet Policy identified the following areas as appropriate for voice-control of dogs:

- Homestead Valley
- Oakwood Valley
- Muir Beach
- Rodeo Beach

- Several trails in Marin County
- Crissy Field
- Baker Beach, north beach area
- East and West Fort Miley
- Lands End
- Ocean Beach
- Fort Funston

Although in the policy the Commission referred to “regulations (that would) be developed by the NPS Field Solicitor’s office,” a special regulation to allow off-leash dog walking in GGNRA, based on this recommendation, was never promulgated by the NPS. The Commission’s policy did not and could not override NPS regulations prohibiting pets off-leash in national parks, but for more than 20 years, the park erroneously implemented the 1979 Pet Policy in contravention of Service-wide regulations.

### **INCREASE IN USE OF THE PARK FOR DOG WALKING AND OTHER RECREATIONAL USES**

Since the 1990s, the San Francisco Bay Area population and overall use of GGNRA park sites have increased, as have the number of private and commercial dog walkers.

At the same time, the number of conflicts between park users with and without dogs began to rise, as did the fear of dogs and dog bites or attacks. The hours devoted by park staff to manage these conflicts, rescue dogs and owners, dispose of dog waste, educate the public on dog walking policies and regulations at each park site, and enforce regulations also increased. In addition, since the establishment of the park, several species with habitat in GGNRA areas used by dog walkers have been listed as threatened, endangered, or special-status species requiring special protection.

Underscoring the increasing conflict over off-leash dog use, dog walking groups filed a lawsuit against the NPS in March 2000 when GGNRA closed part of Fort Funston to the public to provide resource protection and restoration. In particular, the park intended to protect new nesting locations of the state threatened bank swallow (*Riparia riparia*) population; increase biological diversity by restoring coastal native dune scrub habitat; increase public safety by keeping visitors and their pets away from cliff areas; and protect geological resources, including the bluff top and interior dunes, that had been subject to accelerated erosion because of humans and dogs. The park discussed a 12-acre closure with interested groups, including both environmental and off-leash dog walking interests. Based on these discussions, the park reduced the closure to 10 acres. Upon initiation of the 10-acre closure, which reduced available off-leash areas, a lawsuit was filed. The federal district court held that the NPS had not adequately obtained public input on the proposed closure as required by 36 CFR 1.5. Upon completion of public involvement efforts, the court agreed that GGNRA had fully complied with required sections of 36 CFR 1.5 and that the need for “prompt protective action” was “genuine.” The park closed the original 12 acres in February 2001, per the GGNRA Compendium (NPS 2001b, 1; appendix B). During this period, it was clarified by the Department of Justice, the U.S. Attorney, and the Department of the Interior Solicitor Offices that the



**Tracks in the Sand at Fort Funston**

Credit: NPS

voice-control policy then in effect at Fort Funston and other locations in the park was contrary to NPS regulations.

In a public meeting in January 2001, the Commission acknowledged that the voice-control policy was contrary to 36 CFR 2.15(a)(2), prohibiting off-leash dogs in national parks, and therefore illegal and unenforceable. Hundreds of people in favor of the 1979 Pet Policy attended the January 2001 Commission meeting, and following the meeting, the park received significant comment in support of off-leash dog walking. At the same time, the park continued to receive an increasing number of complaints by park visitors, including minorities, seniors, and families with small children, alleging that off-leash dogs had prevented them from visiting the park for fear of being knocked over or attacked by dogs or verbally abused by dog owners, or that they had experienced these situations in visits to the park.

In the year following the Commission meeting, park staff attempted to facilitate the transition into compliance with 36 CFR 2.15(a)(2) through educational outreach, new signs, and law enforcement actions including verbal and written warnings. When these measures failed to bring about compliance with the regulation, GGNRA law enforcement (LE) staff issued citations in addition to warnings. During this time, conflicts between dog walkers and park staff increased significantly.

Since that time, GGNRA has had a mixture of dog management regulations and legal conditions guiding the status of dog walking in the park: the NPS-wide leash regulation, the GGNRA Compendium, the special regulation for protection of western snowy plovers (*Charadrius alexandrinus nivosus*), and the 1979 Pet Policy voice-control conditions (which were effectively reinstated by the 2005 federal court decision). Table 1 summarizes current dog management conditions within the specific park sites addressed in this plan/EIS. Maps located in the “Maps” section of this document, which show park sites by county, from north to south, also illustrate historic and current dog walking management (see maps 2-A, 3-A, 4-A, etc.).

**TABLE 1. CURRENT DOG MANAGEMENT CONDITIONS**

<b>Golden Gate National Recreation Area Site</b>	<b>Alternative A: No Action (represents 36 CFR 2.15, 36 CFR 7.97(d), 1979 Pet Policy, and Golden Gate National Recreation Area Compendium)</b>
Stinson Beach: parking lots/picnic areas only	On-leash only
Homestead Valley	Entire site on-leash or under voice-control
Alta Trail, Orchard Fire Road, Pacheco Fire Road	On-leash or under voice-control from Marin City to Oakwood Valley
Oakwood Valley	Oakwood Valley Fire Road And Oakwood Valley Trail from junction with Fire Road to junction with Alta Trail: on-leash or under voice-control Oakwood Valley Trail from trailhead to junction with Oakwood Valley Fire Road: on-leash
Muir Beach	Beach only: on-leash or under voice-control
Rodeo Beach / South Rodeo Beach	All beach areas only: on-leash or under voice-control Bridge connecting to beaches: on-leash

Golden Gate National Recreation Area Site*	Alternative A: No Action (represents 36 CFR 2.15, 36 CFR 7.97(d), 1979 Pet Policy, and Golden Gate National Recreation Area Compendium)
<p>Marin Headlands Trails</p> <p>Trails previously opened to dog walking, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Coastal Trail from McCullough Road to Muir Beach</li> <li>• Miwok Trail from Tennessee Valley to Highway 1</li> <li>• County View Road off the Miwok Trail</li> <li>• Miwok Trail to Wolf Ridge to Hill 88</li> <li>• Lagoon Trail</li> <li>• South Rodeo Beach Trail</li> </ul>	<p>On-leash or voice-control:</p> <ul style="list-style-type: none"> <li>• Coastal Trail: Golden Gate Bridge to Hill 88, including Lagoon Trail</li> <li>• Coastal, Wolf, Miwok Loop</li> <li>• Old Bunker Fire Road Loop</li> </ul> <p>On-leash only:</p> <ul style="list-style-type: none"> <li>• Coastal Trail: Hill 88 to Muir Beach</li> <li>• Battery Smith–Guthrie Fire Road Loop</li> <li>• North Miwok Trail</li> <li>• County View Road</li> <li>• South Rodeo Beach Trail</li> </ul>
Fort Baker	On-leash in areas where dogs are allowed
Upper and Lower Fort Mason	On-leash
Crissy Field Wildlife Protection Area	Voice-control except for seasonal leash restriction
Crissy Field	<p>Promenade (East Beach to the Warming Hut): voice-control</p> <p>Crissy Airfield: voice-control</p> <p>East and Central Beaches: voice-control</p> <p>Trails and grassy areas near East Beach: voice-control</p>
Fort Point Promenade / Fort Point National Historic Site trails	Fort Point Promenade, Bay Trail, Andrews Road, and Battery East Trail: on-leash
Baker Beach and bluffs to Golden Gate Bridge	<p>Beach North of Lobos Creek: voice-control</p> <p>All trails except Batteries to Bluffs Trail: on-leash</p>
Fort Miley	East and West Fort Miley: voice-control
Lands End	Voice-control
Sutro Heights Park	On-leash
Ocean Beach Snowy Plover Protection Area (Stairwell #21 to Sloat Boulevard)	Voice-control with seasonal leash restriction
Ocean Beach	<p>North of Stairwell 21: voice-control</p> <p>South of Sloat Boulevard: voice-control</p>
Fort Funston (excluding areas closed by fence or signs)	<p>Beach: voice-control</p> <p>South of Main Parking Lot, including all trails: voice-control</p> <p>North of Main Parking Lot, including all trails: voice-control except for fenced wildlife/habitat protection area</p>
Mori Point	On-leash on all trails
Milagra Ridge	On-leash on all trails
Sweeney Ridge/Cattle Hill (adjacent properties that share a trail system)	<p>Sweeney: on-leash on Sneath Lane, Sweeney Ridge Trail, Mori Ridge Trail, and Baquiano Trail</p> <p>Cattle Hill: not yet part of GGNRA</p>
Pedro Point Headlands	Not yet part of GGNRA
* Under current management, no sites in GGNRA allow commercial dog walking.	

## ADVANCE NOTICE OF PROPOSED RULEMAKING

In January 2002 the park published an Advance Notice of Proposed Rulemaking (ANPR) in the Federal Register asking for comment on potential options for future dog management in GGNRA that could include a special regulation for dog walking in GGNRA. During the public comment period, park staff held two informational meetings about the rulemaking process in March 2002 and a public oral comment session in April 2002. Through the ANPR and public comment process, the park asked for public input on a range of dog management questions and put forth two management options for comment: option A, which would continue to enforce the existing NPS regulations that allow only on-leash dog walking; and option B, which would begin the analysis and eventual rulemaking to allow some specific off-leash use areas. Option A indicated that the park would consider allowing on-leash dog walking in some areas where it was not permitted at the time. These areas included Stinson Beach, Fort Baker Pier, Phleger Estate, and portions of Tennessee Valley. The public was also asked for input on specific management questions, including which areas should be closed to dogs, which areas should be fenced, which areas should allow on-leash dog walking, and which areas should allow dogs under voice-control. Additional questions asked how the number of dogs should be limited, how to ensure the park was not liable for injuries caused by or to dogs, and what the potential environmental impacts of the alternatives might be.

In response to the ANPR in January 2002, the park received 8,580 documents and the results were published in a public comment analysis report by the Northern Arizona University (NAU) Social Research Laboratory (NAU 2002a, 1). In this report, 71 percent of public comments favored option B, allowing for off-leash dog walking in selected GGNRA sites. Of the 71 percent, the majority were residents of San Francisco (88 percent of 4,222 comment documents). Twenty-eight percent of public comments favored option A, calling for the enforcement of existing leash laws in the GGNRA. Respondents from out of state overwhelmingly voted for option A (96 percent of 1,186 comment documents). Fort Funston, Crissy Field, and Ocean Beach were the sites most frequently mentioned by those preferring either option A or option B (NAU 2002a, 5, 7).

In response to the ANPR request for input on specific management questions, the public made the following suggestions for future management of dog walking in GGNRA, which were coded into the dataset of the public comment analysis report (NAU 2002a, 9-26):

- Separate dog walking under voice-control from other visitor uses
- Designate specific areas, or days, and times when dog walking under voice-control is allowed.
- Fully enforce whatever regulations result, but if violations occur, do not assume that all dog owners are irresponsible and that areas need to be closed to dogs.
- Create a licensing process to demonstrate that dogs are under voice-control.
- Fence environmentally sensitive areas or fence voice-control areas.
- Limit the number of dogs on-leash and/or under voice-control per person.
- Encourage volunteer efforts to assist in stewardship of voice-control areas.
- Educate the public about how to control dogs and about the impacts dogs have on park resources.
- Monitor the impacts of dogs and report the results every few years.



## **Telephone Survey**

To gain as broad an understanding of public opinion as possible, GGNRA commissioned Northern Arizona University's Social Research Laboratory to conduct a telephone survey in the four-county region surrounding GGNRA regarding NPS pet management regulations (NAU 2002b, 1). The survey design was initiated in the spring of 2002 during the ANPR public comment period and was conducted from May to July 2002. The survey was conducted with a random cross section of people from 400 households each (for a total of 1,600) in Alameda, Marin, San Francisco, and San Mateo counties to provide a more general overview of public support for or opposition to off-leash dog walking. Results of the telephone survey showed that 28 percent of the respondents owned or cared for one or more dogs. Among these dog owners, 50 percent had taken their dog(s) to a GGNRA site and 20 percent of that group had also hired a commercial dog walker to walk their dog(s) in a GGNRA site, which translates to one percent of all survey respondents using a commercial dog walker (NAU 2002b, 16-17).

The first set of questions asked the public if they generally supported or opposed the existing NPS regulation that allows on-leash dog walking at most GGNRA sites and prohibits any off-leash dog walking. Seventy-one percent of all respondents supported and 23 percent opposed the current NPS regulation for walking dogs on-leash at most GGNRA sites and prohibiting off-leash dog walking. Survey results indicated that support for the existing NPS pet regulation was consistent throughout the four counties and across every demographic subset (NAU 2002b, 11, 83-86).

In another set of questions, when asked whether they specifically supported allowing off-leash dog walking in GGNRA, 40 percent of all respondents stated that they supported allowing dogs off-leash in GGNRA. Of this 40 percent, 17 percent strongly supported and 23 percent somewhat supported allowing dogs off-leash in GGNRA. Fifty-three percent of all respondents stated that they opposed allowing off-leash dog walking in GGNRA sites. Of this 53 percent, 17 percent opposed and 36 percent strongly opposed allowing off-leash dog walking in GGNRA sites. However, dog owners were closely divided on the question of whether they specifically supported allowing off-leash dog walking in GGNRA. Fifty-one percent of dog owners supported and 45 percent of dog owners opposed off-leash dog walking at GGNRA sites (NAU 2002b, 25).

The respondents were then read an abbreviated version of the GGNRA mission statement: "The mission of the Golden Gate National Recreation Area is the preservation, unimpaired, of the natural and cultural resources, and scenic and recreation values, of the park for present and future generations to enjoy" (NAU 2002b, 30). When these respondents were again asked if they supported or opposed off-leash dog walking at GGNRA sites, the percentage of all respondents in the four-county area opposing off-leash dog walking at GGNRA rose from 53 to 58 percent, and the percentage of respondents supporting off-leash dog walking in the park fell from 40 to 36 percent (NAU 2002b, 30-31).

## **Federal Panel Recommendation**

Subsequent to the ANPR, a panel of senior NPS officials from outside GGNRA was convened to review the public comment and other technical information. The purpose of the panel was to recommend to the Superintendent of GGNRA whether the park should proceed toward rulemaking to allow some off-leash dog walking or whether the current regulation—requiring that pets be on-leash in all GGNRA areas where they are allowed—should remain in effect. The panel concluded that off-leash dog walking in GGNRA may be appropriate in selected locations where park resources would not be impaired if the standards for appropriate use (as defined in NPS policies and regulations) could be met, if adverse impacts to park resources could be adequately mitigated, and if public safety incidents and public use conflicts could be appropriately managed. The panel further recommended that the park pursue both rulemaking and comprehensive planning for pet management to address suitable locations and proper

management strategies. Options for conducting an integrated rulemaking and planning process were included, as well as suggested criteria for formulating a proposed rule and implementation strategy. As a result of the federal panel review, public comment, and other internal park discussions, GGNRA chose to pursue negotiated rulemaking under the *Negotiated Rulemaking Act*.

### **Negotiated Rulemaking**

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<i>In June 2005, a Notice of Intent to Establish a Negotiated Rulemaking Committee was published in the Federal Register, followed by a Notice of Establishment of the Committee in February 2006.</i>	<p>In 2004 the NPS, working with the U.S. Institute of Environmental Conflict Resolution, hired a neutral team to assess the prospects for using a negotiated rulemaking process that would allow a representative group of stakeholders to have significant, direct input into the development of a special regulation for dog management at GGNRA. In June 2005, a Notice of Intent to Establish a Negotiated Rulemaking Committee (Committee) was published in the Federal Register, followed by a Notice of Establishment of the Committee in February 2006. The Committee was composed of 19 primary representatives and alternates representing three informal caucuses—voice-control advocates, environmental and conservation organizations, and other park users—as well as the NPS. The Committee’s goal was to reach consensus on a special regulation on dog management at GGNRA and recommend that regulation to the NPS. The Committee held seven full Committee meetings and nine Technical Subcommittee meetings between March 2006 and October 2007. The Committee was only able to reach consensus on nine guiding principles, guidelines for commercial dog walking, and a site-specific alternative for Oakwood Valley (Marin County). It was not able to reach consensus on a proposed special regulation for dog management at GGNRA. A report summarizing the negotiated rulemaking process, products, and outcomes; negotiation structures, strategies, and approaches; and dynamics was prepared by the Facilitation Team of the Committee (Bourne et al. 2008, 1).</p>
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The NPS intent was to use the negotiated rulemaking process to provide public input for potentially drafting a special regulation for dog management in GGNRA. Since the Committee was not able to recommend a proposed regulation, the NPS will develop a draft rule for dog management. The findings of this plan/EIS will inform the development of the regulation.

### **Dog Management Plan / Environmental Impact Statement**

This plan/EIS is required prior to implementation of a new regulation for dog management at GGNRA. During the period when the Committee was being formally created, the park began its required environmental planning process under NEPA. In late January 2005, GGNRA park staff and consultant specialists met with the NEPA team from the NPS Environmental Quality Division to draft the purpose, need, and objective statements to identify existing management problems and begin drafting possible solutions in the form of conceptual alternatives. This “internal scoping” is a process that can take many months and usually ends with publication in the Federal Register of a Notice of Intent to prepare an EIS and to hold meetings to gather public comment. The GGNRA Notice of Intent to prepare an EIS was published February 22, 2006.

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*This plan/EIS is required prior to implementation of a new regulation for dog management at GGNRA.*

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GGNRA committed to having the NEPA and negotiated rulemaking processes proceed concurrently, to facilitate the sharing of information between the two processes and to allow any consensus from the negotiated rulemaking process to be fully analyzed along with a range of reasonable alternatives before

choosing a preferred alternative. Additionally, since negotiated rulemaking requires that meetings of the full Committee be open to the public and has other fact-finding requirements that overlap with those of NEPA, the concurrent completion of both processes helped avoid duplication of effort and saved time. However, a Notice of Proposed Rulemaking will not be published in the Federal Register until comments on the draft plan/EIS have been fully analyzed, as public comment will likely influence the substance of the proposed rule.

The GGNRA plan/EIS examines the impacts of a full range of alternatives for dog management, and assesses the impacts that could result from continuing current dog management practices. Upon conclusion of this decision-making process one of the alternatives, or an alternative composed of elements of a number of the alternatives, will be selected for implementation, which will guide future park actions related to dog management.

## Current Dog Management

Current dog management in the park is based on a number of factors. Areas covered by the Commission's 1979 Pet Policy (appendix A) are managed in accordance with the June 2, 2005, decision by U.S. District Court for Northern California Judge Alsup (*U.S. vs. Barley* decision, 405 F.Supp.2d 1121 (N.D. Cal. 2005)) affirming that GGNRA cannot enforce the NPS-wide regulation requiring on-leash walking of pets (36 CFR 2.15(a)(2)) in areas that were included in the 1979 Pet Policy until notice and comment rulemaking under section 1.5(b) is completed. In response, GGNRA revised its enforcement position to reflect that court decision, removing "leash required" signs in areas that had been selected for voice-control in the 1979 Pet Policy and limiting enforcement of the NPS leash regulation to areas that were not included in the 1979 Pet Policy or that were identified as on-leash dog walking areas in the 1979 Pet Policy. However, in all areas where dog walking is allowed in GGNRA, whether under the NPS leash regulation or the 1979 Pet Policy, on-leash dog walking regulations that address areas closed to pets, disturbance to wildlife, removal of pet waste, and creating a hazardous or offensive condition have remained in effect and are being enforced.

In addition, many park areas have been closed to dog and visitor use for resource or safety reasons through the GGNRA Compendium (NPS 2001b, 1), although areas closed where dog use had traditionally occurred were closed pursuant to notice and comment rulemaking. The closures are reviewed and updated each year. The GGNRA Compendium is the format wherein each park, where allowed by the CFR, can publish park-specific regulations to protect cultural or natural resources, enhance public health or safety, or avoid conflict among visitor use activities. It is considered the responsibility of park visitors to know park rules and regulations before they visit any park.

## Protection for the Western Snowy Plover

The western snowy plover was listed as a threatened species under the federal *Endangered Species Act* (ESA) in 1993 due to loss of habitat by encroachment of non-native vegetation, predation, disturbance from recreational use of beaches, and development. The plover's threatened status affords it protection from harassment, defined under the ESA as "an intentional or negligent act or omission which creates the likelihood of injury to



Protection Area Sign at Ocean Beach

Credit: NPS

wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.”

The NPS *Management Policies 2006* (NPS 2006b, 45) provide guidance to the NPS for the management of threatened and endangered species. Section 4.4.2.3 states, “The Service will survey for, protect, and strive to recover all species native to national park system units that are listed under the *Endangered Species Act*. The Service will fully meet its obligations under the NPS *Organic Act* and the *Endangered Species Act* to both proactively conserve listed species and prevent detrimental effects on these species.”

The 2005 decision by Judge Alsup cited above noted that the court’s action “in no way restricts the authority of the Superintendent to ‘protect the resource,’ including the protection of endangered and threatened species.” Following notice and comment under 36 CFR 1.5(b), these actions can be taken through the GGNRA Compendium, wherein each park, where allowed by the CFR, can publish park-specific regulations to protect cultural or natural resources, enhance public health or safety, or avoid conflict among visitor use activities.

In November 2006, and again in 2007, the GGNRA Compendium amendments were signed to adopt emergency regulatory provisions for protection of the federally threatened western snowy plover on portions of Crissy Field and Ocean Beach, which had been reopened to off-leash use through the 2005 federal court decision. These seasonal use restrictions were necessary to provide an area of reduced disturbance for resting and feeding by the western snowy plover. The restrictions required that pets be walked on-leash during the time the plovers overwinter (July–May, or until monitoring determines the species is no longer present). In 2007, the park initiated a notice and comment rulemaking process to provide a special regulation to ensure ongoing seasonal protection for the western snowy plover in two areas, Crissy Field Wildlife Protection Area and Ocean Beach Snowy Plover Protection Area, until long-term dog management for those areas is addressed in the rule resulting from the plan/EIS.

A Final Rule (36 CFR Part 7.97(d)) for the protection of the western snowy plover came into effect October 20, 2008. This rulemaking provides temporary protection for plovers in the Crissy Field and Ocean Beach protection areas until a permanent determination is made through this planning process for a new regulation for dog management for the entire park.

## **CURRENT DOG MANAGEMENT ISSUES AND IMPACT TOPICS**

At the internal scoping session of NPS staff and NEPA consultants held in January 2005, observations of current issues surrounding the dog walking controversy generally fell into the following categories, some of which are described in more detail in the paragraphs below:

- Expectations and views of dog walkers and other visitors
- Impacts of dogs on cultural and natural resources in the park
- Visitor use and experience
- Employee, visitor, and dog health and safety
- Needs of urban area residents
- Public confusion over NPS-wide dog regulation, GGNRA-specific rules, NPS mission and policies
- Public lack of understanding and confusion over regulations for dogs at GGNRA park sites, including why some park areas are completely closed to dogs while other areas allow on-leash dog walking

- Visitor noncompliance with regulations
- Ability of LE staff to enforce rules.

## EXPECTATIONS AND VIEWS OF DOG WALKERS AND OTHER VISITORS

As stated previously and in response to the ANPR in January 2002, a public comment analysis report was published (NAU 2002a, 1). In this report, 71 percent of public comments favored allowing off-leash dog walking in selected GGNRA sites (option B) and 28 percent of public comments favored the enforcement of existing leash laws in the GGNRA (option A) (NAU 2002a, 5). Also in the public comment analysis report, approximately 10 percent of the documents (984 of 8,580 documents) mentioned the sociability benefits that off-leash dog walking provided, not only for the dog owners, but for the dogs themselves (NAU 2002a, 16-17). Other respondents cited the “therapeutic value” dog owners experienced in knowing that their pets had been well exercised. More than 500 affirmed their belief that it is their right to walk dogs off-leash at park sites. Other reasons given in support of off-leash dog walking concerned the benefits to humans, including increased sociability with other dog walkers or with visitors who enjoyed interacting with dogs, and the safer feeling some dog owners have when they visit urban parks, especially at night, if their dogs are present (NAU 2002a, 17-20). Those respondents in favor of enforcing the leash law stated concerns for the environment, human health and safety, and the longevity of the park for the enjoyment of future generations. Nearly half expressed discomfort or fear of off-leash dogs and over 1,180 felt that allowing an exception to the NPS rules would set a negative precedent in other NPS units, giving “dog owners the excuse they want to continue to not obey laws and create confusion and conflict” (NAU 2002a, 9-15).



**Dog Walkers at Fort Funston**

Credit: NPS

In addition to the ANPR public comment analysis report, a telephone survey regarding NPS pet management regulations was also conducted, which was discussed in more detail previously (NAU 2002b, 1). The results of the telephone surveyed showed that 71 percent of all respondents supported and 23 percent opposed the current NPS regulation for walking dogs on-leash at most GGNRA sites and prohibiting off-leash dog walking (NAU 2002b, 11). When asked whether they specifically supported allowing off-leash dog walking in GGNRA, 40 percent of all respondents stated that they supported allowing dogs off-leash in GGNRA and 53 percent of all respondents stated that they opposed allowing off-leash dog walking in GGNRA sites; after hearing the abbreviated GGNRA mission statement, the 53 percent rose to 58 percent opposition (NAU 2002b, 11).

## IMPACTS OF DOGS ON NATURAL AND CULTURAL RESOURCES IN THE PARK

A preliminary list of issues and impact topics was developed at the internal scoping meeting with NPS resource and NEPA specialists and their contractors. This list was further reviewed by the park, its consultants, and the public and eventually became the list of issues and impact topics that were analyzed in this plan/EIS. NEPA and resource specialists used a screening form to determine which resources might experience more than minor adverse or beneficial impacts. The form was also used to aid in determining whether the appropriate NEPA document should be an EIS or an environmental assessment.

Because several factors that normally trigger significant effects are present, the group confirmed that an EIS was appropriate to evaluate dog management options at GGNRA. The impact topics are presented in the following paragraphs by resource. These potential effects are particularly problematic for GGNRA, a unit of the NPS, an agency whose fundamental purpose is to conserve park resources and values, a requirement separate from the mandate that prohibits impairment of park resources and values (NPS 2006b, 10-11).

## Soils

**Issue.** Dog and human overuse of areas may result in trampled vegetation and soil erosion. Dogs have the potential to increase existing erosion through digging, especially in rare, serpentine soils or in sensitive geologic resources such as dune complexes.

**Issue.** Dog waste adds nutrients to soils that affect their characteristics. Some soils in the park are particularly unique or are by nature low in nutrients. The entire ecology of an area starts with the type and nutrient level of soil. If enough dog waste is left in place, it can begin to change soil characteristics over a noticeable geographic area. A change in soil chemistry often translates into a change in vegetation, wildlife habitat, and wildlife species.

## Water Quality

**Issue.** Dogs playing in streams, wetlands, lagoons, and coastal areas can increase turbidity. Dogs playing for even a short time in a creek or pond can greatly increase turbidity levels; smaller sediments can stay suspended for several hours and can disrupt fish feeding, particularly for visual feeders like trout and salmon (salmonids). Two known salmonids (coho salmon (*Oncorhynchus kisutch*) and steelhead trout (*Oncorhynchus mykiss*)) inhabiting the streams and lagoons in GGNRA are federally threatened species.

**Issue.** Dog waste can increase nutrient levels in streams, wetlands, lagoons, and coastal areas. As with terrestrial habitats, changes in nutrient levels in aquatic environments can alter the type and growth of vegetation and the ability of wildlife to continue to use the area for habitat. Crissy Field, Rodeo Lagoon, and Redwood Creek and tidal lagoon are examples of marine or estuarine resources that may be adversely affected by dog waste. Potential impacts to estuarine fauna at GGNRA include those from increased nutrient impacts on coho, steelhead, and other fish nurseries, and on critical reproductive habitat for the federally endangered tidewater goby (*Eucyclogobius newberryi*) known to occupy Rodeo Lagoon.

**Issue.** Domestic dogs can potentially introduce diseases (canine distemper, canine parvovirus, and rabies) and transport parasites into wildlife habitats (Sime 1999, 8.2). If pet waste is left on the ground, runoff from rain events may transport these microorganisms (including fecal coliform) to adjacent water bodies, thereby affecting water quality. Wild birds, small mammals, and dogs can also introduce microorganisms into a water supply, and these microorganisms, algal blooms, and other naturally occurring phenomena can make uninfected dogs sick when they drink from affected streams or ponds.

## Vegetation

**Issue.** Dogs, particularly those off-leash and without adequate voice-control, can potentially trample and denude vegetation and interfere with native plant species. Through intensive and prolonged use of park sites, dogs may reduce the abundance and diversity of native plant communities, resulting in the loss of rare or unusual plants (see the “Species of Special Concern” section below for listed species). Disturbance of soils may influence native plant propagation, establishment, and viability and promote colonization by non-native, invasive species. Plant species may suffer direct impacts from trampling and off-trail use of dunes and other fragile habitats. For example, the San Francisco Bay spineflower (*Chorizanthe cuspidata*

var. *cuspidata*) is a rare plant species that may require or benefit from a substrate protected from disturbance by humans and dogs. Understory is an important wildlife habitat component of many tree- and shrub-dominated plant communities (such as riparian coastal scrub) within GGNRA. Unleashed dogs running into the understory to retrieve balls or simply to explore the scentscape may adversely affect the structure of the plant community and reduce its value as wildlife habitat.

**Issue.** Dog waste can increase soil nutrient levels, affecting vegetation growth, and dog play can trample vegetation, destroying or altering wildlife habitat. Wetlands can serve numerous functions, including helping to moderate flooding and pollution and providing wildlife habitat. Structural diversity in wetland vegetation provides cover, food, and reproductive habitat for many species in the park, including federally listed species like California red-legged frogs (*Rana aurora draytonii*). Dogs can also destroy or disturb habitat to the extent that wildlife species move away or fail to reproduce.

**Issue.** Dogs can be carriers of exotic plant seeds. Dogs can spread non-native plant seeds brought in from outside the park or spread plant seeds from one area of the park to another through shedding and waste elimination. In addition, nutrients from dog waste can alter soil characteristics to favor non-native species over native vegetation.

## Wildlife

**Issue.** Intensive dog use of an area could disrupt its use by wildlife or degrade the habitat, resulting in a multitude of possible negative consequences for wildlife population viability. The adverse effects of intensive dog use, such as chasing and flushing wildlife or disrupting nesting and foraging sites, can range from direct to less direct disturbance from physical effects such as trampling of habitat, degradation of water quality, and scent intrusion into predator territory. Off-leash dogs can potentially injure or even kill shorebirds or other wildlife.

**Issue.** Dog play can trample vegetation and benthic invertebrates. Emergent aquatic vegetation along the edge of watercourses and wetlands provides critical habitat for some listed species, and disturbance of this vegetation from dog play, such as by trampling, could compromise its value to wildlife or dislocate amphibian egg masses.

**Issue.** Dogs or dog waste can infect wildlife and vice versa. Dog-related viruses may be transmitted through dog feces to marine and terrestrial mammals (MDNRE 2010, 1; MVM 2008, 1). Canine distemper affects wildlife including canids (wolves, foxes, coyotes), raccoons, and mustelids (otters, badgers, and skunks) (MDNRE 2010, 1). Subsequent infection of other species may spread the pathogen throughout a population and into its habitat.

**Issue.** Habitat for all wildlife, including habitat for rare, unusual, or sensitive non-listed and/or monitored species may be affected by dog use of specific areas through disturbance, displacement, and habitat alteration. Effects similar to those described above for other wildlife, vegetation, and listed flora and fauna would occur for rare or sensitive non-listed species. Intensive human or dog use of an area occupied by unique or sensitive species may trample vegetation, alter or erode soils, or simply frighten wildlife away from their habitat. This effect may occur even if the species does not reside in the park year-round, as some wildlife species are highly vulnerable to any disturbance or even slight changes in habitat. Unleashed dogs running into the understory to retrieve balls or simply to explore the scentscape may adversely affect the structure of the plant community and reduce its value as wildlife habitat for amphibians, small mammals, and nesting birds, such as Swainson's thrush (*Catharus ustulatus*) and California quail (*Callipepla californica*).



The shoreline of San Francisco Bay provides feeding, roosting, and wintering habitat for shorebirds and other bird species, such as gulls, terns, and the California brown pelican (*Pelecanus occidentalis californicus*). Resting and feeding habitat can be particularly important to migrating and overwintering shorebirds, and in some areas in GGNRA, thousands of roosting or migrating individuals congregate. Beach habitat within GGNRA is also used by over 25 species of shorebirds, including the federally threatened western snowy plover (Beach Watch Online 2009, 1; USFWS 2009, 1).

Abundant literature suggests that shorebirds unaccustomed or unable to acclimate to human or dog disturbance will either no longer reside at a site (unless no other available habitat exists) or will repeatedly flush when approached. This bird behavior can result in energy loss, morbidity (disease), reduced reproductive success, or death (Banks and Bryant 2007, 612; USFWS 2007, 63-65).

### **Species of Special Concern (Federally and State Listed Species or Species Proposed for Listing)**

**Issue.** Habitat used by federally threatened or endangered species may be vulnerable to impacts from intensive use of public areas by humans and dogs. GGNRA contains more federally protected endangered and threatened species than any other unit of the national park system in continental North America (NPS 2009a, 1). There are over 80 rare or special-status wildlife species currently identified as permanent or seasonal residents of the park or dependent on park lands and waters for migration, and there are 38 rare or special-status plant species currently identified within GGNRA (NPS 2009a, 1). Although habitats at GGNRA support many species with special status, only those species potentially affected by this plan/EIS are discussed in this document. Of the 38 listed plant species, 11 are state and/or federally listed and have a detailed impacts analysis in this plan/EIS. This group includes but is not limited to the following: Presidio (Raven's) manzanita (*Arctostaphylos hookeri* ssp. *ravenii*), Presidio clarkia (*Clarkia franciscana*), Marin western flax (*Hesperolinon congestum*), and San Francisco lessingia (*Lessingia germanorum*). Habitat for each exists in patches of coastal dune or coastal scrub/chaparral/grasslands, which have become increasingly rare and whose existence has been compromised by events caused by both humans and nature. Of the 80 listed wildlife species, 12 are state and/or federally listed and have a detailed impacts analysis in this plan/EIS. This group includes but is not limited to the following: mission blue butterfly (*Icaricia icarioides* ssp. *missionensis*), tidewater goby, coho salmon, steelhead trout, California red-legged frog, San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), bank swallow, and western snowy plover.

Visitors with dogs can affect special-status species through disturbance to wildlife and/or plants from chasing, barking, digging, and potential direct or indirect mortality as a result of encounters. Mitigation is often necessary to protect these species. For example, the coastal bluffs of Fort Funston provide nesting habitat for the state threatened bank swallow. The bluffs above the bank swallows and the bluff face are currently posted on a seasonal basis (April 1 to August 15) as a voluntary closure to reduce degradation of the bluffs as a result of human visitation and to protect the bank swallows from disturbance that could lead to nest abandonment. Park staff have observed dogs in the 12 acre Habitat Protection Area closed to public access and on many occasions, dogs and humans were observed inside the Habitat Protection Area. In addition to direct impacts from dogs on habitat for listed species, indirect impacts as a result of dogs can also occur. Dogs can trample upland vegetation along the edges of trails, including lupine host plants for the federally endangered mission blue butterfly.

The federally threatened western snowy plover overwinters on wide, sandy beaches to build energy reserves for migration and breeding. Within GGNRA, this includes the Snowy Plover Protection Area (SPPA) at Ocean Beach and the Wildlife Protection Area (WPA) at Crissy Field. In 2004, the *U.S. v. Barley* decision (405 F.Supp.2d 1121 (N.D. Cal. 2005)) allowed off-leash dogs in certain areas of the park. Increased harassment and disturbance of western snowy plovers and other shorebirds as a result of



off-leash dogs accessing the snowy plover protection areas was recorded following the decision (NPS 2008a, 2).

Freshwater, brackish-water, and marine environments in GGNRA are habitat for the two listed salmonids, coho salmon (federally endangered and state endangered) and steelhead trout (federally threatened), and the federally listed endangered tidewater goby. As previously noted, salmonids are visual feeders, and extended periods of high turbidity following dog play in ponds or creeks can result in reduced foraging time or success for these species. The habitat of the federally listed endangered tidewater goby can also be affected by dogs playing in water, as dogs may crush breeding burrows that male gobies dig in the spring after their lagoon habitat closes to the ocean (USFWS 2005, 13).

## **Park Operations**

**Issue.** Park staff, time, and money would be needed to manage any existing or future dog policies. Managing current dog walking policies in the park requires significant staff time for GGNRA LE, maintenance of heavily used dog walking areas, and response to visitor concerns and complaints.

**Issue.** Park staff, time, and money are also needed to protect natural resources from dogs, including installation of protection measures such as fencing and signage; monitoring and maintenance by park staff would then be required for these protection measures.

## **Cultural Resources**

**Issue.** Dogs may affect cultural resources by dog-related ground disturbance such as digging and/or trampling, which would be a contributing element to natural erosion processes on or around sensitive cultural resources.

**Issue.** Dog urination/defecation may affect cultural resources by affecting vegetation associated with historic properties.

## **Land Use / Long-term Management of Resources or Land**

**Issue.** Dog use can damage resources that cannot be easily restored. Overuse by dogs can change the character of soils, vegetation, wildlife habitat, and the species of wildlife themselves. If these areas are affected by intense use over a long period of time, or if natural resources are particularly vulnerable to change or damage, the impacts caused by dogs can preclude restoration.

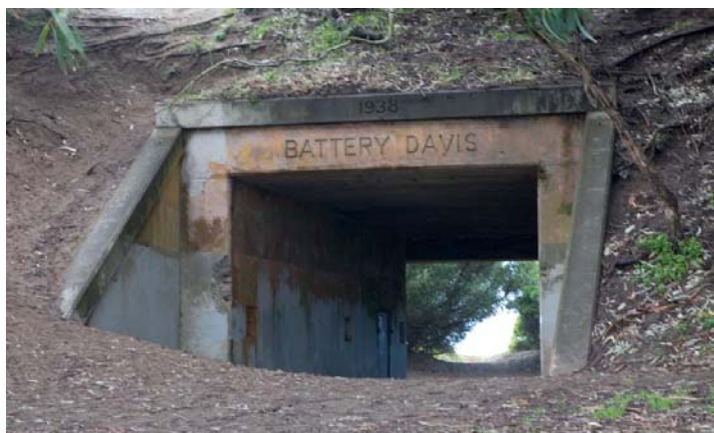
**Issue.** Dog management policy at GGNRA may impact or influence local, state, and federal policy at other parks and open space in the Bay Area, and this plan/EIS has the potential to set a precedent for the NPS nationwide. Open spaces for recreation add to the quality of the urban environment, but the park must serve a variety of visitor needs. Because the San Francisco Bay Area is highly urbanized, dog owners may have only minimal options for exercising their dogs outdoors. In many parts of the San Francisco Bay Area, residents have come to expect that GGNRA lands will be available for dog walking and other recreational activities. These factors result in a high concentration of dog walkers among other visitors who engage in a variety of activities, which often leads to conflicts. California State Parks and San Mateo County Parks, as well as the rest of the national park system, have more restrictive dog-use policies than those currently in place at GGNRA. The comparatively relaxed regulations on GGNRA lands may attract visitors with dogs from other areas that have more restrictive policies. Such a concentration of dogs and dog owners within GGNRA lands would amplify the negative effects of dogs and their owners on the park. Maintaining relatively relaxed restrictions at GGNRA could reduce pressure on regional parks, as dog walkers would continue to be able to use GGNRA for dog walking, whereas

tightening restrictions at GGNRA could increase pressure to lessen restrictions at regional parks to provide dog walking opportunities. Additionally, the less restrictive rules at GGNRA may result in other NPS units being challenged to review the existing NPS-wide 36 CFR 2.15(a)(2) leash regulations for other areas.

## VISITOR USE AND EXPERIENCE

Visitor experience represents the range of experiences a visitor might have, whether it be for recreational, educational, or scientific purposes, as well as the mutual compatibility or exclusivity of such uses, and may include using a park's interpretative or educational services, regardless of where such use occurs (e.g., via internet access, library). It is possible that dog walking under voice-control may be more an "exclusive" than a shared use, although a document prepared to assess whether negotiated rulemaking was likely to succeed (U.S. Institute for Environmental Conflict Resolution 2004, 9) characterized this as an area of disagreement among those interviewed. The reasons it may be an exclusive use include visitor safety and experience. The paragraphs below discuss general impacts to visitor use and experience associated with aesthetics, soundscapes, and environmental justice.

### Visitor Use and Experience—Aesthetics



Battery Davis

Credit: NPS

**Issue.** Dog walkers and visitors without dogs often come into conflict. Walkers, hikers, joggers, bicyclists, horseback riders, wildlife watchers, and those seeking a quiet and natural experience can all potentially be disturbed by running and barking dogs. The potential for visitors to be bitten by dogs at GGNRA also exists and is discussed as part of employee, visitor, and dog health and safety, which follows this section. Some visitors prefer to visit a national park area without encountering dogs. Additionally, dogs may adversely affect the aesthetics of the park by leaving waste on beaches, trails, or near water resources, and the overwhelming

smell of urine in park areas with heavy dog use (i.e., Battery Davis at Fort Funston) may also affect visitor experience at the park. Although signs indicate that dog owners are responsible for picking up their dogs' waste, owners do not always comply. Various dog groups and associations have even organized dog cleanups, provided bags, and tried to influence their members; but despite these efforts, many dog owners still do not comply with picking up dog waste.

### Visitor Use and Experience—Soundscapes

**Issue.** The natural sounds heard in GGNRA are a positive and valued park resource, as well as a component of the visitor experience, which dog barking may interrupt. Soundscapes within the park provide a variety of seasonally changing visitor experiences that are important to some park users as a refuge from the noise of the urban environment. An example is spring birdsong, which is most prevalent in more remote areas and along riparian and forested habitats. Other experiences—lapping waves and frog choruses—may also enrich the visitor experience. Walkers, hikers, joggers, bicyclists, horseback riders, wildlife watchers, and those seeking a quiet and natural experience and/or a national park experience without dogs can all potentially be disturbed (including park staff) by running, barking dogs—

particularly by those that chase or harass people or wildlife. For example, the raucous sounds of a disturbed wildlife community—birds and small mammals giving alarm calls—also add to the disruption of the visitor’s experience of the soundscape. These potential disturbances from barking dogs may change the natural character of the area and the overall visitor experience.

### **Visitor Use and Experience—Environmental Justice**

**Issue.** Minority or low-income populations may be more negatively affected by off-leash dog walking than Caucasian, middle-income, or high-income populations. San Francisco County is a racially diverse area, with minority populations accounting for approximately 53 percent of the population. The largest minority group in the San Francisco area is people of Asian descent (31.3%), followed by Hispanic/Latino persons (14.1%) (U.S. Census Bureau 2000, 1). A phone survey conducted in 2002 by Northern Arizona University (NAU 2002b, 1) separated data by race and income as well as other variables, and found lower support from low-income families for allowing off-leash dog walking under voice-control in GGNRA. The survey indicated that just over 13 percent of respondents with incomes lower than \$50,000 strongly supported off-leash dog walking, whereas almost 22 percent of those with incomes from \$50,000 to \$100,000 and just over 20 percent of those with incomes over \$100,000 strongly supported it. Racial differences were even more apparent, as only about five percent of African-American respondents strongly supported off-leash dog walking, whereas almost 17 percent of Caucasians and just over 20 percent of Asian-Americans supported off-leash dog walking. However, when the “strongly support” and “somewhat support” categories were combined, very few racial differences could be seen; approximately 44 percent of African-American respondents, 40 percent of Caucasians and just over 37 percent of Asian-Americans supported (strongly and somewhat) off-leash dog walking in the telephone survey (NAU 2002b, 92-93). Also noteworthy is that 39.4 percent of respondents of Hispanic origin supported (strongly and somewhat) off-leash dog walking and 39.9 percent of respondents of non-Hispanic origin supported (strongly and somewhat) off-leash dog walking (NAU 2002b, 93). Therefore, the Hispanic and non-Hispanic populations supported off-leash dog walking by almost the same percentages.

### **EMPLOYEE, VISITOR, AND DOG HEALTH AND SAFETY**

**Issue.** GGNRA manages much of the publicly accessible San Francisco Bay and ocean coastal lands in San Francisco and Marin counties; park personnel have stated that the increased number of conflicts among park visitors is of great concern. Many of the issues related to the health and safety of visitors to the park and park employees are related to encounters with unruly or aggressive dogs. Reported incidents include being knocked down, intimidated, and bitten by dogs. Additionally, dog-on-dog bites and dog-on-horse bites often involve visitors who could be injured during these conflicts (e.g., attempts to separate dogs, horses bolting). The paragraphs below discuss statistics and issues regarding safety of employees (rangers, U.S. Park Police, and other employees of the park) and visitors from dogs.

Injuries to visitors from dogs jumping on them, chasing them, harassing them, or biting them are a serious concern, as are increased risks or hazards to rangers who rescue dogs or dog owners. Between 2007 and 2008, there were 43 reported dog bites recorded by GGNRA LE and U.S. Park Police at GGNRA sites that are considered in this plan/EIS. Between 2007 and 2008, 35 rescues of off-leash dogs or their owners occurred at the cliffs of Fort Funston as recorded by GGNRA LE and U.S. Park Police. There is a potential for ranger injuries to occur in the course of these rescues. If the owners had had their dogs leashed and under control, then many of these rescues could have been avoided.

Between 2007 and 2008, GGNRA LE and U.S. Park Police recorded 1,683 total leash law violations (including warnings and citations) at GGNRA sites that are considered in this plan/EIS; 487 of these violations occurred at Crissy Field and 847 occurred at Ocean Beach. In addition, 338 reports of dogs in closed areas at GGNRA sites that are considered in this plan/EIS were recorded by GGNRA LE and U.S.

Park Police between 2007 and 2008. Visitors have reported being jumped on and knocked down by unrestrained dogs. The park has had complaints from people who are so frightened of off-leash dogs that they avoid visiting the park entirely or visit only when least likely to encounter dogs (NPS 2002a, 3). Even leashed dogs can be frightening to some people when dogs bark or strain at the leash. Conflicts between dogs walked under voice-control and other visitors can be particularly intense along the beach areas of the park, as this area attracts large numbers of visitors, both with and without dogs, particularly on weekends and during the summer or on warm days. Visitors with children who play along the water's edge or in the sand and are approached by dogs, either aggressively or not, may feel that their child's safety may be at an elevated risk for dog bites or other injuries.

**Issue.** A health concern associated with dog waste is pathogens that can infect humans if ingested. Organisms carried in dog feces include *Cryptosporidium*, *Giardia lamblia*, and *Salmonella*, which can induce symptoms ranging from skin sores to chest pain. Additionally, the bacteria called *Escherichia* can also be found in dog waste, and particular strains of some species of *Escherichia* are human pathogens, such as *E. coli*, commonly referred to as fecal coliform bacteria. Dog waste can also contain roundworms and other parasitic nematodes, which can cause fevers, bronchitis, asthma, or vision problems in severe infections (U.S. EPA 2001, 2). Infection by any of these pathogens can occur through ingestion of contaminated sand, vegetation, or water.

**Issue.** Wildlife may transmit disease to dogs, and the quality of water where dogs play or drink may be poor. Dogs may pick up canine distemper virus and other diseases from infected wildlife. Wild birds, small mammals, and dogs can also introduce microorganisms into a water supply, and these microorganisms, algal blooms, and other naturally occurring phenomena can make dogs sick when they drink from affected streams or ponds.



**Crissy Field and San Francisco**

Credit: NPS

## NEEDS OF URBAN AREA RESIDENTS

Because the San Francisco Bay Area is highly urbanized, dog owners may have access to few outdoor areas for exercising their pets. Additionally, the adjacent city, county, and state public lands have fewer areas available for dogs and/or more restrictions on these areas, so potential use by urban dog owners is therefore pushed onto NPS lands. For residents of San Francisco and Marin particularly, and increasingly for San Mateo residents, GGNRA lands are the “backyards” of the citizens, and residents have come to expect public lands to be made available for dog walking and other recreational activities. Also, as noted previously, the management and thus enforcement of laws, regulations, and policies for much of

the beach and other coastal property in this highly urbanized area falls to the NPS. The coastal areas are highly popular parts of the San Francisco Bay Area, a region whose population is currently seven million and is expected to grow to eight million by 2020 (NPS 2003a, 39). The expectations of an increased number of visitors, many of whom expect to use the national park sites for their recreational needs, have increased management challenges for the present and future generations.

## **PUBLIC CONFUSION OVER NATIONAL PARK SERVICE-WIDE DOG REGULATION, GOLDEN GATE NATIONAL RECREATION AREA-SPECIFIC RULES, NATIONAL PARK SERVICE MISSION AND POLICIES**

Off-leash, voice-control dog walking has historically been allowed in some areas of GGNRA since before the park was established. This unofficial policy continued after the establishment of GGNRA for more than 20 years, and following the park's 2001 return to the NPS-wide regulation (36 CFR 2.15(a)(2)) requiring dogs to be walked on-leash, some visitors were either unaware of the changes or were opposed to implementation of the rule and chose to ignore it. Additional confusion arose in 2005 when GGNRA reverted to the 1979 Pet Policy in response to the federal court decision barring enforcement of 36 CFR 2.15(a)(2) in areas contained in the 1979 Pet Policy until notice and comment rulemaking took place. Finally, in 2006, GGNRA enacted a special regulation requiring seasonal leash restrictions for protection of the federally threatened western snowy plover on sections of Crissy Field and Ocean Beach.

Further complication arises from the disconnected nature of GGNRA park sites, which are interspersed with other public lands managed by city, county, state, or regional agencies. Each agency has its own set of rules and regulations regarding dog walking, some of which differ from NPS regulations (see "State and Local Laws, Regulations, and Policies" at the end of this chapter), and geographical boundaries between agency jurisdictions are not always obvious.

The public may also be largely unaware of the laws, regulations, and policies that guide the NPS in management of lands and resources, such as the GGNRA Compendium (NPS 2001b, 1). Members of the public may also not know that they must refer to the GGNRA Compendium, or to the park's web site, to find which areas are closed to dog walking (or closed to visitors). Adding to the possible confusion, closures may change from year to year, and portions of park sites, rather than an entire site, may be closed to the public for resource protection or visitor safety.



**Signs at Stinson Beach**

Credit: NPS

As the dog walking regulations changed, GGNRA staff worked to educate the public by distributing information cards and brochures, meeting with organized dog walking groups and asking them to inform their constituencies, updating the park web site, media interviews and, particularly in 2001 and 2002, handing out free leashes to encourage adherence with the NPS leash requirement. Although it is likely that during the enforcement status changes many violations were intentionally committed by those aware of the rules and regulations of the area, public confusion added to the difficulty of enforcing on-leash dog walking rules.

## **ISSUES AND IMPACT TOPICS DISMISSED FROM ANALYSIS**

### **ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL**

The Council on Environmental Quality requires that environmental documents consider energy requirements and the conservation potential of various alternatives and mitigation measures. Dog walkers using GGNRA arrive at park sites on foot or by private automobile. However, vehicle miles traveled because of recreational dog walking in GGNRA are negligible in the context of regional travel because the alternatives would result in negligible to minor changes in private vehicle trips to GGNRA sites



considered in the alternatives. Any change in energy requirements as a consequence of modifications in the number of vehicle trips to GGNRA resulting from the implementation of any of the alternatives would be imperceptible. No consumption of energy during the implementation of the alternatives is expected. As a result, this topic has been dismissed under all alternatives.

## **NATURAL OR DEPLETABLE RESOURCE REQUIREMENTS AND CONSERVATION POTENTIAL**

Consideration of this topic is required by 40 CFR 1502.16. The NPS has adopted the concept of sustainable design as a guiding principle of facility planning and development (NPS 2006b, 124). Essentially, “sustainability” is the concept of living within the environment with the least impact on the environment. The objectives of sustainability are to design facilities to minimize adverse effects on natural and cultural values; to reflect the environmental setting and to maintain facilities to promote their resilience; and to illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use.

No facility planning or development is proposed in the alternatives considered in this plan/EIS, although trail work and limited fencing is proposed. The alternatives would not result in an appreciable loss of natural or depletable resources. As a result, this topic was dismissed from further analysis in this document.

## **URBAN QUALITY AND DESIGN OF THE BUILT ENVIRONMENT**

Consideration of this topic is required by 40 CFR 1502.16. The quality of urban areas is not a significant factor in determining a dog management policy for GGNRA. No new building construction or rehabilitation of existing structures is proposed under the alternatives presented in this plan/EIS; therefore, this topic has been dismissed from further analysis.

## **FLOODPLAINS**

NPS *Procedural Manual 77-2: Floodplain Management* (NPS 2003b, 1) provides agency-specific guidance for implementing Executive Order 11988, Floodplain Management. According to the guideline, an action class and applicable regulatory floodplain must be identified for a proposed action that is either subject to possible harm from flooding or has the potential for adverse floodplain impacts. Dog management actions are not expected to affect GGNRA floodplains, and possible flood events are not expected to affect dog management actions. As a result, this topic has been dismissed from further analysis.

## **PRIME AND UNIQUE AGRICULTURAL LANDS**

In August 1980 the Council on Environmental Quality directed that federal agencies assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture’s Natural Resources Conservation Service as prime or unique. None of the soils at the GGNRA sites considered in the alternatives would qualify as prime or unique farmlands because they have not been used for production of crops during the past four years. Therefore, this topic has been dismissed from further analysis.

## **WILD AND SCENIC RIVERS**

The *Wild and Scenic Rivers Act of 1968* established the national wild and scenic river system to protect the nation's highest quality natural rivers. There are no designated wild and scenic rivers within the study area, so this topic has been dismissed from further analysis.

## **INDIAN TRUST RESOURCES AND SACRED SITES**

Indian trust assets are owned by Native Americans but held in trust by the United States. The U.S. Department of the Interior requires that any anticipated impacts to Indian trust resources due to a proposed project or action by Interior agencies be explicitly addressed in environmental documents (512 Departmental Manual 2). Since the lands within the park boundaries are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians, this topic was dismissed.

## **SOCIOECONOMICS**

GGNRA park operations and visitors create social and economic links between the park and the surrounding community. However, dog management policies are not expected to have a noticeable impact on the economic links between GGNRA and the city of San Francisco. As a result, potential impacts on social and economic conditions would be highly unlikely to exceed a "negligible" threshold, and are therefore eliminated from detailed consideration.

Sufficient background information and description of the affected environment to support the preceding conclusion is presented below.

GGNRA has socioeconomic links with the community, including employment, income, taxes, and infrastructure (NPS 2001a, 1). The socioeconomic environment affected by GGNRA dog policy includes the San Francisco metropolitan statistical area (MSA), comprising the counties of San Francisco, San Mateo, and Marin, each of which encompasses GGNRA lands. The gross domestic product (GDP) for the San Francisco MSA was approximately \$268 billion in 2005 and total employment was approximately 2.7 million.

The GGNRA boundary encompasses approximately 80,500 acres of land in San Francisco, Marin, and San Mateo counties, or nearly 12 percent of the total three-county land area. Currently, the park employs 346 staff members (250 permanent positions, 52 term positions, and 44 temporary positions). In 2008, a total of approximately 14.5 million people made recreational visits to GGNRA.

According to an economic impact model developed for the NPS, in 2006 local day-use visitors to GGNRA spent approximately \$135.3 million out of an estimated total of \$231.7 million spent by all GGNRA visitors (Stynes 2007, 21). The spending numbers were generated using generic expenditure profiles developed for national parks. Based on data from a variety of surveys, local day-use visitors are assumed to spend on average \$38.70 per party per day. Visitation data on local visitors walking their dogs off-leash in the park are not available; however, reports from park staff suggest that use of GGNRA by dog walkers has been increasing as regulations limiting or prohibiting off-leash dogs in areas managed by other agencies have been increasingly enforced. At the same time, the city of San Francisco has increased dog play areas in recent years.

The alternatives could affect visitation patterns of both dog owners, most of whom are likely local residents, and other local and nonlocal visitors in units of the park where dogs are permitted. Alternatives regarding the management of dog walking in the park could affect the socioeconomic environment through changes in spending by visitors at area businesses, which could also cause changes in

employment and tax revenue. Restrictions on dog walking might reduce visitation by parties including dog owners and dog walkers. It is possible that visitation by individuals who prefer not to recreate near off-leash dogs (or dogs being walked on-leash) might increase overall, or visitors might redistribute their visits across different park units, depending on the outcome of the final plan/EIS. There is a broad business community linked to the GGNRA that serves both local and out-of-town visitors. NPS does not know which specific businesses would be most affected by changes in spending by dog owners and dog walkers; however, because dog owners and dog walkers are likely to be local residents, businesses that cater primarily to tourists are less likely to be affected.

Some commercial dog walking businesses visit GGNRA to exercise dogs under their care. These businesses would be directly impacted by changes in park policy that would restrict or prohibit use of the park by commercial dog walkers. Research and interviews indicate that there are at least 100 commercial dog walkers in the city, although there are also commercial dog walkers who do not have a business license and are not listed in the phone book. Many of these dog walkers are single individuals (who may or may not be licensed), as well as companies with several employees. There is at least one association for commercial dog walkers in San Francisco (Prodog). There are 68 registered businesses in the city of San Francisco providing pet care services and 216 such businesses in the San Francisco MSA (Reference USA 2005, 1). The park does not maintain official statistics on use of the park by dog walking businesses. According to interviews with stakeholders (Clayton, pers. comm., N.D.), most of the commercial dog walkers who use GGNRA visit at least once a week and others visit every day. In particular, commercial dog walkers use the Fort Funston area, the Crissy Field area, and Alta Trail above Marin City. Commercial dog walkers typically bring between four and ten dogs at a time to GGNRA and spend about one hour, twice a day, in the park. According to interviews, some dog owners request off-leash time for their dogs, and some dog walkers feel it is important to offer this service.

If commercial dog walking is not permitted in the park, commercial dog walkers may incur higher costs if they have to transport their dogs farther to find areas to walk their dogs, or if they have to reduce the number of dogs they walk at one time because of restrictive regulations in city dog parks or other public lands. While this would cause an impact on commercial dog walkers, the effects will be negligible within the context of employment within the San Francisco MSA (affecting less than 1/100 percent of the over 2.5 million jobs in the San Francisco MSA in 2005).

Based on the information summarized above, the NPS dismissed socioeconomics as an impact topic because implementation of alternative dog management policies is expected to have no measurable socioeconomic impact on the surrounding area. Estimated total spending by all local visitors to GGNRA accounts for 0.0008 percent of the total GDP for the San Francisco MSA in 2005. Current spending by dog owners and dog walkers will be an even smaller fraction of the local GDP. Changes in spending under alternative dog management proposals will have no impact or a negligible impact on the socioeconomic environment defined as employment, income, taxes, and infrastructure. In addition, spending by local residents does not have the same multiplier effect on the local economy as spending by nonlocal visitors. Local residents usually shift spending from one set of area businesses to another, leaving MSA-wide spending unchanged.

A separate cost-benefit analysis and regulatory impact analysis, as required under the *Regulatory Flexibility Act of 1980*, as amended in 1996, will be conducted during the rulemaking process.



## **SUMMARY OF BACKGROUND CONDITIONS AND REVIEW OF LITERATURE**

During the past five years the park staff has amassed as much information as could be found on dog management–related topics. Topics for which information was collected include dog management policies from a variety of jurisdictions, shorebird data and information from scientists and organizations that monitor San Francisco Bay Area shorebird populations, and several topics including literature related to dog interactions with wildlife, diseases, and waste issues.

### **DOG MANAGEMENT POLICIES FROM OTHER AGENCIES**

Federal, state, regional, county, and local agencies and land trusts are the primary providers of publicly accessible shoreline open space in the San Francisco Bay Area. In recent years, the popularity of dog walking has challenged many agencies, municipalities, and nongovernmental organizations that own these lands. Dog ownership in urban areas presents a unique set of circumstances that have increased the demand for outdoor, “dog-friendly” places to exercise and socialize dogs. Increasingly, municipalities are providing dog parks or play areas where dog owners can allow their dogs to be off-leash. Some parks and open space venues also may provide dedicated trails or portions of property for off-leash dog recreation and most have implemented regulations to reduce conflicts among various user groups and to protect sensitive natural and cultural resources as well as visitor experience and safety. To better understand the variety of circumstances dog management policies can address, NPS staff obtained dog management policies, information on visitor experience/conflict information, enforcement success, and other applicable information from a variety of NPS units and state, regional, county, and city park and recreation agencies. Information on dog management policies on lands adjacent to or near GGNRA sites was needed to clarify where other dog-related recreational opportunities were available in the vicinity of GGNRA and to assist with the development of alternatives that meet the goal of consistency with policies on adjacent lands. A summary of this information is stated below to provide an overview of dog management policies and the issues they raise.

### **OTHER NATIONAL PARK UNITS**

Thirty-three NPS units located along waterfronts similar to that of GGNRA provided information on dog policies at their locations. Six Pacific Coast, 17 Atlantic Coast, three Gulf Coast, and seven Great Lakes units were surveyed. Twenty-two of these units allow on-leash dog walking with access restricted to designated areas of the sites. Seven units allow on-leash dog walking throughout the park sites; one with restrictions. No sites allow off-leash dog walking, per federal regulations, and two sites do not allow dogs at all.

Of the NPS sites that allowed on-leash dog walking, restrictions primarily limit on-leash dog walking to developed areas (campgrounds, parking lots, picnic areas, and trails); some units also restrict on-leash dog walking to designated trails. Eleven units incorporate seasonal restrictions for on-leash dog walking on beaches for the protection of species of special concern, such as elephant seals, snowy and piping plovers and other shorebirds, and sea turtles. Other beach access restrictions result from beaches being designated as swimming beaches.

### **OTHER SAN FRANCISCO BAY AREA AGENCIES**

Dog management policies for jurisdictions in the San Francisco Bay Area—the California State Park System, Marin County (unincorporated Marin County, Marin County Open Space, and Marin Municipal Water District), Midpeninsula Regional Open Space District, East Bay Regional Parks, the City/County

of San Francisco, and San Mateo Parks and Recreation—are summarized in the paragraphs that follow. The San Francisco Public Utility Commission watershed lands do not allow dogs; the remainder of agencies contacted did allow dogs in specified areas.

**California State Park System.** There are six state parks in the immediate vicinity of GGNRA. In the counties encompassed by GGNRA, 24 state parks (Angel Island, Mount Tamalpais, Samuel P. Taylor, and China Camp in Marin County; Candlestick Point in San Francisco; and 19 parks and beaches in San Mateo County) are available for recreation. Dog walking is permitted in most state parks and some beaches but dogs are either restricted to developed areas (e.g., picnic areas and campgrounds) or dogs must be in an enclosed vehicle, tent, or pen or be on a leash not more than six feet long. Unlike at GGNRA, even leashed dogs are generally not allowed on trails. There is no limit to the number of dogs allowed per individual, but all dogs must be on a leash no longer than six feet. Compliance is generally not an issue (State of California 2007, 1; McNamee, pers. comm., 2006). Visitors with vicious, dangerous, noisy, or disturbing animals are evicted from park units (California Department of Parks 2007, 1).

**Unincorporated Marin County.** Dog access regulations require dogs to be under immediate control at all times but do not require them to be on a leash. Regulations require that dogs be kept from physically harassing other people and animals, and the maximum number of dogs is regulated at “three over the age of four months unless the walker is a ‘hobbyist’ or has a ranch dog permit.” There is no waste regulation in the unincorporated areas. There may be water access (bays, ocean, lakes, and reservoirs) at some locations. Rules are enforced by the Marin County Humane Society (Machado, pers. comm., 2006).

**Marin County Open Space.** Dogs are restricted to trails and fire roads. Dogs are allowed off-leash only on fire roads. Leashes must be a maximum of six feet in length and dogs not on-leash must be under direct and immediate control. A maximum of three dogs per person is allowed based on the county code for pets per household/per family. Sensitive areas have additional restrictions for dog management. Commercial dog walkers must obtain an annual conditional use permit, which allows up to six dogs to be walked at one time and requires at least three of the six dogs to be on-leash at all times. Dog waste must be picked up by the dog walkers. Rangers enforce restrictions, and the largest area of noncompliance is off-leash dogs in areas where they are not allowed (County of Marin 2006a, 6 and 2006b, 1; Hansen, pers. comm., 2006).

**Marin Municipal Water District.** This district owns about 21,000 acres of watersheds and reservoirs. Dog walking is allowed only on-leash (six feet) in all areas (except for water bodies), unless posted for temporary closures for construction projects or to protect species of special concern. There is no limit to the number of dogs as long as all are on-leash. Enforcement is highest for noncompliance with the on-leash requirement (Marin Municipal Water District 2002, 25-26; May, pers. comm. 2006).

**Midpeninsula Regional Open Space.** Midpeninsula Regional Open Space District is a regional greenbelt system that includes more than 55,000 acres of land in 25 preserves. This district west of U.S. Highway 280 stretches from Los Altos in the south to San Carlos in the north. Dogs are allowed on all trails in six of 25 preserves and on designated trails in four additional preserves. Dogs are permitted to be off-leash only in the marked off-leash area in the Pulgas Ridge Preserve. Walkers may have a maximum of three dogs and a maximum leash length of six feet for traditional leashes and 25 feet for retractable leashes (Midpeninsula Regional Open Space District 2007a, 1 and 2007b, 1). Dog walkers must move dog waste well off the trail and out of sight, or preferably, bag and remove waste from the preserves. There are no special regulations for commercial dog walking enterprises. Major enforcement problems arise from off-leash dogs in restricted areas (Midpeninsula Regional Open Space District 2004, 1 and 2007a, 1; Lenington, pers. comm., 2006).

**East Bay Regional Parks.** Dog walking is allowed on-leash in parking lots, picnic sites, lawns, or developed areas, but dogs are prohibited at swimming beaches, pools, golf courses, wetlands, designated nature study areas, and areas with sensitive habitat or endangered or threatened species. A maximum of three dogs per person is allowed and leashes must be no longer than six feet. Dogs are allowed off-leash in most undeveloped areas except where restricted for resource and wildlife protection. Dogs are also allowed off-leash at one developed site, Point Isabel Regional Shoreline, which is a state park area managed by East Bay Regional Park District and one of the most heavily used dog parks in the country. Commercial dog walkers and private individuals intending to walk more than three dogs are allowed to walk one to six dogs with an annual permit. All other restrictions for dog walkers apply to commercial dog walkers as well. Walkers are required to remove dog waste. The East Bay Regional Park system does not have any major compliance issues (East Bay Regional Parks 2006, 1, 4; Kenny, pers. comm., 2006).

**City/County of San Francisco.** San Francisco Recreation and Park Department has 227 properties and 3,300 acres under its management (San Francisco Recreation and Park Department 2007, 1). Generally, dogs are required to be on-leashes no longer than six feet in San Francisco city parks, which are run by the San Francisco Recreation and Park Department. Up to three dogs per owner are allowed and dog walkers must pick up dog waste. Dogs are prohibited at athletic fields, ball courts, play areas, and sensitive habitat areas. Dogs are allowed off-leash in 28 designated dog play areas (DPAs) within 24 city parks. Some of the DPAs are fenced and others use natural barriers such as topography or shrubbery; all DPAs have a minimum area of 10,000 square feet and have fenced off or posted any sensitive habitat or resource sections where dogs are prohibited. Commercial dog walking is allowed by permit (fee) and with an Animal Care and Control Agreement. Commercial dog walking is time restricted (9 a.m. to 4 p.m.) and up to six dogs may be walked off-leash by a commercial walker (San Francisco Recreation and Park Department 2002, 5, 6, 9, 15; Palacio, pers. comm., 2006).

**San Mateo Parks and Recreation.** In San Mateo, dogs are not allowed in any county park or on any county trail (County of San Mateo 2007, 1; Holland, pers. comm., 2006).

## **OTHER MUNICIPALITIES**

**City of Santa Cruz, California.** Dogs are allowed to run off-leash in designated areas of seven parks, with time restrictions, and are not permitted in six parks. Walkers are required to remove dog waste (City of Santa Cruz 2009, 1).

**City of Boulder, Colorado.** City of Boulder Parks and Recreation District allows on-leash dog walking in all urban parks. Four urban parks also have dog parks where off-leash dog walking is allowed. A separate city department, Open Space and Mountain Parks (OSMP), has 144 miles of trails, 94 percent of which are open to dogs with the exception of seasonal trail closures and leash restrictions for resource protection. Some of these trails require all dogs to be on-leash, but others allow dogs off-leash if they meet voice-and-sight-control standards. Those standards are from the OSMP-developed Voice-and-Sight Tag Program, an education and certification program required of all dog “guardians” wishing to walk their dogs off-leash on OSMP trails that allow voice and sight control. Upon completion of the course, high-visibility tags can be purchased for any dogs that the guardian has agreed can adhere to the voice-and-sight-control guidelines. OSMP has also instituted a “Trailhead Area Leash Program” to reduce incidents at trailheads where there has been a high level of conflict between dog walkers and visitors without dogs (City of Boulder 2009, 1).

**Nashville, Tennessee.** All Nashville Metro parks are open to dogs on-leash, and there are three dog parks that provide fenced areas for off-leash dogs. Dogs are not allowed in playgrounds or pool facilities. Owners/walkers must remove waste and keep dogs under control (City of Nashville and Davidson County 2005, 3-10). Prior to the establishment of the dog parks, Metro Park Police and other staff report that

unrestrained dogs became one of the most frequent sources of complaints on park property (City of Nashville and Davidson County 2005, 3-10).

**Seattle, Washington.** Dogs are allowed to roam off-leash at 11 of the 400 parks and recreation areas in the Seattle metro area. Although dogs are allowed on-leash in most other park areas, they are not allowed on beaches, play areas, or organized athletic fields. Owners are responsible for waste removal. Fines are implemented for leash and waste-removal violations (Seattle Parks and Recreation 2009, 1, 3).

**British Columbia, Canada.** After the City of Surrey conducted an extensive literature review of impacts of dogs on the foreshore and nearshore at Blackie Spit Park, they concluded that the park would not be a good candidate for dog access to the intertidal zone due to highly sensitive and regionally important habitats located within the park, as well as the relatively small size of the less sensitive habitats. The City also decided that extensive fencing to prevent off-leash dogs from accessing other areas of the park and well-spaced signs that clearly indicated dog management regulations should be used. It was also concluded that the City of Surrey, the local dog owners' group, and naturalists' organizations should implement a dog park outside the park in an area that does not have high environmental value (Andrusiak 2003, 35).

## DOGS AND WILDLIFE

This section provides a general summary of the literature review conducted to determine the associations between dogs, wildlife, and diseases associated with wildlife, which are discussed in more detail and used for the purposes of the impacts analysis presented in chapter 4.

**Dogs and Wildlife.** While it is generally well known and well documented that the presence of dogs in natural areas can result in disturbance to wildlife, studies reviewed as part of this analysis provide conflicting conclusions. According to Sime (1999, 8.1-8.17) the manner in which an animal (or group of animals) responds to a dog can be highly variable from species to species, individual to individual, location to location, and season to season. Generally, potential impacts to wildlife as a result of interactions with domestic dogs could be broadly classified as falling into three categories: harassment, injury, or death. The modification of normal behaviors such as feeding, nesting, grooming, and resting can occur through repeated disturbance, and wildlife may relocate from preferred habitat to other areas to avoid harassment. This relocation may include the displacement of wildlife from public to private lands (Sime 1999, 8.4). Dog presence has been correlated with altered patterns of habitat use for wildlife species (Lenth et al. 2008, 1). Authors of many wildlife disturbance studies concluded that dogs with people, dogs on-leash, and loose dogs all provoked the most pronounced disturbance reactions from their study animals (Sime 1999, 8.2). Wildlife habituation to activities may occur, but some studies have shown that local wildlife does not become habituated to continued disturbance by dogs (Banks and Bryant 2007, 612). Animals most often affected by disturbance from dogs include deer, small mammals, and birds (Denny 1974 in Sime 1999, 8.5), although dogs have been documented as disturbing carnivores at GGNRA, specifically coyotes (NPS 2009b, 11, 15).

Migrating species, especially shorebirds, use stopover areas (e.g., beaches) to rest and feed, replacing energy consumed between stops. Unleashed dogs can bark at or chase roosting, foraging or feeding birds, which results in disturbance, and can result in energy loss to migrating and wintering birds, potentially reducing their chances of survival along their migratory routes and reducing fitness for successful reproduction (Andrusiak 2003, 5). When shorebirds are flushed, it is not solely because of dog presence; it has been suggested that dogs extend the zone of human influence when off-leash (Sime 1999, 8.2).

At some level, domestic dogs still maintain instincts to hunt and/or chase (Sime 1999, 8.2). But even if the chase instinct is not triggered, dog presence in and of itself may be an agent of disturbance or stress to

wildlife (Sime 1999, 8.2). Animals that are prey of wild canids may perceive dogs as predators and may therefore be subject to nonlethal, fear-based alterations in physiology, activity, and habitat use due to the presence of dogs (Miller et al. 2001, 131; Lenth et al. 2008, 1). Dogs may disturb wildlife either accidentally or deliberately through chasing (Andrusiak 2003, 5). Dogs walked on-leash disturb wildlife less frequently than dogs off-leash, but dogs causing actual direct injury to or mortality of wildlife is rare (Andrusiak 2003, 5). Although leashing makes it difficult for pets to chase birds and reduces the probability of disturbance and the number of birds per disturbance, leashed pets still disturb birds (Lafferty 2001, 1956).

It has been suggested that dogs are an extension of their owners and the presence of a dog with a person involved in recreation (hiking) increases the radius of the human influence or disturbance beyond what it would be in the absence of a dog (Sime 1999, 8.2; Miller et al. 2001, 124). This influence is greater when a dog is off-leash than when it is walked on-leash. Sime (1999, 8.4) also notes that the predictability of disturbance is diminished when a dog is off-leash. In addition, dogs that are off-leash in natural areas during the breeding season can result in a higher level of disturbance to wildlife, especially young deer and ground-nesting or colonially nesting birds. Andrusiak (2003, 22) suggests that dogs traveling quietly along a trail with screening vegetation on both sides are unlikely to disturb or even encounter wildlife.

**Dogs and Diseases Related to Wildlife.** The role of dogs in wildlife diseases is poorly understood (Sime 1999, 8.4). Most dog owners responsibly vaccinate their pets for diseases such as canine distemper, canine parvovirus, and rabies. Domestic dogs that are not vaccinated can potentially introduce diseases into wildlife habitats (Sime 1999, 8.2). Viruses related to canine distemper virus have been documented in the deaths of a wide variety of wild animals, from seals, dolphins, and porpoises in Russia to lions in Africa, but there are fewer documented instances of deaths caused by canine distemper in areas where domestic animals are regularly vaccinated (Mills 1999, 2-8). Domestic dogs may also host both endoparasites and ectoparasites, and it is possible for dogs to contract diseases from or transmit diseases to wild animals (Sime 1999, 8.4). Dog feces have been implicated in the transmission of muscle cysts (*Sarcocystis* spp.), which can infect a variety of ungulate species, including mule deer and white-tailed deer. Dogs may also introduce diseases or parasites to small mammals. Additionally, in an area of GGNRA, Riley et al. (2004, 11) showed that proximity to urban areas or contact with humans can increase the risk of wild carnivore populations' exposure to disease, including canine parvovirus in foxes and feline calicivirus in bobcats.

## HEALTH AND SAFETY

This section provides a general summary of the literature review conducted to determine the associations between dogs and diseases, encounters with unruly/aggressive dogs, and the safety of off-leash dogs, which is discussed in more detail and used for the purposes of the impacts analysis presented in chapter 4.

**Dogs and Diseases Related to Humans.** Pet waste can contain pathogens, such as *Giardia*, roundworms, *Salmonella*, *Escherichia* (particular strains of some species are human pathogens, such as fecal coliform bacteria), parvovirus, and many other microorganisms that can be harmful to human health (CRCCD 2009, 1). Leaving pet waste anywhere on the ground may expose children, adults, and other pets to these potential pathogens and bacteria (CRCCD 2009, 1). If dog waste from infected dogs is left on the ground, the surrounding soil can become contaminated with parasite eggs that are passed in animal feces and hatch in the soil. The collection of feces and reducing feral and unaccompanied domestic animals in parks could help reduce the risk of transmission of many diseases (Riley et al. 2004, 19).

There is also a risk of humans getting sick from drinking or swimming in waters contaminated by pet waste (CRCCD 2009, 1). If pet waste is left on the ground, runoff from rain events may transport microorganisms to adjacent water bodies. Fecal coliform bacteria are routinely measured at bathing

beaches as an indicator of potential contamination from human or animal waste, although once contamination is detected, other tests are needed to determine the specific source. Wild birds, small mammals, and dogs can also introduce microorganisms into a water supply, and these microorganisms, algal blooms, and other naturally occurring phenomena can make uninfected dogs sick when they drink from affected streams or ponds.

**Encounters with Unruly/Aggressive Dogs.** Encounters with unruly or aggressive dogs can pose a major health and safety concern to people and other pets. Serious bites can result in injury/disease, medical insurance and worker's compensation claims, lost wages, and sick leave (AVMA Task Force 2001, 1732-1749). At GGNRA, reported incidents of encounters with unruly/aggressive dogs include instances of visitors being knocked down, intimidated, and bitten by dogs. In 2007/2008 a total of 52 violations were given for dog bites or attacks at the GGNRA park sites as recorded by GGNRA LE and U.S. Park Police. In a recent study, researchers estimated the extent of environmental damage and subsequent economic costs due to nonindigenous species in the United States, stating that an estimated 4.7 million people are bitten by feral and pet dogs annually, with 800,000 cases requiring medical treatment; costs associated with medical treatment for dog bites are estimated to be \$165 million per year (Pimentel et al. 2000, 5). In general, children are the most common victims of serious dog bites in the United States, but the elderly are also considered at higher risk of dog bite injury/disease due to thinning skin (increased risk of bruising, serious lacerations). Decreased sensory perception (diminished eye sight, hearing) and motor skills can result in elderly persons not seeing or hearing a threatening or unruly dog or being unable to physically protect themselves or escape from an aggressive dog (AVMA Task Force 2001, 1732-1749).

**Safety of Off-Leash Dogs.** The instinct to chase wild animals threatens the safety of dogs that are not controlled by leashes. Dogs can get lost or hit by a car or can run into conflict with more threatening animals; therefore, dogs walked on-leashes and kept in fenced areas are less likely to be harmed as the result of long-distance chases. However, some research suggests opposing conclusions. In a case study in Boulder, Colorado, on interactions among dogs, people, and the environment, Bekoff and Meaney's (1997, 1) behavioral data showed that dogs off-leash generally did not travel far from their owners or the trail. However, if dogs did travel off trail, it was generally for a short period of time and they were rarely observed chasing other dogs, disturbing people, chasing wildlife, destroying vegetation, or entering bodies of water. Additionally, results from a questionnaire demonstrated that both dog owners and non-dog owners believed that humans are more disruptive to the environment than dogs (Bekoff and Meaney 1997, 1). Another study on the effects of dog leash laws and habitat type on avian and small-mammal communities in urban parks concluded that off-leash dogs have no effect on the diversity or abundance of small mammals or birds in urban parks (Forrest and St. Clair 2006, 1).

## **DOGS AND VISITOR EXPERIENCE**

The presence of dogs, whether on or off-leash in parks, may affect visitor experience. Some visitors enjoy the sight of dogs in the park, and enjoy the ability to interact with other people's dogs. For others, dogs off-leash create fear, and some people just prefer to avoid encounters with dogs (Roberts 2007, iii). Dog walkers can indirectly affect the aesthetics of the park, as well as affecting visitor experience through reduced enjoyment, when they do not pick up their dogs' waste on trails, beaches, or in picnic areas (Roberts 2007, iii). Also, dog walking results in the smell of dog urine, which can be an especially displeasing experience on a hot summer day. Park visitors with dogs typically use GGNRA for dog walking because of leash laws in the surrounding areas, where off-leash dog walking is prohibited or limited, and because they prefer to visit areas with access to beaches, shoreline, and greater exercise opportunities for their dogs.

As stated previously and in response to the ANPR in January 2002, a public comment analysis report was published (NAU 2002a, 1). In this report, 71 percent of public comments favored allowing off-leash dog

walking in selected GGNRA sites (option B) and 28 percent of public comments favored the enforcement of existing leash laws in the GGNRA (option A) (NAU 2002a, 5). More than 500 respondents affirmed their belief that it is their right to walk dogs off-leash at park sites. Other reasons given in support of off-leash dog walking concerned the benefits to humans, including increased sociability with other dog walkers or with visitors who enjoyed interacting with dogs, and the safer feeling some dog owners have when they visit urban parks, especially at night, if their dogs are present (NAU 2002a, 17-20). However, approximately 13 percent of the comments received cited feelings of discomfort around or fear of off-leash dogs and felt that off-leash dogs were dangerous to children; a similar percentage also stated that dogs in general make the park unsafe for visitors (NAU 2002a, 10).

In addition to the ANPR public comment analysis report, a telephone survey regarding NPS pet management regulations was also conducted, which was discussed in more detail previously (NAU 2002b, 1). The results of the telephone survey showed that 71 percent of all respondents supported and 23 percent opposed the current NPS regulation for walking dogs on-leash at most GGNRA sites and prohibiting off-leash dog walking (NAU 2002b, 11). When asked whether they specifically supported allowing off-leash dog walking in GGNRA, 40 percent of all respondents stated that they supported allowing dogs off-leash in GGNRA and 53 percent stated that they opposed allowing off-leash dog walking in GGNRA sites (NAU 2002b, 11). A total of 28 percent of the respondents were dog owners or dog caregivers; of these respondents, 50 percent used GGNRA for dog walking purposes (NAU 2002b, 16). Almost one-third of visitors from each of four counties surveyed who had seen off-leash dogs while visiting GGNRA sites viewed that experience positively, but the largest proportion of visitors from each county stated that off-leash dogs had neither a positive nor negative effect on their experience at GGNRA (NAU 2002b, 20). Some of the respondents stated that they enjoy playing with other visitors' dogs and that dogs at play add to the park's visual appeal (NAU 2002b, 19-20). Also during the 2002 telephone survey, a total of 22 percent of respondents who saw dogs off-leash in GGNRA said that it detracted from their visitor experience; additional comments received during the survey found that visitors who are not familiar with dogs or who have had unpleasant experiences with dogs in the past are easily intimidated by dogs (NAU 2002b, 19-20).

## **ENVIRONMENTAL JUSTICE**

In a study conducted by San Francisco State University in 2007 on ethnic minority visitor use experience at GGNRA, research found that dogs were a problem mentioned by all Latino and Asian groups (Roberts 2007, iii). Research found that these minority groups mentioned dogs, especially dog waste, as a barrier to park visitation, and overall, Latinos were the most concerned with dog owners' lack of concern or control of their dogs (Roberts 2007, iii). However, in the telephone survey conducted by Arizona University's Social Research Laboratory, 39.4 percent of respondents of Hispanic origin supported (strongly and somewhat) off-leash dog walking and 39.9 percent of respondents of non-Hispanic origin supported (strongly and somewhat) off-leash dog walking (NAU 2002b, 93). Therefore, the Hispanic and non-Hispanic populations supported off-leash dog walking by almost the same percentages. The telephone survey also divided respondents by Asian-American, Black/African-American, and Caucasian races. Racial differences in opinion did not vary by many percentage points for support of off-leash dog walking. Approximately 44 percent of African-American respondents, 40 percent of Caucasians, and just over 37 percent of Asian-Americans supported (strongly and somewhat) off-leash dog walking in the telephone survey (NAU 2002b, 92-93). Only when the support category was further divided into "strongly support" and "somewhat support" could racial differences be seen. For example, only about five percent of African-American respondents strongly supported off-leash dog walking, whereas almost 17 percent of Caucasians and just over 20 percent of Asian-Americans strongly supported off-leash dog walking (NAU 2002b, 93).

## SCOPING PROCESS AND PUBLIC PARTICIPATION

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in a planning document prepared in accordance with NEPA. Scoping includes obtaining early input about the planning project from the public, staff, interested agencies, or any agency with jurisdiction by law or expertise. Scoping activities for this project are summarized below. Additional information on the public involvement process and ongoing agency coordination is presented in “Chapter 5: Consultation and Coordination.”

### PUBLIC INVOLVEMENT WITH THE NATIONAL ENVIRONMENTAL POLICY ACT PROCESS

Significant public involvement on dog walking in GGNRA has occurred since 2001, as described in previous sections, including the following:

- Public attendance and comments at the Commission meeting in January 2001, in which the voice-control policy was acknowledged as contrary to 36 CFR 2.15(a)(2), prohibiting off-leash dogs in national parks.
- Public comments on the ANPR received within the 91-day comment period, January to April 2002.
- Public informational meetings on the ANPR in March 2002 and an oral comment session in April 2002.
- Phone survey by NAU of 1,600 households in the four-county San Francisco Bay Area in spring 2002.
- Interviews with stakeholders conducted as part of the negotiated rulemaking assessment process in 2004.
- Notice of Intent to Establish the Negotiated Rulemaking Committee, published in the Federal Register on June 28, 2005, which invited the public to comment on the proposal to create the Committee.
- Notice of Establishment of the Negotiated Rulemaking Committee, published in the Federal Register on February 17, 2006.
- Dog Management Negotiated Rulemaking Advisory Committee Meetings in March 2006, April 2006, May 2006, July 2006, September 2006, April 2007, and October 2007.
- Dog Management Plan/EIS public scoping comment period and public meetings, February–April 2006.
- Numerous emails, phone calls, correspondence, and media stories regarding the issue.

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to be addressed in a  
planning document  
prepared in  
accordance with the  
National  
Environmental Policy  
Act.*

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### GOALS OF THE PUBLIC INVOLVEMENT PROCESS

At the January 2005 internal scoping meeting, NPS staff discussed goals for future public involvement on this issue and the means and processes that might be used to involve the interested and affected public



effectively. The following public involvement goals were derived from the January 2005 internal scoping meeting:

- Work toward community acceptance of the process and the solution.
- Allow the community to participate, maximizing creative thinking.
- Enhance public understanding of natural and cultural resource values.
- Enhance public understanding of the requirements of the ESA and other legal obligations.
- Provide notice that the park is moving forward, and that now, not later, is the time for the public to provide input.
- Create broad, representative input at a local, regional, and national level.
- Educate members of the public on competing and similar interests of all involved groups or individuals.
- Enhance public appreciation of park resources and the challenges of park management.
- Promote understanding of the park's mandate and mission and of its connections to legislation, the ESA, the *National Historic Preservation Act* (NHPA), and other elements.
- Promote public understanding that the NPS policies for national recreation areas do not differ from those of national parks.
- Form positive relationships with stakeholder groups.
- Clarify distinctions and differences among GGNRA and local/regional parks and other local land management agencies.
- Keep elected officials informed.

## **PUBLIC INVOLVEMENT IN THE ENVIRONMENTAL IMPACT STATEMENT PROCESS**

The EIS process formally began with a notice of intent (NOI) published in the Federal Register on February 22, 2006, announcing the intention both to prepare this EIS and to begin public scoping. The public was asked to submit comments within 30 days after the NOI publication. In mid-March, the Public Scoping Brochure for the GGNRA plan/EIS was mailed to the names on the park's dog management project and general mailing lists for public review and comment. A Notice of Extension of Comment Period was published in the Federal Register on March 29, 2006, to extend the period for public comment on the scope of the planning process and potential alternatives through April 24, 2006. During the scoping period, two public scoping workshops were held. The first was held at the Bay Model Visitor Center in Sausalito on April 4, 2006, and the second was held at the Fort Mason Officers Club on April 5, 2006. Both workshops presented information about current GGNRA dog management and the planning and negotiated rulemaking processes. Park staff and other NPS specialists were on hand to answer questions and provide additional information to workshop participants. During the scoping period, over 500 pieces of correspondence were entered into the NPS Planning, Environment, and Public Comment (PEPC) web-based database, either by direct entry by the commenter, or by uploading of emails, faxes, and hard-copy letters by NPS staff.

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*The NEPA process for this project was initiated and run concurrently with the negotiated rulemaking process.*

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In addition to the brochure and workshops, the public was kept up to date on the project by information on the park's project telephone information line and posted on the NPS PEPC web site (<http://parkplanning.nps.gov/goga>) and the park's web site ([www.nps.gov/goga](http://www.nps.gov/goga)). A summary report of the public comments received during the public scoping phase of the plan/EIS was prepared in August 2006 and is posted, along with the NOI and the Public Scoping Brochure (NPS 2006a, 1), on the PEPC web site and linked to the park web site.

As described previously, the NEPA process for this project was initiated and run concurrently with the negotiated rulemaking process. During the negotiated rulemaking process the public had additional opportunities for listening and providing input by attending the seven meetings of the full Negotiated Rulemaking Committee.

## **RELATED LAWS, REGULATIONS, AND POLICIES**

GGNRA is guided by a variety of legal directives, including federal and state laws, regulations, executive orders, NPS management policies, Director's Orders, other agency and departmental policies, decisions made through other NEPA planning processes, and legal agreements. Foremost among these directives is the *NPS Organic Act of 1916* and its interpretation in the *NPS Management Policies 2006* (NPS 2006b, 10). Park units also turn to their park-specific enabling legislation to determine the park purpose, significance, and mission (why the unit was established as a park, its unique features, and what the park should accomplish).

### **NATIONAL PARK SERVICE ORGANIC ACT AND MANAGEMENT POLICIES**

By enacting the *NPS Organic Act of 1916* (Organic Act), Congress directed the U.S. Department of the Interior and the NPS to manage units "to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations" (16 USC 1). The Organic Act prohibits actions that impair park resources unless a law directly and specifically allows for these actions (16 USC 1a-1). An action constitutes an impairment when its impacts "harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values" (NPS 2006b, 11). Congress reiterated this mandate in the *Redwood National Park Expansion Act of 1978* by stating that the NPS must conduct its actions in a manner that will ensure no "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" (16 USC 1a-1).

Despite these mandates, the Organic Act and its amendments afford the NPS latitude when making resource decisions that balance visitor recreation and resource preservation. In these acts, Congress "empowered [the NPS] with the authority to determine what uses of park resources are proper and what proportion of the park's resources are available for each use" (*Bicycle Trails Council of Marin v. Babbitt*, 82 F.3d 1445, 1453 (9th Cir. 1996)).

Because conservation remains its predominant mandate, the NPS seeks to avoid or to minimize adverse impacts on park resources and values.

The NPS has discretion to allow negative impacts when necessary (NPS 2006b, 10); however, while some actions and activities cause impacts, the NPS cannot allow an adverse impact that constitutes impairment (NPS 2006b, 11). To determine impairment, the NPS must evaluate "the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in

question and other impacts” (NPS 2006b, 11). The NPS *Management Policies 2006* require that these determinations, and all planning decisions in the Service, be based on current scientific and scholarly understanding of park resources and ecosystems, as well as professional judgment of the NPS decision maker (NPS 2006b, 11, 12, 24). The NPS *Management Policies 2006* also have separate chapters on the appropriate management of the parks and their resources (e.g., wilderness, natural resources) and state that “the law enforcement program is an important tool in carrying out the NPS mission” (NPS 2006b, 108).

Park units vary in their enabling legislation, natural resources, cultural resources, and missions. Management activities appropriate for each unit and for areas within each unit vary as well. An action appropriate in one unit could impair resources or values in another unit. Thus, this plan/EIS will analyze the context, duration, and intensity of impacts related to dog management only within GGNRA, as well as the potential for resource impairment, as required by the NPS *Director’s Order #12* and handbook (NPS 2001a, 1).

## **Impairment of National Park Resources**

In addition to determining the environmental consequences of implementing the preferred and other alternatives, NPS *Management Policies 2006* (section 1.4) requires analysis of potential effects to determine whether or not proposed actions would impair a park’s resources and values.

The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the *General Authorities Act*, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the NPS the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park. That discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values (NPS *Management Policies 2006*). Whether an impact meets this definition depends on the particular resources that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park’s general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated.

Impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park.

Impairment findings are not necessary for visitor experience, public health and safety, environmental justice, and park operations, etc., because impairment findings relate back to park resources and values. The determination of non-impairment for the preferred alternative is found in appendix C.

## **GOLDEN GATE NATIONAL RECREATION AREA LAWS, POLICIES, AND PLANS**

### **Golden Gate National Recreation Area Enabling Legislation**

<hr/> <i>The enabling legislation requires that the park and its visitors “utilize the resources in a manner which will provide for recreation and education opportunities consistent with sound principles of land use planning and management...”</i> <hr/>	<p>GGNRA was established by Congress in 1972 (PL 92-589). The language of the enabling legislation states the park’s purpose as follows: “In order to preserve for 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 is hereby established.” The hearing records pertinent to the enabling legislation reveal that the future use of the park was the subject of considerable discussion. The nearby presence of several million people provided an unprecedented opportunity to make national park resources and programs available to a wide variety of visitors, many of whom had not been able or willing to access the more remote national parks. Based on the record, this “parks to the people” idea was clearly intended by Congress and the administration to be a major purpose of GGNRA (NPS 1980, 7).</p> <p>The enabling legislation also requires that the park and its visitors “utilize the resources in a manner which will provide for recreation and education opportunities consistent with sound principles of land use planning and management,” and that the recreation area be preserved “as far as possible in its natural setting” and protected from uses that would “destroy the scenic beauty and natural character of the area.”</p>
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### **The Golden Gate National Recreation Area General Management Plan**

The original GGNRA General Management Plan (GMP) (NPS 1980, 1) was combined with the plan for Point Reyes National Seashore, which adjoins GGNRA. The GMP is a document that ensures that a park has a clearly defined direction that sets achievable and sustainable goals for resource preservation and visitor use. The joint GMP notes that the resources in these two park units would be of outstanding significance even if they did not exist at the fringes of a large city. Together, these two parks represent one of the nation’s largest coastal preserves—more than 100,000 acres of “superlative North Pacific Coast landscape” (NPS 1980, 8). This has since grown to more than 150,000 acres. The GMP goes on to say that “in spite of the outstanding quality of the scenic, natural, and historic resources” in GGNRA, it may be the sharp contrast between the intensively developed urban environment of San Francisco and the park’s adjacent and undeveloped areas that make it particularly unique. It points to the chance to view wilderness-quality scenery, headlands that are much like they were when gold-seekers first viewed them a century ago, and the chance to be removed “from the sights and sounds of man” a short hike away (NPS 1980, 9) as examples. This wide variety of resources and outdoor settings provide opportunities for a correspondingly diverse array of recreational and educational activities of “a quality and character found

nowhere else” (NPS 1980, 9). Management objectives in the 1980 GMP that are relevant to dog management include the following:

- Maintain and restore character of natural environment lands by maintaining the diversity of native park plant and animal life; identifying and protecting threatened and endangered plant and animal species, marine mammals, and other sensitive natural resources; controlling exotic plants; and checking erosion whenever feasible.
- Retain the current character of cultural resources pending completion of detailed resource management plans.
- Offer recreational opportunities to a diversity of park users and impart knowledge necessary for full enjoyment of park resources through a particular emphasis on interpretation, education, and information programs.
- Develop facilities and programs that respond to the special needs of senior citizens, the handicapped, and cultural and ethnic minorities.
- Plan facilities to offer a wide variety of uses.
- Retain opportunities for recreational activities pursued in the park today.
- Balance the responsibility of meeting the needs of park visitors with the need to protect the interests of residents in adjacent communities (NPS 1980, 9-11).

GGNRA and Point Reyes National Seashore are currently updating their GMPs. The updated GMP for GGNRA will be the blueprint for the parks to move into the future. Since 1980, GGNRA has doubled in size, and park staff members have gained a better understanding of the natural and cultural resources and recreational uses within the park. Although always valued for its preservation of public open spaces, GGNRA is now considered to be one of the most biologically diverse areas along the California coast and is recognized by the United Nations as part of the Golden Gate Biosphere Reserve. Numerous and varied landscapes, including military landscapes, ranch sites, and historic districts, have been identified with the park since 1980, expanding awareness of the park’s historical importance.

Additionally, the growing and diverse population of the Bay Area now enjoys the park in a variety of ways, creating new and different demands that must be addressed. The GMP process has coordinated with the concurrent dog management planning process. The decisions and analyses of dog walking issues from the dog management planning process will be incorporated into the GMP planning process, and the GMP will defer specific dog management actions to this plan/EIS.

### **Crissy Field Plan Golden Gate National Recreation Area Environmental Assessment**

The environmental assessment for the Crissy Field Plan (NPS 1996, 1) was developed for a cultural and ecological restoration of Crissy Field that would be consistent with the NPS mission of conservation. The proposal also allowed Crissy Field to maintain its role in San Francisco as a “people place” that provides a variety of recreational activities and offers ways to enhance that role. The plan was based on the NPS GMP Amendment (NPS 1994a, 1) and formulated on a public involvement process.

The Crissy Field Plan included the restoration of a 20-acre portion of a historical tidal marsh and the cultural resources of the historic airfield, the establishment of a waterbird protection area, and improvements to parking, transportation, and circulation at Crissy Field. The plan also had the objective of continuing existing multiple recreational opportunities, including voice-control dog walking.

## **General Management Plan Amendment, Presidio of San Francisco / Presidio Trust Management Plan**

GGNRA legislation ensured that if the military deemed the Presidio of San Francisco in excess of its needs, jurisdiction would be transferred to the NPS. In 1989 the Presidio was designated for closure, and in 1994 the U.S. Army transferred the Presidio to the NPS. The GMP Amendment (NPS 1994a, 1) was developed by the NPS to provide direction and policy guidance in the transition of this former military post to a unit of the NPS, and provide guidelines for management, use, and development of the overall site. The GMP Amendment assumed that a federally chartered partnership institution would be established under the Department of the Interior with the NPS retaining primary oversight and management responsibility for the entire Presidio.

However, in 1996, two years after the NPS adopted the GMP Amendment, Congress passed the *Presidio Trust Act*, creating the Presidio Trust as a wholly owned, federal government corporation and granting jurisdiction of the 1,168-acre interior area of the Presidio, known as Area B, to the Presidio Trust. This transferred jurisdiction of Area B from the Secretary of the Interior to the Trust and required that the Trust conform only to the purposes of the GGNRA establishing legislation and the general objectives of the GMP Amendment.

In 2002, the Presidio Trust approved the Presidio Trust Management Plan to update and supersede the GMP Amendment in Area B. The Presidio Trust Management Plan EIS acknowledges that the NPS is currently engaged in a process that could ultimately lead to a rulemaking procedure to develop new dog management regulations for GGNRA and that the Trust is closely monitoring this rulemaking process and “will give future consideration to its regulation regarding dogs once the GGNRA rulemaking process is concluded” (Presidio Trust 2002, 2:4-225).

The GGNRA GMP Amendment remains the management plan for Area A, the coastal lands of the Presidio, which are still under the jurisdiction of the NPS. Management objectives in the GMP Amendment relevant to dog management include the following:

- Provide for safe and enjoyable recreational use of the Presidio.
- Identify and protect sensitive wildlife species, and restore and maintain their habitats.

## **OTHER FEDERAL REGULATIONS, LAWS, AND POLICIES**

The NPS is also governed by the following laws, regulations, and management plans relevant to this planning effort.

### **NATIONAL ENVIRONMENTAL POLICY ACT, 1969, AS AMENDED**

Section 102(2)(C) of this act requires that an EIS be prepared for proposed major federal actions that may significantly affect the quality of the human environment.

### **NATIONAL PARKS OMNIBUS MANAGEMENT ACT OF 1998**

The *National Parks Omnibus Management Act* (16 USC 5901 et seq.) underscores NEPA in that both are fundamental to NPS park management decisions. Both acts provide direction for articulating and connecting resource management decisions to the analysis of impacts, using appropriate technical and scientific information. Both also recognize that such data may not be readily available, so they provide alternative options for resource impact analysis should this be the case. Specifically, the *National Parks*

*Omnibus Management Act* directs the NPS to use the findings of science and the analyses of scientifically trained resource specialists in decision making. It also provides guidance for the issuance of commercial use authorizations and concessions contracts.

### **ENDANGERED SPECIES ACT OF 1973, AS AMENDED**

This act requires all federal agencies to consult with the Secretary of the Interior on all projects and proposals having potential impacts on federally threatened and endangered plants and animals.

### **MIGRATORY BIRD TREATY ACT AND EXECUTIVE ORDER 13186**

The *Migratory Bird Treaty Act of 1918* makes it unlawful to kill, capture, buy, sell, import, or export migratory birds, eggs, feathers, or other parts. Executive Order 13186, issued in January 2001, restated the value of migratory birds and directed agencies to develop and implement memoranda of understanding with the U.S. Fish and Wildlife Service (USFWS) to protect them. The NPS memorandum of understanding remains in draft form, but would require park units to restore and enhance migratory bird habitat and support conservation of migratory birds.

### **THE NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED**

Section 106 of the NHPA requires that federal agencies consider the effects of their undertakings on properties listed or potentially eligible for listing on the National Register of Historic Places (NRHP). All actions affecting the parks' cultural resources must comply with this legislation.

### **COASTAL ZONE MANAGEMENT ACT**

The *Coastal Zone Management Act* (CZMA) was enacted as a plan to manage coastal areas. The CZMA encourages state, local, regional, and federal agencies to cooperate when implementing their coastal zone programs. The CZMA requires a balance between the protection of resources and economic interests within the coastal zone. Each state may develop a coastal zone management plan, which defines allowed land and water uses within the coastal zone.

### **CODE OF FEDERAL REGULATIONS, TITLE 36, VOLUME 1**

These regulations provide “for the proper use, management, government, and protection of persons, property, and natural and cultural resources within areas under the jurisdiction of the National Park Service.” The sections below are specifically called out as relevant to the plan/EIS. Sections of Title 36 of the CFR are included as appendix D of this document.

**36 CFR 2.1** covers the preservation of natural, cultural, and archeological resources. The following is prohibited under this section: possessing, destroying, injuring, defacing, removing, digging, or disturbing from its natural state living or dead wildlife, plants, or cultural or archeological resources; and walking on, climbing, entering, etc. an archeological or cultural resource.

**36 CFR 2.2** covers wildlife protection. The following is prohibited under this section: the taking of wildlife; the feeding, touching, teasing, frightening, or intentional disturbing of wildlife nesting, breeding, or other activities; and possessing unlawfully taken wildlife or portions thereof.

**36 CFR 2.15** lists the regulations for pets:

(a) The following are prohibited:

- (1) Possessing a pet in a public building, public transportation vehicle, or location designated as a swimming beach, or any structure or area closed to the possession of pets by the superintendent. This subparagraph shall not apply to guide dogs accompanying visually impaired persons or hearing-ear dogs accompanying hearing-impaired persons.
- (2) Failing to crate, cage, restrain on a leash which shall not exceed six feet in length, or otherwise physically confine a pet at all times.
- (3) Leaving a pet unattended and tied to an object, except in designated areas or under conditions which may be established by the superintendent.
- (4) Allowing a pet to make noise that is unreasonable considering location, time of day or night, impact on park users, and other relevant factors, or that frightens wildlife by barking, howling, or making other noise.
- (5) Failing to comply with pet excrement disposal conditions which may be established by the superintendent.

(b) In park areas where hunting is allowed, dogs may be used in support of these activities in accordance with applicable federal and state laws and in accordance with conditions which may be established by the superintendent.

(c) Pets or feral animals that are running-at-large and observed by an authorized person in the act of killing, injuring, or molesting humans, livestock, or wildlife may be destroyed if necessary for public safety or protection of wildlife, livestock, or other park resources.

(d) Pets running-at-large may be impounded, and the owner may be charged reasonable fees for kennel or boarding costs, feed, veterinarian fees, transportation costs, and disposal. An impounded pet may be put up for adoption or otherwise disposed of after being held for 72 hours from the time the owner was notified of capture or 72 hours from the time of capture if the owner is unknown.

(e) Pets may be kept by residents of park areas consistent with the provisions of this section and in accordance with conditions which may be established by the superintendent. Violation of these conditions is prohibited.

(f) This section does not apply to dogs used by authorized federal, state, and local law enforcement officers in the performance of their official duties.

**36 CFR 2.34** is for disorderly conduct. This section would include dogs that are unmanaged and are creating hazardous or physically offensive conditions.

**36 CFR 5.3** prohibits engaging or soliciting any business in park areas, unless through a permit, contract, or written agreement, except as authorized under a special regulation. Commercial dog walking, if allowed, would be authorized by this section, through the special dog management regulation for GGNRA.

**36 CFR 7.97(d)** describes the seasonal dog walking restrictions for western snowy plover protection areas in the SPPA at Ocean Beach and in the WPA at Crissy Field.



## NATIONAL PARK SERVICE DIRECTOR'S ORDERS

**Director's Order #9** (NPS 2006c) (Chapter 4.6 Community Relations and Outreach) directs efforts to identify appropriate opportunities to enhance the effectiveness of law enforcement by assisting in public education and awareness about the full range of threats to and the challenges of protecting park resources.

**Director's Order #12** (NPS 2001a) prescribes NPS-specific requirements for NEPA analysis, including analyzing a full range of reasonable alternatives, and analyzing impacts to park resources in terms of their context, duration, and intensity. *Director's Order #12* also requires that an analysis of impairment to park resources and values be made as part of the NEPA document.

**Director's Order #28** (NPS 1998) states that NPS will protect and manage cultural resources in agreement with *NPS Management Policies 2006*. NPS will also comply with the requirements of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation and the 1995 Service-wide Programmatic Agreement with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers.

**Director's Order #75A** (NPS 2007a) emphasizes the NPS commitment to civic engagement and public involvement. It provides a framework for successfully engaging the public in NPS activities and work and providing them with information from a range of sources. The order also ensures NPS responsiveness to the concerns, views, and values of the public. It provides guidance and direction on ways to engage the public in decisions at park and program levels and establishes processes that can track improvements to civic engagement and involvement within NPS.

## STATE AND LOCAL LAWS, REGULATIONS, AND POLICIES

The following laws, regulations, and policies are currently in effect or are being developed for future application by other land management agencies in the Bay Area:

**California State Park System.** As stated previously in the "Summary of Background Conditions and Review of Literature" section, dog walking is permitted in most state parks and some beaches but dogs are either restricted to developed areas (e.g., picnic areas and campgrounds) or dogs must be in an enclosed vehicle, tent, or pen or be on a leash not more than six feet long.

**California State Water Resources Control Board.** The Board disseminates information on pet waste pollution and the need to comply with county ordinances (California State Water Resources Control Board 2009, 1; Torrey, pers. comm., 2006).

**Marin County.** This county includes both unincorporated Marin County (rules enforced by the Marin County Humane Society) and Marin County Open Space (rules enforced by the County of Marin Rangers). As stated previously in the "Summary of Background Conditions and Review of Literature" section, dog regulations in Marin County range from allowing off-leash dogs under immediate control to requiring that dogs be on a leash no longer than six feet in length in areas designated for dog walking. Marin County Municipal Code 8.04.185 states that "it is unlawful for any person to keep or harbor more than three dogs which are over the age of four months on any lot, premises, dwelling, building, structure, boat, or living accommodation."

**Marin Municipal Water District.** As stated previously in the "Summary of Background Conditions and Review of Literature" section, on-leash dog walking is permitted in the District but dogs are not allowed to enter, wade, or swim in any stream or reservoir or enter within the high water mark of any reservoir (Marin Municipal Water District 2002, 26).

**Midpeninsula Regional Open Space District.** As stated previously in the “Summary of Background Conditions and Review of Literature” section, dogs are allowed on all trails in six of 25 preserves in this District and on designated trails in four additional preserves; off-leash dogs are permitted only in the marked area of the Pulgas Ridge Preserve.

**City/County of San Francisco.** The Municipal Health Code—SEC. 37—Keeping and Feeding of Small Animal, Poultry and Game Birds (a) Number of Animals states that “it shall be unlawful for any person, firm or corporation to keep or feed, or cause to be kept or fed, or permit to be kept or fed, on any premises over which any such person, firm, or corporation may have control within residential districts, (1) more than three dogs of age six months or older without obtaining a proper permit and license to operate a dog kennel as defined in Section 220 of the San Francisco Business and Tax Regulations Code.”

**San Francisco Recreation and Park Department.** As stated previously in the “Summary of Background Conditions and Review of Literature” section, dogs are generally required to be on a leash no longer than six feet in length in San Francisco city parks unless dogs are using one of the established DPAs; 28 DPAs have been established within 24 city parks of San Francisco.

**San Francisco Public Utilities Commission.** Only limited public access is allowed within the San Francisco watershed lands. Walking of domestic dogs is prohibited within the watershed lands with the exception of guide, search and rescue, and police dogs. The San Francisco Public Utilities Commission has also instituted a citywide pet waste pollution prevention program to encourage compliance with 7.2 Health Code section 40, requiring pet waste pick-up (San Francisco Public Utilities Commission 2007, 1).

**San Mateo County.** The San Mateo County Ordinance Code 6.20.020—The Keeping of Dogs and Cats (a) states that “it shall be unlawful for any person, business or entity to keep or cause to be kept five (5) or more dogs, or five (5) or more cats, or five (5) dogs and cats in any combination per dwelling unit or per business establishment unless in conformance with this chapter.”

**San Mateo Parks and Recreation.** As stated previously in the “Summary of Background Conditions and Review of Literature” section, dogs are not allowed in any county park or on any county trail in San Mateo (County of San Mateo 2007, 1; Holland, pers. comm., 2006).

**Pacifica.** Pacifica is the closest city to NPS lands within San Mateo County. As stated by the Pacifica Permit Office, the number of dogs within a household has no upper limit; however, a permit is required if a household has more than three dogs.



Alternatives

## CHAPTER 2: ALTERNATIVES

### INTRODUCTION

This “Alternatives” chapter describes current management and the various actions that could be implemented for future dog management within Golden Gate National Recreation Area (GGNRA). The *National Environmental Policy Act of 1969* (NEPA) requires that federal agencies explore a range of reasonable alternatives and provide an analysis of what impacts the alternatives could have on the natural and human environment. The “Environmental Consequences” chapter (chapter 4) of this plan / environmental impact statement (plan/EIS) presents the results of the analysis. Table 5 at the end of this chapter summarizes the impacts of each alternative.

The alternatives under consideration must include a “no action” alternative as prescribed by 40 CFR 1502.14. The no action alternative in this plan/EIS is the continuation of the current regulations, management policies, and legally prescribed practices for dog management within GGNRA, including *U.S. v. Barley* (405 F.Supp.2d 1121 (N.D. Cal. 2005)), and it assumes that the NPS would not make major changes to current management. The four action alternatives presented in this chapter were derived from current laws, regulations, and policies as listed in chapter 1, including the following:

- The Commission’s 1979 Pet Policy (appendix A)
- National Park Service (NPS) *Management Policies 2006* (NPS 2006b)
- Title 36 of the Code of Federal Regulations (sections are included in appendix D)
- The *Endangered Species Act* (ESA)
- The *Organic Act*
- The GGNRA enabling legislation
- The GGNRA Compendium (NPS 2001b; appendix B)
- The Federal Panel Recommendations to the General Superintendent on Proposed Rulemaking for Pet Management at GGNRA (NPS 2002b)
- The Committee findings
- The 2005 federal court decision (*U.S. v. Barley*, 405 F.Supp.2d 1121 (N.D. Cal. 2005))
- Information from review of park resources, visitor use information and surveys, and feedback received during the NEPA and negotiated rulemaking public comment processes.

### STUDY AREA DEFINITION

Primarily because of GGNRA’s proximity to a large urban population center, there is a history of dog walking in some park sites prior to the establishment of GGNRA in 1972, when these sites were managed by various other agencies.

Alternatives in this plan/EIS include locations in Marin, San Francisco, and San Mateo counties. The selection of sites addressed in this plan/EIS was determined by NPS managers, and was based on information from historical and current dog management in GGNRA, including the 1979 Pet Policy; NPS law, policy, and regulations; park resources; and the Federal Panel Recommendations to the General Superintendent (NPS 2002b). The panel concluded that dog walking off-leash in GGNRA may be

appropriate in selected locations where resource impacts can be adequately mitigated and public safety incidents and public use conflicts can be appropriately managed.

In addition to lands currently under GGNRA management, the plan/EIS includes two areas within the park's boundary that will be transferred to GGNRA in the near future: Pedro Point Headlands and Cattle Hill in San Mateo County. When the dog management planning process started, these two new portions were included because it was anticipated that acquisition would occur in the near future. A very recent change is that another San Mateo property, Rancho Coral de Tierra, may be acquired before Pedro Point and Cattle Hill. This property is not directly addressed in this plan/EIS because of timing; however, it will be addressed by the considerations for new lands. Table 2 lists the sites that were considered under the action alternatives for this plan/EIS. Dog management for other lands that may be acquired and managed by the NPS in the future is discussed in the "Elements Common to Action Alternatives" section.

This plan/EIS will define dog management actions for specific sites within the park, shown in table 2. Maps located in the "Maps" section of this document show park sites by county, from north to south, illustrating the current and proposed dog walking management (see "Maps").

**TABLE 2. GOLDEN GATE NATIONAL RECREATION AREA PARK SITES CONSIDERED FOR DOG MANAGEMENT IN THE ALTERNATIVES**

<b>Marin County</b>
Stinson Beach (parking lots/picnic areas only)
Homestead Valley
Alta Trail, Orchard Fire Road, Pacheco Fire Road
Oakwood Valley
Muir Beach
Rodeo Beach/South Rodeo Beach
Marin Headlands Trails
Fort Baker
<b>San Francisco County</b>
Upper and Lower Fort Mason
Crissy Field (including Crissy Field Wildlife Protection Area)
Fort Point Promenade and Fort Point National Historic Society (NHS) Trails
Baker Beach and bluffs to Golden Gate Bridge
Fort Miley
Lands End
Sutro Heights Park
Ocean Beach (including Ocean Beach Snowy Plover Protection Area)
Fort Funston
<b>San Mateo County</b>
Mori Point
Milagra Ridge
Sweeney Ridge and Cattle Hill
Pedro Point Headlands

GGNRA lands north of Bolinas-Fairfax Road in western Marin County (comprising 15,400 acres) are managed by the Point Reyes National Seashore under an agreement between the two NPS units. The interior portion of the Presidio of San Francisco (Area B) is managed by the Presidio Trust, a federal corporation. Because these areas are not under the direct management of GGNRA, they are not included in the dog management study area.

## ALTERNATIVES DEVELOPMENT PROCESS

### RANGE OF ALTERNATIVES

The management actions under consideration within GGNRA sites are detailed in the range of alternatives presented in this chapter. A summary of the alternatives can be found in table 3.

**Alternative A** is the no action alternative. The no action alternative is defined in the NEPA guidelines as no change from current management and current conditions. In the impact analysis of no action, the plan/EIS assumes current management would continue as it is now over the lifetime of the plan, which is approximately 20 years. The description of no action is also referred to in this plan/EIS as the baseline, and the impacts of each action alternative are analyzed against those of the baseline for comparative purposes. Under the no action alternative, current dog walking management and conditions would remain the same, which would include 36 CFR 2.15 (36 CFR 2.15(a)(2) applicable only in areas not part of 1979 Pet Policy—see below), 36 CFR 7.97(d), the Commission’s 1979 Pet Policy (appendix A), and the GGNRA Compendium (NPS 2001b; appendix B). The 1979 Pet Policy allows voice control dog walking in a number of areas of GGNRA (table 3). The 1979 Pet Policy described voice or leash control as a flexible system wherein success is dependent upon the willingness of visitors and local residents to cooperate with GGNRA personnel and the willingness of GGNRA personnel to manage dogs, people, and wildlife situations; to enforce regulations; and to cite visitors (1979 Pet Policy). As a result of the 2005 federal court decision (*U.S. v. Barley*, 405 F.Supp.2d 1121 (N.D. Cal. 2005)), the NPS currently cannot enforce the NPS-wide regulation requiring pets to be on-leash (36 CFR 2.15(a)(2)) or designating an area “no dogs” for park sites that were included in the 1979 Pet Policy and where 36 CFR 1.5 was not followed (allowing for public comment). However, regulations that address disturbance to wildlife, removal of pet waste, and disturbance of other park visitors remain in effect in all areas open to dog walking in GGNRA. The GGNRA Compendium also includes provisions for the closure of park areas to dog and human use for resource or safety reasons. Under the current conditions commercial dog walkers use park lands and no permit is required.

**Alternative B** realigns GGNRA dog management to the policy governing dogs at the other 391 units of the national park system, as defined by 36 CFR 2.15(a)(2). Areas closed to dogs would be further defined by a special regulation or the GGNRA Compendium. All dog walkers, including commercial dog walkers, would be allowed up to three dogs per person. All dogs would have to be on-leash and no permits would be needed for dog walking.

**Alternative C** emphasizes the diversity of users of GGNRA sites and apportions dog walking geographically across Marin, San Francisco, and San Mateo counties by allowing a variety of options in each county. In Marin and San Francisco counties, there are options for on-leash areas, regulated off-leash areas (ROLAs) (“off-leash” is assumed to mean “under voice and sight control” throughout the description of the action alternatives, per the definition outlined in Guidelines for ROLAs (NPS 2009c, 1) in appendix E of this plan/EIS), and areas where dogs would be prohibited. In San Mateo, there are options for on-leash areas and areas where dogs would be prohibited. GGNRA is used by visitors for a multitude of purposes and alternative C would minimize potential conflicts, reduce potential health and safety issues, and protect natural and cultural resources, while providing dog walkers with recreational options. Alternative C also includes the consensus agreements resulting from the Committee meetings.

All dog walkers, including commercial dog walkers, would be allowed to walk one to three dogs without a permit. Any dog walker, commercial or private, would be able to obtain a permit to walk one to six dogs, whether on-leash or in a ROLA, as allowed by the regulation. Permits could restrict dog walking use by time and area.

**Alternative D** would provide the highest overall level of protection for natural and cultural resources and the highest overall level of visitor safety. Dog management practices listed in alternative D would allow options for dogs to be exercised on-leash and in ROLAs but would be more protective in areas where natural resources (plant and wildlife species) and cultural resources are located. The more protective dog management elements offered in alternative D would also provide a stronger measure of visitor protection for both dog walkers and other park visitors by reducing circumstances that would cause conflicts among users and interactions among dogs, thereby minimizing direct and indirect effects of dogs on visitors. Dog walkers would be allowed to walk one to three dogs without a permit. No commercial dog walking would be allowed under this alternative.

**Alternative E** would provide the greatest level of access for dog walkers throughout GGNRA. Alternative E would also require the most intensive long-term management to ensure that greater access for dog walkers did not impact natural and cultural resources, visitor safety, and visitor experience. Alternative E would also include the consensus agreements resulting from the Committee meetings. All dog walkers, including commercial dog walkers, would be allowed to walk one to three dogs without a permit. Any dog walker, commercial or private, could obtain a permit to walk one to six dogs. In a ROLA, permit holders could have up to six dogs under voice and sight control. Permits could restrict dog walking use by time and area.

The following sections describe in detail how these alternatives were developed.

### **Review of Existing Data and Application of Research**

The review of existing information was initiated by the interdisciplinary team first by reviewing information provided by park resource specialists on topics such as sensitive species and their habitats, wildlife, soil, vegetation, park operations, visitor experience, and health and safety to provide the information necessary to stimulate informed discussions. The team also reviewed literature and park documents and visited the park sites that this plan/EIS addresses. Guided by a NEPA specialist and the Environmental Quality Division (EQD) project manager, the park held a series of internal scoping sessions with the planning team to review the data and determine existing conditions within the park.

Existing conditions at GGNRA vary among park sites due to the diversity of resources within sites, which are scattered throughout three counties. After existing conditions were established, data (soils, vegetation, etc.) for each park site was characterized to more fully understand the park's resources, the visitor experience, and the impacts of dog walking activities at each park site, developing an informed basis for future management decisions. The Committee received a number of presentations from the NPS NEPA planning team and other NPS staff explaining the NEPA process and explaining the rationale by which GGNRA sites could be considered for dog walking. Addressing the issue by individual park site allowed a level of specificity as well as providing an organizational tool to help analyze resource impacts that could occur under each of the action alternatives described in this chapter. This site-specific analysis was also a useful tool in gauging how each of the management alternatives met the objectives in taking action, as described in the "Purpose of and Need for Action" chapter.

This section provides an overview of how the analysis of data, expert opinion, and best professional judgment was applied to develop management alternatives. The "Environmental Consequences" chapter

provides further details of how research was used to evaluate the effects of those management alternatives.

### **Development of Management Actions for Alternatives B, C, D, and E**

As discussed in chapter 1, the action alternatives must meet each of the objectives of this EIS. Many objectives were developed for this EIS, including protecting sensitive species and their habitats from the detrimental effects associated with dogs and minimizing conflicts related to dog use by providing a variety of safe, high-quality, visitor use experiences, including areas where dogs are allowed. A complete list of objectives can be found in the “Objectives” section of chapter 1.

During their discussions, the team grouped the park sites by county (Marin, San Francisco, and San Mateo), which allowed for an informed discussion of strategies and management goals from the countywide level, and, ultimately, a more balanced approach in each county.

The entirety of the alternatives development effort, filtered through the specific expertise of the park interdisciplinary team and verified against the purpose and objectives of this planning effort and knowledge of park resources, resulted in the formulation of the alternatives presented in this EIS.



**TABLE 3. SUMMARY OF ALTERNATIVE ELEMENTS BY COUNTY, NORTH TO SOUTH**

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*</b>
<b>Common to All Action Alternatives:</b> <ul style="list-style-type: none"> <li>• Dog walking allowed only in areas designated for either on-leash or regulated off-leash (ROLA*) dog walking.</li> <li>• All dogs must be licensed in county of residence.</li> <li>• Maximum number of dogs per dog walker is 3, unless permits allowed.</li> <li>• No off-trail dog walking; no dogs in campgrounds or public buildings; on leash in parking lots, picnic areas and on paved, public roads unless otherwise noted.</li> <li>• Service animals accompanying a person with a disability, as defined by Federal law and Department of Justice regulations (Title 28 Code of Federal Regulations § 36.104), are allowed wherever visitors or employees are allowed.</li> <li>• Compliance-based management strategy.</li> </ul> <p>*The concept of a ROLA walking area as a defined area where off-leash dog walking is allowed only under specific guidelines came from discussions in the Negotiated Rulemaking Committee for Dog Management at GGNRA.</p>					
<b>Permits for More than three Dogs – Commercial and Individual Dog Walkers</b>	No permits	All dog walkers, including commercial dog walkers, allowed up to three dogs per person. All dogs must be on-leash. No permit is required.	All dog walkers, including commercial dog walkers, allowed with up to 3 dogs per person. Commercial dog walkers and private individuals with more than 3 dogs can obtain a dog walking permit; limit is 6 dogs. In a ROLA, permit holders may have up to 6 dogs off leash. Permits would restrict use by time and area. Permits would only be issued for: Alta Trail, Rodeo Beach, Fort Baker, Fort Mason, Crissy Field, Baker Beach, Fort Funston.	No commercial dog walking allowed and no permits for more than 3 dogs.	All dog walkers, including commercial dog walkers, allowed with up to 3 dogs per person. Commercial dog walkers and private individuals with more than 3 dogs can obtain a dog walking permit; limit is 6 dogs. In a ROLA, permit holders may have up to 6 dogs off leash.  Permits would restrict use by time and area. Permits would only be issued for: Alta Trail, Rodeo Beach, Fort Baker, Fort Mason, Crissy Field, Baker Beach, Fort Funston.

Table 3. Summary of Alternative Elements by County, North to South

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*</b>
<b>Marin County Sites</b>					
<b>Stinson Beach</b> (parking lots and picnic areas only)	On-leash	On-leash	On-leash	No dogs	On-leash
<b>Homestead Valley</b>	Entire site on-leash or under voice control	Homestead Fire Road, and neighborhood connector trails that may be designated in the future: On- leash	Same as alternative B	Homestead Fire Road: On-leash	Same as alternative B
<b>Alta Trail Orchard Fire Road Pacheco Fire Road</b>	On-leash or under voice control from Marin City to Oakwood Valley	Alta Trail: On-leash to Orchard Fire Road Orchard and Pacheco fire roads: On-leash	Same as alternative B	No dogs	Same as alternative B
<b>Oakwood Valley</b>	Oakwood Valley Fire Road and Oakwood Valley Trail from junction with Fire Road to junction with Alta Avenue: On-leash or under voice control Oakwood Valley Trail from trailhead to junction with Oakwood Valley Fire Road: On-leash	Oakwood Valley Fire Road and Trail: On-leash to junction of the trail and fire road	Oakwood Valley Fire Road: ROLA to junction with Oakwood Valley Trail. Double gates at both ends and with continuous fencing to protect sensitive habitat Oakwood Valley Trail: On- leash from junction with Fire Road to new gate at Alta Avenue	Oakwood Valley Fire Road: On-leash to junction with Oakwood Valley Trail	Oakwood Valley Fire Road: ROLA to junction with Oakwood Valley Trail. Double gates at both with non-continuous fencing where needed to protect sensitive habitat Oakwood Valley Trail: On- leash from junction with Fire Road to new gate at Alta Avenue
<b>Muir Beach</b>	Beach only: On-leash or under voice control	Beach, path to beach, boardwalk, Pacific Way Trail (trail to be built as part of Muir Beach Wetland and Creek Restoration Project): On-leash	Same as alternative B	Pacific Way Trail: On- leash	Beach South of Entrance Path from parking lot: ROLA Pacific Way Trail, boardwalk and path to beach: On-leash

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*
<b>Rodeo Beach/ South Rodeo Beach</b>	All beach areas: On-leash or under voice control	All beach areas, access trails and footbridge to beach: On-leash	Rodeo Beach- ROLA Footbridge to beach: On-leash	Rodeo Beach North of Foot Bridge: On-leash Footbridge to Beach: On-leash	Rodeo Beach: <ul style="list-style-type: none"> <li>• ROLA to crest of the beach</li> <li>• On leash from Crest of Beach to Fence along Rodeo Lagoon</li> </ul> Footbridge to Beach: On-leash South Rodeo Beach and Trail to Beach: On-leash
<b>Marin Headlands Trails</b> Trails previously opened to dog walking open to consideration of on-leash or no dogs, including but not limited to: <ul style="list-style-type: none"> <li>• Coastal Trail from McCullough Road to Muir Beach</li> <li>• Miwok Trail from Tennessee Valley to Highway 1</li> <li>• County View Trail off the Miwok Trail</li> <li>• Miwok Trail to Wolf Ridge to Hill 88</li> <li>• Lagoon Trail</li> <li>• South Rodeo Beach Trail</li> </ul>	On-leash or Voice control: <u>Coastal Trail</u> : Golden Gate Bridge to Hill 88- includes Lagoon Trail <u>Coastal, Wolf Ridge, Miwok Loop</u> <u>Old Bunker Fire Road Loop</u> On-leash only: <u>Coastal Trail</u> : Hill 88 to Muir Beach <u>Battery Smith-Guthrie Fire Road Loop</u> <u>South Rodeo Beach Trail</u> <u>North Miwok Trail</u> : from Tennessee Valley to Highway 1 <u>County View Trail</u>	No dogs	On-leash: <u>Lower Rodeo Valley Trail Corridor</u> : Rodeo Beach parking lot to the intersection of Bunker and McCullough Roads via Lagoon Trail, Miwok Trail and Rodeo Valley Trail <u>Old Bunker Fire Road Loop</u> <u>Battery Smith-Guthrie Fire Road Loop</u>	Same as alternative B	On-leash: <u>Old Bunker Fire Road Loop</u> <u>Battery Smith-Guthrie Fire Road Loop</u> <u>Lower Rodeo Valley trail corridor</u> <u>Coastal Trail Bike Route</u> : including Julian Fire Road 101 to Rodeo Beach parking lot

Table 3. Summary of Alternative Elements by County, North to South

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*
<b>Fort Baker</b>	On leash in areas where dogs allowed	Drown Fire Road, Bay Trail (not including Battery Yates Loop), Lodge/Conference Center grounds, and parade ground: On leash	Drown Fire Road, Bay Trail including Battery Yates Loop road, Lodge/Conference Center grounds, and parade ground: On leash	Lodge/Conference Center grounds and Bay Trail (not including Battery Yates Loop): On-leash	Same as alternative C
<b>San Francisco County Sites</b>					
<b>Upper and Lower Fort Mason</b>	On-leash.	On leash in all areas where allowed (Great Meadow, Laguna Green, lawns, sidewalks, paved trails parking lots and housing areas)	Inner Great Meadow and Laguna Green: ROLAs with barriers to separate ROLAs from other uses. Lawn below Laguna Street path: On-leash All sidewalks/paved trails/housing areas: On- leash	Great Meadow: On-leash Laguna Green: ROLA Lawn below Laguna Street path: On-leash All sidewalks/paved trails/parking lots/housing areas: On-leash	Great Meadow and Laguna Green: ROLA Lawn below Laguna Street path: On-leash All sidewalks/paved trails/parking lots/housing areas: On-leash
<b>Crissy Field Wildlife Protection Area</b>	Voice control except for seasonal leash restriction.	No dogs	Same as alternative B	Same as alternative B	On-leash
<b>Crissy Field</b>	Promenade (East Beach to the Warming Hut): Voice control	Promenade: On-leash	Promenade: Same as alternative B	Promenade: Same as alternative B	Promenade: Same as alternative B
	Airfield: Voice control	Airfield: On-leash	Airfield – middle section: ROLA between the easternmost and westernmost n/s paths Reduce or preclude ROLA as dictated by special event Airfield – eastern and western section: On leash east of easternmost n/s path and west of westernmost n/s/ path	Airfield – western section: ROLA west of easternmost n/s path Reduce or preclude ROLA as dictated by special event Airfield – eastern section: On-leash east of easternmost north-south path	Airfield: ROLA. Reduce or preclude ROLA as dictated by special event

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*</b>
<b>Crissy Field, continued</b>	East and Central Beaches: Voice control	East and Central Beaches: On-leash Paths to Central Beach: On- leash	Central Beach: ROLA Paths to Central Beach: On-leash	No dogs	Central Beach: ROLA East Beach: On-leash. Paths to Central Beach: On- leash
	Trails and grassy areas near East Beach: Voice control	Trails and grassy areas near East Beach, multi-use trail along Mason Street: On- leash	Same as alternative B	Same as alternative B except no dogs in the West Bluff picnic area	Same as alternative B
<b>Fort Point Promenade/Fort Point NHS Trails</b>	Fort Point Promenade, Bay Trail, Andrews Road and Battery East Trail: On-leash	Same as alternative A	Same as alternative A	Bay Trail: On-leash	Same as alternative A
<b>Baker Beach and bluffs to Golden Gate Bridge</b>	Beach North of Lobos Creek: Voice control All trails except Batteries to Bluffs Trail: On-leash	Beach: On-leash All Trails except Batteries to Bluffs Trail and Battery Crosby Trail: On-leash	Same as alternative B	Beach South of North End of North Parking Lot: On-leash Trails To Beach South of North End of North Parking Lot and Multi-Use Coastal Trail: On-leash	Beach South of North End of North Parking Lot: ROLA Beach North of North End of North Parking Lot: On-leash All Trails except Batteries to Bluffs Trail and Battery Crosby Trail: On-leash
<b>Fort Miley</b>	East and West Fort Miley: Voice control	No dogs	East Fort Miley: On-leash in east side trail corridor	Same as alternative B	East Fort Miley: ROLA in east side trail corridor West Fort Miley: On-leash on road only
<b>Lands End</b>	Voice control	El Camino del Mar, Coastal Trail: On-leash	El Camino del Mar Trail: ROLA Coastal Trail and steps to El Camino del Mar Trail: On-leash	El Camino del Mar Trail: On-leash Coastal Trail: On-leash to, and on, connector trail/steps leading to El Camino del Mar Trail	Same as alternative C
<b>Sutro Heights Park</b>	On-leash	Paths and parapet: On- leash	Same as alternative B	No dogs	Paths, parapet, and lawns: On-leash

Table 3. Summary of Alternative Elements by County, North to South

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*
<b>Ocean Beach Snowy Plover Protection Area</b> (Stairwell 21 to Sloat Boulevard)	Voice control with seasonal leash restriction	Adjacent trail along Great Highway: On-leash	Same as alternative B	Same as alternative B	On-leash Adjacent trail along Great Highway: On-leash
<b>Ocean Beach</b> • North of Stairwell 21 • South of Sloat Boulevard	North of Stairwell 21: Voice control South of Sloat Boulevard: Voice control	North of Stairwell 21: On- leash South of Sloat Boulevard: On-leash	North of Stairwell 21: ROLA South of Sloat Boulevard: No dogs	North of Stairwell 21: On- leash South of Sloat Boulevard: No dogs	North of Stairwell 21: ROLA South of Sloat Boulevard: On-leash
<b>Fort Funston</b> (excluding areas closed by fence or signs)	Beach: Voice control	Beach: On-leash with voluntary seasonal closure at the foot of northernmost bluffs when bank swallows are nesting (April 1– August 15)	South of Beach Access Trail: ROLA North of Beach Access Trail: No dogs	South of Beach Access Trail: On-leash North of Beach Access Trail: No dogs	South of Beach Access Trail: ROLA North of Beach Access Trail: On-leash with voluntary seasonal closure at the foot of northernmost bluffs when bank swallows are nesting (April 1–August 15)
	South of Main Parking Lot, including all trails: Voice control	South of Main Parking Lot: On-leash on all trails not closed to dogs	South of Main Parking Lot: On-leash on sand ladder and <i>Americans with Disabilities Act</i> (ADA) Accessible Trail	South of Main Parking Lot: Same as alternative C	South of Main Parking Lot: Same as alternative C

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*
<b>Fort Funston, continued</b> (excluding areas closed by fence or signs)	North of Main Parking Lot, including all trails: Voice control except for fenced wildlife/habitat protection area	North of Main Parking Lot: On-leash on all trails not closed to dogs	North of Main Parking Lot: ROLA between (and not including) Chip Trail, Sunset Trail, and parking lot  On leash on all trails except no dogs on Sunset, Battery Davis and horse trails	North of Main Parking Lot: ROLA with fencing in disturbed area north of the water fountain  All designated trails on- leash except no dogs on northern end of Coastal Trail and Horse Trail	North of Main Parking Lot: Create north-south corridors for on-leash and ROLA <u>ROLA corridor</u> between Chip Trail, Coastal Trail, and the western boundary of Habitat Corridor and Horse Trail. ROLA includes Chip Trail to junction with Sunset Trail  <u>On-leash corridor</u> between cliffs and western edge of Chip Trail.  Battery Davis – dogs on- leash on designated trails only  All other trails on-leash except Horse Trail, which is closed to dogs
<b>San Mateo County Sites</b>					
<b>Mori Point</b>	On-leash on all trails	Coastal Trail and beach within GGNRA boundary: On-leash	Coastal Trail, Old Mori Road, and beach within GGNRA boundary: On- leash	No dogs	Coastal Trail, Old Mori Road, Pollywog Path and beach within GGNRA boundary: On-leash
<b>Milagra Ridge</b>	On-leash on trails	Fire road, trail to overlook and World War (WW) II bunker, and Milagra Battery Trail – (future connector to lower Milagra): On-leash	Same as alternative B	No dogs	Same as alternative B with addition of loop to top of hill

Table 3. Summary of Alternative Elements by County, North to South

<b>GGNRA Site</b>	<b>Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)</b>	<b>Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)</b>	<b>Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*</b>	<b>Alternative D: Most Protective Based on Resource Protection and Visitor Safety</b>	<b>Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*</b>
<b>Sweeney Ridge and Cattle Hill –</b> Combined (adjacent properties that share a trail system)	Sweeney Ridge: On- leash on all trails except the Notch Trail, which is closed to dogs Cattle Hill: not currently managed by GGNRA	Sweeney Ridge and Cattle Hill: No dogs	Sweeney Ridge: No dogs <u>Cattle Hill:</u> Baquiano Trail from Fassler Avenue to, and including, Farallons View Trail: on leash	Same as alternative B	<u>Sweeney Ridge:</u> Sneath Lane, Sweeney Ridge Trail from Portola Discovery site to Notch Trail, and Mori Ridge Trail: On-leash <u>Cattle Hill:</u> Baquiano Trail from Fassler Avenue to, and including, Farallons View Trail: On- leash
<b>Pedro Point Headlands</b>	Not yet part of GGNRA	Coastal Trail: On-leash	Coastal Trail: On-leash	No dogs	Coastal Trail: On-leash



GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*
New Lands					
New Lands	Dog walking allowed per 36 CFR 2.15	Dog walking allowed per 36 CFR 2.15. An area will be closed to on-leash dog walking if it: <ol style="list-style-type: none"> <li>1. impedes the attainment desired future conditions for natural and cultural resources as identified through the park's planning process, or</li> <li>2. creates an unsafe or unhealthful environment for visitors or employees, or</li> <li>3. impedes or interferes with park programs or activities, or</li> <li>4. triggers the compliance-based management strategy's process for closure.</li> </ol>	Same as B	No dog walking allowed unless opened by GGNRA Compendium. Only on-leash dog walking would be considered. Once an area is open to on-leash dog walking, the compliance-based management strategy applies. Areas could be opened to dog walking if opening the area would not: <ol style="list-style-type: none"> <li>1. impede the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or</li> <li>2. create an unsafe or unhealthful environment for visitors or employees, or</li> <li>3. impede or interfere with park programs or activities.</li> </ol>	New lands begin as 36 CFR 2.15 and new lands with <i>existing</i> off-leash use before acquisition may also be considered for voice and sight control in the future, per criteria established in the plan and rule. <p>An area will be closed to on-leash dog walking if it:</p> <ol style="list-style-type: none"> <li>1. impedes the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or</li> <li>2. creates an unsafe or unhealthful environment for visitors or employees, or</li> <li>3. impedes or interferes with park programs or activities, or</li> <li>4. triggers the compliance-based management strategy's process for closure.</li> </ol>

Table 3. Summary of Alternative Elements by County, North to South

GGNRA Site	Alternative A: No Action (36 CFR 2.15, 36 CFR 7.97 (d); 1979 Pet Policy; GGNRA Compendium)	Alternative B: NPS Leash Regulation (36 CFR 2.15 and GGNRA Compendium)	Alternative C: Emphasis on Multiple Use – balanced by county. (contains Negotiated Rulemaking Committee Consensus)*	Alternative D: Most Protective Based on Resource Protection and Visitor Safety	Alternative E: Most Dog Walking Access/Most Management Intensive (Contains Negotiated Rulemaking Committee Consensus)*
New Lands, continued					<p>New lands may be opened to voice and sight control if:</p> <ol style="list-style-type: none"> <li>1. Off-leash dog use existed before acquisition, and</li> <li>2. One year baseline data is collected through the compliance-based management strategy's monitoring program, and</li> <li>3. Compliance-based management strategy not triggered (Primary or Secondary Management Response).</li> </ol>

## **ALTERNATIVE A: NO ACTION (CONTINUATION OF EXISTING MANAGEMENT)**

The no action alternative for the plan/EIS is based on a combination of NPS regulations, the 2005 federal court decision (*U.S. v. Barley*, 405 F.Supp.2d 1121 (N.D. Cal. 2005)), and public use practices. Because dog walking regulations are routinely ignored by visitors at many park sites, on-the-ground activities sometimes vary widely from posted regulations. These differences are attributable in part to changes in dog walking policies over the years, court decisions regarding dog walking in GGNRA, and public confusion due to both those changing circumstances and variable levels of enforcement. The changing history of dog management is described in the “Purpose and Need for Action” chapter of this plan/EIS (chapter 1).

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*The no action alternative for the plan/EIS is based on a combination of NPS regulations, the 2005 federal court decision, and public use practices.*

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### **CURRENT REGULATIONS AND POLICIES**

Pets in the park are managed under several legal provisions. Some areas remain closed to dogs or to all public use, or have restrictions imposed on them by special regulation, the GGNRA Compendium, or consultation under the ESA. Dog walking is authorized in compliance with 36 CFR 1.5, “Visiting Hours, Public Use Limits, and Closures,” and 36 CFR 2.15, “Pets.” The authority to close or restrict areas to protect resources or public safety, or for a variety of other reasons, derives from 36 CFR 1.5(a), which states, in part, “based upon a determination that such action is necessary for the maintenance of public health and safety, protection of environmental and scenic values, protection of natural and cultural resources, [and] aid to scientific research ... the superintendent may ... designate areas for a specific use or activity, or impose conditions or restrictions on a use or activity.” Such restrictions are to be available in writing, and the reasons for them referenced either in the GGNRA Compendium itself or another document, such as consultation under ESA. Under 36 CFR 2.15, pets are prohibited in public buildings, public transportation vehicles, or locations designated as a swimming beach, or any structure or area closed to pets by the superintendent. The GGNRA Compendium is updated each year and is available to the public by request or on the park’s web site ([www.nps.gov/goga](http://www.nps.gov/goga)).

In addition to these general provisions, dog walking in GGNRA is also currently managed in accordance with a 2005 federal court decision (*U.S. v. Barley*, 405 F.Supp.2d 1121 (N.D. Cal. 2005)) that preserves dog walking under voice control in those areas covered by the 1979 Pet Policy until the NPS has developed a dog management plan and special regulation pursuant to public notice and comment.

### **CURRENT COSTS FOR DOG MANAGEMENT**

Current total costs for alternative A are estimated at \$203,422. The bulk of these costs are associated with the personnel for maintaining the current conditions. For a more detailed explanation of personnel costs under alternative A, see the “Park Operations” section in chapter 4.

### **STATUS OF CURRENT DOG WALKING ACTIVITIES UNDER ALTERNATIVE A**

Below are the park sites where dogs are currently allowed, listed in order from north to south, and shown on alternative A maps (see “Maps”). Details on the resource impacts for these sites can be found in the impact analyses in chapter 4.

## **Marin County Sites (No Action Alternative)**

### **Stinson Beach**

On-leash dog walking is allowed only in the parking lot and picnic areas of Stinson Beach. Dogs are not allowed on the beach itself, because it is a designated swimming beach (closed per the CFR).

### **Homestead Valley**

The entire site allows on-leash dog walking or dog walking under voice control.

### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

On-leash dog walking or dog walking under voice control is allowed from Marin City to Oakwood Valley.

### **Oakwood Valley**

On-leash dog walking or dog walking under voice control is allowed on the Oakwood Valley Fire Road and the section of the Oakwood Valley Trail from its junction with the Oakwood Valley Fire Road to the junction with Alta Avenue. On-leash dog walking is allowed on the Oakwood Valley Trail from the trailhead to the junction with the Oakwood Valley Fire Road.

### **Muir Beach**

On-leash dog walking or dog walking under voice control is allowed on the beach. Dogs are prohibited in the lagoon and Redwood Creek per the GGNRA Compendium.

### **Rodeo Beach**

On-leash dog walking or dog walking under voice control is allowed on all beach areas at Rodeo Beach and South Rodeo Beach. Dogs and visitors are prohibited in Rodeo Lagoon per the GGNRA Compendium.

### **Marin Headlands Trails**

On-leash dog walking or dog walking under voice control is allowed on the Coastal Trail from the Golden Gate Bridge to Hill 88 (includes the Lagoon Trail), the Coastal Trail, Wolf Ridge Trail, Miwok Trail Loop, and the Old Bunker Fire Road Loop. Only on-leash dog walking is allowed on the Coastal Trail from Hill 88 to Muir Beach, Battery Smith-Guthrie Fire Road Loop, South Rodeo Beach Trail, North Miwok Trail, and the County View Road.

### **Fort Baker**

On-leash dog walking is allowed in areas not closed to dogs. Areas closed to dogs include the Chapel Trail, the Fort Baker pier, and the trail around Vista Point.

## **San Francisco County Sites (No Action Alternative)**

### **Upper and Lower Fort Mason**

On-leash dog walking is allowed throughout Upper Fort Mason, except the community garden; on-leash dog walking is also allowed in Lower Fort Mason. Dogs are not allowed under voice control.

### **Crissy Field**

The Crissy Field Wildlife Protection Area (WPA) is defined in 36 CFR 7.97(d), Snowy Plover Protection, as an area “which encompasses: from the west, starting at Fort Point Mine Depot (a.k.a. Torpedo Wharf) eastward to concrete riprap, which lies approximately 700 feet east of former Coast Guard Station, and includes all uplands and all tidelands and extends from the high-water mark to 100 yards off shore.” It was later discovered that a measurement error was made on the eastern boundary of the Crissy Field WPA. The correct measurement is approximately 900 feet east of the former Coast Guard Station. The action alternatives (B – E) presented in this plan/EIS considers the latter, expanded (by 200 feet) definition of the Crissy Field WPA; the former definition will be applied to existing conditions or Alternative A – No Action Alternative. Dogs are allowed in the Crissy Field WPA under voice control from May 15 to July 1, with a seasonal leash restriction the rest of the year for the protection of the federally threatened western snowy plover (*Charadrius alexandrinus nivosus*) as per 36 CFR 7.97(d), Snowy Plover Protection.

**Promenade, Crissy Airfield, Beaches, Trails, and Grassy Areas.** Dog walking on-leash or under voice control is allowed on the Promenade (East Beach to the Warming Hut), Crissy Airfield, East and Central beaches, the trails and grassy areas near East Beach, and the multi-use trail along Mason Street.

### **Fort Point Promenade / Fort Point National Historic Site Trails**

**Promenade and Trails.** On-leash dog walking is allowed outside the fort but is prohibited inside the fort or on the Fort Point pier. Areas for on-leash dog walking include the Fort Point Promenade, Bay Trail, Andrews Road, and Battery East Trail. Dog walking under voice control is not allowed at Fort Point.

### **Baker Beach and Bluffs to Golden Gate Bridge**

Dog walking on-leash or under voice control is allowed on the beach north of Lobos Creek. Dogs must be walked on-leash on all trails except on the Batteries to Bluffs Trail, where dogs are prohibited per the GGNRA Compendium for the protection of irreplaceable natural resources.

### **East and West Fort Miley**

Dogs are allowed on-leash or under voice control within East and West Fort Miley.

### **Lands End**

Dogs are allowed on-leash or under voice control throughout the entire site.

### **Sutro Heights Park**

On-leash dog walking only is allowed throughout Sutro Heights Park. Dog walking under voice control is not allowed.

## Ocean Beach

**Ocean Beach Snowy Plover Protection Area (Stairwell 21 to Sloat Boulevard).** Dogs are allowed in the Snowy Plover Protection Area (SPPA) on-leash or under voice control from May 15 to July 1, with a seasonal leash restriction the rest of the year for the protection of the federally threatened western snowy plover.

**Ocean Beach North of Stairwell 21 and South of Sloat Boulevard.** Dog walking on-leash or under voice control is allowed outside the SPPA, north of Stairwell 21 and south of Sloat Boulevard.

## Fort Funston

Dog walking on-leash or under voice control is allowed throughout Fort Funston, excluding the 12-acre habitat protection area closure and the voluntary seasonal closure at the base of the northernmost bluffs to protect nesting bank swallows (April 1–August 15).

## San Mateo County Sites (No Action Alternative)

### Mori Point

On-leash dog walking is allowed on all trails and at the beach at Mori Point. Dogs are not allowed under voice control.

### Milagra Ridge

On-leash dog walking is allowed on all trails at Milagra Ridge. Dogs are not allowed under voice control.

### Sweeney Ridge / Cattle Hill

On-leash dog walking is allowed on all trails at Sweeney Ridge except the Notch Trail, which is closed to dogs for the protection of Mission Blue butterfly (*Icaricia icarioides missionensis*) habitat. Dog walking under voice control is not allowed at Sweeney Ridge. Cattle Hill is not currently part of GGNRA. However, this land is within the park boundary and it is anticipated that it will pass to NPS management in the near future. On-leash dog walking and dog walking under voice control both currently occur at this site.

### Pedro Point Headlands

Pedro Point Headlands is not currently part of GGNRA. However, this land is within the park boundary and it is anticipated that the land will transfer to NPS management in the near future. On-leash dog walking and dog walking under voice control both currently occur at this site.

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*Several elements are common to all of the action alternatives (alternatives B, C, D, and E).*

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## ELEMENTS COMMON TO ACTION ALTERNATIVES

Several elements are common to all of the action alternatives (alternatives B, C, D, and E). These elements provide overall clarification and detail for the proposed dog management framework at GGNRA.

## AREAS OPEN TO DOG WALKING

Dog walking would be allowed only in designated on-leash areas or ROLAs; all other areas of the park would be closed to dogs. Guidelines for ROLAs originated in discussions by the Committee for Dog Management at GGNRA and were finalized by NPS staff. Under the action alternatives, voice control within a ROLA would be specifically defined and incorporated into the new special regulation for dog walking at GGNRA. It would be expected that the ROLA guidelines would change the behavior of dog walkers in the future at GGNRA. Complete ROLA guidelines are in appendix E and include the following:

- Each off-leash dog must be under voice and sight control at all times, meaning that dog walkers must be able to recall their dog promptly, and shall demonstrate this ability when requested by law enforcement (LE) personnel.
- Any uncontrolled dog is prohibited. Dogs in a ROLA are to be kept under control at all times. Dogs are considered under control when they are within direct eyesight of the owner/guardian/handler and when they have the ability to immediately return to their owner/guardian/handler.
- Aggressive dogs (snarling, unwanted jumping) are not allowed in ROLAs and are subject to fines per 36 CFR 2.34(a)(4).
- Dogs under four months old must be leashed.
- Dogs in heat are not allowed in ROLAs.
- Dogs must be licensed and wear an ID tag at all times that includes the name and phone number of the owner.
- All dog walkers must have a leash for each dog under their care.
- Dog walkers must keep dogs in parking lots and on paths that access ROLAs.
- Dog walkers must keep dogs out of any area closed by fence or sign for restoration, habitat protection, or safety concerns.
- Dog walkers must pick up their dogs' feces immediately and dispose of them in a garbage container.

Additional elements common to all of the action alternatives (B, C, D, and E), are as follows:

- All dogs must be licensed in county of residence.
- Areas designated for on-leash dog walking require walkers to have full control of their dog(s) by using a leash no more than six feet long.
- On-leash dogs would be allowed in all parking lots, picnic areas, and paved public roads throughout to provide for visitor and staff safety, except as follows: alternative D—Stinson Beach, no dogs in parking lots or picnic areas; Crissy Field, no dogs in West Bluff picnic area; West Fort Miley, no dogs in picnic areas; alternatives B and E—West Fort Miley, no dogs in picnic areas.
- Dogs would be prohibited in all campgrounds within GGNRA and off designated trails.
- No more than three dogs may be walked, on-leash or in a ROLA, by an individual at any time in any of the GGNRA sites, except under alternatives that allow a permit for up to six dogs.

## **PERMITS FOR MORE THAN THREE DOGS – COMMERCIAL AND INDIVIDUAL DOG WALKERS**

Commercial dog walking is allowed under alternatives B, C, and E. Under alternative B, commercial dog walking would be regulated under the same guidelines and regulations that apply to recreational dog walkers, including the three-dog maximum. Because alternative B does not allow for dog walking under voice control, commercial dog walking would be on-leash only. Under alternatives C and E, commercial dog walking would be allowed under the same guidelines and regulations that apply to recreational dog walkers, including the three-dog minimum. However, under these two alternatives, both commercial and recreational dog walkers could apply for a permit to walk one to six dogs. In a ROLA, permit holders may have up to six dogs under voice and sight control. Permits would restrict use by time and area. Permits would be issued for the following sites: Alta Trail, Rodeo Beach, Fort Baker, Fort Mason, Crissy Field, Baker Beach, and Fort Funston. See appendix F for Special Use Permit conditions and fines associated with noncompliance with the permit. Alternative D would not allow commercial dog walking, due to the emphasis on resource protection and visitor safety. Please see appendix F for additional permit conditions.

## **OUTREACH AND EDUCATION**

Education and public outreach would be a large component of all the action alternatives. GGNRA would establish a long-term public outreach campaign to help educate and inform the public about the selected alternative and new dog management regulation. The park would develop a comprehensive dog management guide that would be available at visitor centers and contact stations. Special use permits for large special events will require that the event organizer provide educational materials on the dog walking program during their event. The NPS web page would maintain a clear, concise, illustrated explanation of the new dog management regulation by GGNRA site. New regulatory and interpretive signs would be developed for dog walking areas with consistent design and style that is clear and concise so the public can understand the regulations at specific sites. GGNRA would encourage media coverage of the new dog walking regulation and would place ads in community newspapers and dog walking magazines, as funding allows, to help inform the dog walking community of the new regulation. Dog management information would be available at all the park's quarterly open house meetings, allowing the public to talk with park staff about dog management. Outreach volunteers, such as Trail Keepers, and park staff would help educate and inform the public about the new dog management regulation. The park would also consider regularly meeting with stakeholder organizations for information sharing on dog management. Summaries of these meetings would be posted on the park web site.

## **PARTNERSHIPS**

The federal panel recommended that dog walking groups be active partners in management of dog walking in the park, including disseminating accurate information to constituents regarding dog management regulations (NPS 2002b, 11). This was also stated in the parameters and scope of the negotiated rulemaking discussion. The NPS would actively seek partnerships with stakeholder groups and members of the public who have been involved in the development of dog management policies for GGNRA sites to help in disseminating information to park visitors in order to reduce noncompliance.

## **COMPLIANCE-BASED MANAGEMENT STRATEGY**

**Background.** The compliance-based management strategy has been designed to encourage compliance with sections of the Code of Federal Regulations (CFR) applicable to dog management, and ensure protection of park resources, visitors and staff. It will provide the framework for monitoring and recording observed noncompliance with the applicable sections of the CFR, including the new 36 CFR Part 7 special regulation, and will guide use of park resources to address those violations. Noncompliance with federal regulations related to dog management will be met with a range of management responses.



**Timeline.** Monitoring will begin with plan implementation, or soon thereafter. A detailed monitoring plan will be developed to guide compliance monitoring, data management, and reporting.

All areas and zones (see frequently asked questions (FAQ) 1 below) addressed by the dog management plan will be subject to monitoring. Starting with the implementation of the dog management plan, months 1-3 will be a public education period, and in months 3-6 the monitoring strategy will be tested. During months 6-18, a baseline of numbers and rates of visitors with and without dogs, numbers of dogs per visitor, type of use (on-leash or voice control) and noncompliance with regulations (includes noncompliance observed but not resulting in citations) will be established. After this baseline has been established, monitoring efforts may be prioritized, with the park reducing the frequency of monitoring in low use or high compliance areas to focus on areas with high use or low compliance as needed. Monitoring will continue in all areas for at least 4 years. However, all areas addressed in the dog management plan will be periodically monitored for changes in baseline to reprioritize monitoring as needed. Park management responses will focus on areas with demonstrated noncompliance with the regulations, as described in the primary management response section below. Monitoring will inform park management and law enforcement when, where, and how to prioritize responses to noncompliance. If the rolling 12 month average for compliance in any of the management zones addressed by the dog management plan falls below 75% (measured as the percentage of total dogs / dog walkers observed during the previous 12 months not in compliance with the regulations), park management actions as described in the secondary management response will be implemented. The initial 12-month rolling average is based on data collected during months 6-18 after initiation of the dog management plan. Regular monitoring of an area over a 12-month period is required before secondary management responses (see below) can be implemented.

NPS will prepare annual reports documenting monitoring data collected and any consequent management actions, which will be made available to the public. NPS will also release a preliminary report providing baseline data after the first 6 months of monitoring (month 12 after plan initiation).

Standard: Compliance with federal regulations applicable to dog management.

Indicators: Noncompliance with federal regulations applicable to dog management as shown in table 4.

**TABLE 4. FEDERAL REGULATIONS APPLICABLE TO DOG MANAGEMENT**

<b>Dog Management Activity</b>	<b>Federal Regulation</b>
Vegetation Damage	36 CFR 2.1 (a) (1) (ii)
Wildlife Disturbance	36 CFR 2.2(a)(2)
Disturbance to Threatened and Endangered (T&E) Species	36 CFR 2.2 (a) (2), 50 CFR Part 17
Violation of Areas Closed to Dogs (T&E and Sensitive Habitat)	NEW PART 7 SPECIAL REGULATION
Violation of Areas Closed to All (T&E and Sensitive Habitat)	36 CFR 1.5 (f)
Violation of Areas Closed to Dogs (Safety)	36 CFR 1.5 (f), NEW PART 7 SPECIAL REGULATION
Hazardous Condition (aggressive behavior, pet rescues)	36 CFR 2.34 (a)
Degree of Compliance with special regulation (no dogs, on-leash, ROLA)	NEW 36 CFR PART 7 SPECIAL REGULATION
Government Property Damage	36 CFR 2.31 (a) (3)
Pet Excrement	36 CFR 2.15 (a) (5)

### Triggers and Management Responses

1. Primary management response: When noncompliance is observed at an area, NPS would weigh appropriate management options and would respond from a suite of potential actions that include: focused enforcement of regulations, education (e.g., additional information and regulatory signs and exhibits, brochures and fliers, public meetings, meetings with user groups, etc.), establishment of buffer zones to protect sensitive habitat and species, time/use restrictions, and special use permit (SUP) restrictions.
  - a. Areas with the highest rates of noncompliance, and/or sensitive resources, will receive first priority for primary management responses.<sup>4</sup>
  - b. Aggressive dogs or unsafe behavior (e.g., resulting in cliff rescues) are treated on an individual, case-by-case basis, and may result in banning a particular dog from the park, or if applicable, a SUP restriction. However, violations recorded by the monitoring team will count towards the rate of noncompliance.
2. Secondary management response: When compliance falls below 75% over a yearly rolling average (measured as the percentage of total dogs / dog walkers observed during the previous 12 months not in compliance with the regulations), in a management zone (on-leash, voice control, or no dogs) in any of the specific areas addressed by the plan, the zone's management changes to the next more restrictive level of dog management, for example: ROLA to on-leash, or on-leash to no dogs. The secondary management response could not be implemented until after the first 18 months, during which the monitoring plan will be tested and baseline data collection begun. Note that primary management responses may continue to apply.

<sup>4</sup> If Section 7 consultation pursuant to the *Endangered Species Act* requires preparation of a Biological Opinion, management responses related to threatened and endangered species will be governed by the Terms and Conditions described in the Biological Opinion, and would be separate from the compliance-based strategy. Emergency closures for listed species protection may also occur outside of the compliance-based strategy.

## Frequently Asked Questions

1. What is an area versus a zone? An area is a specific geographic site. The dog management plan addresses 21 areas, plus new lands. A zone denotes a type of use allowed in an area (on leash, voice control, or no dogs). An area may have more than one zone, depending on the alternative.
2. Will the monitoring plan be peer-reviewed before implementation? Yes, the plan will be subject to peer review, as required by Department of Interior (DOI) policy to ensure integrity of scientific data. Such a review will include monitoring protocols to ensure statistical rigor and accuracy, and training of monitoring staff to ensure uniform measurement and interpretation of data.
3. How do law enforcement citations or other instances of noncompliance, such as a case incident report, factor into the 75% criteria in the secondary management response? While violations will likely occur that are not documented by the monitoring team, including those resulting in law enforcement citations, those would not count towards the cumulative total for a particular zone, because the number of incidents of noncompliance at any zone must be measured against the total number of dogs in the area during monitoring. However, all violations reported to the park, including citations, may be used to inform the monitoring team where to focus its efforts.
4. Does baseline information factor into the 75% criteria in the secondary management response? No. Baseline information is used to prioritize monitoring initially, and reevaluate monitoring if use patterns change. It does not set a standard against which the 75% criteria is measured. The 75% criteria is measured as the percentage of total dogs / dog walkers observed during the previous 12 months not in compliance with the regulations.
5. What are some examples of the compliance-based management strategy in practice at different periods in time?
  - a. Month 15 of the plan implementation: The monitoring team visits a specific area at random times of the day and week. The team will count the total number of dogs, dog walkers and types of use (on-leash, voice control) over a pre-set monitoring period, while also recording the number of violations in each zone contained in the area. This information will be compiled with the preceding months' monitoring data to develop a cumulative total number of dogs and violations. Information gained through monitoring will direct use of park resources to initiate primary management responses as required. In 3 more months the monitoring team will have 12 months of data to evaluate, to determine if a secondary management response is warranted.
  - b. Month 18 of the plan: The monitoring team has continued to visit this specific area at random times of the day and week, following the same monitoring protocols as noted above. If compliance falls below 75% based on the previous 12 months' monitoring data in one of the zones, in spite of the park's primary management actions, the zone will change to the next most restrictive dog management regulation.
6. What kind of public notice will be provided before initiation of the secondary management response? The public will receive notice when an area is approaching the 75% compliance benchmark, that is, if compliance decreases the public will be notified before compliance falls below 75%, most likely through a website, notices posted in the specific area, and outreach to affected groups.
7. After the secondary management strategy has been initiated, if compliance later rises above 75%, can a zone within an area be changed back to the next least restrictive management regime? No.

The secondary management response is a permanent change given the limited administrative resources of the NPS. The NPS goal is that compliance rates stay above 75% after the primary management response, but believes that the possibility of a permanent secondary management response will help ensure this.

8. Why is the secondary management response set at a 75% compliance rate? The dog management plan/EIS and the resulting special regulation, along with existing regulations applicable to dog management, determine appropriate behavior for visitors with dogs within Golden Gate National Recreation Area. NPS does not condone any level of noncompliance, and the primary management response detailed above is sufficient to address noncompliance where it is not widespread. The secondary management response is meant to apply when it is clear that park management has been unable to reduce noncompliance through conventional means, and when there is continued and widespread noncompliance occurring over a longer period of time, at which point the benefits in allowing the use is outweighed by the NPS administrative burden required to manage the use, draining limited resources needed for other important park programs. The secondary management response provides visitors with dogs an additional incentive to comply with the dog regulations, and because it is site-specific, it encourages a communal response to address noncompliance. It also places a burden on NPS to take an initial, proactive approach to dog management by addressing individual violators and by increasing public awareness through community education and outreach, and not punish the majority for individual or isolated violations. At the same time, this secondary response is intended to ensure that NPS does not allow activities that do not correspond with its primary conservation mandate. It recognizes that NPS has multiple competing priorities to address with its funding and does not have unlimited resources with which to ensure compliance with dog regulations. Compliance less than 75% would not be acceptable for park operations, and could only be addressed through increased restrictions.
9. Rationale for 18 month period before a secondary management response could initially be applied:
  - a. Months 0-6: provides for a 3-month public education period after plan implementation, and an additional 3 months to test, possibly modify, and implement the monitoring plan.
  - b. Months 7-18: provides one year to implement the full range of possible management actions addressing noncompliance as outlined in the primary management response, and provides 12 months of monitoring data.
  - c. One year rolling average is measured at the end of each month; after the initial 18 months action could be taken after any month as long as there are 11 consecutive preceding months of data.

## **UNFORESEEABLE CHANGES TO PLAN / ENVIRONMENTAL IMPACT STATEMENT IMPLEMENTATION**

Minor changes to plan implementation may be required as a result of changing conditions (e.g., coastal erosion and loss of parkland, storm damage) of the park's dynamic ecosystem to ensure the safety of visitors and staff and to protect natural resources. The park is not able to foresee how future resource and visitor use conditions and patterns will change. Minor changes include actions such as trail realignments to protect natural resources and park map revisions due to inadvertent errors (i.e., boundary of the Crissy Field WPA).

While this plan/EIS presents areas open to dog walking activities, the Superintendent has the discretion to close these areas to dog walking due to minor and major changes. Major changes will continue to require a public process; however, the park currently closes areas, and will continue to close areas in the future, to protect visitor safety and natural resources. Closures and public use limits will follow 36 CFR 1.5, which includes public use limits and closures, and 36 CFR 1.7, Public Notice.

## **ALTERNATIVE B: NPS LEASH REGULATION (36 CFR 2.15 AND GOLDEN GATE NATIONAL RECREATION AREA COMPENDIUM)**

Alternative B reflects the NPS-wide approach to dog walking as defined in NPS policy and regulations. Management conditions for alternative B are regulated by the CFR, specifically 36 CFR 2.15(a)(2), and the GGNRA Compendium. This alternative does not include the voice control provisions of the 1979 Pet Policy. The federal regulation 36 CFR 2.15(a)(2) prohibits failing to crate, cage, restrain on a leash, which shall not exceed 6 feet in length, or otherwise physically confine a pet at all times in national parks (appendix D). The GGNRA Compendium is the format wherein each park, as allowed by the CFR, can publish park-specific actions to establish closures and public use limits to protect cultural or natural resources, enhance public health or safety, or manage public use and recreation (NPS 2001b; appendix B).

Some areas of the park would be closed to dogs or to all public use, or have restrictions imposed on them by the GGNRA Compendium or consultation under the ESA. Section 1.5, “Visiting Hours, Public Use Limits, and Closures,” and section 2.15, “Pets,” are the sections of the GGNRA Compendium that establish site closures in the park for visitors and restrictions for pets. Section 2.15 of the 36 CFR states that pets are prohibited in public buildings, public transportation vehicles, locations designated as swimming beaches, or any structure or area closed to pets by the superintendent. The authority to close or restrict areas to protect resources or public safety, or for a variety of other reasons, derives from 36 CFR 1.5, which states in part, “based upon a determination that such action is necessary for the maintenance of public health and safety, protection of environmental or scenic values, protection of natural or cultural resources, [or] aid to scientific research ... the superintendent may ... designate areas for a specific use or activity, or impose conditions or restrictions on a use or activity.” Such restrictions are to be available in the GGNRA Compendium, and the reasons for them referenced either in the GGNRA Compendium itself or the separate written determination as to why the restriction or use limit is necessary. In addition, the public must be notified of closures and use limits put in place through the GGNRA Compendium by signs or brochures as stated in 36 CFR 1.7(a).

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*Alternative B reflects the NPS-wide approach to dog walking as defined in NPS policy and regulations.*

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The GGNRA Compendium is updated each year and is available to the public by request and on the park’s web site. These restrictions are intended to reduce any possible conflict between users, to protect natural, cultural, and archeological resources, and for public safety concerns (NPS 2008b, p. 23).

In the GGNRA Compendium, some areas of the park are designated as closures due to public safety concerns (e.g., steep coastal cliffs) and other areas have natural and cultural resources that are highly sensitive to damage. The ESA and NPS policy require special protection for the threatened and endangered species and the anadromous fish (fish living mostly in the ocean and breeding in freshwater) found in areas of GGNRA. Some park areas provide vital protection of habitat for the state threatened bank swallow and federally threatened western snowy plover as well as habitat for shorebirds, marine mammals, and other sea life. Restrictions on pets in these areas provide important areas of reduced disturbance for resting and feeding waterbirds, shorebirds, and other marine wildlife. Some vegetated areas of the park contain significant native plant communities that are subject to human-induced impacts,

like the coastal bluffs and dunes of Fort Funston. Other vegetated areas contain native and/or culturally significant vegetation that is susceptible to erosion due to environmental factors but is also exacerbated as a result of trampling, short-cutting and off-trail travel.

In addition, the GGNRA Compendium includes restrictions for pets in areas of the park for public health and safety, protection of cultural resources, and avoidance of conflict among visitor use activities.

For all sites, all dog walkers, including commercial dog walkers, would be allowed to walk one to three dogs per person without a permit. All dogs would be required to be on a leash.

## **NEW LANDS**

New lands that come under GGNRA management would fall under 36 CFR 2.15, which forbids possession of a pet in a public building, a public transportation vehicle, a location designated as a swimming beach, or any structure or area closed to pets by the superintendent. This approach would be consistent with all other park units nationwide. This would also make 36 CFR 2.15 applicable to all lands within GGNRA, since 36 CFR 2.15 also applies to existing lands in this alternative. New lands would not be considered for voice and sight control (ROLAs). New lands would be closed to on-leash dog walking if it would impede the attainment of the park's desired future conditions for natural or cultural resources as identified through the park's planning process. Areas would also be closed to on-leash dog walking if this activity would create an unsafe or unhealthful environment for visitors or employees, would impede or interfere with park programs or activities, or would trigger the compliance-based management strategy's process for closure.

## **COST OF IMPLEMENTATION**

The total costs of implementing alternative B are estimated at \$1,085,170. The bulk of these costs are associated with the hiring of additional personnel for implementing the dog management plan. For a more detailed explanation of personnel costs under alternative B, see the "Park Operations" section in chapter 4.

## **DOG WALKING ACTIVITIES PROPOSED UNDER ALTERNATIVE B**

Detailed information on alternative B for individual park sites, listed in order from north to south, is presented below and shown on alternative B maps (see "Maps"). The following rationale for the alternative options for each site describes resource impacts from dog walking in a generalized way. Details of these resource impacts can be found in the impact analyses in chapter 4.

### **Marin County Sites (Alternative B)**

#### **Stinson Beach**

As in alternative A, on-leash dog walking would be allowed only in the parking lot and picnic areas of Stinson Beach. Dogs would not be allowed on the beach itself, because it is a designated swimming beach (closed to dogs, per the CFR). Leashed dogs in the parking lot and picnic areas would minimize conflict with visitors in these areas. In addition, leashed dogs would also reduce the concern for health and safety issues associated with dogs in the picnic areas.

### **Homestead Valley**

This alternative would allow on-leash dog walking only on Homestead Fire Road and on neighborhood connector trails that may be designated by the park in the future. Homestead Valley is regularly used by local residents. This alternative would provide neighborhood connections for dog walkers. Requiring that pets be walked on-leash would protect native plant communities, wildlife habitat, and the federally listed northern spotted owl (*Strix occidentalis caurina*).

### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

On-leash dog walking would be allowed on Alta Trail up to the junction with Orchard Fire Road and on Pacheco and Orchard fire roads, which branch off Alta Trail and connect to Marin City. The on-leash designation requires that pets be walked on-leash, thereby protecting native plant communities and wildlife habitat—and specifically protecting habitat for the federally listed Mission Blue butterfly, which is consistent with the treatment of Mission Blue butterfly habitat throughout GGNRA. The on-leash designation would also limit the potential for dog/coyote interaction.

### **Oakwood Valley**

On-leash dog walking would be allowed only on Oakwood Valley Fire Road and Oakwood Valley Trail to the junction of the trail and fire road. This alternative would provide protection for contiguous habitat beyond the trail and fire road junction and would limit the potential for dog/coyote interaction. It would also provide protection for potential habitat for species of concern, such as the Mission Blue butterfly habitat nearby and possible habitat for the northern spotted owl.

### **Muir Beach**

On-leash dog walking would be allowed on the beach, the path to the beach, the boardwalk, and the proposed Pacific Way Trail, which is to be built as part of the Muir Beach Wetland and Creek Restoration Project (NPS 2007b, 1-4). Requiring that pets be leashed would protect federally listed coho salmon and steelhead in Redwood Creek, as well as sensitive wetland, riparian, and dune habitat. This designation would also allow for multiple uses on this beach.

### **Rodeo Beach**

On-leash dog walking would be allowed on both Rodeo Beach, South Rodeo Beach, access trails, and the footbridge to the beach. Dogs and visitors are prohibited in Rodeo Lagoon per the GGNRA Compendium to protect the federally listed tidewater goby and California brown pelican, as well as waterbirds and shorebirds that use the lagoon. On-leash dogs would be allowed on the beach because this area has a low incidence of dog/visitor conflicts. Fenced areas (existing or future) are closed to the public to protect dunes, sensitive habitats/species, restoration areas, or other sensitive resources.

### **Marin Headlands Trails**

This alternative would not allow dogs on any of the trails in the Marin Headlands, including those previously open to dogs. This restriction would protect resources by maintaining the integrity of the native plant communities and wildlife habitat, including habitat for the federally listed Mission Blue butterfly.

## **Fort Baker**

On-leash dog walking would be allowed on Drown Fire Road, the Bay Trail (excluding the Battery Yates Loop and the portion loop around Vista Point), the Lodge and Conference Center grounds, the loop around the Coast Guard station, and the parade ground. This restriction would be for visitor protection in an area of increasing visitation, both around the lodge and conference center and along the waterfront. The restriction would also be for the protection of the Mission Blue butterfly habitat surrounding the area. The Chapel Trail, which is located adjacent to Mission Blue butterfly habitat, is closed to dogs per the GGNRA Compendium.

## **San Francisco County Sites (Alternative B)**

### **Upper and Lower Fort Mason**

On-leash dog walking would be allowed throughout Upper Fort Mason, including the Great Meadow, the vendor area, Laguna Green, the parking lot, lawns, sidewalks, paved trails, housing areas, and the parade ground; on-leash dog walking would also be allowed in Lower Fort Mason. Requiring on-leash dog walking is for visitor safety, since this is a multiple-use area (picnicking, sunbathing, walking, running, and bike riding). Dog and human rescues have occasionally been required on the cliffs on the northern edge of Fort Mason.

### **Crissy Field**

**Crissy Field Wildlife Protection Area (Warming Hut to approximately 900 feet east of the former Coast Guard Pier).** No dogs would be allowed in the Crissy Field WPA under this alternative. The federally threatened western snowy plover has been observed in the WPA at Crissy Field during the nonbreeding season since 2006. Prohibiting dogs in the WPA would be consistent with the Crissy Field Recovery Plan Environmental Assessment (EA) (NPS 1996) and the GMP Amendment EIS for the Presidio of San Francisco (NPS 1994a). This alternative would afford the maximum protection for the western snowy plover, marine mammals (including immature elephant seals, which have been using the area recently), other wildlife, and native dune habitat.

**Promenade, Crissy Airfield, Beaches, Trails, and Grassy Areas.** On-leash dog walking would be allowed on the Promenade, Crissy Airfield, East and Central beaches, the paths leading to Central Beach, the trails and grassy areas near East Beach, and the multi-use trail along Mason Street. The leash requirement would provide visitor and pet safety as well as visitor satisfaction for those who would prefer to visit this national park site without encountering off-leash dogs. The leash requirement would also reduce the potential for dog/visitor conflict in this heavily visited, multiple-use area. Crissy Field receives intense visitor use, including from individual and commercial dog walkers. Staff estimates that there are generally five to ten commercial dog walkers per day (fewer on weekends than weekdays), and typically three present, with between four and six dogs each, at any given time of the day. These dogs are often walked under voice control, as are many of the dogs walked by individual dog owners. The area is busy with a variety of visitors, including joggers, cyclists, pedestrians, kiteboarders, windsurfers, and rollerbladers. Particularly on nice days, the high level and variety of visitor uses have resulted in conflicts, including intimidation, dogs knocking people over, dog-on-dog fights, and dogs biting people.

### **Fort Point Promenade / Fort Point National Historic Site Trails**

**Promenade and Trails.** As in alternative A, on-leash dog walking would be allowed only outside the fort (Fort Point Promenade Bay Trail, Andrews Road, and Battery East Trail) and would be prohibited inside the fort or on the Fort Point pier. This would minimize conflicts on the promenade along the entrance



road, where joggers, cyclists, and walkers share space with dog walking visitors. In addition, this alternative's requirement for on-leash use reduces risks to dogs from the adjacent roadways (Marine Drive and Lincoln Boulevard) and the edge of the seawall.

### **Baker Beach and Bluffs to Golden Gate Bridge**

On-leash dog walking would be allowed on Baker Beach and on all trails except on the Batteries to Bluffs Trail and Battery Crosby Trail, where dogs are prohibited per the GGNRA Compendium for the protection of irreplaceable natural resources. Requiring on-leash dog walking on the beach would provide protection for shorebirds, sensitive serpentine bluffs, and rare plant habitat as well as for visitors.

### **Fort Miley**

No dogs would be allowed at either East or West Fort Miley under this alternative, due to conflicting uses such as picnicking and bird watching. This alternative would provide the most protection for bird habitat. Due to the concrete bunkers edged by steep embankments at both East and West Fort Miley and the location of the VA hospital directly adjacent to the site, safety is a concern at this location. Hospital patients use the area, and the site is typically subject to heavy pedestrian, vehicular, and construction traffic, which causes safety concerns.

### **Lands End**

On-leash dog walking would be allowed only on the El Camino del Mar and Coastal trails. On-leash dog walking would increase visitor safety on the heavily used, *Americans with Disabilities Act* (ADA) accessible, restored Coastal Trail. This alternative would protect wildlife and provide visitor satisfaction for those visitors who would prefer to experience the park without the presence of dogs, which would be possible on the Ocean View Trail. Resources in this area that are potentially subject to impacts by dogs include natural seeps, migratory birds, and coyotes. A visitor center is proposed for the Lands End area, which will increase use of this area in the future.

### **Sutro Heights Park**

On-leash dog walking would be allowed only on the paths and parapet of Sutro Heights Park. This restriction is needed because this area is a multiple-use area. The park has formal landscaping and is frequently used for special events, including weddings.

### **Ocean Beach**

**Ocean Beach Snowy Plover Protection Area (Stairwell 21 to Sloat Boulevard).** Dogs would be prohibited in the SPPA, but would be allowed on-leash on the NPS section of the trail east of the dunes, adjacent to Great Highway. The Ocean Beach SPPA was established to protect western snowy plovers when they are present on the beach during their nonbreeding season. Prohibiting dog walking in the SPPA and having on-leash dog walking only along the NPS section of the trail adjacent to Great Highway would provide protection for the western snowy plover consistent with the *Final Recovery Plan for the Western Snowy Plover* (USFWS 2007). In addition, there are multiple reported instances of dogs flushing or chasing shorebirds or plovers in this area. This alternative would allow on-leash dog walking adjacent to the beach on the two-mile trail while protecting plover and shorebird habitat by separating the dogs from the habitat.

**Ocean Beach (North of Stairwell 21 and South of Sloat Blvd.).** Outside the SPPA, on-leash dog walking would be allowed north of Stairwell 21 and south of Sloat Boulevard. Having on-leash dog

walking north of Stairwell 21 would reduce conflicts between dogs and visitors in this heavily visited area, which is located close to the parking area at the beach. Requiring on-leash dog walking south of Sloat Boulevard would provide protection for shorebirds in this area.

### **Fort Funston**

On-leash dog walking would be allowed only on the beach and on trails that are not closed to dogs. A strip of beach at the foot of the northernmost bluffs would also have a voluntary seasonal closure to visitors and dogs when the state threatened bank swallows are nesting (April 1–August 15). The voluntary seasonal closure and the required on-leash dog walking on the beach is for the protection of bank swallows and shorebirds, but also reduces the possibility of conflict between user groups. Requiring on-leash dog walking on the trails south of the main parking lot is for the protection of a large restored area at Fort Funston and would provide increased opportunities to restore coastal dune and bluff habitat and allow for the reintroduction of San Francisco lessingia. The on-leash dog walking requirement would also reduce possible disturbance or safety concerns for the school programs of the San Francisco Unified School District and would increase visitor safety.

Requiring on-leash dog walking on the trails north of the main parking lot, an area with a high incidence of dog/human technical cliff rescues, reduces risks to dogs and dog owners due to the hazardous cliffs. The leash requirement also provides protection for the restored habitat area and for Battery Davis, a historic battery built in 1936, as well as visitor safety, and minimizes the possibility of conflict between user groups.

### **San Mateo County Sites (Alternative B)**

#### **Mori Point**

On-leash dog walking would be allowed only on the Coastal Trail and the beach area at Mori Point, which would be consistent with the City of Pacifica regulations for the levee area and the beach. This alternative would minimize disturbance and damage to restored ponds that provide habitat for federally listed endangered species (California red-legged frog and San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)) and would allow visitors the opportunity to experience the area without potential disturbance from the presence of dogs.

#### **Milagra Ridge**

On-leash dog walking would be allowed only on the fire road, the trail to the overlook and WWII bunker, and the Milagra Battery Trail (future connector to lower Milagra). Allowing on-leash dog walking on some, but not all, trails at Milagra Ridge would allow visitors to experience the site with dogs or without dogs. Dogs would not be allowed on the unpaved, hiking-only trail, which would provide the no-dog experience for visitors. This alternative would provide protection for federally endangered species (Mission Blue butterfly, San Bruno elfin butterfly (*Incisalia mossii bayensis*), and California red-legged frog) and their habitats that exist at Milagra Ridge and is consistent with GGNRA's parkwide management of Mission Blue butterfly habitat areas. Milagra Ridge is an island of habitat in a fragmented landscape; therefore, it is important to minimize further impacts to this area.

#### **Sweeney Ridge / Cattle Hill**

No dogs would be allowed at Sweeney Ridge or Cattle Hill under this alternative. This area has Mission Blue butterfly habitat as well as a large area of relatively undisturbed, contiguous native habitat. This alternative is consistent with regulations of adjacent lands managed by the San Francisco Public Utility

Commission. Intensive restoration efforts have occurred at Cattle Hill, including soil erosion mitigation and trail development, in partnership with the City of Pacifica.

### **Pedro Point Headlands**

On-leash dog walking would be allowed only on the Coastal Trail. Requiring on-leash dog walking for this alternative is for the protection of the contiguous native habitat at Pedro Point and to limit the disturbance of wildlife in this area by dogs. Restricting dog walking to the Coastal Trail also addresses safety concerns for dogs and dog owners due to the presence of cliff edges.

This area is expected to have a high level of visitor use with multiple recreational activities as a result of the planned trail along the present Highway 1 roadway, following the rerouting of the highway. This alternative would be consistent with adjoining land management regulations for the Coastal Trail, where on-leash dog walking is allowed.

## **ALTERNATIVE C: EMPHASIS ON MULTIPLE USE – BALANCED BY COUNTY**

This alternative balances a variety of dog walking opportunities with areas where dogs are not allowed within each of the three counties containing park sites, Marin, San Francisco, and San Mateo, and contains the consensus agreement for the Oakwood Valley site resulting from the negotiated rulemaking process. Details of the Committee consensus are provided in chapter 1.

Alternative C would emphasize recreational opportunities and experiences for multiple user groups, including dog walkers, while considering visitor and dog safety and minimizing conflict between dog walkers and other visitors. The alternative would provide a no-dog experience for visitors to some sites within GGNRA and protection for significant cultural and natural resources.

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*Alternative C balances a variety of dog walking opportunities with areas where dogs are not allowed, and contains the consensus agreement for the Oakwood Valley site resulting from the negotiated rulemaking process.*

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Alternative C, like alternatives D and E, would include ROLAs, areas for dog walking under voice and sight control, where users would have to adhere to specific guidelines initiated by the Committee and finalized by NPS staff (appendix E).

Alternative C allows all dog walkers, including commercial dog walkers, to walk one to three dogs without requiring a permit. Any dog walker, private or commercial, can obtain a permit to walk more than three dogs, to a maximum of six dogs. See appendix F for details on the Special Use Permit conditions. All dogs are required to be on a leash unless in a ROLA, where allowed. Permits may restrict use based on time and location. Permits would be issued for Alta Trail, Rodeo Beach, Fort Baker, Fort Mason, Crissy Field, Baker Beach, and Fort Funston.

### **NEW LANDS**

New lands that come under GGNRA management following the implementation of this dog management plan/EIS would fall under 36 CFR 2.15, the NPS-wide pet regulation. This approach would be consistent with all other park units Service-wide. New lands would not be considered for voice and sight control (ROLAs). An area would be closed to on-leash dog walking if this activity would impede the attainment of the park's desired future conditions for natural and cultural resources as identified through the park's planning process, create an unsafe or unhealthful environment for visitors or employees, impede or

interfere with park programs or activities, or trigger the compliance-based management strategy's process for closure.

## **COST OF IMPLEMENTATION**

The total costs of implementing alternative C are estimated at \$1,511,270. The bulk of these costs are associated with the hiring of additional personnel for implementing the dog management plan. For a more detailed explanation of personnel costs under alternative B, see the "Park Operations" section in chapter 4.

## **DOG WALKING ACTIVITIES PROPOSED UNDER ALTERNATIVE C**

The following rationale for the alternative options for each site describes resource impacts from dog walking in a generalized way. Details on these resource impacts can be found in the impact analyses in chapter 4. Below is a description of alternative C for each park site, listed in order from north to south, and shown on alternative C maps (see "Maps").

### **Marin County Sites (Alternative C)**

#### **Stinson Beach**

Alternative C for Stinson Beach would be the same as alternative B (on-leash dog walking).

#### **Homestead Valley**

Alternative C for Homestead Valley would be the same as alternative B (on-leash dog walking).

#### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

Alternative C for Alta Trail and Orchard and Pacheco fire roads would be the same as alternative B (on-leash dog walking).

#### **Oakwood Valley**

Dog walking under voice and sight control would be allowed only within a ROLA on Oakwood Valley Fire Road from Tennessee Valley Road to the junction with the Oakwood Valley Trail. On-leash dog walking would be allowed on the Oakwood Valley Trail only from the junction of Oakwood Valley Fire Road to a new gate that would be installed at the top of the Oakwood Valley Trail at Alta Avenue.

The consensus agreement of the Committee stipulated that double gates at each end of the ROLA and continuous fencing along the road would be required to reduce impacts to sensitive habitat. Fencing would also reduce the potential for disturbance and possible interactions among dogs under voice and sight control and wildlife in the area. Interactions between dogs under voice and sight control can endanger both animals and visitors. This alternative also protects potential habitat for species of special concern, including nearby Mission Blue butterfly habitat and possible habitat for the northern spotted owl.

#### **Muir Beach**

Alternative C for Muir Beach would be the same as alternative B (on-leash dog walking).

### **Rodeo Beach/South Rodeo Beach**

Dog walking under voice and sight control would be allowed within a ROLA at Rodeo Beach, bounded on the inland edge by the proposed fence (to be installed as part of a separate park project) along Rodeo Lagoon and by the ridge to the south. The Rodeo Beach ROLA would allow for dogs to be under voice and sight control in an area that historically has had relatively few conflicts between dog walkers and other users. The Rodeo Beach area is not heavily used by migrating and wintering shorebirds, so disturbance from chasing by dogs would be expected to be minimal. By limiting the ROLA to only the main beach, alternative C also would provide for the protection of South Rodeo Beach, which is adjacent to Bird Island, where seabirds such as brown pelicans, common murre (*Uria aalge*), and Brandt's cormorants (*Phalacrocorax penicillatus*) are found. On-leash dog walking would be allowed on the footbridge to the beach. Lastly, opportunities for visitors to experience the area without the presence of dogs would be available on trails and beach areas outside the ROLA.

### **Marin Headlands Trails**

On-leash dog walking would be allowed only along the lower Rodeo Valley trail corridor, which runs from the Rodeo Beach parking lot to the intersection of Bunker and McCullough roads on sections of the Lagoon, Miwok, and Rodeo Valley trails, the Battery Smith–Guthrie Fire Road Loop, and on the Old Bunker Fire Road Loop. All other trails in the Marin Headlands and Tennessee Valley (Tennessee Valley is currently closed to dogs) would be no-dog areas, providing visitors the opportunity to experience the park without the presence of dogs.

This alternative would maintain the integrity of habitat within the interior of the Marin Headlands by restricting dog walking to trails at the perimeter of the large expanse of contiguous habitat. This would provide protection for wildlife and native habitat and protect Mission Blue butterflies and their habitat along the North Miwok Trail and the sections of the Coastal Trail.

### **Fort Baker**

For Fort Baker, alternative C would be the same as alternative B (on-leash dog walking), except that alternative C would include on-leash dog walking on Battery Yates Loop road.

### **San Francisco County Sites (Alternative C)**

#### **Upper and Lower Fort Mason**

Dog walking under voice and sight control would be allowed only within ROLAs in the Inner Great Meadow and Laguna Green areas, with barriers to separate the ROLAs from other uses. Upper Fort Mason is easily accessible from residential neighborhoods in San Francisco and the ROLAs would provide areas for dogs to exercise and socialize in an unrestricted environment. On-leash dog walking would be required on all sidewalks, roadways, paved trails, and housing areas at Fort Mason, as well as on the lawn below the path paralleling Laguna Street; on-leash dog walking would also be allowed in Lower Fort Mason. The on-leash requirement for public access pathways and trails would increase safety for visitors by reducing interactions with dogs under voice and sight control that may result in public conflict and visitor injuries due to falls or bites. Portions of the Great Meadow would continue to provide visitors the opportunity to experience the park without the presence of dogs.

## **Crissy Field**

Crissy Field Wildlife Protection Area (Warming Hut to approximately 900 feet east of the former Coast Guard Pier). Dog walking would not be allowed within the Crissy Field WPA, the same as alternative B.

**Promenade, Crissy Airfield, Beaches, Trails, and Grassy Areas.** Dog walking under voice and sight control would be allowed only within ROLAs on Crissy Airfield and Central Beach. These two ROLAs would provide areas for off-leash exercise and socialization for dogs in less heavily used areas of Crissy Field. The ROLA on Crissy Airfield would include the middle section between the easternmost and westernmost north/south paths. On-leash dog walking would be allowed on the Airfield eastern and western section east of the easternmost north/south path, and west of the westernmost north/south path.

On Crissy Airfield, the NPS would reduce or temporarily suspend the ROLA as necessary for special events. Fencing would not be required to establish the ROLA boundaries, eliminating a potential impact to cultural resources at Crissy Airfield. Central Beach is not heavily used by visitors except dog walkers. Designating only the Central Beach portion of the Crissy Field beachfront as a ROLA would reduce potential conflict among the many diverse users of East Beach and improve visitor safety and enjoyment.

On-leash dog walking would be allowed on the Promenade, the paths leading to Central Beach, the trails and grassy areas south of East Beach, and the multi-use trail along Mason Street.

## **Fort Point Promenade and Fort Point National Historic Site Trails**

**Promenade and Trails.** Alternative C for the Fort Point Promenade and National Historic Site trails within GGNRA would continue under the current management policy (alternative A, allowing on-leash dog walking on the Fort Point Promenade Bay Trail, Andrews Road, and the Battery East Trail).

## **Baker Beach and Bluffs to Golden Gate Bridge**

Alternative C would be the same as alternative B (on-leash dog walking).

## **East Fort Miley**

On-leash dog walking would be allowed only in the trail corridor along the east edge of East Fort Miley. This would provide visitor safety, separating visitors from the hazardous, steep embankments above the adjacent concrete bunkers, and would minimize the potential for visitor conflicts in the picnic area. In addition, this restriction would minimize conflicts with users coming to the area for bird watching, and, particularly during migratory season, would protect bird habitat from potential damage resulting from dogs under voice control. Based on the outcome of discussions with the City of San Francisco, a new trail may connect East Fort Miley with El Camino del Mar across San Francisco property.

## **West Fort Miley**

Alternative C would not allow dogs in West Fort Miley, providing visitors the opportunity for passive recreational experiences without the presence of dogs and eliminating the potential for visitor conflicts around the Fort Miley Adventure Challenge Course. This alternative would also provide protection for significant bird habitat and prime bird watching areas for visitors.

## **Lands End**

Dog walking under voice and sight control would be allowed only within a ROLA along the El Camino del Mar Trail that extends from the San Francisco Memorial parking lot eastward to the steps below Fort Miley. On-leash dog walking would be allowed on the Coastal Trail and steps to the El Camino del Mar Trail. The restored Coastal Trail is heavily used and ADA accessible; its use is projected to increase because of the restoration and ADA compatibility. The area is also being developed with visitor amenities (visitor center, etc.) that would further increase visitation and use. Requiring on-leash dog walking along the Coastal Trail would reduce the potential for user conflicts and would enhance visitor safety and dog safety.

This alternative would provide protection of wildlife from potential interactions with dogs and, by not allowing dogs on the Ocean View Trail, would also provide a segment of Lands End where the outdoor experience would not include the presence of dogs.

## **Sutro Heights Park**

For Sutro Heights Park, alternative C would be the same as alternative B (on-leash dog walking).

## **Ocean Beach**

**Ocean Beach Snowy Plover Protection Area (Stairwell 21 to Sloat Boulevard).** Under alternative C, dog management at the Ocean Beach SPPA would be the same as described under alternative B (on-leash dog walking only on the trail adjacent to the Great Highway; no dogs allowed on the beach between Stairwell 21 and Sloat Boulevard).

**Ocean Beach (North of Stairwell 21 and South of Sloat Boulevard).** Dog walking under voice and sight control would be allowed in a ROLA stretching north from Stairwell 21 to the north end of Ocean Beach. Data shows that wintering and migratory shorebird use along this section of the beach is lower than in the SPPA south of Stairwell 21, and restricting dog walking to north of Stairwell 21 would provide protection for wintering and migratory shorebirds elsewhere on the beach. This restriction would also allow visitors a beach experience that would not include the presence of dogs. Alternative C would also provide consistent dog management along the beach from the Fort Funston beach access trail north to Stairwell 21.

## **Fort Funston**

Dog walking under voice and sight control would be allowed in two designated ROLAs, one on the beach south of the beach access trail and a second between (and not including) the Chip Trail, Sunset Trail, and parking lot. On-leash dog walking would be allowed on all trails north of the parking lot except the Sunset, Battery Davis, and Horse trails, which would be closed to dogs. South of the main parking lot, on-leash dog walking would be allowed on the sand ladder and ADA-accessible trails. The combination of ROLAs and on-leash trails would provide a loop for dog walkers from either the main parking lot or the John Muir parking lot to the beach access trail, then down to the beach and into the ROLA south of the beach access trail. From the southern end of the beach ROLA, the sand ladder trail would return dog walkers to the main parking lot and the adjacent ROLA. No dog walking would be allowed north of the Beach Access Trail.

This alternative would provide protection to migratory and wintering shorebirds and bank swallow habitat north of the beach access trail and would provide visitors with the opportunity to experience the area both with and without the presence of dogs. Alternative C would also provide protection for cultural resources

(Battery Davis) and habitat areas undergoing restoration. Requiring on-leash dog walking along trails would provide protection for dogs and their owners near the sand cliffs and would reduce the potential for user conflicts and safety incidents among dogs as well as with visitors as a result of having dogs under voice control.

### **San Mateo County Sites (Alternative C)**

#### **Mori Point**

On-leash dog walking would be allowed only on Old Mori Road, the Coastal Trail, and the beach area that is located within the GGNRA boundary. Requiring on-leash dog walking at Mori Point is for the protection of sensitive habitat and of the federally listed California red-legged frog and San Francisco garter snake.

#### **Milagra Ridge**

Under alternative C, dog management designations for Milagra Ridge would be the same as those under alternative B (on-leash dog walking on the fire road, overlook, WWII bunker, and future Milagra Battery Trail).

#### **Sweeney Ridge / Cattle Hill**

Under alternative C, dog management at Sweeney Ridge would be identical to dog management actions described in alternative B (no dogs). On-leash dog walking would be allowed at Cattle Hill on the Baquiano Trail from Fassler Avenue to, and including, the Farallons View Trail.

#### **Pedro Point Headlands**

Dog management at Pedro Point Headlands under alternative C would be identical to dog management actions described in alternative B (on-leash dog walking on the Coastal Trail).

## **ALTERNATIVE D: MOST PROTECTIVE OF RESOURCES AND VISITOR SAFETY**

Alternative D would offer greater protection of GGNRA natural and cultural resources, including sensitive and protected species, although it would allow recreation opportunities and experiences for multiple user groups, including dog walkers. However, this alternative would prohibit commercial dog walking. Alternative D would also offer more protection for visitors and staff from potential incidents with dogs. Similar to alternatives C and E, this alternative would include some areas for dog walking under voice and sight control in ROLAs, where users must adhere to specific guidelines initiated by the Committee and finalized by NPS staff (appendix E).

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*Alternative D would offer greater protection of GGNRA natural and cultural resources, including sensitive and protected species.*

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### **NEW LANDS**

New lands that come under GGNRA management would be closed to all dogs unless opened by the GGNRA Compendium, as evaluated by the criteria discussed below. The “closed unless opened” approach is the reverse of 36 CFR 2.15. New lands would not be considered for voice and sight control (ROLAs). For alternative D, an area would be open to dogs only if it would not impede the attainment of



the park's desired future conditions for natural and cultural resources as identified through the park's planning process, create an unsafe or unhealthful environment for visitors or employees, or impede or interfere with park programs or activities. Once the area is open to on-leash dog walking, the compliance-based management strategies would be applied.

## **COST OF IMPLEMENTATION**

The total costs of implementing alternative D are estimated at \$1,512,081. The bulk of these costs are associated with the hiring of additional personnel for implementing the dog management plan. For a more detailed explanation of personnel costs under alternative D, see the "Park Operations" section in chapter 4.

## **DOG WALKING ACTIVITIES PROPOSED UNDER ALTERNATIVE D**

A description of the specific aspects of alternative D and their rationale are presented here for each park site, listed in order from north to south, and shown on alternative D maps (see "Maps"). The following discussion of the alternative options for each site describes resource impacts from dog walking in a generalized way. Details on these resource impacts can be found in the impact analyses in chapter 4.

### **Marin County Sites (Alternative D)**

#### **Stinson Beach**

Under alternative D, no dogs would be allowed in any area of Stinson Beach. As in all the alternatives, the beach, as a designated swimming beach, is closed to dogs by the CFR. Prohibiting dogs in the picnic areas and parking lots would remove the potential for conflicts between dogs and between dogs and visitors and would provide visitors the opportunity to experience Stinson Beach without the presence of dogs.

#### **Homestead Valley**

On-leash dog walking would be allowed only on Homestead Fire Road, which runs from Panoramic Highway to Lattie Lane in Mill Valley. This alternative would provide the most protection for native plant communities and wildlife, including habitat for the federally listed northern spotted owl. Allowing on-leash dog walking on only the fire road would provide visitors the opportunity to experience the site without the presence of dogs, while still allowing access for dog walkers from the local area.

#### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

Under alternative D, the trail and the two fire roads in this site would be no-dog areas. Prohibiting dogs would provide the most protection for native plant communities and natural habitat for wildlife, including habitat for the federally listed Mission Blue butterfly, and would eliminate the potential for conflicts between dogs and coyotes. Alternative D would also allow multiple user groups to experience Alta Trail and Pacheco and Orchard fire roads without the presence of dogs. This management option would also eliminate the potential for incidents between dogs, dog walkers, and other users, resulting in the potential for improved visitor safety.

#### **Oakwood Valley**

On-leash dog walking would be allowed only on Oakwood Valley Fire Road from Tennessee Valley Road to the junction with Oakwood Valley Trail. This alternative provides dog walkers access to the area

and also more cost-effective protection of adjacent habitat, as it does not include the fences and gates described in alternatives C and E. Allowing on-leash dog walking at Oakwood Valley Fire Road would also reduce the potential for dogs interacting with wildlife, especially coyotes, decreasing safety and health impacts to both wildlife and dogs from physical contact. This alternative would also provide visitors the opportunity to experience the site both with and without the presence of dogs.

### **Muir Beach**

Alternative D would allow on-leash dog walking only along the Pacific Way Trail. Alternative D would provide the most protection to sensitive dune, riparian, and wetland habitats. Protection of riparian and wetland habitats would result in protection of species such as the federally listed steelhead and coho salmon from potential impacts resulting from dog waste and disturbance in shallow water areas. This management option would also provide the most protection for wintering and migrant shorebirds from potential disturbance by dogs. Muir Beach is a heavily used, multiple-use area; restricting dog walking to the Pacific Way Trail would provide a no-dog beach experience for visitors at this site.

### **Rodeo Beach**

On-leash dog walking would be allowed only on the section of Rodeo Beach north of the footbridge and on the footbridge itself. Fenced areas (existing or future) are closed to the public to protect dunes, sensitive habitat/species, restoration areas, or other sensitive resources. This would provide some beach access for dog walking at Rodeo Beach but would maximize resource protection of Rodeo Lagoon, providing resting and feeding for shorebirds and waterbirds in the area. Lastly, visitors would have the opportunity to experience a portion of the beach without the presence of dogs.

### **Marin Headlands Trails**

Under alternative D, dog management designations for Marin Headlands Trails would be the same as those under alternative B (no dogs).

### **Fort Baker**

On-leash dog walking would be allowed only on the Lodge and Conference Center grounds, and the Bay Trail (not including the Battery Yates Loop or the trail around Vista Point). The on-leash designation would allow maximum resource protection for sensitive species and their habitats, including the Mission Blue butterfly. Because the area has been developed as a lodge and conference center, increased visitation could lead to an increase in conflicts among a variety of user groups. Prohibiting dogs in areas beyond the Lodge and Conference Center grounds and the Bay Trail in this alternative would provide visitors with an opportunity to experience the park without the presence of dogs and maximize safety for visitors.

### **San Francisco County Sites (Alternative D)**

#### **Upper and Lower Fort Mason**

Dog walking under voice and sight control would be allowed only in a ROLA on the Laguna Green area. On-leash dog walking would be allowed on the Great Meadow and on all public access pathways, roads, trails, housing areas, and Lower Fort Mason, increasing safety for visitors and reducing the potential for conflict between on-leash dogs and dogs under voice and sight control by the presence of a boundary, the planted landform, between the ROLA and Great Meadow. The ROLA at Upper Fort Mason would be easily accessible from residential neighborhoods in San Francisco and would allow dogs to enjoy exercise

and socialization in an unrestricted environment. Other visitors would still find areas of Upper Fort Mason in which to experience the park without the presence of dogs.

### **Crissy Field**

Crissy Field Wildlife Protection Area (Warming Hut to approximately 900 feet east of the former Coast Guard Pier). As with alternatives B and C, dogs would not be allowed in the WPA under this alternative.

**Promenade, Crissy Airfield, Beaches, Trails, and Grassy Areas.** Dog walking under voice and sight control would be allowed in a ROLA on the western portion (division at the easternmost north-south path across Crissy Airfield) of Crissy Airfield. The NPS would reduce or temporarily suspend the ROLA as needed for special events using Crissy Airfield. On-leash dog walking would be allowed on the Promenade (East Beach to the Warming Hut), the eastern portion of Crissy Airfield east of the easternmost north/south path, the trails and grassy areas south of East Beach, and the multi-use path along Mason Street. No dog walking would be allowed on the East and Central Beaches

Although all other alternatives are guided by the common element of on-leash dog walking being allowed in parking lots and picnic areas throughout the park, this alternative closes the West Bluff picnic area to dogs. This option was suggested by a dog walking group that participated in the negotiated rulemaking process to provide an area for visitors desiring a picnic area without the presence of dogs and to provide maximum protection to the WPA adjacent to the picnic area, where dogs are prohibited.

Alternative D would maximize visitor safety on the beaches and eliminate the potential for conflict between multiple user groups, particularly on the heavily used East Beach. Alternative D would also provide the maximum protection of natural resources on the beaches from dog waste, disturbance, and trampling.

### **Fort Point Promenade / Fort Point National Historic Site Trails**

**Promenade and Trails.** On-leash dog walking would be allowed only on the Bay Trail, which leads from the eastern end of the Fort Point promenade up to the Golden Gate Bridge. This alternative addresses safety concerns for visitors and dogs on the promenade, which is between the edge of a heavily used roadway and the edge of the seawall, and on trails at this site that are heavily used by visitors and can be congested. This alternative reduces the potential for conflicts among users and the possibility of interactions with aggressive dogs and compromised visitor safety.

### **Baker Beach and Bluffs to Golden Gate Bridge**

On-leash dog walking would be allowed on the beach south of the north end of the north parking lot and on all trails to the beach south of the north end of the north parking lot, as well as on the multi-use Coastal Trail.

Alternative D would allow visitors the opportunity to experience a portion of the beach without the presence of dogs by providing distinctly separate and direct access to a no-dog portion of the beach. This alternative would provide protection from disturbance for wintering and migrant shorebirds on the beach and would further protect natural resources along the new Batteries to Bluffs Trail at the north end of the beach, where visitor use is increasing.

## **Fort Miley**

Under alternative D, dog management at both East and West Fort Miley would be the same as alternative B (no dogs).

## **Lands End**

On-leash dog walking would be allowed on the El Camino del Mar Trail and on the Coastal Trail up to and including the connector trails and steps between those two trails. This alternative would provide protection for natural resources and visitor safety. The restored Coastal Trail, which is ADA accessible, is heavily used by visitors, and the planned development of a visitor center would increase visitation to the area. This alternative would minimize visitor conflicts with dog walkers and would also allow a trail where visitors can experience the area without the presence of dogs.

## **Sutro Heights Park**

Under alternative D, no dogs would be allowed throughout the Sutro Heights Park area, where weddings and other special events are frequently scheduled. Prohibiting dogs in the area would provide protection for the formal landscaping. Dog walkers would be able to access other nearby area trails, such as those at Lands End, from the parking area.

## **Ocean Beach**

**Ocean Beach Snowy Plover Protection Area (Stairwell 21 to Sloat Boulevard).** Under alternative D, dog management for the Ocean Beach SPPA would be the same as described in alternative B (on-leash dog walking only on the trail adjacent to the Great Highway; no dogs would be allowed on the beach between Stairwell 21 and Sloat Boulevard).

**Ocean Beach (North of Stairwell 21 and South of Sloat Boulevard).** On-leash dog walking would be allowed on the beach only north of Stairwell 21. No dogs would be allowed south of Sloat Boulevard. The on-leash designation would reduce the potential for conflict among visitors in the heavily used north end of the beach, closest to the parking lot, and would maximize protection for wintering and migratory shorebirds south of Sloat Boulevard. This management option would also provide consistency with the alternative D actions for the northern section of the beach at Fort Funston, which is immediately south of Ocean Beach.

## **Fort Funston**

Dog walking under voice and sight control would be allowed only in a ROLA established, with fencing, in a disturbed area across the Coastal Trail from the top of the beach access trail. On-leash dog walking would be allowed on the beach south of the beach access trail to the southern boundary of the Fort Funston beach and on all trails except the Horse Trail and the north end of the Coastal Trail, where dog walking would be prohibited.

This alternative would provide dog walkers with a loop option, starting either at the main parking lot or the John Muir parking lot, following trails north to the ROLA adjacent to the beach access trail. From there, the loop would continue down the beach access trail and south along the beach to the sand ladder, which leads back to the main parking lot and the Coastal Trail.

This alternative would protect restored habitat and Battery Davis; reduce conflict with multiple user groups, including school groups visiting the Environmental Education Center; and reduce safety concerns

near the cliffs. The alternative would also provide protection for wintering and migratory shorebirds and the seasonal bank swallow colony in the sand cliffs at the north end of the Fort Funston beach. The exclusion of dogs from the beach area north of the beach access trail would provide visitors the opportunity to experience the area without the presence of dogs. In addition, this alternative would also allow continuity with dog walking use at the south end of Ocean Beach, which is located directly north of the Fort Funston beach.

### **San Mateo County Sites (Alternative D)**

#### **Mori Point**

Alternative D would prohibit dogs at Mori Point. This alternative would provide the most protection for newly restored, sensitive habitat for the federally listed California red-legged frog and San Francisco garter snake, and would reduce the potential for conflict with other user groups, particularly walkers, hikers, and bicyclists. This management option would allow visitors the opportunity to experience the area without distraction and potential disturbance from the presence of dogs.

#### **Milagra Ridge**

Alternative D would prohibit dogs at Milagra Ridge. This alternative would provide the greatest level of protection for federally endangered species (Mission Blue butterfly, San Bruno elfin butterfly, and California red-legged frog) and their habitats that exist at Milagra Ridge and is consistent with GGNRA's park wide management of Mission Blue butterfly habitat areas. Alternative D would also protect restored habitat and the wildlife species that inhabit the area. Dog interactions with wildlife, including coyotes, could be detrimental to the safety of both dogs and wildlife from physical conflicts. This management option would provide an expanse of trails for visitors to experience without the potential for distraction and potential disturbance from the presence of dogs.

#### **Sweeney Ridge / Cattle Hill**

The dog management actions for Sweeney Ridge and Cattle Hill in alternative D would be the same as alternative B (no dogs).

#### **Pedro Point Headlands**

Alternative D at Pedro Point would prohibit dogs at the site. This alternative would provide the greatest level of protection for extensive areas of restored native habitat, including coastal bluff habitat, and for wildlife species that inhabit the headlands. It would also protect possible habitat for special-status species. This alternative would not be consistent with other agencies' management of the Coastal Trail outside the NPS boundary, where dogs are allowed on-leash.

## ALTERNATIVE E: MOST DOG WALKING ACCESS / MOST MANAGEMENT INTENSIVE

Alternative E would offer recreation opportunities and experiences for multiple user groups, including dog walkers; however, this alternative would allow more opportunities for dog walkers to access portions of GGNRA than the other alternatives while still providing protection for natural and cultural resources, including sensitive and protected species. Alternative E also provides for visitor protection and dog safety, and minimizes conflict between dog walkers and other visitors.

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*Alternative E would offer recreation opportunities and experiences for multiple user groups, including dog walkers.*

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For all sites, alternative E allows all dog walkers, including commercial dog walkers, to walk one to three dogs without a permit. A permit may be obtained to walk more than three dogs, to a maximum of six dogs (appendix F). Dogs must be on a leash unless in a ROLA, where permit holders may have up to six dogs under voice and sight control. Permits may restrict use by time and location. Permits would be issued for Alta Trail, Rodeo Beach, Fort Baker, Fort Mason, Crissy Field, Baker Beach, and Fort Funston.

Similar to alternative C, alternative E includes the Committee's consensus agreement on Oakwood Valley. Details on the negotiated rulemaking process are provided in chapter 1.

### NEW LANDS

Dog management for new lands that come under GGNRA management would begin as 36 CFR 2.15. New lands with existing off-leash use before acquisition may also be considered for voice and sight control in the future, per criteria established in the plan/EIS. An area would be closed to on-leash dog walking if it would impede the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, create an unsafe or unhealthful environment for visitors and employees, impede or interfere with park programs or activities, or trigger the compliance-based management strategy's process for closure. Additionally, new lands may be opened to voice and sight control if one year of baseline data is collected through the compliance-based management strategy monitoring program and compliance-based management strategies are not triggered. If compliance-based management strategies are not triggered, areas may be opened to voice and sight control where the NEPA planning process does not identify greater than minor impacts. Once open to voice and sight control, compliance-based management strategies would continue to apply.

### COST OF IMPLEMENTATION

The total costs of implementing alternative E are estimated at \$1,511,270. The bulk of these costs are associated with the hiring of additional personnel for implementing the dog management plan. For a more detailed explanation of personnel costs under alternative E, see the "Park Operations" section in chapter 4.

### DOG WALKING ACTIVITIES PROPOSED UNDER ALTERNATIVE E

A description of the specific aspects of alternative E and their rationale are presented here for each park site, listed in order from north to south, and shown on alternative E maps (see "Maps"). The following discussion of the alternative options for each site describes resource impacts from dog walking in a generalized way. Details on these resource impacts can be found in the impact analyses in chapter 4.

## **Marin County Sites (Alternative E)**

### **Stinson Beach**

As with alternatives B and C, alternative E would allow on-leash dog walking only in the parking lots and picnic areas at Stinson.

### **Homestead Valley**

Alternative E would be the same for Homestead Valley as alternative B (on-leash dog walking).

### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

Alternative E would provide the same options as described under alternatives B and C (on-leash dog walking) for Alta Trail and Orchard and Pacheco fire roads. Alternative E would also provide an on-leash trail loop (using public streets in addition to NPS trail system) for Marin City residents to access Alta Trail.

### **Oakwood Valley**

As with alternative C, the management of Oakwood Valley represents the consensus agreement of the Committee. Dog walking under voice and sight control would be allowed within a ROLA, with the installation of double gates and non-continuous fencing, on Oakwood Valley Fire Road from Tennessee Valley Road to the junction with the Oakwood Valley Trail. On-leash dog walking would be required on Oakwood Valley Trail from the junction with the Fire Road to a new gate at Alta Avenue. This approach would reduce the potential for dogs to access and potentially damage sensitive habitat and would provide protection for Mission Blue butterflies and their habitat. This alternative would also reduce the potential for disturbance and possible interactions among dogs under voice and sight control and wildlife in the area, especially other canids, such as coyotes. Park visitors would also have the opportunity for a no-dog park experience.

### **Muir Beach**

Dog walking under voice and sight control would be allowed only within a ROLA on the beach south of the access path from the parking lot; dogs would be prohibited on the remainder of the beach outside the ROLA. On-leash dog walking would be allowed on the Pacific Way Trail, the boardwalk, and the path to the beach. In the future, ROLA boundaries may need to be adjusted to correspond with habitat restoration occurring as part of the Muir Beach Wetland and Creek Restoration Project. Areas may be fenced (existing or future) or signed as closed to the public to protect dunes, sensitive habitat/species, restoration areas, or other sensitive resources. On-leash dog walking would be allowed on the future Pacific Way Trail (part of the Muir Beach Wetland and Creek Restoration Project (NPS 2007b, 1-4), on the boardwalk, and on the path to the beach. Muir Beach is a multiple-use area, which requires management to provide balanced use for all user groups, including dog walkers. Alternative E provides recreational experiences at Muir Beach for dog walkers as well as for visitors preferring a park experience without the presence of dogs. As discussed previously for alternative C, restricting on-leash dog walking to designated areas would provide protection for riparian and wetland habitat, as well as for federally listed steelhead and coho salmon.

### **Rodeo Beach / South Rodeo Beach**

Dog walking under voice and sight control would be allowed on Rodeo Beach in a ROLA from the ocean waterline to the crest of the beach. On-leash dog walking would be allowed between the crest of the beach and a fence that would be installed along the western edge of Rodeo Lagoon, on the footbridge to the beach, and on South Rodeo Beach and its access trail. The Rodeo Beach ROLA would provide an area for exercising dogs under voice and sight control in a portion of Rodeo Beach that historically has had relatively few conflicts between dog walkers and other users. The Rodeo Beach area is not heavily used by migrating and wintering shorebirds, so disturbance from chasing by dogs would be expected to be minimal. Alternative E would also provide for more protection of South Rodeo Beach, which is adjacent to colonially nesting and roosting seabirds on Bird Island. Lastly, opportunities for visitors to experience the area without the presence of dogs would be available on trails outside the ROLA.

### **Marin Headlands Trails**

On-leash dog walking would be allowed only along the Lower Rodeo Valley Trail Corridor (incorporating sections of the Lagoon Trail, Miwok Trail, and Rodeo Valley Trail), the Old Bunker Fire Road Loop, the Battery Smith–Guthrie Fire Road Loop, and the Coastal Trail Bike Route from the Golden Gate Bridge to the Rodeo Beach parking lot, which includes use of Julian Fire Road. Alternative E would provide the largest amount of access for on-leash dog walking within the Marin Headlands, while maintaining the integrity of the expanse of contiguous habitat within the interior of the Marin Headlands by keeping on-leash dog walking on existing trails in the more developed portion of the Marin Headlands. This alternative would also protect native habitat, including Mission Blue butterfly habitat, and provide visitors the opportunity to experience this large natural area of the park without the presence of dogs.

### **Fort Baker**

For Fort Baker, alternative E would be the same as alternative C (on-leash dog walking).

### **San Francisco County Sites (Alternative E)**

#### **Upper and Lower Fort Mason**

Dog walking would be allowed under voice and sight control in ROLAs established in the Great Meadow and Laguna Green. The Great Meadow ROLA in alternative E would encompass all of Great Meadow instead of only the inner portion, as in alternative C. Both ROLAs at Upper Fort Mason would be easily accessible from residential neighborhoods in San Francisco. On-leash dog walking would be required on all sidewalks, in housing areas, parking lots, and on paved trails at Fort Mason as well as on the lawn below the trail that parallels Laguna Street and Lower Fort Mason. The on-leash dog walking requirement for public access pathways and trails increases safety for visitors by reducing interactions with dogs under voice and sight control that may result in public conflict and visitor injuries due to falls or dog bites. Portions of Fort Mason (lawn areas near the Officer's Club and the parade ground) would continue to provide visitors the opportunity to experience the park without the presence of dogs.

### **Crissy Field**

**Crissy Field Wildlife Protection Area (Warming Hut to approximately 900 feet east of the former Coast Guard Pier).** On-leash dog walking would be allowed in the WPA. This would provide expanded dog walking on the beach while still reducing the disturbance to the federally listed western snowy plover and other wintering and migratory shorebirds.



**Promenade, Crissy Airfield, Beaches, Trails, and Grassy Areas.** Dog walking under voice and sight control would be allowed in ROLAs established on Central Beach and on Crissy Airfield. Central Beach is not heavily used by visitors except dog walkers, and Crissy Airfield is a relatively little-used portion of Crissy Field. On-leash dog walking would be allowed along the Promenade (East Beach to the Warming Hut), on East Beach, the trails and grassy areas south of East Beach, the paths to Central Beach, and the multi-use trail along Mason Street, which are more heavily used by pedestrians, bicyclists, and other visitors, to reduce uncontrolled dog/human interactions and provide visitor safety. No fencing would be used around the ROLA on Crissy Airfield in order to minimize impacts to cultural landscapes.

The East Beach portion of Crissy Field is more heavily used by multiple user groups because of its proximity to parking and facilities. Having Central Beach dedicated as a ROLA while requiring on-leash dog walking at East Beach would reduce potential conflict among dogs under voice and sight control and the many and diverse users of East Beach. In turn, this would improve visitor safety and enjoyment.

### **Fort Point Promenade / Fort Point National Historic Site Trails**

**Promenade and Trails.** Alternative E would be the same as the current management policy (alternative A) for the Fort Point Promenade and National Historic Site trails within GGNRA (on-leash dog walking).

### **Baker Beach and Bluffs to Golden Gate Bridge**

Dog walking under voice and sight control would be allowed in a ROLA on the section of Baker Beach south of the north parking lot to the NPS boundary near Lobos Creek. On-leash dog walking would be allowed on the section of Baker Beach north of the north parking lot and on all trails except the new Batteries to Bluffs Trail and Battery Crosby Trail, where dogs are prohibited. This would provide an area of protection from disturbance by uncontrolled dogs on the beach for wintering shorebirds while providing the most dog walking access at Baker Beach.

### **Fort Miley**

Dog walking under voice and sight control would be allowed in a designated ROLA in the eastside trail corridor at East Fort Miley. Based on the outcome of discussions with the City of San Francisco, this trail may ultimately cross San Francisco property to connect to El Camino del Mar. This ROLA would be easily accessible by residents of the neighborhood surrounding Fort Miley and would provide an off-leash experience protected from the safety hazards of the steep embankments above the adjacent bunkers. Establishing the ROLA corridor and prohibiting dogs from the remaining areas of East Fort Miley would allow both an off-leash experience and the opportunity for other visitors to experience the site without the presence of dogs.

In West Fort Miley, on-leash dog walking would be allowed only on the old roadway at the site. This would allow the multiple users of the area to have a park experience either with or without the presence of dogs. This alternative also provides protection for significant bird habitat and prime bird watching areas.

### **Lands End**

Alternative E would allow the same on-leash dog walking opportunities for Lands End as alternative C (both a ROLA and an on-leash trail).

## **Sutro Heights Park**

On-leash dog walking would be allowed on the paths, parapet, and lawns of Sutro Heights Park. This alternative would provide the greatest dog walking access to Sutro Heights Park. Because the area is heavily landscaped and developed, the existing plant community is not natural. On-leash dog walking would not disturb or destroy habitat. The area is frequently used for weddings and other special events, so it would not be suitable for dog walking under voice and sight control. Maintaining Sutro Heights Park as an on-leash area would reduce the potential for visitor conflict and safety incidents that could occur if dogs were under voice and sight control.

## **Ocean Beach**

**Ocean Beach Snowy Plover Protection Area (Stairwell 21 to Sloat Boulevard).** Dog walking would be allowed on-leash in the SPPA and along the trail adjacent to the Great Highway. This alternative would provide the most dog walking access. Requiring on-leash dog walking would maintain the seasonal protections currently in place for western snowy plovers and other shorebirds and would extend them throughout the year to eliminate visitor confusion and provide better year-round protection for the shorebirds.

**Ocean Beach North of Stairwell 21 and South of Sloat Boulevard.** Dog walking under voice and sight control would be allowed in a ROLA established from Stairwell 21 to the northern end of the beach. Long-term data indicates that shorebird use along this section of the beach is lower than in the SPPA between Stairwell 21 and Sloat Boulevard. On-leash dog walking would be allowed south of Sloat Boulevard to Fort Funston.

This management proposal for the southern section of Ocean Beach would be consistent with the alternative E proposal for the adjacent Fort Funston beach north of the beach access trail, and together with the on-leash proposal for the SPPA in this alternative, would provide approximately three miles of on-leash dog walking along the beach. The on-leash requirement south of Sloat Boulevard would provide protection for the high number of shorebirds that use this area.

## **Fort Funston**

Dog walking under voice and sight control would be allowed in two ROLAs at Fort Funston. One ROLA, on the beach south of the beach access trail to the southern boundary of Fort Funston, would provide part of a loop trail for dog walkers between upper Fort Funston and the beach. A second ROLA would be established as a corridor from north of the main parking lot, using the Chip Trail to the Coastal Trail, then along the Coastal Trail to the northern limit of the disturbed area near the top of the beach access trail. The Chip Trail would be part of the ROLA; however, north of the Chip Trail the ROLA would be east of and would not include the Coastal Trail. The boundary of the ROLA would extend along the western edge of the habitat corridor and the Horse Trail. This corridor would extend north to the northern limit of the disturbed area across the Coastal Trail from the beach access trail. On-leash dog walking would be allowed on the beach north of the beach access trail, except for a voluntary seasonal closure at the base of the northernmost sand cliffs to provide protection for the bank swallow colony that nests in the sand cliffs (April 1–August 15). On-leash dog walking would also be allowed on all trails at Fort Funston except the Horse Trail, which is within a habitat corridor and is closed to dogs. The combination of on-leash trails and ROLAs would provide dog walkers with a loop trail around Fort Funston, starting from either the main parking lot or the John Muir parking lot. Also, the on-leash designation for the Fort Funston beach north of the beach access trail, together with the alternative E on-leash proposal for Ocean Beach from its southern end to stairwell 21, would provide approximately three miles of on-leash dog walking along the beach.

This alternative would provide the greatest expanse of ROLA compared to the other alternatives. Requiring on-leash dog walking along trails would provide protection for dogs and their owners and would reduce the potential for user conflicts and safety incidents among dogs, as well as with visitors, as a result of having dogs under voice and sight control. The voluntary seasonal closure at the base of the northernmost sand cliffs would provide protection of the bank swallow colony from disturbance related to dog walking during the bank swallow nesting season. This alternative would also provide protection of restored areas at the site and at Battery Davis.

## **San Mateo County Sites (Alternative E)**

### **Mori Point**

On-leash dog walking would be allowed on the Coastal Trail, Old Mori Road, Pollywog Path, and the beach area within the GGNRA boundary. This alternative provides the most dog walking access for visitors. The on-leash designation would be consistent with the City of Pacifica regulations for the levee area and the beach and would facilitate access to Mori Point for the neighboring community residents who want to walk with their dogs. Requiring dogs to be on-leash along the Old Mori Road would also provide protection for habitat for the federally listed California red-legged frog and San Francisco garter snake, including their breeding habitat in restored ponds adjacent to the road. This alternative would also allow visitors the opportunity to experience some trails in the area without distraction and potential disturbance from the presence of dogs.

### **Milagra Ridge**

Alternative E would be the same at Milagra Ridge as alternative B (on-leash dog walking allowed only on the fire road, the trail to the overlook and WWII bunker, and the Milagra Battery Trail), with the addition of an on-leash portion of trail to the top of the hill opposite the bunker. The on-leash designation for the fire road and trail takes into account the need for protection of restored habitat where wildlife, including coyotes, could encounter dogs if under voice and sight control. Dog interactions with wildlife, including coyotes, could be detrimental to the safety of both dogs and wildlife. This alternative would also provide an area for visitors to experience portions of the site without the presence of dogs.

### **Sweeney Ridge / Cattle Hill**

On-leash dog walking would be allowed at Sweeney Ridge on Sneath Lane, the section of the Sweeney Ridge Trail from the Portala Discovery Site to the junction with the Notch Trail, and the Mori Ridge Trail. On-leash dog walking would be allowed on Cattle Hill only on the Baquiano Trail from Fassler Avenue to, and including, the Farallons View Trail

This alternative would provide protection to a large expanse of native habitat, including habitat for the federally listed Mission Blue butterfly, at Sweeney Ridge and Cattle Hill, while still providing some trails on which visitors could walk their dogs. Requiring on-leash dog walking would also reduce the potential for dogs interacting with wildlife, which could cause conflicts and safety issues for the dogs, their owners, and wildlife. Finally, the alternative would provide trails that would allow a visitor experience without the presence of dogs.

### **Pedro Point Headlands**

Alternative E would be the same at Pedro Point as alternatives B and C (on-leash dog walking on the Coastal Trail).

## HOW THE ALTERNATIVES MEET THE OBJECTIVES

Objectives are specific goals that describe what GGNRA intends to accomplish by preparing a plan/EIS. These objectives come from a variety of sources, including NPS management policies, laws, and regulations. The objectives help develop alternatives for evaluation and public review. The internal scoping process yielded the following specific objectives for this planning process:

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*Objectives are specific goals that describe what GGNRA intends to accomplish by preparing a plan/EIS.*

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### Visitor Experience and Safety

- Minimize conflicts related to dog use by providing a variety of safe, high-quality visitor use experiences, including areas where dogs are allowed.

### Law Enforcement / Compliance with Dog Rules, and Park Operations

- Maximize dog walker compliance with clear, enforceable parameters in order to improve park operations and use of staff resources in managing dog walking.

### Park Operations

- Provide adaptability and flexibility so that information gathered from monitoring can be used in future decision making based on estimated outcomes, including in new park areas.
- Ensure a safe and healthy working environment for park staff.
- Evaluate commercial dog walking, and if allowed, create and implement an enforceable policy.

### Natural Resources

- Protect native wildlife and their habitat (including sensitive species and their habitat, and federally or state listed, unique, or rare species) from detrimental effects of dog use, including harassment or disturbance by dogs.
- Minimize degradation of soil and water resources by dog use.
- Preserve opportunities for future natural resource restoration and enhancement.

### Cultural Resources

- Preserve opportunities for future cultural resource restoration and enhancement.
- Protect cultural resources from the detrimental effects of dog use.

### Education

- Build community support for the plan to maximize management of dog walking use.
- Increase public understanding of NPS policies.

During the modified CBA workshop team members from GGNRA compared each of the alternatives for each site to the objectives listed above. Some of the subtopics for each objective were not compatible, requiring team members to balance competing needs. After evaluating each alternative against each objective for each site, it was determined that all action alternatives meet the objectives of the plan/EIS.

Some of the action alternatives met the objectives better than others and the alternative that best met the objectives for the dog management plan was selected as the preferred alternative as described previously.

## ALTERNATIVE ELEMENTS ELIMINATED FROM FURTHER CONSIDERATION

During the alternatives development process, several alternative elements were considered but eliminated from further consideration, as described below.

A ROLA that would encompass all of Fort Funston, both beach and uplands, was considered but dismissed. Allowing dog walking in all areas does not meet the purpose of this plan/EIS, which includes preserving and protecting natural resources, providing a variety of visitor experiences, improving visitor and employee safety, reducing visitor conflicts, and maintaining park resources and values for future generations. Specifically, increasing the diversity of visitor uses at Fort Funston, including hiking, bird watching, equestrian activities, hang gliding, and others, precludes a ROLA throughout the area. Species-protection requirements also preclude a ROLA throughout the area.

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*During the alternatives development process, several elements were considered but eliminated from further consideration.*

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Establishing a ROLA within San Mateo lands was considered but dismissed. The Cattle Hill site was evaluated for voice and sight control, but accessibility is difficult, and the public access through the area is entirely on trails that would require fencing if the area was proposed for voice and sight control. The only other trail where voice and sight control is proposed is in Oakwood Valley, but to allow that use, a fence would be constructed. Extensive restoration has also been completed at Cattle Hill and there is habitat for the Mission Blue butterfly on Sweeney Ridge, directly adjacent to Cattle Hill, and a strong likelihood that this habitat also exists at Cattle Hill. A ROLA in this area would not meet the purpose of preserving and protecting natural resources. Pedro Point was also evaluated for voice and sight control, but the

uplands portion of the property has undergone restoration, and voice and sight control here would not meet the purpose of preserving and protecting natural resources. Additionally, the park has sought to make dog management consistent with neighboring land management areas; at Pedro Point adjacent landowners require dogs to be on-leash, and a GGNRA on-leash option would be consistent with neighboring management. Sweeney Ridge, Milagra, and Mori Point were evaluated for voice and sight control, but this option was dismissed because there is endangered species habitat immediately adjacent to the trails in these areas. Establishment of a ROLA here would not meet the purpose of the plan/EIS, which is to preserve and protect natural resources.

Fence or barrier construction for trails to allow voice and sight control of dogs was considered but dismissed throughout the plan/EIS because fences and barriers may alter the aesthetic landscape and must be of sufficient construction to contain dogs not on-leash, which would then hinder or prevent wildlife movement. The only site where fence construction was considered was on the Oakwood Valley fire road, because it was a part of the Committee's consensus, which the NPS agreed to carry forward for consideration in the alternatives.

Time-of-use restrictions (such as hour of day or day of week) were considered but dismissed for all but SUPs (required for those wishing to walk more than three dogs). One objective of the dog plan/EIS is to maximize dog walker compliance with clear, enforceable parameters in order to improve park operations and use of staff resources in managing dog walking. Time-of-use restrictions create confusion among the public and lead to noncompliance with dog regulations. Time-of-use restrictions are also very difficult for LE staff to enforce, and the park does not have the needed resources. One example of this has been the

even broader time-of-year restrictions in plover protection areas, which, while clearly signed, still create public confusion and frequent requests to simplify the restriction by making it effective all year.

A dog ROLA certification program was considered but dismissed. This program would have required any dog walker who wanted to bring their dog to a ROLA to undergo an education and certification program, which the park would oversee and which would require recertification every two years. This program was cost prohibitive and would have required substantial park staff time. However, other alternative elements address education. The compliance-based management strategy includes focused education and enforcement as the primary management response for noncompliance, and would better achieve the purpose, need, and objectives of the plan/EIS, including protection of natural resources, enhancement of visitor experience, and use of monitoring for future decision making. Additionally, dog walkers applying for a permit to walk more than three dogs need proof of training.

An alternative proposing voice and sight control in more areas than the no action alternative (alternative A) was considered but dismissed. NPS *Management Policies 2006* section 1.4.3 (NPS 2006b, 10-11) describes the affirmative obligation to conserve and provide for the enjoyment of park resources and values. It states, in part, “The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment and applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest extent practicable, adverse impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values.” The NPS carefully evaluated each alternative for its adherence to conservation of park resources and values. Based on the best professional judgment of park staff, visitor use surveys, public comment, and the plan/EIS impact analysis, it became clear that allowing the current level and type of use under alternative A, which provides for the greatest amount of dog walking use, would not meet this mandate.

This project is unique in that adverse impacts to park resources are currently occurring as a result of alternative A and are therefore described as “continued” because they are occurring and will continue to occur without action. These impacts are documented by numerous pet-related incident reports and citations. Under alternative A, undefined and contradictory rules for dog activities within the park compromise the natural resources of the park as well as the ability of future generations to enjoy the park. Dog walking activities would continue within the park as they have under the 1979 Pet Policy (appendix A) and 36 CFR 2.15 and 7.97(d) (appendix D), resulting in long-term, adverse impacts; degradation of soil, vegetation, and water resources; disturbance to native wildlife and their habitat as well as listed species; detracting from visitor experience; disturbance to cultural resources; and compromised visitor health and safety within the park. Dog activities under the no action alternative continue to threaten other special-status species and their habitat as well, including the tidewater goby, coho salmon, steelhead trout, bank swallow, and many others. Listed vegetation species, including the Presidio manzanita, Marin western flax, and San Francisco lessingia, are a few of the many federally listed species that would continue to be adversely affected by the no action alternative. The no-action alternative does not provide protection for these listed species from dogs, nor is it consistent with the recovery plans for these species, including the San Bruno elfin butterfly, Mission Blue butterfly, northern spotted owl, western snowy plover, San Francisco garter snake, tidewater goby, and California red-legged frog. Additionally, the dog management policy that would continue as a result of the no action alternative would be inconsistent with NPS regulations and would increase controversy and conflict and could potentially lead to future litigation. Finally, adverse impacts to park operations and health and safety would continue to occur as a result of alternative A.

It was precisely these impacts to park resources and values, including visitor experience, which led to this planning effort. The no action alternative (alternative A), which provides for the highest level of dog walking under voice control, does not meet the purpose and need for this plan/EIS. It would not preserve and protect natural and cultural resources and natural processes, would not provide for a variety of visitor experiences, would not improve visitor and employee safety, would not reduce user conflicts, and would not maintain park resources and values for future generations. The need for this plan/EIS directly addresses the fact that alternative A, or use greater than alternative A, would compromise park resources and values to the extent that “without action, those resources and values in some areas of the park might not be available for enjoyment by future generations.” Accordingly, alternative E represents the highest level of voice and sight control that the NPS felt could be allowed while continuing to meet its mandate to conserve park resources and values, as well as the purpose and need for this plan/EIS.

## SUMMARY—CONSISTENCY WITH SECTIONS 101(B) AND 102(1) OF NEPA

The NPS requirements for implementing NEPA include an analysis of how each alternative meets or achieves the purposes of NEPA, as stated in sections 101(b) and 102(1). Each alternative analyzed in a NEPA document must be assessed as to how it meets the following purposes:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
2. Ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
5. Achieve a balance between population and resource use that would permit high standards of living and a wide sharing of life’s amenities.
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

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*The NPS requirements  
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Council on Environmental Quality (CEQ) Regulation 1500.2 establishes policy for federal agency implementation of NEPA. Federal agencies shall, to the fullest extent possible, interpret and administer policies, regulations, and public laws of the United States in accordance with the policies set forth in NEPA (sections 101(b) and 102(1)); therefore, other acts and NPS policies are referenced as applicable in the following discussion.

1. Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations.

Alternatives B through E provide increased protection to special status species by establishing dog management guidelines that restrict dog walking from sensitive habitats, require on-leash dog walking, or establish specific areas where dog walking under voice and sight control would be allowed. Limitations on dog walking access would not only benefit special status species when compared to the No Action Alternative, but would also provide protection to other resources including soils, water quality, vegetation, wetlands, and other wildlife.

Alternative B reflects the NPS-wide approach to dog walking as defined in NPS policy and regulations. Management conditions would also be regulated by the GGNRA Compendium, which can establish park-specific actions to establish closures and public use limits to protect cultural and natural resources. By requiring on-leash dog walking, this alternative would protect natural resources including wildlife, vegetation, and special status species, as well as soils and water quality. If impacts to the resources occur, impacts would be limited to the defined trail/roads/beaches and the six-foot corridor adjacent to these areas. Alternative B would fully meet the purpose of fulfilling the responsibilities of each generation as trustee for the environment.

Alternative C balances a variety of dog walking opportunities with areas where dogs are not allowed within each of the three counties containing park sites. Alternative C emphasizes recreation opportunities and experiences for multiple user groups, including dog walkers, while considering visitor and dog safety and minimizing conflict between dog walkers and other conflicts. This alternative also restricts dogs from some areas in order to provide a no-dog experience to some visitors and also protect significant natural resources. Alternative C would include ROLAs in designated areas. This alternative has been designed to protect natural resources including sensitive species, wildlife, vegetation, and soils, and water quality. Dog walking would be restricted from sensitive habitats, such as the lagoons, creeks, and other wetland areas that contain special status species. On-leash dog walking would be required in most areas to restrain dogs from entering areas that have not been previously impacted. Impacts would generally be limited to selected trails/roads/beaches and adjacent six foot corridor. The location of the ROLAs would be located away from any sensitive species or habitats. Consequently, alternative C would also fully meet the purpose of fulfilling the responsibilities of each generation as trustee of the environment.

Alternative D would offer the greatest protection of natural resources, including sensitive species/habitats, wildlife, vegetation, soils, and water quality, among the action alternatives. Alternative D would also allow recreation opportunities and experiences for multiple user groups, including dog walkers. Alternative D offers the least amount of area to dog walkers and the least amount of ROLAs. On-leash dog walking would be required in most areas in order to restrain dogs from entering undisturbed areas. Alternative D has the most amount of area closed to dog walking when compared to the other action alternatives. Consequently, alternative D would also fully meet the purpose of fulfilling the responsibilities of each generation as trustee of the environment.

Alternative E would offer recreation opportunities and experiences for multiple user groups, including dog walkers; however, this alternative would allow more opportunities for dog walkers to access portions of GGNRA than other alternatives while still providing protection of natural resources. Even though alternative E offers the most area for dog walking of all action alternatives, this alternative would fully meet the purpose of fulfilling the responsibilities of each generation as trustee of the environment. Alternative E would protect special status species, wildlife, vegetation, soils, and water quality. ROLAs would be established in areas that would avoid impacts to sensitive species and habitats. Like the other action alternatives, alternative E would require on-leash dog walking on selected trails/roads/beaches. By restraining dogs on leash, impacts would be reduced to the trail/road/beach and the adjacent 6-foot corridor. In most cases, areas for on-leash dog walking have been previously disturbed.

Alternative A would not fully meet the purpose of fulfilling the responsibilities of each generation as trustee for the environment. The no action alternative is based on a combination of NPS regulations, the 2005 federal court decision (*U.S. v. Barley*, 405 F.Supp.2d 1121 (N.D. Cal. 2005)), and public use practices. Because dog walking regulations are routinely ignored by visitors at many park sites, on-the-ground activities sometimes vary widely from posted



regulations. These differences are attributable in part to changes in dog walking policies over the years, court decisions regarding dog walking in GGNRA, and public confusion due to both those changing circumstances and variable levels of enforcement. Off-leash dog walking currently occurs at many of the sites. Dogs enter areas where sensitive species or habitats may occur. Dogs also frequently go off the trails or roads and create impacts to soils and vegetation through compaction, trampling, and nutrient addition. Under the no action alternative, dog walking activities would remain the same and adverse impacts to vegetation, wildlife, special status species, soils, and water quality would continue unregulated and unmitigated.

2. Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.

Alternatives B, C, D, and E would fully meet the purpose of ensuring for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. The action alternatives would increase safety by minimizing visitor conflicts and dog related injuries. Visitor conflicts and injuries are expected to decrease since the new dog management regulations would be clear to all visitors and would be enforced by park police. Requiring on-leash dog walking in most areas would also decrease visitor conflicts and injuries since dog walkers would have more control over their pets. Additionally, dog walking under voice and sight control would be restricted to designated areas that could be easily avoided by those visitors who do not prefer dogs. The action alternatives would require all dog walkers to clean up dog waste. This would eliminate or greatly reduce dog waste and nutrient additions to the soil. It is assumed that leash control and/or voice and sight control would reduce dog waste and nutrient addition in comparison to current voice control restrictions because owners would be in closer contact with their dogs and presumably would be more likely to comply with cleanup regulations. The reduction of pet waste would reduce health and safety issues associated with dog waste and also improve the aesthetics and cultural landscape of the park.

Alternative D would best meet this purpose when compared to the other action alternatives, since alternative D is the most restrictive of dog walking. Alternative D would allow the least amount of on-leash dog walking and dog walking under voice and sight control. Since this alternative is the most restrictive, fewer conflicts and dog-related incidents may occur. Additionally, dog waste would be further reduced. Although alternative E would fully meet this purpose, when compared to the action alternatives, this alternative would meet the purpose the least. Alternative E would allow the most on-leash dog walking and dog walking under voice and sight control. It is possible that alternative E would have a greater risk of visitor conflicts and safety issues; however, the compliance-based management strategy would ensure that visitors are in compliance with dog walking regulations. However, alternative E could conceivably produce less conflict because it allows for diverse visitor opportunities throughout the park, and could provide a greater incentive for dog walkers to comply with the regulations.

Under the compliance-based management strategy, park staff would regularly monitor dog walking activities at the park sites to ensure that visitors with dogs are in compliance with new and existing regulations, including picking up pet waste, not going outside of on-leash areas or ROLAs, as well as monitoring for vegetation, wildlife, and special status species damage. Where noncompliance over a period of time is observed, multiple, targeted management strategies would take effect to bring compliance back to acceptable levels, or if that fails, not allow the use.

Alternative A would not fully meet the purpose of ensuring for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. Dog walking regulations would continue to be unclear to visitors and would continue to create visitor and dog conflicts. Off-leash dog walking would continue in areas with high visitor use and high multiple-uses, which would increase the risk of dog related injuries to occur. Unkempt dog waste would also

continue to be a problem, which would increase health and safety concerns and decrease the aesthetic and cultural landscape of the park.

3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.

Alternatives B, C, D, and E would meet the purpose of attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences. All action alternatives would continue to allow a wide range of visitor use opportunities. On-leash dog walking and dog walking under voice and sight control would be allowed within designated areas. Additionally, some areas would restrict dog walking, which would allow visitors who do not prefer dogs, to have a no dog experience at the park. Other visitor uses at the park including hiking, biking, running, equestrian use, and roller blading would continue. Eliminating dogs or requiring on-leash dog walking in areas where multiple visitor use occurs, would reduce risks to health and safety. The action alternatives have been designed to allow multiple uses of the area without degradation of important resources including special status species, wildlife, vegetation, soils, and water quality. Alternative D would best meet the purpose because it is the most protective of the resources and would offer the least amount of area for dog walking activities. Alternative E would also meet the purpose by allowing the most area for dog walking, while still protecting resources. Alternative C is the most balanced of the alternatives in terms of multiple visitor use and protection of resources. All action alternatives would reduce multiple visitor use conflicts and provide protection of the environment.

Alternative A would not fully meet the purpose of attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences. Under the no action alternative, off-leash dog walking would still occur in areas with high multiple visitor use, creating visitor conflicts and dog-related injuries. Dog walking regulations would remain unclear, which would also contribute to visitor conflicts and dog related injuries. In addition, off-leash dogs would enter areas where sensitive species or habitat exists, trample vegetation, compact soils, or chase wildlife, all of which would degrade the natural environment.

4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

The action alternatives (alternatives B, C, D, and E) would fully meet the purpose of preserving important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice. Allowing on-leash dog walking and dog walking under voice control in designated areas would be expected to result in a decreased potential for trampling and ground disturbance of sensitive cultural resources. The physical restraint of dogs would prevent dogs from entering important cultural resource areas. In addition the ROLAs established would be located in areas away from known cultural resources at the park. Dog walking would also be prohibited in some areas, including the Batteries to Bluffs Trail north of Baker Beach within the Presidio National Historic Landmark (NHL), where a number of sensitive historic structures occur. Alternative D would be the most protective of the resources and would best meet the purpose when compared to the other action alternatives. Alternative E would fully meet this purpose, but to the least extent when compared to the other action alternatives, since alternative E would allow the most dog walking opportunities. To ensure that cultural resources are protected, ROLAs would be established away from important cultural properties. As described above, the alternative have been designed to protect natural resources including sensitive species, wildlife, vegetation, and soils, and water quality. The action alternatives would require on-leash dog walking on selected

trails/roads/beaches. By restraining dogs on leash, impacts would be reduced to the trail/road/beach and the adjacent 6-foot corridor. In most cases, areas for on-leash dog walking have been previously disturbed. ROLAs would be established in areas that would avoid impacts to sensitive species and habitats.

Alternative A would not fully meet the purpose of preserving important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice. Currently ground disturbance by dog walking, specifically under voice control is damaging to cultural resources at sites such as Fort Funston and Baker Beach within the Presidio NHL. Under the no action alternative, dog walking under voice control could continue in areas that would damage the cultural resources.

5. Achieve a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities.

Balancing population and resource use under the plan/EIS would include protecting the resources unimpaired for the enjoyment of present and future generations and providing access for visitors to experience the natural resources of the park. NPS *Management Policies 2006* states that the enjoyment that is contemplated by the *Organic Act* is broad; it is the enjoyment of all the people of the United States and includes enjoyment both by people who visit parks and by those who appreciate them from afar. It also includes deriving benefit (including scientific knowledge) and inspiration from parks, as well as other forms of enjoyment and inspiration. Congress, recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant. As discussed above, alternatives B, C, D, and E would provide opportunities for on-leash dog walking and dog walking under voice control, as well as opportunities for a no dog experience at the park, all of which, when compared to the no action alternative, would benefit the natural and physical resources at the park. In addition, the action alternatives would provide an amenity for visitors to experience that would permit a high standard of living. All of the alternatives evaluated would allow some level of access to the park by both dog walkers and visitors who do not prefer dogs that would contribute to the sharing of these amenities. As visitation to the park increases and the population of the area continues to increase, having areas with designated dog walking regulations under the action alternatives would contribute to the protection of the park's natural and physical resources.

Given this, all the action alternatives would fully meet this purpose because each action alternative would provide the public access to share the park's amenities and would protect the resources so that they would be available for future generations. Protection is evident both in how areas were chosen for level and type of use, and by the implementation of the compliance-based management strategy. Park staff would regularly monitor dog walking activities at the park sites to ensure that visitors with dogs are in compliance with new and existing regulations, including picking up pet waste, not going outside of on-leash areas or ROLAs, as well as monitoring for vegetation, wildlife, and special status species damage. Where noncompliance over a period of time is observed, multiple, targeted management strategies would take effect to bring compliance back to acceptable levels, or if that fails, not allow the use.

Alternative D would meet this purpose to the highest degree because it is the most protective of the resources, while still offering opportunities for on-leash dog walking and dog walking under voice and sight control. Alternative E would meet this purpose, but to the least extent when compared to the other action alternatives. Alternative E allows the greatest amount of area for dog walking under voice and sight control. To ensure that resources are protected, ROLAs would be

established away from sensitive areas and on-leash dog walking would be required in designated areas to minimize impacts to undisturbed vegetation, soil, and wildlife.

Alternative A would not fully meet the purpose of achieving a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities. Under the no action alternative, dog walking regulations would continue to be unclear to visitors. Dog walking would continue to occur in restricted areas and would continue to adversely impact the park's natural and physical resources. Although, visitors would have the opportunity for dog walking at the park, resources would continue to deplete. Without higher protection of resources and clear dog management regulations, these amenities would not be available for the enjoyment of future generations.

6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

For the reasons discussed above, the action alternatives (alternatives B, C, D, and E) would enhance the quality of and protect the park's biological and physical resources. Alternative D would provide the greatest protection of these resources since it would allow the least amount of dog walking when compared to the other resources. Alternative A would not meet the purpose of enhancing the quality of renewable resources. Under the no action alternative, dog walking would continue to contribute to the adverse impacts to the park's resources. The second purpose, "approach the maximum attainable recycling of depletable resources," is less relevant to the dog management plan, as it is geared toward a discussion of "green" building or management practices. There would be no construction related to the no action alternative (alternative A), so this purpose would not apply. The action alternatives would involve the installation of new signage throughout the park stating the dog walking regulations for each site. Environmentally appropriate design standards and materials would likely be used to minimize impacts to depletable resources.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment. The NPS, in accordance with the U.S. Department of the Interior policies contained in the Department Manual (515 DM 4.10) and CEQ's Forty Questions, defines the environmentally preferred alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (section 101(b)) (516 DM 4.10). The CEQ's Forty Questions (Q6a) further clarifies the identification of the environmentally preferable alternative stating, "this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources."

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*The NPS is required to  
identify the  
environmentally  
preferable alternative  
in its NEPA documents  
for public review and  
comment.*

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The Environmentally Preferable Alternative was selected during the Choosing by Advantages meeting for each of the 21 sites. The following discussion identifies the Environmentally Preferable Alternative for each site and the rationale to support the decision.

### New Lands

Alternative D was also chosen as the Environmentally Preferable Alternative. Under alternative D, new lands would be closed to all dog walking unless opened by the GGNRA Compendium. The "closed unless opened" approach is the reverse of 36 CFR 2.15. New lands would not be considered for a ROLA.

Alternative D provides protection of the natural and cultural resources that may occur at the site and requires the park to evaluate several factors before determining what areas could be opened to on-leash dog walking, including desired future conditions for natural and cultural resources.

### **Stinson Beach**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs at the site. It provides protection of the dunes area and the creek adjacent to the parking lot that has been restored.

### **Homestead Valley**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs at the site. Alternative D would provide the most protection for the contiguous habitat with little fragmentation, and the Mission Blue Butterfly habitat.

### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

Alternative D was chosen as the Environmentally Preferable Alternative for Alta Trail/Orchard Fire Road/Pacheco Fire Road. No dogs would be allowed on the Alta Trail, Orchard Fire Road or the Pacheco Fire Road. Alternative D provides the most protection for sensitive species and contiguous habitat in the area.

### **Oakwood Valley**

Alternative D was chosen as the Environmentally Preferable Alternative for Oakwood Valley. On-leash dog walking would be allowed on the Oakwood Valley Fire Road to the junction with the Oakwood Valley Trail. Alternative D provides the most protection for sensitive species and contiguous habitat in the area.

### **Muir Beach**

Alternative D was also chosen as the Environmentally Preferable Alternative. On-leash dog walking would be allowed on the Pacific Way Trail. Alternative D would provide maximum protection for the restored lagoon, shorebirds, California red-legged frog, steelhead, Coho, and the riparian wetlands.

### **Rodeo Beach / South Rodeo Beach**

Alternative D was chosen as the Environmentally Preferable Alternative for Rodeo Beach. Alternative D would allow on-leash dog walking on the beach north of the footbridge and on the footbridge to the beach. Alternative D provides the maximum resource protection and provides resource protection in area close to Bird Island.

### **Marin Headlands Trails**

Alternative D was chosen as the Environmentally Preferable Alternative for the Marin Headland Trails. Alternative D would not allow dog walking at the site. Alternative D is the most protective of the resources by maintaining the integrity of the Marin Headlands habitat.

## **Fort Baker**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would allow on-leash dog walking in the Lodge/Conference Center grounds and the Bay Trail. Alternative D provides the maximum resource protection for sensitive species and cultural resources. This alternative is also the most protective of the parade ground and Battery Yates.

## **Upper and Lower Fort Mason**

Alternative B was also chosen as the Environmentally Preferable Alternative for Upper Fort Mason. Alternative B includes on-leash dog walking in all areas where dogs are allowed (Great Meadow, Laguna Green, lawns, sidewalks, paved trails, and housing areas). Alternative B provides the maximum protection of natural and cultural resources at the site.

## **Crissy Field**

Alternative D was chosen as the Environmentally Preferable Alternative for Crissy Field. Alternative D does not allow dogs within the WPA or on the East and Central Beaches. On-leash dog walking would be allowed on the promenade and a ROLA would be established on the western portion of the airfield. Alternative D provides the most resource protection of the Western Snowy Plover and other shorebirds. It also minimizes the potential for impacts to water quality within the tidal marsh.

## **Fort Point Promenade / Fort Point National Historic Site Trails**

Alternative D was chosen as the Environmentally Preferable Alternative for Fort Point. Alternative D would allow for on-leash dog walking on the Bay Trail. Alternative D would allow dog walking on the least number of trails when compared to the other alternatives presented. Alternative D would protect the natural and cultural resources in the area to the greatest extent.

## **Baker Beach and Bluffs to Golden Gate Bridge**

Alternative D was chosen as the Environmentally Preferable Alternative for Baker Beach. Alternative D would allow on-leash dog walking on the beach south of the North Parking Lot. On-leash dog walking would also be allowed on the trails to the beach south of the north parking lot and on the multi-use Coastal Trail. Dog walking would not be allowed on the northern section of the beach. Alternative D provides the most protection to the shorebirds and other natural and cultural resources at the site.

## **Fort Miley**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs in East or West Fort Miley. Alternative D provides the most protection of the bird habitat and bird watching area. It also provides the safest area for hospital workers/patients, school groups, and visitors. Alternative D provides the maximum protection of the cultural resources in the area.

## **Lands End**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would allow on-leash dog walking on the El Camino del Mar trail and on the Coastal Trail as far as the connector trails/steps leading to the El Camino del Mar Trail. Since the Coastal Trail east of the stairway would not allow dogs, alternative D provides the greatest protection of the natural and cultural resources for this site.

Alternative D also provides the maximum protection for the wetlands and coastal shrub communities at the site.

### **Sutro Heights Park**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would no longer allow dogs at the site. Alternative D is the most protective of the resources at the site including the formally landscaped sites that are heavily used for weddings and other events.

### **Ocean Beach**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would allow on-leash dog walking within the SPPA and on the beach north of Stairwell 21. No dogs would be allowed on the beach below Sloat Boulevard. Alternative D provides the maximum protection of natural resources including shorebirds and plovers.

### **Fort Funston**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would allow dogs on-leash on the beach south of the Beach Access Trail and on the sand ladder and ADA Accessible Trail. A ROLA would be located in the disturbed area north of the main parking lot. No dogs would be allowed on the beach north of the Beach Access Trail. This alternative provides the most protection of the cultural and natural resources in the area including the Battery Davis, bank swallow habitat, shorebirds, and the restored areas.

### **Mori Point**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs at the site; therefore the alternative would provide the most protection of sensitive habitats, California red-legged frogs, and San Francisco garter snakes. This alternative would also reduce conflicts between dog walkers and other user groups.

### **Milagra Ridge**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs at Milagra Ridge. Alternative D provides the maximum protection sensitive habitat, California red-legged frogs, San Francisco garter snake, and Mission Blue butterfly. It would also best protect the restored habitat and wildlife such as coyote, which are susceptible to disturbance from dogs.

### **Sweeney Ridge / Cattle Hill**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs at Sweeney Ridge or Cattle Hill. Alternative D would provide maximum protection to the contiguous wildlife habitat and eliminates disturbance to wildlife and vegetation. This alternative also protects habitat of special status species and habitat restoration areas.

### **Pedro Point Headlands**

Alternative D was chosen as the Environmentally Preferable Alternative. Alternative D would not allow dogs at Pedro Point. Alternative D would provide maximum protection to the contiguous wildlife habitat

and eliminate disturbance to wildlife and vegetation. This alternative also protects habitat of potential special status species and habitat restoration areas.

## NATIONAL PARK SERVICE PREFERRED ALTERNATIVE

A preferred alternative was selected for each of the 21 sites identified in this plan/EIS. Due to the high number of sites and alternatives, a modified Choosing by Advantages (CBA) process was used for choosing the preferred alternative for each site. The CBA workshop took place May 26 -27, 2010. For each site, team members from GGNRA selected the alternative that best met the objectives of the plan (defined in chapter 1). Six main objectives were used to identify the preferred alternative. Each objective included more than one subtopic for the resource. Not all of the subtopics for each objective were compatible, requiring team members to balance competing needs. After evaluating each alternative against each objective, a preferred alternative was selected that best met the objectives for the dog management plan.

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*A preferred alternative  
was selected for each  
of the 21 sites  
identified in this  
plan/EIS.*

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In addition, a preferred alternative was also selected for the handling of permits at GGNRA. To ensure consistency of the permitting process within the park it was determined that only one permit alternative would be selected and this selected alternative would be applied to all park sites. One permit alternative would also simplify the enforcement of the new permit regulation for law enforcement and it would be more easily understood by visitors. Alternative C was selected as the preferred alternative for permits. This alternative states that all dog walkers, including commercial dog walkers are allowed up to three dogs per person. Commercial dog walkers and private individuals with more than three dogs can obtain a dog walking permit; however the limit is six dogs. In a ROLA, permit holders may have up to six dogs off leash. Permits would restrict use by time and area. Permits would only be issued for: Alta Trail/Orchard Fire Road/Pacheco Fire Road, Rodeo Beach/South Rodeo Beach, Fort Baker, Upper and Lower Fort Mason, Crissy Field, Baker Beach, and Fort Funston. This alternative was selected since it provides a parkwide opportunity for visitors with more than three dogs to experience GGNRA.

The following discussion identifies the preferred alternative for each site and the rationale to support the decision.

### New Lands

Alternative D was chosen as the Preferred Alternative for New Lands because it would best meet the objectives of the plan. Under alternative D, New Lands would be closed to all dog-walking unless opened by the GGNRA Compendium. The “closed unless opened” approach is the reverse of 36 CFR 2.15. New lands would not be considered for a ROLA. Alternative D provides protection of the natural and cultural resources that may occur at the site and requires the park to evaluate several factors before determining what areas could be opened to on-leash dog walking, including desired future conditions for natural and cultural resources, safety of park visitors and employees, and integrity of park programs and activities. Having the area closed to dogs would be more easily enforced by park law enforcement staff. Areas opened to dogs would also be evaluated under the compliance-based management strategy.

### Stinson Beach

Alternative C was chosen as the Preferred Alternative for Stinson Beach. On-leash dog walking would be allowed within the parking lots and picnic areas. Alternative C would minimize conflict with other visitors and would provide health and safety benefits. Alternative C would allow dog walking, but under



clear, concise direction, which is the same as the current condition and consistent with the overall NPS regulation for dog walking.

### **Homestead Valley**

Alternative C was chosen as the Preferred Alternative for Homestead Valley. On-leash dog walking would be allowed on the Homestead Fire Road and the neighborhood connecting trails that may be designated in the future. Alternative C would provide a neighborhood connection for dog walkers. Alternative C is protective of the spotted owl and rare grassland plants at the site. Alternative C would allow dog walking but that is clearly defined, easily understood by visitors and enforceable by park law enforcement staff.

### **Alta Trail / Orchard Fire Road / Pacheco Fire Road**

Alternative C was chosen as the Preferred Alternative for Alta Trail/Orchard Fire Road/Pacheco Fire Road. Alternative C includes on-leash dog walking on the Alta Trail to the Orchard Fire Road, and on the Orchard and Pacheco Fire Roads. This alternative provides both an on-leash loop trail and a no-dog experience on the Alta Trail beyond the Orchard Fire Road. Alternative C provides protection for contiguous habitat with little fragmentation where dogs are a potential impact to top predators such as coyotes. Alta Trail also traverses Mission Blue butterfly habitat; therefore alternative C is consistent with the treatment of that habitat throughout the park. Overall, alternative C provides a clear, simple dog regulation that provides a dog and no-dog experience that could be clearly explained by park staff and enforceable by park law enforcement staff.

### **Oakwood Valley**

Alternative C was chosen as the Preferred Alternative for Oakwood Valley. Oakwood Valley would provide on-leash dog walking on the Oakwood Valley Trail from its junction with the Oakwood Valley Fire Road to the new gate at the Alta Trail. A ROLA would be established on the Oakwood Valley Fire Road from the Tennessee Valley Road trailhead to the junction with the Oakwood Valley Trail. Continuous fencing would be installed to protect sensitive habitat and double gates would be installed at each end of the fire road. This alternative is a consensus recommendation from the negotiated rulemaking. The fencing along the ROLA would protect habitat for potential special status species. The gates at the trail junction provide protection for the contiguous habitat beyond the trail/fire road junction. Alternative C also provides a no-dog experience on the section of the Oakwood Valley Trail from the trailhead at Tennessee Valley Road to the junction with the Oakwood Valley Fire Road. The defined ROLA with the gates would provide clear boundaries to the public and would be clearly defined and enforceable by park law enforcement staff.

### **Muir Beach**

Alternative D was chosen as the Preferred Alternative for Muir Beach because it would best meet the objectives of the plan. On-leash dog walking would be allowed on the Pacific Way Trail. Alternative D would provide maximum protection for the restored lagoon, shorebirds, California red-legged frog, steelhead, Coho, and the riparian wetlands. Off-leash dog walking can occur at a small beach area on county property adjacent to the NPS beach. Alternative D provides a no-dog experience on the beach and those visitors looking for a southern Marin beach for dog walking could go to Rodeo Beach. Alternative D would be clearly defined and would be easily enforceable by park law enforcement staff.

### **Rodeo Beach / South Rodeo Beach**

Alternative C was chosen as the Preferred Alternative for Rodeo Beach because it would best meet the objectives of the plan. Alternative C would include a ROLA on the beach and on-leash dog walking on the footbridge to the beach and South Rodeo Beach. This site is considered a low conflict area and has a low number of shorebirds, which allows a ROLA to work easily. In addition, low conflicts may be due to the large size of the beach so visitors can easily spread out. Alternative C provides the best experience for dog walkers and it would be easily explainable and enforceable by park law enforcement staff since the regulation would be simple and clear. Alternative C would provide a separate beach area, South Rodeo Beach, for a no-dog experience and also provides resource protection close to Bird Island.

### **Marin Headlands Trails**

Alternative C was chosen as the Preferred Alternative for Marin Headlands Trails because it would best meet the objectives of the plan. Alternative C includes on-leash dog walking in the Lower Rodeo Valley trail corridor, which includes the Rodeo Beach parking lot to the intersection of Bunker and McCullough Roads via the Lagoon Trail, Miwok Trail, and Rodeo Valley Trail, Old Bunker Fire Road Loop, Battery Smith-Guthrie Fire Road Loop, and the Coastal Trail Bike Route, which includes the Julian Fire Road 101 to Rodeo Beach parking lot. Alternative C provides a dog and no-dog experience for park visitors. By eliminating dog walking on the Coastal Trail, alternative C protects and maintains the integrity of the interior Marin Headlands habitat including the Mission Blue Butterfly habitat. Alternative C provides protection of the habitat by limiting dog walking, but it is offset by the ROLA located on Rodeo Beach.

### **Fort Baker**

Alternative C was chosen as the Preferred Alternative for Fort Baker because it would best meet the objectives of the plan. On-leash dog walking would be allowed on the Drown Fire Road, Bay Trail, Lodge and Conference Center grounds, Battery Yates Loop Road, and the parade ground. Alternative C provides protection for the Mission Blue Butterfly habitat including the unfenced habitat near Battery Yates and the fenced habitat adjacent to the Chapel Trail. Alternative C provides for a no-dog experience and it does not allow dogs at the waterfront where there is currently high or anticipated increased visitation. Alternative C provides a variety of areas for dog walking within a controlled environment that could be clearly described and enforced by park law enforcement staff. Overall, alternative C provides the most opportunity for multiple user groups.

### **Upper and Lower Fort Mason**

Alternative B was chosen as the Preferred Alternative for Upper Fort Mason because it would best meet the objectives of the plan. Alternative B includes on-leash dog walking in all areas where dogs are allowed (Great Meadow, Laguna Green, lawns, sidewalks, paved trails, parking lots, and housing areas). The site contains the park headquarters and receives a high number of tourists including those on rental bikes. The on-leash regulation provides for visitor safety in this multiple use site. This regulation would be clear and would be easily explained and enforced by park law enforcement staff. Alternative B also provides the most protection of the cultural resources on the parade ground.

### **Crissy Field**

Alternative C was chosen as the Preferred Alternative for Crissy Field because it would best meet the objectives of the plan. Alternative C would include no dogs within the Wildlife Protection Area (WPA) to provide maximum protection for the western snowy plover and other shorebirds and listed species. It is also consistent with the Crissy Field EA, the GGNRA General Management Plan Amendment (GMPA),

and the Final Recovery Plan for the Western Snowy Plover. Alternative C would allow on-leash dog walking on the promenade, which would provide visitor safety and resource protection. A ROLA would be established on the middle section of the airfield, a relatively underused section of the site. This ROLA would not be fenced, minimizing the impact to the cultural landscapes. A ROLA would also be established on Central Beach; no dogs would be allowed on East Beach. This would provide visitor safety and enjoyment by multiple user groups and would reduce conflict on the beach. East Beach is the most heavily used area by diverse interests due to the proximity to parking and facilities. Central Beach receives less use by other visitor groups other than dog walkers and it offers a great stretch of beach for dogs to exercise. The trails and grassy areas near East Beach and the multi-use trail along Mason Street would require dog walking on-leash. The on-leash regulation in this area would benefit the safety of both visitors and pets and reduce conflicts in the area. Overall, alternative C provides the best option for multiple user groups to experience the site; space is available for dog walking on-leash, dog walking under voice control, and a no-dog experience. It is anticipated that clear geographical boundaries would aid visitor understanding and compliance with the regulations. Since alternative C provides multiple options, it would be easy for park staff to direct park users to a site that meets their use needs.

### **Fort Point Promenade / Fort Point National Historic Site Trails**

Alternative B was chosen as the Preferred Alternative for Fort Point because it would best meet the objectives of the plan. Alternative B would allow for on-leash dog walking on the promenade, Bay Trail, Andrews Road, and Battery East Trail. The on-leash regulation would provide visitor safety in an area of high congestion and multiple uses. It would also provide safety to dogs and dog walkers due to the close proximity of the roadway and the edge of the seawall. Alternative B provides a balanced approach for the multiple user groups at the site and provides clear regulations that would be easily enforceable by park law enforcement staff.

### **Baker Beach and Bluffs to Golden Gate Bridge**

Alternative D was chosen as the Preferred Alternative for Baker Beach because it would best meet the objectives of the plan. Alternative D would allow on-leash dog walking on the beach south of the North Parking Lot. On-leash dog walking would also be allowed on the trails to the beach south of the north parking lot and on the multi-use Coastal Trail. Dog walking would not be allowed on the northern section of the beach. Alternative D provides areas for different user groups. It provides separate and direct visitor access to no dog areas. Alternative D provides the greatest protection for shorebirds on the beach. Overall, alternative D allows multiple visitor experiences while still protecting the resources at the site.

### **Fort Miley**

Alternative C was chosen as the Preferred Alternative for Fort Miley because it would best meet the objectives of the plan. Alternative C would allow on-leash dog walking in the east side trail corridor. The on-leash regulation would provide safety to visitors and staff due to the adjacent park maintenance operations area - concrete bunkers edged by the steep embankments, the, and the picnic area. Alternative C in East Fort Miley also provides both a dog and no-dog experience for visitors. No dogs would be allowed in West Fort Miley. This regulation would separate the dog walkers from special use groups such as school groups, Ropes Course participants, and other users such as picnickers. Alternative C would also provide additional safety to construction traffic and hospital workers and patients since West Fort Miley is located adjacent to the Veteran's Administration (VA) hospital, which has heavy pedestrian and vehicle traffic. Overall, alternative C provides a variety of visitor uses. The dog walking regulation would be clear and easily enforceable by park law enforcement staff. Alternative C provides the best opportunity for multiple user groups.

## **Lands End**

Alternative B was chosen as the Preferred Alternative because it would best meet the objectives of the plan. Alternative B would allow on-leash dog walking on the El Camino del Mar and Coastal Trails. This area is currently being developed for a visitor center, full access trails, and more parking; therefore, on-leash dog walking would increase safety as use will continue to increase in the future. On-leash dog walking would also increase visitor safety on the heavily used/ADA accessible restored Coastal Trail. The on-leash dog walking regulation would be clear and simple for visitors to understand and therefore would be easily enforced by park law enforcement staff. Alternative B would also provide the longest loop at the site for dog walking; therefore it is likely that the park would receive community support for this alternative.

## **Sutro Heights Park**

Alternative E was chosen as the Preferred Alternative because it would best meet the objectives of the plan. Alternative E would allow on-leash dog walking on the paths, parapet, and lawns within Sutro Heights Park. This alternative allows the most dog walking access. Dog walking would not be allowed within the formal, landscaped gardens. Alternative E is dog friendly, but still with logical limits. This alternative would be easily enforceable since it is clear, straightforward, and easy to understand. The community is likely to support this alternative since it is similar to the current regulation with minor alterations.

## **Ocean Beach**

Alternative C was chosen as the Preferred Alternative because it would best meet the objectives of the plan. Alternative C allows on-leash dog walking on the trail along the Great Highway adjacent to the SPPA. Alternative C would provide a ROLA on the beach north of Stairwell #21 and no dogs on the beach south of Sloat Boulevard. The no dog regulation in the SPPA and on the southern portion of the beach provides the maximum protection for shorebirds. There are fewer shorebirds located on the northern section of the beach where the ROLA is proposed. The no dog regulation is also continuous with dog walking use on the northern section of the Fort Funston beach. Alternative C provides balance for both dog walkers and those wanting a no-dog experience and also provides protection of natural resources. Monitoring would be simplified since there would be less areas providing dog walking.

## **Fort Funston**

Alternative C was chosen as the Preferred Alternative because it would best meet the objectives of the plan. Alternative C would allow a ROLA on the beach south of the Beach Access Trail and a ROLA between the Chip Trail, Sunset Trail, and the main parking lot. On-leash dog walking would be allowed on the sand ladder and ADA Accessible Trail south of the main parking lot. No dogs would be allowed north of the Beach Access Trail. These areas would provide a loop from upper Fort Funston down to the beach for dog walkers. The on-leash requirement for most trails provides protection for the restored areas in Fort Funston and would minimize safety concerns related to cliff edges and use of south Funston area by school groups. Prohibiting dogs on the north end of the beach provides protection for nesting bank swallows and shorebirds. This also provides a no- dog beach experience.

## **Mori Point**

Alternative C was chosen as the Preferred Alternative for Mori Point. This alternative allows on-leash dog walking on the Coastal Trail, Old Mori Road, and the beach within the GGNRA boundary. Alternative C was selected because it provides protection to sensitive habitat, the California red-legged frog, and San

Francisco garter snake. Additionally, alternative C provides adequate space for multiple user groups and provides access to the site from the adjacent neighborhoods. The site would be clearly signed and would be easily enforceable by park rangers and law enforcement.

### **Milagra Ridge**

Alternative C was chosen as the Preferred Alternative for Milagra Ridge. Alternative C would allow on-leash dog walking on the Fire Road, the trail to the western-most overlook and WWII bunker, and on the Milagra Battery Trail (future connector to lower Milagra). Alternative C provides both a dog and no-dog experience at the site. This alternative provides protection for species and is consistent with the parkwide policy regarding Mission Blue butterfly habitat areas. Alternative C would reduce further fragmentation of the habitat at this site. There has been ongoing outreach to the community by park staff and much community involvement in restoration efforts at Milagra. It is anticipated that the community would be supportive of continued leash regulations at this site.

### **Sweeney Ridge / Cattle Hill**

Alternative C was selected as the Preferred Alternative for Sweeney Ridge/ Cattle Hill. This alternative would not allow dog walking within the Sweeney ridge area. At Cattle Hill, alternative C would allow on-leash dog walking from the Baquiano Trail from Fassler Avenue to, and including, Farallons View Trail. Alternative C protects the Mission Blue butterfly habitat and large area of undisturbed contiguous habitat that is rare and contains wildlife that could be disturbed by the presence of dogs. This site is contiguous with the San Francisco watershed, which also does not allow dogs. Alternative C would be clear to the public and would be easily enforceable by park law enforcement staff. Alternative C would allow multiple user groups to experience the trail and provide balance.

### **Pedro Point Headlands**

Alternative C was chosen as the Preferred Alternative because it would best meet the objectives of the plan. Alternative C would allow on-leash dog walking on the Coastal Trail. Alternative C is consistent with the adjoining land management regulations and maintains consistency as the trail crosses the park boundary. Alternative C protects the contiguous wildlife habitat and helps to limit the disturbance of wildlife, vegetation, and possible special status species habitat. It provides safety to both dogs and dog walkers by keeping dogs on-leash away from the cliff edges. Alternative C provides opportunity for many visitor uses and is well-balanced. The on-leash regulation on the Coastal Trail would be clear and readily enforceable by park law enforcement staff.

### **Cost of Implementation of the Preferred Alternative**

The total costs of implementing the preferred alternative are estimated at \$1,511,270. The bulk of these costs are associated with the hiring of additional personnel for implementing the dog management plan. For a more detailed explanation of personnel costs under the preferred alternative, see the “Park Operations” section in chapter 4.

TABLE 5. ENVIRONMENTAL IMPACT SUMMARY BY ALTERNATIVE

(Preferred alternative is shaded)

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>STINSON BEACH</b>										
<b>Soil and Geology</b>	<ul style="list-style-type: none"> <li>Negligible impacts in parking lots and picnic area</li> <li>Long-term, minor, adverse impact in areas outside of parking lots and picnic areas</li> </ul>	<ul style="list-style-type: none"> <li>Soil no longer has natural function.</li> <li>Naturally occurring soils would be compacted, nutrient addition, and erosion in areas where dogs are not permitted.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Soil in allowed areas no longer has natural function; picnic area and parking lot are a small portion of the entire site.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Soil in allowed areas no longer has natural function; picnic area and parking lot are a small portion of the entire site.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would not be allowed within the site so no soil would be disturbed.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Soil in allowed areas no longer has natural function; picnic area and parking lot are a small portion of the entire site.</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		No cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
<b>Water Quality</b>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Dogs could cause turbidity and release nutrients and pathogens into creek, however pollutants are dispersed in high energy beach environment; dog access to Easkoot Creek is difficult</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts, assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dog access to the creek would be limited by leash restraint</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts, assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dog access to the creek would be limited by leash restraint</li> </ul>	<ul style="list-style-type: none"> <li>No impacts, assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dog access to the creek would be limited by leash restraint</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts, assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dog access to the creek would be limited by leash restraint</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Vegetation										
Coastal Community	• Negligible impacts	• Dune communities are generally not within areas where dogs are allowed on leash and the majority of the dune vegetation is non-native species where dogs can affect dunes; it is unlikely that dogs could affect dunes through trampling, digging, and dog waste	• No impacts assuming compliance	• Dogs would be prohibited on trails and beach	• No impacts assuming compliance	• Dogs would be prohibited on trails and beach	• No Impacts assuming compliance	• Dogs would be prohibited at site	• No impacts assuming compliance	• Dogs would be prohibited on trails and beach
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Wildlife										
Coastal Community Wildlife	• Negligible to long-term, minor, adverse impacts	• Dogs would not be allowed near dune communities or on the beach but noncompliance occurs at this site from the adjacent county beach where dogs disturb shorebirds on the beach; it is possible that dogs directly affect wildlife that utilize coastal dunes and beaches; dog presence and barking at site could also indirectly affect on wildlife such as shorebirds	• No impacts assuming compliance	• Dogs would be prohibited on trails and beach	• No impacts assuming compliance	• Dogs would be prohibited on trails and beach	• No Impacts assuming compliance	• Dogs would be prohibited at site	• No impacts assuming compliance	• Dogs would be prohibited on trails and beach
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Species of Special Status										
Steelhead Trout	• Negligible impacts	• Easkoot Creek is densely vegetated with riparian plant species and generally difficult for leashed dogs to access	• No impacts assuming compliance	• Dogs would be prohibited in creek; dense vegetation precludes access to creek by leashed dogs	• No impacts assuming compliance	• Dogs would be prohibited in creek; dense vegetation precludes access to creek by leashed dogs	• No impacts assuming compliance	• Dogs would be prohibited in creek; dense vegetation precludes access to creek by leashed dogs	• No impact assuming compliance	• Dogs would be prohibited in creek; dense vegetation precludes access to creek by leashed dogs
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• No impacts	• On-leash dog walking would still be allowed on site	• Negligible impacts	• On-leash dog walking would still be allowed on site	• Negligible impacts	• On-leash dog walking would still be allowed on site	• Long-term, minor, adverse impacts	• No dogs would be allowed.	• Negligible impacts	• On-leash dog walking would still be allowed on site
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Visitors would still encounter dog walkers in the picnic area, parking lot, and beach.	• Beneficial impacts	• Visitors would still encounter dogs in the picnic area and parking lot	• Beneficial impacts	• Visitors would still encounter dogs in the picnic area and parking lot.	• Beneficial impacts	• No dogs would be allowed.	• Beneficial impacts	• Visitors would still encounter dogs in the picnic area and parking lot
Cumulative impacts	• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Park Operations	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/ management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/ management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/ management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/ management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	• Long-term, moderate, adverse impacts	• Continued threat to health and safety from uncontrolled dogs and confrontational events would exist	• Long-term, minor, adverse impacts, assuming compliance	• Contact with unruly or aggressive dogs would still exist; risk of dog bites or other injuries could occur	• Long-term, minor, adverse impacts, assuming compliance	• Contact with unruly or aggressive dogs would still exist; risk of dog bites or other injuries could occur	• No impacts, assuming compliance	• Dogs would be prohibited from picnic areas and parking lots	• Long-term, minor, adverse impacts, assuming compliance	• Contact with unruly or aggressive dogs is would still exist; risk of dog bites or other injuries could occur
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
HOMESTEAD VALLEY										
Soil and Geology	• Long-term, minor, adverse impacts	• Soil compaction, erosion, and nutrient addition would occur in areas off of the trail since dogs would be under voice control.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire road and the LOD area are small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/ fire road and the LOD area are small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; fire road and the LOD area are small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire road and the LOD area are small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Scrub, Chaparral, and Grassland	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs would be caused through physical damage such as trampling, digging, and dog waste; these affects as well as fragmentation could lead to the spread of invasive plant species	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Wildlife										
Coastal Scrub Chaparral, and Grassland Wildlife	• Long-term, minor to moderate, adverse impacts	• Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors	• Long-term, minor adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails generally receive heavy use by visitors	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Species of Special Status										
Northern Spotted Owl	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Young owls on the ground could be disturbed or injured by dogs; adult owls could be stressed or physically challenged when trying to protect fledglings on the ground in the presence of a dog(s), but suitable owl habitat at this site is very limited</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be physically restrained on a leash and it would be unlikely that dogs would gain access to fledglings on/along the trails/roads</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be physically restrained on a leash and it would be unlikely that dogs would gain access to fledglings on/along the trails/roads</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be physically restrained on a leash and it would be unlikely that dogs would gain access to fledglings on/along the trails/roads</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be physically restrained on a leash and it would be unlikely that dogs would gain access to fledglings on/along the trails/roads</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	<ul style="list-style-type: none"><li>No impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog walking would still be allowed on site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would be on-leash and in designated areas.</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would be on-leash and in designated areas.</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would be on-leash and in designated areas.</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would be on-leash and in designated areas.</li></ul>
Visitors who prefer not to have dogs at the park	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Visitors would still encounter dogs off-leash throughout the site.</li></ul>	<ul style="list-style-type: none"><li>Beneficial impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.</li></ul>	<ul style="list-style-type: none"><li>Beneficial impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.</li></ul>	<ul style="list-style-type: none"><li>Beneficial impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.</li></ul>	<ul style="list-style-type: none"><li>Beneficial impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.</li></ul>
Cumulative impacts	<ul style="list-style-type: none"><li>Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>Negligible cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Park Operations	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	• Negligible impacts, assuming compliance	• Low use; no pet-related violations or incidents	• Negligible impacts, assuming compliance	• Low use; no pet-related violations or incidents	• Negligible impacts, assuming compliance	• Low use; no pet-related violations or incidents	• Negligible impacts, assuming compliance	• Low use; no pet-related violations or incidents	• Negligible impacts, assuming compliance	• Low use; no pet-related violations or incidents
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		No change assuming compliance		No change assuming compliance	
ALTA TRAIL, ORCHARD FIRE ROAD AND PACHECO FIRE ROAD										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil compaction, erosion, and nutrient addition would occur in areas off of the trail since a high number of dogs would be under voice control.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire roads and the LOD area are a small portion of the entire site; area receives high use.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire roads and the LOD area are a small portion of the entire site; area receives high use.	• No impacts	• Dogs would not be allowed in the site so no soil would be disturbed.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire roads and the LOD area are a small portion of the entire site; area receives high use.
Cumulative Impacts	Negligible to long-term, moderate, adverse impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Scrub, Chaparral and Grassland Communities	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs are caused through trampling, digging, and dog waste and these affects as well as fragmentation can lead to the spread of invasive plant species	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Native Hardwood Forest/Douglas-Fir and Coast Redwoods	• Long-term, minor, adverse impacts	• Vegetation would be affected by dogs through trampling, digging, dog waste; nutrient addition would also occur.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• No impacts assuming compliance	• Dogs would not be allowed at the site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Wildlife										
Coastal Scrub, Chaparral and Grassland Communities	• Long-term, minor to moderate, adverse impacts	• Off-leash dog access to wildlife and associated habitat off trails/fire roads; disturbance includes physical damage to habitat or nest, trampling, chasing; wildlife may also be displaced; trails within this site are easily accessible	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife behavior; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife behavior; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife behavior; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Native Hardwood Forest/Douglas-Fir and Coast Redwoods	<ul style="list-style-type: none"><li>Long-term, minor, adverse</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes physical damage to habitat from digging, trampling, chasing; wildlife may also be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs would still infrequently disturb wildlife behavior; wildlife may be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs would still infrequently disturb wildlife behavior; wildlife may be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site</li></ul>	<ul style="list-style-type: none"><li>No impact</li></ul>	<ul style="list-style-type: none"><li>Dogs prohibited at site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs would still infrequently disturb wildlife behavior; wildlife may be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Species of Special Status										
Mission Blue Butterfly	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dogs can damage mission blue butterfly habitat in the trail beds and adjacent to the trails and roads; protective fencing for habitat does not exclude noncompliant dogs and social trails degrade habitat</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Existing habitat is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Existing habitat is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Existing habitat is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated</li></ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impact		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impacts	• Off-leash dog walking would still be allowed on site.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Long-term, moderate, adverse impacts	• Dog walking would not be allowed at this site; high dog walking use area.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.
Visitors who prefer not to have dogs at the park	• Long-term, moderate, adverse impacts	• Visitors would still encounter dog walkers throughout the site; high use site.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Dog walking would no longer be allowed at the site.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.
Cumulative impacts	Negligible cumulative impacts for visitors who would prefer to walk dogs at the park		Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts once education, compliance, and understanding become the norm		Negligible cumulative impacts once education, compliance, and understanding become the norm		Negligible cumulative impacts once education, compliance, and understanding become the norm		Negligible cumulative impacts once education, compliance, and understanding become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Long-term, minor, adverse, impacts	• Heavily used by visitors walking dogs provides opportunity pet-related incidents	• Negligible impacts, assuming compliance	• Pets on leash are restricted and controllable reducing the risk for pet-related incidents to visitors and park staff	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Pets on leash are restricted and controllable reducing the risk for pet-related incidents to visitors and park staff	• No impacts, assuming compliance	• Dogs are prohibited from trails and fire roads in the site	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Pets on leash are restricted and controllable reducing the risk for pet-related incidents to visitors and park staff; commercial dog walking would contribute to adverse impacts.
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change, assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
OAKWOOD VALLEY										
Soil and Geology	• Long-term, moderate, adverse impact	• Soil compaction, erosion, and nutrient addition would occur in areas off trail since dogs would be under voice control.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trail/fire roads and the LOD area are a small portion of the entire site.	• Long-term, minor, adverse impacts assuming compliance	• Trails, LOD, and ROLA are a small portion of the entire site; however moderate impacts to soil in the ROLA would cause changes to the natural function of the soil.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off trail; fire road and LOD area are a small portion of the entire site	• Long term, minor adverse impacts, assuming compliance	• Trail/fire road, LOD, and ROLA are a small portion of the entire site; however, moderate impacts on soil in the ROLA would cause changes to the natural function of the soil
Cumulative Impacts	Long term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	• Negligible impacts	• Infrequent access to the tributary would occur; nutrient and pathogens could enter the tributary directly or through runoff; dogs in tributary could cause turbidity.	• Negligible impacts, assuming compliance	• Dog access to the tributary would be limited by leash restraint; nutrients and pathogens could enter the tributary through runoff.	• Negligible impacts, assuming compliance	• Dog walking in the ROLA or limited by leash restraint would occur in areas distant from the tributary.	• Negligible impacts, assuming compliance	• Physically restraining dogs and limiting the areas of on-leash dog walking would result in reducing potential dog access to the tributary.	• Negligible impacts, assuming compliance	• Dog walking in the ROLA or limited by leash restraint would occur in areas distant from the tributary
Cumulative Impacts	Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		No change with compliance		No change with compliance		No change with compliance		No change with compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Vegetation										
Coastal Scrub, Chaparral and Grassland Communities	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste and these affects as well as fragmentation can lead to the spread of invasive plant species	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical Restraint of dogs would protect vegetation off-trail; trails, LOD, and ROLA areas are small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance	
Native Hardwood Forest/Douglas-Fir and Coast Redwoods	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste and these affects as well as fragmentation can lead to the spread of invasive plant species.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails, LOD, and ROLA areas are small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails, LOD, and ROLA areas are small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance,	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Coastal Scrub, Chaparral and Grassland Communities	<ul style="list-style-type: none"> <li>Long-term, minor to moderate, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes digging, trampling, chasing; wildlife may also be displaced; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible; heavy use by visitors</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible; heavy use by visitors</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible; heavy use by visitors</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible; heavy use by visitors</li> </ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance	
Native Hardwood Forest/Douglas-Fir and Coast Redwoods	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes digging, trampling, chasing; wildlife may also be displaced; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible; heavy use by visitors</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site; LOD and ROLA areas are small portion of the entire site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site; LOD area is a small portion of the entire site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; wildlife may be displaced; this habitat and supporting wildlife constitutes a very small portion of entire site; LOD and ROLA areas are small portion of the entire site</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Species of Special Status										
Mission Blue Butterfly	• Long-term, minor to moderate, adverse impacts	• Dogs can damage mission blue butterfly habitat in the trail beds and adjacent to the trails and roads; protective fencing for habitat does not exclude noncompliant dogs and social trails degrade habitat	• Negligible impacts assuming compliance	• Existing habitat at is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated	• Negligible impacts assuming compliance	• Existing habitat at is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated; ROLA is not located with mission blue butterfly habitat	• Negligible impacts assuming compliance	• Existing habitat at is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated	• Negligible impacts assuming compliance	• Existing habitat at is located away from trails; dogs on leash on the trails would not be in proximity to mission blue butterfly habitat; use of social trails would be eliminated; ROLA is not located with mission blue butterfly habitat
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance	
Northern Spotted Owl	• Negligible to long-term, minor, adverse impacts	• Portions of the trails/roads that allow dogs under voice control are through suitable habitat of the owl, but there is no documentation that the northern spotted owl exists at the site	• Negligible impacts assuming compliance	• Dogs would be physically restrained on a leash and there is no documentation that the owl exists at the site	• Negligible impacts assuming compliance	• Dogs would be physically restrained on a leash or in a fenced ROLA; there is no documentation that the owl exists at the site	• Negligible impacts assuming compliance	• Dogs would be physically restrained on a leash and there is no documentation that the owl exists at the site	• Negligible impacts assuming compliance	• Dogs would be physically restrained on a leash or in a fenced ROLA; there is no documentation that the owl exists at the site
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance		Beneficial to no change, assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• No impacts	• Off-leash dog walking would still be allowed on site	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Negligible impacts	• Off-leash dog walking would be restricted to one area	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Negligible impacts	• Off-leash dog walking would be restricted to one area
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Visitors would still encounter dog walkers throughout the site	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Dog walking limited to portions of the site; no dog experience available.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walkers would be in restricted areas.	• Beneficial impacts	• Dog walking would be limited to portions of the site; no dog experience available.
Cumulative impacts	• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Park Operations</b>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create long-term, minor, adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create long-term, minor, adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs</li> </ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>Negligible impacts</li> </ul>	<ul style="list-style-type: none"> <li>Site experiences low local use; no pet-related violations or incidents would be likely</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Low use; no pet-related violations or incidents</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Site experiences low local use; no pet-related violations or incidents would be likely</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Site experiences low local use; no pet-related violations or incidents would be likely</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Site experiences low local use; no pet-related violations or incidents would be likely</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		No change assuming compliance		No change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
MUIR BEACH										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil compaction, erosion, and nutrient addition would occur on trails and pathway. Disturbance to dunes and nutrient addition would occur on beach.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail and would protect dunes.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail and would protect dunes.	• Negligible, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trail area is a small portion of the entire site.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail and would protect dunes.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	• Long-term, minor, adverse impacts	• Localized increase in turbidity from dogs accessing surface waters including the ocean; increased potential for nutrients and pathogens from dog waste to enter water bodies; however, pollutants from dog waste are dispersed in high energy beach environment	• Negligible impacts, assuming compliance	• Physical restraint would minimize dog access to water bodies assuming compliance	• Negligible impacts, assuming compliance	• Physical restraint would minimize dog access to water bodies assuming compliance	• No impacts, assuming compliance	• Physical restraint and fewer areas for dogs to access would minimize dog access to water bodies assuming compliance	• Negligible to long-term, minor, adverse impacts assuming compliance	• Assuming compliance dogs would not have access to the creek or lagoon, but dogs could access the ocean from the beach ROLA.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Vegetation										
Coastal Communities	• Long-term, moderate, adverse impacts	• Dune communities are not well protected, are adjacent to off-leash areas, and are subject to impacts by dogs through trampling, digging, and dog waste	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area is small portion of the entire site.	• No impacts assuming compliance	• Dogs would not allowed on the beach or boardwalk/path near dune communities	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation; dunes would not be able to expand naturally
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wetlands and Aquatic Habitat	• Long-term, minor to moderate, adverse impacts	• Wetland vegetation around lagoon is affected by dogs through trampling and increase turbidity; there is no physical barrier to prevent dogs from accessing the lagoon shoreline and closures are violated regularly	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect wetlands along shoreline of lagoon	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect wetlands along shoreline of lagoon	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect wetlands along shoreline of lagoon; because dogs would not be permitted along the lagoon shoreline; dogs allowed on trail along Pacific Way on leash, that supports some wetland habitat.	• Negligible impacts assuming compliance	• Compliance in ROLA and physical restraint of dogs would protect wetlands along shoreline of lagoon
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Riparian Forest and Stream Corridors	• Long-term, minor, adverse impacts	• Redwood Creek has been closed to dogs by NPS to protect sensitive habitat within the watershed but there is no physical barrier and off-leash dogs enter the riparian areas as well as the creek; this habitat is subject to impacts by dogs through trampling, digging, and dog waste, specifically the riparian stream corridor adjacent to the trail along Pacific Way	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail; trails and the LOD area is small portion of the entire site; trails within riparian habitat are small in comparison to entire site; trails generally receive low to moderate use	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail; trails and the LOD area is small portion of the entire site; trails within riparian habitat are small in comparison to entire site; trails generally receive low to moderate use	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail; trails and the LOD area is small portion of the entire site; trails within riparian habitat are small in comparison to entire site; trails generally receive low to moderate use	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail; trails and the LOD area is small portion of the entire site; trails within riparian habitat are small in comparison to entire site; trails generally receive low to moderate use
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Coastal Communities	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Shorebirds on beach are occasionally to frequently subjected to impacts by on-leash and voice-control dogs through barking, chasing, and proximity to roosting or feeding birds; although shorebird numbers are low, visitor usage is high at this site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect shorebirds and marine mammals on beach, although on-leash dogs can still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect shorebirds and marine mammals on beach, although on-leash dogs can still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited on the beach</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect shorebirds and marine mammals in on-leash areas, although on-leash dogs can still disturb roosting and feeding birds; ROLA only encompasses a portion of beach habitat at the site and is located away from Redwood Creek and the lagoon (high bird use areas)</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Wetlands and Aquatic Habitat	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts (range is presented because the intensity of use - by dogs and wildlife - is dependent upon the time of year)</li></ul>	<ul style="list-style-type: none"><li>Lagoon closures have been violated and fence is ineffective; shorebirds, wading birds, and water birds are occasionally to frequently subjected to impacts from; visitor usage is high at this site</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The lagoon is closed to dogs; physical restraint of dogs would not allow access to the lagoon or its shorelines utilized by birds; on-leash dogs could still infrequently disturb birds</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The lagoon is closed to dogs; physical restraint of dogs would not allow access to the lagoon or its shorelines utilized by birds; on-leash dogs could still infrequently disturb birds</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at Muir Beach site except for parking lot and trail along Pacific Way that supports some wetlands/ aquatic habitat.</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The lagoon is closed to dogs; physical restraint of dogs and compliance in ROLA would not allow access to the lagoon; on-leash dogs could still infrequently disturb birds and other wildlife</li></ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Riparian Forest and Stream Corridors	• Long-term, minor, adverse impacts	• Redwood Creek closures have been violated; wildlife and associated riparian habitat along the trail are occasionally subjected to impacts by dogs – barking, chasing, fouling water with dog waste, trampling vegetation, causing turbidity, or by injuring or causing direct mortality to eggs or individual species in the creek	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; fewer trails available to on-leash dogs compared to Alternative A; trails generally receive low to moderate use	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; fewer trails available to on-leash dogs compared to Alternative A; trails generally receive low to moderate use	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; fewer trails available to on-leash dogs compared to Alternative A; trails generally receive low to moderate use	• Negligible to long-term, minor, adverse impact assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; chasing of wildlife would be eliminated but on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; fewer trails available to on-leash dogs compared to Alternative A; trails generally receive low to moderate use
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Species of Special Status										
Coho Salmon	• Negligible to long-term, minor, adverse impacts	• Lagoon and Redwood Creek closures have been violated; adult and juvenile life stages could be affected by dogs; increased turbidity by trampling shoreline areas	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines; ROLA has not been sited near or adjacent to Redwood Creek
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Steelhead Trout	• Negligible to long-term, minor, adverse impacts	• Lagoon and Redwood Creek closures have been violated; adult and juvenile life stages could be affected by dogs that gain access to the creek	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines	• Negligible impacts assuming compliance	• The lagoon and Redwood Creek would be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines; ROLA has not been sited near or adjacent to lagoon or Redwood Creek
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
California Red-Legged Frog	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Although lagoon closures are violated frequently, there is no frog breeding at the Muir Beach site, but the site provides non-breeding habitat; breeding occurs at a pond offsite and noncompliant dogs could access this area; frog eggs, juveniles, and adults could be affected by dogs through habitat or behavioral disturbance</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Water bodies would continue to be closed to dogs and the fence would discourage access; physically restraining dogs on leash would prevent dog access to water bodies that may provide habitat to juvenile or adult frogs</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The lagoon and Redwood Creek would continue to be closed to dogs; physically restraining dogs on leash would prevent dog access to water bodies that may provide habitat to juvenile or adult frogs</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The lagoon and Redwood Creek would continue to be closed to dogs; physically restraining dogs on leash would prevent dog access water bodies and part of the creek, the lagoon, and the shoreline are in areas where dogs a prohibited under alternative D</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The lagoon and Redwood Creek would continue to be closed to dogs; physical restraint of dogs would not allow access to the creek or its shorelines; ROLA would not be sited near Redwood Creek</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Cultural Resources	<ul style="list-style-type: none"><li>Negligible to long-term, minor, site-specific adverse impacts to archeological resources.</li><li>For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to archeological sites</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts to archeological resources.</li><li>For purposes of Section 106 of the NHPA, the assessment for alternative B would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts to archeological resources.</li><li>For purposes of Section 106 of the NHPA, the assessment for alternative C would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts to archeological resources.</li><li>For purposes of Section 106 of the NHPA, the assessment for alternative D would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts to archeological resources.</li><li>For purposes of Section 106 of the NHPA, the assessment for alternative E would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources</li></ul>
Cumulative Impacts	<ul style="list-style-type: none"><li>Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>Beneficial cumulative impacts related to preservation and enhancement efforts</li><li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>	
Impact change compared to current condition	NA		Beneficial to no change for archeological resources		Beneficial to no change for archeological resources		Beneficial to no change for archeological resources		Beneficial to no change for archeological resources	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impacts	• Off-leash dog walking would still be allowed on site	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Long-term, moderate, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas. ROLA available.
Visitors who prefer not to have dogs at the park	• Long-term, moderate, adverse impacts	• Visitors would still encounter dogs on the beach and trails; high us area.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Off leash dog walking in designated areas; no dog experience available.
Cumulative impacts	<ul style="list-style-type: none"> <li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term, moderate, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	<ul style="list-style-type: none"> <li>• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>• ROLAs would create long-term, minor, adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>• Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs</li> </ul>

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	• Long-term, minor, adverse impacts	• Hazardous condition/pet rescues are expected to continue putting dogs, pet owners/ walkers and NPS staff at risk	• Negligible impacts, assuming compliance	• Limitation in the number of dogs permitted and the leash requirement minimize the chance of pet-related incidents	• Negligible impacts, assuming compliance	• Limitation in the number of dogs permitted and the leash requirement minimize the chance of pet-related incidents	• Negligible impacts, assuming compliance	• Limitation in the number of dogs permitted and the leash requirement minimize the chance of pet-related incidents	• Long-term, minor, adverse impacts, assuming compliance	• Conditions still provide the potential for encountering unruly or aggressive dogs and the occurrence of pet-related incidents
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		No change assuming compliance	
RODEO BEACH AND SOUTH RODEO BEACH										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil disruption, digging, and, addition would occur in areas along the beach and in foredunes since dogs would be under voice control.	• Long-term, minor adverse impacts assuming compliance	• Physical restraint of dogs would help to protect soil function on beach.	• Long-term, minor to moderate, adverse impact assuming compliance	• Physical restraint of dogs would protect soil function; soils would be disturbed in the beach ROLA.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function on beach and dogs are only allowed on half of the beach area.	• Long-term, minor to moderate, adverse impacts assuming compliance	• Physical restraint of dogs would protect soils function but soils would be disturbed in the ROLA.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Water Quality	• Long-term, minor, adverse impacts	• Localized increase in turbidity from dogs accessing surface waters; increased potential for nutrients and pathogens from dog waste to enter water bodies, and dogs can access ocean from beach; however pollutants are dispersed in high-energy beach environment.	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Dog access to water bodies would be limited and assuming compliance opportunities for increased turbidity, and entry of pathogens and/or nutrients into water bodies would be minimized.	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Dog access to water bodies would be limited and assuming compliance opportunities for increased turbidity, and entry of pathogens and/or nutrients into water bodies would be minimized, but dogs could access ocean from beach ROLA.	• Negligible impacts, assuming compliance	• Dog access to water bodies would be limited and assuming compliance opportunities for increased turbidity, and entry of pathogens and/or nutrients into water bodies would be minimized.	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Dog access to water bodies would be limited and assuming compliance opportunities for increased turbidity, and entry of pathogens and/or nutrients into water bodies would be minimized, but dogs could access ocean from beach ROLA
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Vegetation										
Rodeo Beach Coastal Communities	• Long-term, moderate, adverse impacts	• Dune communities, including fenced dunes are within the area where dogs would be allowed under voice control and subject to impacts by dogs through trampling, digging, and dog waste.	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation, but even on leash dogs could trample unfenced dune vegetation	• Long-term, minor to moderate, adverse impacts assuming compliance	• Physical restraint of dogs in some areas and fencing would protect dune vegetation, but dune vegetation is in ROLA and subject to impacts from dogs	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation, but vegetated foredunes along the lagoon inlet would still be open to on-leash dog-walking	• Long-term, minor, adverse impacts assuming compliance	• Fencing and physical restraint of dogs and fencing would protect the majority of dune vegetation, but some dune vegetation is still in the ROLA
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial to no change, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance	
Rodeo Lagoon Wetlands and Aquatic Habitat	• Long-term, minor, adverse impacts	• Wetland vegetation around lagoon is affected by dogs through trampling and turbidity; no physical barrier to prevent dogs from accessing the lagoon or lake and closures are violated regularly	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect wetlands along shoreline of lagoon	• Negligible impacts assuming compliance	• Compliance in ROLA and physical restraint of dogs would protect wetlands along shoreline of lagoon.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect wetlands along shoreline of lagoon.	• Negligible impacts assuming compliance	• Compliance in ROLA and physical restraint of dogs would protect wetlands along shoreline of lagoon.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance	
Wildlife										
Rodeo Beach Wildlife Coastal Communities	• Long-term, moderate, adverse impacts	• Shorebirds on beach and wading birds such as pelicans are frequently subjected to impacts dogs through barking, chasing; visitor usage is high and coastal habitat is large at this site	• Negligible to long-term, minor, adverse impacts assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)	• Physical restraint of dogs would protect shorebirds and marine mammals on beach, although on-leash dogs can still disturb birds	• Long-term, minor to moderate, adverse impacts assuming compliance (range included because impacts depend on the seasonal presence of the birds and the level of activity at the site)	• ROLA encompasses a large portion of beach habitat at the site and off-leash dogs could disturb shorebirds and marine mammals on the beach at this site;	• Negligible to long-term, minor, adverse impacts assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)	• Physical restraint of dogs would protect shorebirds and marine mammals on beach, although on-leash dogs can still disturb roosting and feeding birds by barking and their presence on the beach.	• Long-term, minor to moderate, adverse impacts assuming compliance (range included because impacts depend on the seasonal presence of the birds and the level of activity at the site)	• Physical restraint of dogs would protect shorebirds and dogs would be on leash in the areas closest to Rodeo Lagoon (a portion of the lagoon shoreline will be fenced and closed to public access); ROLA encompasses a portion of beach habitat but off-leash dogs could disturb shorebirds and marine mammals
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Long-term minor adverse cumulative impacts	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial to no change assuming compliance		Beneficial, assuming compliance		Beneficial to no change, assuming compliance	
Wetlands and Aquatic Wildlife	• Long-term, moderate, adverse impacts	• Dogs gain access to closed lagoon at least once a week; birds are frequently subjected to impacts by dogs through barking and chasing; shorebird numbers are high and visitor usage is high at this site	• Negligible impacts assuming compliance	• Rodeo Lagoon closed to dogs; physical restraint of dogs would not allow access in Rodeo Lagoon; on-leash dogs could still infrequently disturb roosting and feeding birds by barking and their presence	• Negligible impacts assuming compliance	• Rodeo Lagoon closed to dogs; physical restraint of dogs and compliance in ROLA would not allow access in Rodeo Lagoon; on-leash dogs could still infrequently disturb birds	• Negligible impacts assuming compliance	• Rodeo Lagoon closed to dogs; physical restraint of dogs would not allow access in Rodeo Lagoon; on-leash dogs could still infrequently disturb roosting and feeding birds by barking and their presence	• Negligible impacts assuming compliance	• Rodeo Lagoon closed to dogs; physical restraint of dogs and compliance in ROLA would not allow access in Rodeo Lagoon; on-leash dogs could still infrequently disturb birds
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance		Beneficial, assuming compliance	
Species of Special Status										
Tidewater Goby	• Negligible to long-term, moderate, adverse impacts (a range of impacts is presented to encompass possible unknown effects)	• Dogs could gain access to closed lagoon; dogs along the shoreline could crush goby burrows; cause increased turbidity; individuals would be affected but the population and gene pool of the gobies would not be affected	• Negligible impacts assuming compliance	• Rodeo Lagoon would continue to be closed to dogs; physically restraining dogs on leash would prevent dog access to Rodeo Lagoon	• Negligible impacts assuming compliance	• Rodeo Lagoon would continue to be closed to dogs; physically restraining dogs on leash would prevent dog access to Rodeo Lagoon; compliant dogs in the ROLA would not affect the goby; the proposed fence would also deter dogs from gaining access to the lagoon	• Negligible impacts assuming compliance	• Rodeo Lagoon would continue to be closed to dogs; physically restraining dogs on leash would prevent dog access to Rodeo Lagoon	• Negligible impacts assuming compliance	• Rodeo Lagoon would continued to be closed to dogs; physically restraining dogs on leash would prevent dog access to Rodeo Lagoon; compliant dogs in the ROLA would not affect the goby; the proposed fence would deter dogs from gaining access to the lagoon
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impact	• Off-leash dog walking would still be allowed on site and on both beaches.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash. No off-leash dog walking area available.	• Beneficial impacts	• Dog walking would still be allowed on site and off-leash within the ROLA.	• Long-term, moderate, adverse impacts	• Dog walking would be on-leash and in designated areas; no off-leash dog walking.	• Beneficial impacts	• Dog walking would still be allowed on site and off-leash within the ROLA.
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Visitors would still encounter dog walking off-leash throughout the site; no dog experience not available.	• Beneficial impacts	• Dog walking would no longer be off-leash	• Long-term, minor, adverse impacts	• Visitors would still encounter off-leash dog walking along the beach.	• Beneficial impacts	• Dog walking would no longer be off-leash and dog walking would be in restricted areas; no dog experience available.	• Long-term, minor, adverse impacts	• Visitors would still encounter off-leash dog walking along the beach.
Cumulative impacts	<ul style="list-style-type: none"> <li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	<ul style="list-style-type: none"> <li>• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>• ROLAs would create long-term, minor, adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>• Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs</li> </ul>	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	<ul style="list-style-type: none"> <li>• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>• ROLAs would create long-term, minor, adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>• Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs</li> </ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	• Long-term, minor, adverse impacts	• Conditions still exist for pet-related incidents from unruly or aggressive dogs	• Negligible impacts, assuming compliance	• Limitation in the number of dogs permitted and the leash requirement minimize the chance of pet-related incidents	• Long-term, minor, adverse impacts, assuming compliance	• Conditions allow chance for pet-related incidents from unruly or aggressive dogs	• Negligible impacts, assuming compliance	• Dogs are restricted to a leash and no commercial dog walking minimize chance of unruly or aggressive dog encounters resulting in risk to safety and health of visitors and staff	• Long-term, minor adverse impacts, assuming compliance	• Conditions allow chance for pet-related incidents from unruly or aggressive dogs
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
MARIN HEADLANDS TRAILS										
Soil and Geology	• Long-term, minor, adverse impacts	• Soil compaction, erosion, and nutrient addition would occur in areas off of the trail since dogs would be under voice control.	• No impacts assuming compliance	• Dogs would not be allowed in the site so no soil would be disturbed.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire roads and the LOD area are a small portion of the entire site.	• No impacts assuming compliance	• Dogs would not be allowed in the site so no soil would be disturbed.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trails/fire roads and the LOD area are a small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Scrub, Chaparral, and Grassland	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste and these affects as well as fragmentation can lead to the spread of invasive plant species	• No Impacts assuming compliance	• Dogs would be prohibited on trails	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• No Impacts assuming compliance	• Dogs would be prohibited at site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wetland and Aquatic Vegetation	• Long-term, minor, adverse impacts	• Wetland vegetation around Rodeo Lake is affected by dogs through trampling and turbidity; no physical barrier to prevent dogs from accessing the lake and closures are violated regularly; extensive areas of wetlands in the valley bottom along Rodeo Valley Trail	• No Impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs would protect Rodeo Lake wetland vegetation and habitat off-trail along the Rodeo Valley Trail Corridor which supports wetlands	• No Impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect Rodeo Lake wetland vegetation and habitat off-trail along the Rodeo Valley Trail Corridor which supports wetlands
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Riparian Forest and Stream Corridor Vegetation	• Long-term, minor, adverse impacts	• Off-leash dogs would affect riparian vegetation along the Rodeo Valley Trail Corridor and the Lagoon Trail through trampling, digging, dog waste; nutrient addition would also occur from outside of LOD	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail along the Lower Rodeo Valley Trail Corridor and the Lagoon Trail (North) which supports riparian habitat; LOD area and trails with riparian habitat make up a fair portion of the entire site	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail along the Lower Rodeo Valley Trail Corridor and the entire Lagoon Trail loop (North and South) which supports riparian habitat; LOD area and trails with riparian habitat make up a fair portion of the entire site
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Wildlife										
Coastal Scrub Chaparral, and Grassland Wildlife	• Long-term, minor to moderate, adverse impacts	• Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; trails within this site are easily accessible from residential areas and generally receive heavy use by visitors	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Long-term, minor to moderate, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
Wetland and Aquatic Wildlife	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dogs would continue to gain access to Rodeo Lake and birds are occasionally subjected to impacts by dogs through barking and chasing; wildlife that utilize areas of wetlands in the valley bottom along Rodeo Valley Trail should not be affected by dogs since dogs are not allowed in the vicinity of this trail</li></ul>	<ul style="list-style-type: none"><li>No Impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The physical restraint of dogs and closure of Rodeo Lake would protect wildlife in wetlands along Rodeo Lake and along the Rodeo Valley Trail Corridor which supports wetland habitat as well</li></ul>	<ul style="list-style-type: none"><li>No Impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>The physical restraint of dogs and closure of Rodeo Lake would protect wildlife in wetlands along Rodeo Lake and along the Rodeo Valley Trail Corridor which supports wetland habitat as well</li></ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Riparian Forest and Stream Corridor Wildlife	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated riparian habitat along the Rodeo Valley Trail Corridor and the Lagoon Trail would continue; these areas make up a fair portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; LOD area and the Rodeo Valley Trail Corridor and Lagoon Trail (North) makes up a fair portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; LOD area and Rodeo Valley Trail Corridor and entire Lagoon Trail Loop (North and South) makes up a fair portion of the entire site</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Species of Special Status</b>										
Mission Blue Butterfly	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Dogs can damage mission blue butterfly habitat in the trail beds and adjacent to the trails and roads; protective fencing for habitat does not exclude noncompliant dogs</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>On leash dog access would be allowed only on the perimeter trails which preserve/maintains integrity of interior habitat; no dogs on the North Miwok Trail and the hiking-only section of the Coastal Trail would protect habitat</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>On leash dog access would only be allowed on the perimeter trails which preserve /maintains integrity of interior habitat; no dogs on the North Miwok Trail and the hiking-only section of the Coastal Trail would protect habitat</li> </ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		No change assuming compliance	
Steelhead Trout	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>In Rodeo Creek and Gerbode Creek adult and juvenile life stages could be affected by dogs that gain access to and indirectly cause increased turbidity by trampling shoreline areas and re-suspending sediment</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Both Gerbode and Rodeo Creek would be closed and physical restraint of dogs in vicinity of creek would not allow access to the creek or its shorelines</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Both Gerbode and Rodeo Creek would be closed and physical restraint of dogs in vicinity of creek would not allow access to the creek or its shorelines</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
California Red-Legged Frog	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>The site provides both breeding (Rodeo Lake) and non-breeding (Rodeo lagoon) areas that are accessed by noncompliant dogs; eggs, juveniles, and adults could be affected by dogs through habitat disturbance as well as behavioral disturbance</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physically restraining dogs on leash would prevent dog access to the Tennessee Valley pond, Rodeo Lake, or Rodeo Lagoon</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physically restraining dogs would prevent dog access to the Tennessee Valley pond, Rodeo Lagoon, and Rodeo Lake</li> </ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Cultural Resources</b> —includes affected resources within Forts Baker, Barry, Cronkhite Historic District	<ul style="list-style-type: none"><li>• Negligible to long-term, minor, site-specific and localized adverse impacts to historic structures; and negligible to long-term minor localized adverse impacts to cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to historic structures and cultural landscapes</li></ul>	<ul style="list-style-type: none"><li>• Negligible to beneficial impacts for historic structures and cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative B would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative C would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative D would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative E would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li></ul>
Cumulative Impacts	Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.	
Impact change compared to current condition	NA		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impacts for visitors who prefer dogs	• Dog walking would still be allowed on site and off leash in some areas.	• Long-term, moderate, adverse impacts	• Visitors would no longer be allowed to walk dogs at this site.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas; no off-leash area available	• Long-term, moderate, adverse impacts	• Visitors would no longer be allowed to walk dogs at this site.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas.; no off-leash area available
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Dog walking would still be allowed on site and off leash in some areas.	• Beneficial impacts	• Dog walking would not be allowed on site; no dog experience available.	• Beneficial impact	• Dog walking would no longer be off-leash and dogs would be in restricted areas.	• Beneficial impacts	• Dog walking would not be allowed on site; no dog experience available.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.
Cumulative impacts	<ul style="list-style-type: none"> <li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Beneficial impacts for visitors who would prefer not to have dog walking at the park</li> </ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Long-term, moderate, adverse impacts	• Conditions exist for continued encounters with unruly or aggressive dogs for visitors and park staff	• No Impacts, assuming compliance	• Dogs prohibited	• Long-term, minor, adverse impacts, assuming compliance	• History of dog-related confrontations and incidents that put visitors and park staff health and safety at risk	• No Impacts, assuming compliance	• Dogs prohibited	• Long-term, minor adverse impacts, assuming compliance	• History of dog-related confrontations and incidents that put visitors and park staff health and safety at risk
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Beneficial cumulative impacts		Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
FORT BAKER										
Soil and Geology	• Long-term, minor, adverse impacts	• Soil compaction, erosion, and nutrient addition would occur in areas off of the trails/fire roads since dogs would be under voice control.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trail/fire road and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trail/fire road and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trail and the LOD area are a small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; trail/fire road and the LOD area are a small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	• Long-term, minor, adverse impacts	• Frequency of violations and accessibility of Horseshoe Cove to dogs would increase; dogs would contribute to localized increases in turbidity in the bay; nutrients and pathogens from dog waste would enter the bay; however pollutants are dispersed in high energy beach environment,	• Negligible impacts, assuming compliance	• Dog access to the tributary would be limited by leash restraint	• Negligible impacts, assuming compliance	• Dog access to Horseshoe Cove would be limited by leash restraint.	• Negligible impacts, assuming compliance	• Physically restraining dogs and limiting the areas of on-leash dog walking would result in reducing potential dog access to Horseshoe Cove.	• Negligible impacts, assuming compliance	• Dog walking would be limited by leash restraint and assuming compliance, dogs would not be able to access Horseshoe Cove
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Vegetation</b>										
Coastal Community	• Negligible impacts	• No coastal dune communities; off-leash dogs could gain access to rocky intertidal vegetation but it would be unlikely that dogs could cause measurable changes through trampling and dog waste	• Negligible impacts assuming compliance	• Rocky, intertidal habitat only, no coastal dune communities; unlikely that on-leash dogs could gain access to rocky intertidal vegetation and cause impacts through trampling and dog waste	• Negligible impacts assuming compliance	• Rocky, intertidal habitat only, no coastal dune communities; unlikely that on-leash dogs could gain access to rocky intertidal vegetation and cause impacts through trampling and dog waste	• Negligible impacts assuming compliance	• Rocky, intertidal habitat only, no coastal dune communities; unlikely that on-leash dogs could gain access to rocky intertidal vegetation and cause impacts through trampling and dog waste	• Negligible impacts assuming compliance	• Rocky, intertidal habitat only, no coastal dune communities; unlikely that on-leash dogs could gain access to rocky intertidal vegetation and cause impacts through trampling and dog waste
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		No change assuming compliance		No change assuming compliance	
Coastal Scrub, Chaparral, and Grassland	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste and these affects as well as fragmentation can lead to the spread of invasive plant species	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impact		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Native Hardwood Forests and Douglas Fir-Coast Redwood	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste; fragmentation can lead to the spread of invasive plant species	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area is small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Coastal Community	• Long-term, minor, adverse impacts	• Rocky, intertidal habitat only - no coastal dunes; shorebirds or marine mammals utilizing rocky habitat are occasionally subjected to impacts by on-leash dogs through barking, chasing, and proximity to roosting or feeding birds or other wildlife	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect shorebirds and marine mammals utilizing rocky habitat, although on-leash dogs can still disturb roosting and feeding birds as well as marine mammals by barking and their presence	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect shorebirds and marine mammals utilizing rocky habitat, although on-leash dogs can still disturb roosting and feeding birds as well as marine mammals by barking and their presence	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect shorebirds and marine mammals utilizing rocky habitat, although on-leash dogs can still disturb roosting and feeding birds as well as marine mammals by barking and their presence	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect shorebirds and marine mammals utilizing rocky habitat, although on-leash dogs can still disturb roosting and feeding birds as well as marine mammals by barking and their presence
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Coastal Scrub Chaparral, and Grassland Wildlife	• Long-term, minor to moderate, adverse impacts	• Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue and disturbance includes digging, trampling, and chasing; trails within this site are easily accessible from residential areas and generally receives heavy use by visitors	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible and generally receives heavy use by visitors	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible and generally receives heavy use by visitors	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible and generally receives heavy use by visitors	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; on-leash dogs can still disturb wildlife; trails and the LOD area is small portion of the entire site; trails within this site are easily accessible and generally receives heavy use by visitors
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Native Hardwood Forest/Douglas-Fir and Coast Redwoods	• Long-term, minor, adverse impacts	• Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; this habitat and supporting wildlife constitutes a very small portion of entire site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; this habitat and supporting wildlife constitutes a very small portion of entire site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; this habitat and supporting wildlife constitutes a very small portion of entire site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; this habitat and supporting wildlife constitutes a very small portion of entire site	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect habitat off-trail as well as wildlife; this habitat and supporting wildlife constitutes a very small portion of entire site
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Species of Special Status										
Mission blue butterfly	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dogs could damage mission blue butterfly habitat in the trail beds and adjacent to the trails/roads; protective fencing for habitat does not exclude noncompliant dogs</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Prohibiting dogs on the Battery Yates Loop would protect mission blue butterfly habitat, but dogs would be allowed on Drown Fire Road, where host plants occur unfenced along the road</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Allowing dogs along Battery Yates Loop and Drown Fire Road would affect butterfly habitat, but impacts would be localized at the site</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Prohibiting dogs on the Battery Yates Loop and Drown Fire Road would provide additional protection of mission blue butterfly habitat</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance,</li></ul>	<ul style="list-style-type: none"><li>Allowing dogs along Battery Yates Loop and Drown Fire Road would affect butterfly habitat, but impacts would be localized at the site</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Cultural Resources	<ul style="list-style-type: none"><li>• Negligible to long-term, minor, site-specific and localized adverse impacts to historic structures; and negligible to long-term minor localized adverse impacts to cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to historic structures and cultural landscapes</li></ul>	<ul style="list-style-type: none"><li>• Negligible to beneficial impacts for historic structures and cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative B would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative C would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative D would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative E would be no adverse effects to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li></ul>
Cumulative Impacts	Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.	
Impact change compared to current condition	NA		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impact	• On-leash dog walking would still be allowed on site.	• Negligible impacts	• On-leash dog walking would still be allowed on site	• Negligible impacts	• On-leash dog walking would still be allowed on site	• Long-term, minor, adverse impacts	• Dog walking would be on leash and in designated areas	• Negligible impacts	• On-leash dog walking would still be allowed on site
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Visitors would still encounter dogs throughout the site.	• Negligible impacts	• Visitors would still encounter throughout the site.	• Negligible impacts	• Visitors would still encounter throughout the site.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Negligible impacts	• Visitors would still encounter throughout the site.
Cumulative impacts	• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park • Negligible cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Health and Safety</b>	• Negligible impacts	• Risk from encounters with unruly or aggressive dogs still possible	• Negligible impacts, assuming compliance	• Risk from encounters with unruly or aggressive dogs still possible but minimized from leash requirements and number of dogs allowed	• Negligible impacts, assuming compliance	• Risk from encounters with unruly or aggressive dogs still possible but minimized from leash requirements and number of dogs allowed	• Negligible impacts, assuming compliance	• Risk from encounters with unruly or aggressive dogs still possible but minimized from leash requirements and no commercial dog walking	• Negligible impacts, assuming compliance	• Risk from encounters with unruly or aggressive dogs still possible but minimized from leash requirements and number of dogs allowed
Cumulative Impacts	Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		No change assuming compliance		No change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
UPPER AND LOWER FORT MASON										
Soil and Geology	• Long-term, moderate, adverse impact	• Soil compaction, erosion, and nutrient addition would occur in lawn areas and areas off of the trail since dogs would be under voice control.	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function but on leash areas are a large portion of the site and dogs are not limited to trails/roads.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; soils disturbance in ROLA; land adjacent to paved trails and sidewalks. ROLAs are only a portion of the entire site	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; soils disturbance in ROLA; land adjacent to paved trails and sidewalks. ROLAs are a small portion of the entire site	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function off-trail; soils disturbance in ROLA; land adjacent to paved trails and sidewalks. ROLAs are a small portion of the entire site
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation	NA		NA		NA		NA		NA	
Wildlife	NA		NA		NA		NA		NA	
Species of Special Status	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>• Negligible to long-term, minor, site-specific and localized adverse impacts to historic structures; and negligible to long-term minor localized adverse impacts to cultural landscapes.</li> <li>• For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to historic structures and cultural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible to beneficial impacts for historic structures and cultural landscapes</li> <li>• For purposes of Section 106 of the NHPA, the assessment for alternative B would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes</li> <li>• For purposes of Section 106 of the NHPA, the assessment for alternative C would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes</li> <li>• For purposes of Section 106 of the NHPA, the assessment for alternative D would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li> </ul>	<ul style="list-style-type: none"> <li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes</li> <li>• For purposes of Section 106 of the NHPA, the assessment for alternative E would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li> </ul>
Cumulative Impacts	Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.	
Impact change compared to current condition	NA		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impacts	• On-leash dog walking would still be allowed on site	• Negligible impacts	• On-leash dog walkers would still be allowed on site	• Beneficial impacts	• Off-leash dog walking in two ROLAs	• Beneficial impacts	• Off-leash dog walking in one ROLA.	• Beneficial impacts	• Off-leash dog walking in two ROLAs
Visitors who prefer not to have dogs at the park	• Long-term, minor to moderate, adverse impacts	• Visitors would still encounter dogs throughout the site.	• Long-term, minor, adverse impacts	• Visitors would encounter dog walking throughout the site.	• Long-term, moderate, adverse impacts	• Visitors would now encounter off-leash dog walking - ROLA	• Long-term, minor, adverse impacts	• Visitors would now encounter off-leash dog walking. - ROLA	• Long-term, moderate, adverse impacts	• Visitors would now encounter off-leash dog walking.- ROLA
Cumulative impacts	• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, minor to moderate, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, moderate, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, moderate, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management  • ROLAs would create long-term, minor adverse impacts to park operations	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.  • Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management  • ROLAs would create long-term, minor adverse impacts to park operations	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.  • Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management  • ROLAs would create long-term, minor adverse impacts to park operations	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.  • Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Long-term, moderate, adverse impacts	• Continued incidents related to unruly or aggressive dogs that may place visitors and park staff health or safety at risk. History of dog bites/attacks, pet rescues, noncompliance with the leash law.	• Long-term, minor, adverse impacts, assuming compliance	• Incidents related to unruly or aggressive dogs may place visitors and park staff health or safety at risk. History of dog bites/attacks, pet rescues.	• Long-term, minor to moderate, adverse impacts, assuming compliance	• Incidents related to unruly or aggressive dogs may place visitors and park staff health or safety at risk.	• Long-term, minor to moderate, adverse impacts, assuming compliance	• Incidents related to unruly or aggressive dogs may place visitors and park staff health or safety at risk.	• Long-term, minor to moderate, adverse impacts, assuming compliance	• Incidents related to unruly or aggressive dogs may place visitors and park staff health or safety at risk.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
CRISSY FIELD (INCLUDES WPA)										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil compaction, erosion, and nutrient addition would occur at Crissy marsh and marsh inlet. Dogs digging would disturb dunes and nutrient addition on beach would occur.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function within fenced areas and in the WPA, but soil disturbance would occur where dogs are allowed in non-fenced areas which make up a large portion of the entire site, including the trail margins.	• Long-term, minor to moderate, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function in the WPA; soil disturbance would occur on the promenade, trails and grassy areas; these impacts would occur within a large portion of the entire site.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function in the WPA and Central Beach; soil disturbance would occur on the promenade, eastern portion of the airfield, trails and grassy areas; these impacts would occur within a large portion of the entire site.	• Long-term, minor to moderate, adverse impacts assuming compliance	• Physical restraint of dogs would protect soil function in fenced areas; soil disturbance would occur on the promenade, trails and grassy areas; these impacts would occur within a large portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Water Quality	• Long-term, minor to moderate, adverse impacts	• Increased turbidity to tidal inlet, marsh and localized, adjacent areas of San Francisco Bay as well as addition of nutrients and pathogens from dog waste; however pollutants are dispersed in high energy beach environment,	• Negligible impacts, assuming compliance	• Leash restraints would minimize the opportunity for dogs to gain entry to water bodies	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Dog access to water bodies would be limited from enforcement of leash restraints or ROLA requirements, but dogs could access the ocean from the beach ROLA	• Negligible impacts, assuming compliance	• Assuming compliance, dogs would not have access to the tidal inlet or marsh or adjacent areas of San Francisco Bay	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Leash requirements and regulated ROLAs would minimize dog access to tidal inlet, marsh and adjacent areas of San Francisco Bay, but dogs could access the ocean from the beach ROLA
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Vegetation</b>										
Coastal Community	• Long-term, moderate, adverse impacts	• Restored dune areas are fenced, but there is considerable access to dune habitat which is also present within the WPA and subject to impacts by dogs through trampling, digging, and dog waste	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area are a small portion of the entire site; WPA (which supports dunes) would be closed to dogs	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation in restored dune areas; trails, LOD, and ROLA are a small portion of the entire site; WPA (which supports dunes) would be closed to dogs	• Negligible impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation; LOD area is a small portion of the entire site; WPA (which supports dunes) would be closed to dogs	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation in restored dune areas; trails, LOD, and ROLAs are a small portion of the entire site; WPA (which supports dunes) would be open to on-leash dogs
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Wetlands and Aquatic Habitat	• Long-term, minor, adverse impacts on tidal wetlands (Negligible impact to freshwater wetlands)	• Tidal marsh vegetation is affected by dogs through trampling and increased turbidity; despite fencing, dogs under voice control gain access to the tidal marsh; freshwater wetland areas are fenced to prohibit access by dogs and people	• Negligible impacts assuming compliance	• Physical restraint of dogs, and the existing fence would protect tidal marsh wetlands, which would be closed to dogs	• Negligible impacts assuming compliance	• Physical restraint of dogs and the existing fence would protect tidal marsh wetlands, which would be closed to dogs	• Negligible impacts assuming compliance	• Compliance in ROLA, physical restraint of dogs, and the existing fence would protect tidal marsh wetlands, which would be closed to dogs	• Negligible impacts assuming compliance	• Compliance in ROLA, physical restraint of dogs, and the existing fence would protect tidal marsh wetlands, which would be closed to dogs
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Coastal Community	<ul style="list-style-type: none"> <li>Long-term, minor to moderate, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Shorebirds on beach and within WPA (seasonal leash restriction is often violated in the WPA) are occasionally to frequently subjected to impacts dogs through barking and chasing; visitor usage is high at this site; marine mammals would occasionally be subjected to impacts from dogs on the beach.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect shorebirds and marine mammals, although on-leash dogs can still disturb birds</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Shorebirds would be protected through WPA site closure to dogs and by physical restraint of dogs in other areas; ROLA encompasses about one-third of beach habitat at the entire site.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Prohibiting dogs on all beach areas would protect shorebirds and stranded marine mammals; no coastal community habitat or wildlife in airfield ROLA, which makes up less than a third of the site.</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor to moderate, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs allowed in majority of coastal community at Crissy Field, including WPA and East Beach (on-leash) as well as ROLA; ROLA encompasses about one-third of beach habitat; on-leash dogs can still disturb birds</li> </ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
Wetlands and Aquatic Habitat	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>The tidal marsh is a high usage area for birds and is fenced although dogs have been observed in the marsh; dogs that gain access to the marsh can disturb by barking, chasing, and proximity to roosting or feeding birds; visitor usage is high at this site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited in marsh; physical restraint of dogs would not allow access to marsh; on-leash dogs could still infrequently disturb roosting and feeding birds by barking and their presence</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited in marsh; physical restraint of dogs and compliance in ROLA would not allow access to marsh; on-leash dogs could still infrequently disturb roosting and feeding birds by barking and their presence</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited in marsh; physical restraint of dogs and compliance in ROLA would not allow access to marsh; on-leash dogs could still infrequently disturb roosting and feeding birds by barking and their presence</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited in marsh; physical restraint of dogs and compliance in ROLAs would not allow access to marsh; on-leash dogs could still infrequently disturb roosting and feeding birds by barking and their presence</li> </ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Species of Special Status</b>										
Western Snowy Plover	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>The seasonal leash restriction is frequently violated in the WPA; dogs would continue to disturb and/or harass the birds in the WPA and potentially limit their use of preferred habitat, interrupt roosting or foraging behavior; frequent disturbance of this type affects fat reserves needed for migration and breeding</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Habitat and individual species of western snowy plovers would be protected through WPA site closure to dogs and by physical restraint of dogs in other areas; use of preferred habitat in WPA by the plover would not be limited; is consistent with the Recovery Plan for the western snowy plover</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Habitat and individual species of western snowy plovers would be protected through WPA site closure to dogs and by physical restraint of dogs in other areas; use of preferred habitat in WPA by the plover would not be limited; consistent with the Recovery Plan for the western snowy plover</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Habitat and individual species of western snowy plovers would be protected through WPA site closure to dogs and by physical restraint of dogs in most areas; ROLA is not located adjacent to WPA; use of preferred habitat in WPA by the plover would not be limited; consistent with the Recovery Plan for the western snowy plover</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs in the WPA would reduce chasing, but leashed dogs can bark and/or lunge at feeding and roosting western snowy plovers, causing disturbance and/or harassment in a relatively small area; beach ROLA is located adjacent to WPA; use of preferred habitat in WPA by the plover may be limited; not consistent with the Recovery Plan for the western snowy plover</li></ul>
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
California Seablite	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dogs have been observed in the marsh and if the marsh restoration project was expanded, dogs would affect the seablite through trampling, digging, or dog waste</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would continue to be prohibited in Crissy Marsh; there would be potential for future restoration projects to restore species</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would continue to be prohibited in Crissy Marsh; there would be potential for future restoration projects to restore species</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would continue to be prohibited in Crissy Marsh; there would be potential for future restoration projects to restore species</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would continue to be prohibited in Crissy Marsh; there would be potential for future restoration projects to restore species</li></ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impact		Negligible cumulative impact		Negligible cumulative impact		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, site-specific and localized adverse impacts to historic structures; and negligible to long-term minor localized adverse impacts to cultural landscapes.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to historic structures and cultural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to beneficial impacts for historic structures and cultural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li> </ul>	<ul style="list-style-type: none"> <li>Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li> </ul>
	<ul style="list-style-type: none"> <li>For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in <i>no adverse effects</i> to cultural resources.</li> </ul>		<ul style="list-style-type: none"> <li>For purposes of Section 106 of the NHPA, the assessment for alternative B would be <i>no adverse effects</i> to cultural resources.</li> </ul>		<ul style="list-style-type: none"> <li>For purposes of Section 106 of the NHPA, the assessment for alternative C would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Site-specific adverse impacts to cultural resources ranging from negligible to minor are associated with the Crissy Airfield's use as a ROLA.</li> </ul>	<ul style="list-style-type: none"> <li>For purposes of Section 106 of the NHPA, the assessment for alternative D would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Site-specific adverse impacts to cultural resources ranging from negligible to minor are associated with the Crissy Airfield's use as a ROLA.</li> </ul>	<ul style="list-style-type: none"> <li>For purposes of Section 106 of the NHPA, the assessment for alternative E would be <i>no adverse effects</i> to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Site-specific adverse impacts to cultural resources ranging from negligible to minor are associated with the Crissy Airfield's use as a ROLA.</li> </ul>
Cumulative Impacts	Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.	
Impact change compared to current condition	NA		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• Beneficial impact	• Dog walking would still be allowed on site and off-leash.	• Long-term, moderate, adverse impacts	• Dog walking would be on-leash and in designated areas.	• Long-term, minor to moderate, adverse impacts	• Off-leash dog walking would be limited to designated areas.	• Long-term, moderate, adverse impacts	• Off-leash dog walking would be limited to designated areas.	• Long-term, minor, adverse impacts	• Off-leash dog walking would be limited to designated areas.
Visitors who prefer not to have dogs at the park	• Long-term, moderate, adverse impacts	• Visitors would still encounter off-leash dog walking in most areas of the site.	• Beneficial impacts	• Dog walking would no longer be off-leash and on-leash dog walking would be in restricted areas.	• Beneficial impacts	• Dog walking off-leash would be restricted to designated areas.	• Beneficial impacts	• Dog walking off-leash would be restricted to designated areas.	• Beneficial impacts	• Dog walking off-leash would be restricted to designated areas.
Cumulative impacts	• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park • Long-term, moderate, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, minor to moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, moderate, adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Park Operations</b>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs and due to the history of frequent incidents of noncompliance</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs and due to the history of frequent incidents of noncompliance</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.</li> <li>Due to a continued need for enforcement activities and monitoring for compliance particularly at problematic sites, and sites with unfenced boundaries for ROLAs and due to the history of frequent incidents of noncompliance</li> </ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Continued incidents related to unruly or aggressive dogs that may place visitors and park staff health or safety at risk. Past history of incidents is high</li></ul>	<ul style="list-style-type: none"><li>In the WPA no impacts, assuming compliance</li><li>Long-term, minor, adverse impacts in other areas under dog management, assuming compliance</li><li>Short-term moderate adverse impacts on park staff during education and enforcement period</li></ul>	<ul style="list-style-type: none"><li>Dogs are prohibited</li><li>Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs; high use area</li><li>Increased confrontations with visitors/dogs could occur</li></ul>	<ul style="list-style-type: none"><li>In the WPA no impacts, assuming compliance</li><li>Long-term, minor to moderate, adverse impacts in other areas under dog management, assuming compliance</li><li>Short-term moderate adverse impacts on park staff during education and enforcement period</li></ul>	<ul style="list-style-type: none"><li>Dogs are prohibited</li><li>Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs; high use area</li><li>Increased confrontations involving visitors/dogs could occur</li></ul>	<ul style="list-style-type: none"><li>In the WPA, on East and Central Beaches no impacts, assuming compliance</li><li>Long-term, minor to moderate, adverse impacts in other areas under dog management, assuming compliance</li><li>Short-term moderate adverse impacts on park staff during education period</li></ul>	<ul style="list-style-type: none"><li>Dogs are prohibited</li><li>Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs; high use area</li><li>Increased confrontations involving visitors/dogs could occur</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts in the WPA and other areas under dog management, assuming compliance</li><li>Short-term moderate adverse impacts on park staff during education period</li></ul>	<ul style="list-style-type: none"><li>Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs; high use area</li><li>Increased confrontations between visitors and dogs could occur</li></ul>
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance in the WPA and in other areas		Beneficial assuming compliance in the WPA Beneficial to no change in other areas		Beneficial assuming compliance in the WPA Beneficial to no change in other areas		Beneficial to no change assuming compliance in the WPA and other areas	
FORT POINT										
Soil and Geology	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Soil compaction, erosion, and nutrient addition would occur in the Promenade and areas off of the trails, which contain areas of undisturbed soil.</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soil along trails and road no longer has natural function; the LOD area is small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soil along trails and road no longer has natural function; the LOD area is small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soil along Bay Trail no longer has natural function; the LOD area is small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soil along trails and road no longer has natural function; the LOD area is small portion of the entire site.</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation	NA		NA		NA		NA		NA	
Wildlife	NA		NA		NA		NA		NA	
Species of Special Status	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>Negligible to long-term minor, site-specific and localized adverse impacts to historic structures and cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to archeological sites, historic structures and cultural landscapes.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to beneficial impacts to historic structures and cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative B would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits and negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative C would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits, negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative D would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources as well as the prohibition of dogs in areas containing sensitive resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits, negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative E would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources as well as the prohibition of dogs in areas containing sensitive resources.</li> </ul>
Cumulative impacts	<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts.</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>	
Impact change compared to current condition	NA		Beneficial to no change for historic structures, and cultural landscapes.		Beneficial to no change for historic structures, and cultural landscapes.		Beneficial to no change for historic structures, and cultural landscapes		Beneficial to no change for historic structures, and cultural landscapes	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impacts	• On-leash dog walking would still be allowed on site	• Negligible impacts	• On-leash dog walking would still be allowed on site	• Negligible impacts	• On-leash dog walking would still be allowed on site	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas; no off-leash dog walking available.	• Negligible impacts	• On-leash dog walking would still be allowed on site
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Visitors would still encounter dog walking throughout the site; little opportunity for no dog experience.	• Negligible to long-term, minor, adverse impacts	• Visitors would still encounter dog walking throughout the site; no off-leash dogs.	• Negligible to long-term, minor, adverse impacts	• Visitors would still encounter dog walking throughout the site; no off-leash dogs.	• Beneficial impacts	• Dog walking would be on-leash and in limited areas; no dog experience available.	• Negligible to long-term, minor, adverse impacts	• Visitors would still encounter dog walking throughout the site; no off-leash dogs.
Cumulative impacts	• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Negligible to long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Negligible to long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term, minor, adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Negligible to long-term, minor, adverse cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Due to the hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc., records management, court appearances, etc. to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Long-term, minor to moderate, adverse impacts	• Pet-related safety incidents (rescues); noncompliance	• Long-term, minor, adverse impacts, assuming compliance	• Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs	• Long-term, minor, adverse impacts, assuming compliance	• Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; commercial dog walking increases number of dogs encountered; however, leash requirements would reduce opportunity by providing more control over dogs	• Long-term, minor, adverse impacts, assuming compliance	• Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs	• Long-term, minor, adverse impacts, assuming compliance	• Continued risk to safety and health of visitors and park staff from potential incidents resulting from unruly or aggressive dogs; however, leash requirements would reduce opportunity by providing more control over dogs
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
BAKER BEACH to GOLDEN GATE BRIDGE										
Soil and Geology	• Long-term, minor to moderate, adverse impacts	• Soil compaction, erosion, disturbance from digging, and nutrient addition would occur in areas adjacent to the trails; disturbance to dunes and nutrient addition on beach would occur	• Negligible impact assuming compliance	• Soils along trails no longer have natural function; the LOD and beach area are only a small portion of the entire site	• Negligible impact assuming compliance	• Soils along trails no longer have natural function; the LOD and beach area are only a small portion of the entire site	• Negligible impact assuming compliance	• Soils along trails no longer have natural function; the LOD and beach area are only a small portion of the entire site	• Long-term, minor, adverse impacts assuming compliance	• Soils along trails no longer have natural function; the LOD area and ROLA are only a portion of the entire site
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Water Quality	• Long-term, minor to moderate, adverse impacts	• Dogs could cause increased turbidity and increased nutrients and pathogens entering water bodies including Lobos Creek and the ocean; however pollutants are dispersed in high energy beach environment	• Negligible impacts, assuming compliance	• Dogs would be restricted by area closures and by leash; potential for waste to enter Lobos Creek flow at the beach would be minimized; dilution factor of adjacent ocean waters would minimize waste products that create water quality impacts	• Negligible impacts assuming compliance	• Dogs would be restricted by area closures and by leash; potential for waste to enter Lobos Creek flow at the beach would be minimized; dilution factor of adjacent ocean waters would minimize waste products that create water quality impacts	• Negligible impacts assuming compliance	• Entry of nutrients/pathogens into water bodies and incidents of turbidity would be minimized; the dilution factor of the adjacent Pacific Ocean waters would minimize water quality impacts	• Long-term, minor, adverse impacts assuming compliance	• The ROLA is located at the south end of the beach and at Lobos Creek, where there is potential for direct contact with Lobos Creek including nutrients and pathogens entering the creek and incidents of turbidity; dogs could also gain access to the ocean in the beach ROLA
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Vegetation										
Coastal Community	• Long-term, moderate, adverse impacts	• Dogs and their owners/walkers have created social trails in coastal dune habitat which would be subject to impacts by dogs through trampling, digging, and dog waste	• Negligible impact, assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area are a small portion of the entire site; use of social trails would be reduced.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area are a small portion of the entire site; use of social trails would be reduced.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area are a small portion of the entire site; use of social trails would be reduced.	• Long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect dune vegetation; no unfenced dunes would be affected; the ROLA, trails and LOD area are a small portion of the entire site; use of social trails would be reduced.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Coastal Scrub, Chaparral, and Grassland	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs would be caused through physical damage such as trampling, digging, and dog waste; these affects as well as fragmentation can lead to the spread of invasive plant species	• Negligible impacts, assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site	• Negligible impacts, assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site	• Negligible impacts, assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site; ROLA is located on the beach, not in coastal scrub habitat
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wildlife										
Coastal Community	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Shorebirds on beach would frequently be subjected to impacts from on-leash and voice-control dogs through dogs barking at, chasing after, and being in proximity to roosting or feeding birds; shorebird numbers are fairly high, visitor use is low to moderate, and coastal habitat is extensive at this site; marine mammals would occasionally be subjected to impacts from dogs on the beach</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach.</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor to moderate adverse impacts assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash in some areas of the site would protect shorebirds and other wildlife but the presence of dogs barking and running (even while on leash) would disturb wildlife; ROLA encompasses about one-third of beach habitat at the site</li></ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Coastal Scrub, Chaparral, and Grassland	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife; wildlife may also be displaced from high quality habitat that is degraded by the presence of dogs; trails in this site are easily accessible from residential areas and receive heavy use by visitors</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site; beach ROLA is not in coastal scrub habitat</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Species of Special Status										
San Francisco Lessingia	<ul style="list-style-type: none"><li>• Negligible to long-term, moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Dogs and their walkers have created social trails in habitat that supports a small population of this species at the site; portions of the recovery unit for this species are in and adjacent to areas where dogs under voice control are allowed; this plant could be disturbed by dogs since dogs are allowed on the trail to Battery Crosby near a small population of this plant; however, the Lobos Valley, where the core population of the plant occurs at GGNRA, is not in the study area for this plan/EIS</li></ul>	<ul style="list-style-type: none"><li>• Negligible to long-term, minor impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs on-leash would protect San Francisco lessingia and potential habitat, but recovery and enhancement sites for the species are located in and adjacent to areas where on-leash dog walking would be allowed; dogs could affect the San Francisco lessingia through trampling, digging, or dog waste</li></ul>	<ul style="list-style-type: none"><li>• Negligible to long-term, minor impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs on-leash would protect San Francisco lessingia and potential habitat, but recovery and enhancement sites for the species are located in and adjacent to areas where on-leash dog walking would be allowed; dogs could affect the San Francisco lessingia through trampling, digging, or dog waste</li></ul>	<ul style="list-style-type: none"><li>• Negligible to long-term, minor impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs on-leash would protect San Francisco lessingia and potential habitat, but recovery and enhancement sites for the species are located in and adjacent to areas where on-leash dog walking would be allowed; dogs could affect the San Francisco lessingia through trampling, digging, or dog waste</li></ul>	<ul style="list-style-type: none"><li>• Negligible to long-term, minor impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs on-leash would protect San Francisco lessingia and potential habitat, but recovery and enhancement sites for the species are located in and adjacent to areas where on-leash dog walking would be allowed; dogs could affect the San Francisco lessingia through trampling, digging, or dog waste</li></ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Presidio (Raven's) Manzanita	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>Clones of this serpentine endemic plant exist in the vicinity of the Coastal Trail midway to the Golden Gate Bridge; off-trail dogs could affect this species although it exists in soil outcrops that are relatively inaccessible at the site; dogs could affect this plant by trampling, digging, or dog waste; the restored population is being affected and few individuals of the species exist at the site, so impacts could affect the reproductive success of the plant</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on leash would protect Presidio manzanita and potential habitat; the restored population would be protected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Presidio manzanita and potential habitat; the restored population would be protected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Presidio manzanita and potential habitat; the restored population would be protected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Presidio manzanita and potential habitat; the restored population would be protected</li></ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Marin Dwarf-flax	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>This annual serpentine endemic plant exists in the vicinity of the Coastal Trail midway to the Golden Gate Bridge; off-trail dogs could affect this species by trampling, digging, or dog waste; individuals of the species could be injured or killed; few individuals of the species exist at the site, so reproductive success could be affected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Marin dwarf flax and potential habitat; the restored population would be protected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Marin dwarf flax and potential habitat; the restored population would be protected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Marin dwarf flax and potential habitat; the restored population would be protected</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash would protect Marin dwarf flax and potential habitat; the restored population would be protected</li></ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>Negligible to long-term minor, site-specific and localized adverse impacts to historic structures.</li> <li>For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to archeological sites, historic structures and cultural landscapes.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to beneficial impacts to historic structures and cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative B would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits and negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative C would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits, negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative D would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources as well as the prohibition of dogs in areas containing sensitive resources.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits, negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes.</li> <li>For purposes of Section 106 of the NHPA, the assessment for alternative E would be no adverse effects to cultural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources as well as the prohibition of dogs in areas containing sensitive resources.</li> </ul>
Cumulative impacts	<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts.</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>		<ul style="list-style-type: none"> <li>Beneficial cumulative impacts related to preservation and enhancement efforts</li> <li>Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li> </ul>	
Impact change compared to current condition	NA		Beneficial to no change for historic structures, and cultural landscapes.		Beneficial to no change for historic structures, and cultural landscapes.		Beneficial to no change for historic structures, and cultural landscapes		Beneficial to no change for historic structures, and cultural landscapes	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• No impact	• Dog walking would still be allowed on site both on-leash and off-leash.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas; no off-leash dog walking would be available.	• Long-term, minor, adverse impacts	• Dog walking would be on-leash and in designated areas; no off-leash dog walking would be available.	• Long-term, moderate, adverse impacts	• Dog walking would be on-leash and in designated areas; no off-leash dog walking would be available.	• Negligible impact	• Dog walking would still be allowed on site; dog walking under voice and sight control would be available.
Visitors who prefer not to have dogs at the park	• Long-term, minor to moderate, adverse impact	• Visitors would still encounter dog walking throughout the site.	• Beneficial impact	• Off-leash dog walking would no longer be allowed.	• Beneficial impact	• Off-leash dog walking would no longer be allowed.	• Beneficial impact	• Off-leash dog walking would no longer be allowed; a no dog experience would be available on beach.	• Long-term, minor, adverse impacts	• Visitors would still encounter dog throughout the site; a no-dog experience would not be available
Cumulative impacts	• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park • Long-term minor to moderate adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the beach • Long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Park Operations</b>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts on park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts on park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>
Cumulative impacts	Long-term minor adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>Long-term, minor to moderate adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Dog walking under voice control would continue to add risk to safety and health of visitors and park staff from encounters with unruly or aggressive dogs</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Leash restrictions and limitations on the number of dogs would reduce risk to safety and health of visitors and park staff</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Leash restrictions and limitations on the number of dogs would reduce risk to safety and health of visitors and park staff</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Leash restrictions and limitations on the number of dogs would reduce risk to safety and health of visitors and park staff</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Voice and sight control in the ROLA would add risk to safety and health of visitors and park staff from encounters with unruly or aggressive dogs</li> </ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
FORT MILEY										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil compaction, erosion, digging, and nutrient addition would occur in areas off trail and outside picnic areas since dogs would be under voice control	• No impact assuming compliance	• Dogs would not be allowed in the site; therefore, no soil would be disturbed	• Negligible impact assuming compliance	• Soil along trails no longer has natural function; the LOD area is a small portion of the entire site.	• No impact assuming compliance	• Dogs would not be allowed in the site; therefore, no soil would be disturbed	• Long-term, minor adverse impacts assuming compliance	• Soil along trails no longer has natural function; the LOD and ROLA areas are a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Other coniferous communities	• Negligible impacts	• Stands of mature Monterey cypress are unlikely to be affected by dogs through trampling, digging, or dog waste due to their already established nature at the site and previous development at Fort Miley	• Negligible impacts assuming compliance	• Stands of mature Monterey cypress are unlikely to be affected by dogs through trampling, digging, or dog waste due to their already established nature at the site and previous development at Fort Miley	• Negligible impacts assuming compliance	• Stands of mature Monterey cypress are unlikely to be affected by dogs through trampling, digging, or dog waste due to their already established nature at the site and previous development at Fort Miley	• Negligible impacts assuming compliance	• Stands of mature Monterey cypress are unlikely to be affected by dogs through trampling, digging, or dog waste due to their already established nature at the site and previous development at Fort Miley	• Negligible impacts assuming compliance	• Stands of mature Monterey cypress are unlikely to be affected by dogs through trampling, digging, or dog waste due to their already established nature at the site and previous development at Fort Miley
Cumulative impacts	Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		No change assuming compliance		No change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Other coniferous communities	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife would continue; these areas make up a small portion of the entire site; occasional disturbance would include physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited from the site</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs would still infrequently disturb wildlife behavior; wildlife may avoid areas that allow on-leash dog walking and be displaced from habitat that is degraded by the presence of dogs; this habitat and supporting wildlife constitutes a very small portion of entire site</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited from the site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs in on-leash areas would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs would still infrequently disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from habitat that is degraded by the presence of dogs; this habitat constitutes a very small portion of entire site; LOD and ROLA areas are a small portion of the site</li></ul>
Cumulative impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Species of Special Status	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Cultural Resources	<ul style="list-style-type: none"><li>• Negligible to long-term minor, site-specific and localized adverse impacts to historic structures and negligible to long-term minor localized adverse impacts to cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to historic structures and cultural landscapes.</li></ul>	<ul style="list-style-type: none"><li>• Negligible to beneficial impacts to historic structures and cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative B would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative C would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits, negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative D would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources as well as the prohibition of dogs in areas containing sensitive resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits, negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative E would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources as well as the prohibition of dogs in areas containing sensitive resources.</li></ul>
Cumulative impacts	<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities), impacts to views and vistas associated with cultural landscapes, and historic structure demolition.</li></ul>	
Impact change compared to current condition	NA		Beneficial to no change for historic structures and cultural landscapes.		Beneficial to no change for historic structures and cultural landscapes.		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impact	• Dog walking would still be allowed on site, both on-leash and off-leash.	• Long-term, minor, adverse impacts	• No dog walking would be allowed; site is low use area for dog walkers	• Long-term, minor, adverse impacts	• Off-leash dog walking would no longer be allowed; area for on-leash dog walking would be reduced	• Long-term, minor, adverse impacts	• Dog walking would no longer be allowed on site; site is low use area for dog walking	• Long-term, minor, adverse impacts	• Dog walking under voice and sight control would be limited to one area.
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impacts	• Visitors would still encounter dogs throughout the site.	• Beneficial impact	• Dog walking would no longer be allowed on site; a no-dog experience would be available.	• Beneficial impact	• Dog walking under voice control would no longer be allowed; a no-dog experience would be available	• Beneficial impact	• Dog walking would no longer be allowed on site; a no-dog experience would be available.	• Beneficial impact	• Dog walking under voice and sight control would be limited to one area; a no-dog experience would be available
Cumulative impacts	• No cumulative impacts for visitors who would prefer to walk dogs  • Long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Park Operations	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul> <ul style="list-style-type: none"><li>ROLAs would create long-term, minor adverse impacts to park operations</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul> <ul style="list-style-type: none"><li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li></ul>
Cumulative impacts	Long-term, minor, adverse cumulative impact		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	<ul style="list-style-type: none"><li>Negligible impacts</li></ul>	<ul style="list-style-type: none"><li>Dog walking under voice control would continue to potentially be a risk to the safety and health of visitors and park staff</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Risk to safety and health of visitors and park staff would be reduced by leash restrictions and limitation on number of dogs; no recorded incidents have occurred in recent years</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Risk to safety and health of visitors and park staff would be reduced by leash restrictions and limitation on number of dogs; no recorded incidents have occurred in recent years</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
LANDS END										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil compaction, erosion, digging, and nutrient addition would occur in areas off of the trail since dogs would be under voice control; includes impacts on serpentine soil.	• Negligible impact assuming compliance	• Soil along trails no longer has natural function; the LOD area is a small portion of the entire site.	• Long-term, minor, adverse assuming compliance	• Soil along trails no longer has natural function; the LOD and ROLA areas are a small portion of the entire site.	• Negligible impact assuming compliance	• Soil along trails no longer has natural function; the LOD area is a small portion of the entire site.	• Long-term, minor, adverse impacts assuming compliance	• Soil along trails no longer has natural function; the LOD and ROLA areas are a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Community	• Negligible impact	• Off-leash dogs could access rocky intertidal habitat and affect the vegetation through trampling, digging, and dog waste	• Negligible impact assuming compliance	• Dogs could access rocky intertidal habitat in the LOD, but this area is only a small portion of the entire site	• Negligible impact assuming compliance	• Dogs could access rocky intertidal habitat in the LOD, but this area is only a small portion of the entire site	• Negligible impact assuming compliance	• Dogs could access rocky intertidal habitat in the LOD, but this area is only a small portion of the entire site	• Negligible impact assuming compliance	• Dogs could access rocky intertidal habitat in the LOD, but this area is only a small portion of the entire site
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		No change assuming compliance		No change assuming compliance	
Coastal Scrub, Chaparral, and Grassland	• Long-term, minor to moderate, adverse impacts	• Impacts to vegetation from dogs would be caused through physical damage such as trampling, digging, and dog waste and these affects as well as fragmentation could lead to the spread of invasive plant species	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site but the ROLA is partially located within coastal scrub/chaparral habitat	• Negligible impact, assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible to long-term, minor, adverse impacts assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are small portion of the entire site but the ROLA is partially located within coastal scrub/chaparral habitat
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Coastal Community	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact</li></ul>	<ul style="list-style-type: none"><li>Site consists of rocky, intertidal habitat only—no coastal dunes; shorebirds or marine mammals using rocky habitat would occasionally be subjected to impacts from on-leash dogs barking at, chasing after, and being in proximity to roosting or feeding birds or other wildlife</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals using rocky habitat, although on-leash dogs could still disturb roosting and feeding birds as well as marine mammals through barking and by their presence</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals using rocky habitat, although on-leash dogs could still disturb roosting and feeding birds as well as marine mammals through barking and by their presence</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals using rocky habitat, although on-leash dogs could still disturb roosting and feeding birds as well as marine mammals through barking and by their presence</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals using rocky habitat, although on-leash dogs could still disturb roosting and feeding birds as well as marine mammals through barking and by their presence</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Coastal Scrub, Chaparral, and Grassland	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife; wildlife may also be displaced from high quality habitat that is degraded by the presence of dogs; trails in this site are easily accessible from residential areas and receive heavy use by visitors</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
Species of Special Status	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Cultural Resources	<ul style="list-style-type: none"><li>• Negligible to long-term, minor, site-specific adverse impacts to archeological resources.</li><li>• For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to archeological sites</li></ul>	<ul style="list-style-type: none"><li>• Negligible impacts to archeological resources.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative B would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Negligible impacts to archeological resources.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative C would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>• Negligible impacts to archeological resources.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative D would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>• Negligible impacts to archeological resources.</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative E would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related to the reduction in dog activity in areas of sensitive cultural resources</li></ul>
Cumulative impacts	<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts related to preservation and enhancement efforts.</li><li>• Negligible to long-term, moderate, adverse cumulative impacts related to ground disturbance (transportation, construction activities).</li></ul>	
Impact change compared to current condition	NA		Beneficial to no change for archeological resources		Beneficial to no change for archeological resources		Beneficial to no change for archeological resources		Beneficial to no change for archeological resources	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	<ul style="list-style-type: none"><li>• No impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking would still be allowed on site both on-leash and off-leash.</li></ul>	<ul style="list-style-type: none"><li>• Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed; on-leash dog walking would be limited to two trails</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking would still be allowed on site; dog walking under voice and sight control would be allowed in one area</li></ul>	<ul style="list-style-type: none"><li>• Long-term, minor, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed; on-leash dog walking would be limited to designated areas</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking would still be allowed on site; dog walking under voice and sight control would be allowed in one area</li></ul>
Visitors who prefer not to have dogs at the park	<ul style="list-style-type: none"><li>• Long-term, minor, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Visitors would still encounter dogs throughout the site.</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed; a no-dog experience would be available</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice and sight control would be restricted to one area; a no-dog experience would be available</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed; a no-dog experience would be available</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice and sight control would be restricted to one area; a no-dog experience would be available</li></ul>
Cumulative impacts	<ul style="list-style-type: none"><li>• Beneficial cumulative impacts for visitors who would prefer to walk dogs</li><li>• Negligible cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Park Operations</b>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create long-term, minor adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> <li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create long-term, minor adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> <li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li> </ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>Long-term minor to moderate adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Pet rescues and unruly or aggressive dogs encounters could continue to occur, placing visitors and park staff safety at risk; site experiences moderate use by dog walkers</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Risk to safety and health of visitors and park staff would be reduced by leash restrictions and limitation on number of dogs</li> </ul>	<ul style="list-style-type: none"> <li>Long-term minor adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Pet rescues and unruly or aggressive dogs encounters could continue to occur when dogs are under voice control and would continue to place visitors and park staff safety at risk</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Risk to safety and health of visitors and park staff would be reduced by leash restrictions</li> </ul>	<ul style="list-style-type: none"> <li>Long-term minor adverse impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Pet rescues and unruly or aggressive dogs encounters could continue to occur when dogs are under voice control and would continue to place visitors and park staff safety at risk</li> </ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
SUTRO HEIGHTS PARK										
Soil and Geology	• Long-term, moderate, adverse impacts	• Soil compaction, erosion, digging, and nutrient addition would occur in areas off of the trail since dogs would be under voice control.	• Negligible impact assuming compliance	• Soils along the parapet and paths no longer have natural function; the LOD area is a small portion of the entire site.	• Negligible impact assuming compliance	• Soils along the parapet and paths no longer have natural function; the LOD area is a small portion of the entire site.	• No impact assuming compliance	• Dogs would not be allowed in the site; therefore, no soil would be disturbed.	• Negligible impact assuming compliance	• Soils along the parapet and paths no longer have natural function; the LOD area is a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impact	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation	NA		NA		NA		NA		NA	
Wildlife	NA		NA		NA		NA		NA	
Species of Special Status	NA		NA		NA		NA		NA	
Cultural Resources	NA		NA		NA		NA		NA	
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• No impact	• On-leash dog walking would still be allowed on site.	• Long-term, minor, adverse impact	• Areas for dog walking would be limited to designated areas	• Long-term, minor, adverse impact	• On-leash dog walking would be limited	• Long-term, minor, adverse impact	• No dog walking would be allowed on site.	• Negligible impact	• Dog walking would still be allowed on-leash throughout most of the site.
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impact	• Visitors would still encounter dog walking throughout the site.	• Beneficial impact	• A no-dog experience would be available.	• Beneficial impact	• A no-dog experience would be available.	• Beneficial impact	• A no-dog experience would be available throughout the entire site.	• Negligible to long-term, minor, adverse impact	• Visitors would still encounter dogs throughout the site.
Cumulative impacts	• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Negligible to long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Park Operations</b>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.) records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Health and Safety</b>	<ul style="list-style-type: none"> <li>Negligible impacts</li> </ul>	<ul style="list-style-type: none"> <li>Risk to safety and health of visitors and park staff would be low due to low use by dog walkers; visitors and staff may encounter an unruly or aggressive dog</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Risk to safety and health of visitors and park staff would be low due to low use by dog walkers; visitors and staff may encounter an unruly or aggressive dog</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Risk to safety and health of visitors and park staff would be low due to low use by dog walkers; visitors and staff may encounter an unruly or aggressive dog</li> </ul>	<ul style="list-style-type: none"> <li>No impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited from the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impacts assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Risk to safety and health of visitors and park staff would be low due to low dog walking use; visitors and staff may encounter an unruly or aggressive dog</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
OCEAN BEACH (INCLUDES SPPA)										
Soil and Geology	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Soil compaction, digging, and nutrient addition would occur on the beach since dogs would be under voice control, even though there are no undisturbed areas at the site since the beach was built out from the natural shoreline; erosion of vegetated dunes could also occur</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Prohibiting dogs in the SPPA would protect soil function in the SPPA on the beach; on-leash area is only a portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect soil function on the beach in leashed areas; prohibiting dogs in the SPPA would protect soil function in the SPPA on the beach; disturbance to soil function on the beach could affect habitat quality within the ROLA, but the ROLA makes up a quarter of site and will have a greater impact to soils compared to leash areas.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect soil function in leashed areas; prohibiting dogs in the SPPA would protect soil function in the SPPA on the beach; the on-leash area only makes up about a quarter of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect soil function in leashed areas; disturbance to soil function on the beach could affect habitat quality within the ROLA; even though the ROLA area makes up a quarter of the entire site, the on-leash areas make up the remaining portion of the site.</li></ul>
Cumulative Impacts	Long term, minor, adverse impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Localized increase in turbidity from dogs accessing surface waters including the ocean; increased potential for nutrients and pathogens from dog waste to enter water bodies; however pollutants are dispersed in high energy beach environment</li></ul>	<ul style="list-style-type: none"><li>Negligible impact, assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dog access is limited by restraint; flushing and dilution abilities of the adjacent ocean minimize potential effects</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs would limit dog access to water bodies and opportunities for increased turbidity would be minimized; improved clean-up of dog waste would reduce entry of pathogens and/or nutrients into water bodies, but dogs could access the ocean from the beach ROLA</li></ul>	<ul style="list-style-type: none"><li>Negligible impact, assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs and limiting the areas of on-leash dog walking would result in reducing potential dog access to ocean waters; dilution capabilities of the Pacific Ocean adjacent to Ocean Beach would result in no perceptible water quality changes</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs would limit dog access to water bodies and opportunities for increased turbidity would be minimized; improved clean-up of dog waste would reduce entry of pathogens and/or nutrients into water bodies, but dogs could access the ocean from the beach ROLA</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Vegetation										
Coastal Community	• Long-term, minor, adverse impacts	• The majority of the vegetated dunes along Ocean Beach comprised of the non-native European beachgrass while the sparsely vegetated foredunes consist of native dune grass; these areas would be subject to impacts by dogs through trampling, digging, and dog waste	• Negligible impact assuming compliance	• Physical restraint of dogs would protect dune vegetation even though majority is non-native grass; the trail and the LOD area are a small portion of the entire site	• Negligible impact assuming compliance	• Physical restraint of dogs would protect dune vegetation even though majority is non-native grass; the trail and the LOD area are a small portion of the entire site	• Negligible impact assuming compliance	• Physical restraint of dogs would protect dune vegetation even though majority is non-native grass; the trail and the LOD area are a small portion of the entire site	• Negligible to long-term, minor, adverse impact assuming compliance	• Physical restraint of dogs would protect dune vegetation even though majority is non-native grass; the trail and the LOD area are a small portion of the entire site but the impact on vegetation in the SPPA would occur in a relatively large area of the entire site
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Wildlife										
Ocean Beach SPPA Coastal Community Wildlife	• Long-term, moderate to major, adverse impacts	• The seasonal leash restriction is often violated in the SPPA; dogs would continue to disturb and/or harass the birds, potentially limiting their use of preferred habitat, and to interrupt roosting or foraging behavior, which causes the expenditure of energy and could affect migration and breeding; shorebird numbers are high, visitor use is high, and coastal habitat is extensive at this site	• No impact assuming compliance	• Shorebirds and their habitat would be protected through SPPA site closure to dogs	• No impact assuming compliance	• Shorebirds and marine mammals would be protected through SPPA site closure to dogs	• No impact assuming compliance	• Shorebirds and their habitat would be protected through SPPA site closure to dogs	• Long-term, minor, adverse impact assuming compliance	• On-leash dogs would be allowed in the SPPA during all seasons and would disturb shorebirds and affect wildlife; on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach; dogs would potentially limit shorebird use of preferred habitat
Cumulative Impacts	Long term, moderate to major, and adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Ocean Beach Coastal Community Wildlife	<ul style="list-style-type: none"><li>Long-term, moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dogs would continue to disturb and/or harass birds and potentially limit their use of preferred habitat and interrupt roosting or foraging behavior, which causes expenditure of energy and could affect migration and breeding; south of Sloat Boulevard has high shorebird use in a very narrow beach and north of Stairwell 21 has relatively high shorebird use in a large area with high visitor use; marine mammals would occasionally be subjected to impacts from dogs on the beach</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach; south of Sloat Boulevard has high shorebird use on a very narrow beach and north of Stairwell 21 has relatively high shorebird use in a large area with high visitor use</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor to moderate adverse impact assuming compliance (range included because impacts depend on the seasonal presence of the birds and the level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Shorebirds and marine mammals would be protected at the beach south of Sloat Boulevard where dogs are prohibited, but the ROLA encompasses about a quarter of the beach habitat at the site and off-leash dogs could disturb shorebirds and marine mammals on the beach at this site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach; south of Sloat Boulevard has high shorebird use in a very narrow beach and north of Stairwell 21 has relatively high shorebird use in a large area with high visitor use</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor to moderate adverse impact assuming compliance (range included because impacts depend on the seasonal presence of the birds and the level of activity at the site)</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash at the beach south of Sloat Boulevard would protect shorebirds and marine mammals, although on-leash dogs could still disturb shorebirds and wildlife; the ROLA encompasses only a portion of the beach habitat at the site; off-leash dogs could disturb shorebirds and marine mammals on the beach at this site</li></ul>
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Long-term, minor, and adverse cumulative impacts		Long-term minor to moderate, adverse cumulative impacts		Long term, minor, adverse cumulative impacts		Long term, minor to moderate, and adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Species of Special Status</b>										
Western Snowy Plover (in the SPPA)	<ul style="list-style-type: none"> <li>Long-term, moderate, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>The seasonal leash restriction is frequently violated in the SPPA; dogs would continue to disturb and/or harass the birds and potentially limit their use of preferred habitat and interrupt roosting or foraging behavior, which causes birds to expend energy; frequent disturbance of this type affects fat reserves needed for migration and breeding</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Western snowy plover habitat and individuals would be protected by closing the SPPA site to dogs and physically restraining dogs on leash in other areas; plovers' use of preferred habitat in the SPPA would not be limited; the alternative is consistent with the recovery plan for the western snowy plover.</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Western snowy plover habitat and individuals would be protected by closing the SPPA site to dogs and physically restraining dogs on leash in other areas; plovers' use of preferred habitat in the SPPA would not be limited; the alternative is consistent with the recovery plan for the western snowy plover</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Western snowy plover habitat and individuals would be protected by closing the SPPA site to dogs and physically restraining dogs on leash in other areas; plovers' use of preferred habitat in the SPPA would not be limited; the alternative is consistent with the recovery plan for the western snowy plover</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physically restraining dogs on leash in the SPPA would reduce chasing, but even leashed dogs could bark and/or lunge at feeding and roosting western snowy plovers, causing disturbance and/or harassment in a relatively small area; plovers' use of preferred habitat in SPPA may be limited; this alternative is not consistent with the recovery plan for the western snowy plover</li> </ul>
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Western Snowy Plover (North of Stairwell 21 and South of Sloat Boulevard)	<ul style="list-style-type: none"> <li>Long-term, minor to moderate, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Only small numbers of western snowy plovers have been observed in this area, but disturbance and harassment could occur; also, dogs can access the SPPA from this beach</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Only small numbers of western snowy plovers have been observed in this area (outside the SPPA); plover habitat and individuals would be protected by physically restraining dogs on leash on the beach, but even leashed dogs may affect the behavior of the plover</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Only small numbers of western snowy plovers have been observed in this area (outside the SPPA), but the ROLA would be sited immediately adjacent to the SPPA</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Only small numbers of western snowy plovers have been observed in this area; plover habitat and individuals would be protected by physical restraint of dogs on leash on the beach, but even leashed dogs may affect the small numbers of plovers on the beach where dogs would be allowed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Only small numbers of western snowy plovers have been observed in this area, but the ROLA would be sited immediately adjacent to the SPPA</li> </ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible to long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
<b>Cultural Resources</b>	NA		NA		NA		NA		NA	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	<ul style="list-style-type: none"><li>• No impact</li></ul>	<ul style="list-style-type: none"><li>• Off-leash dog walking would continue along the beach.</li></ul>	<ul style="list-style-type: none"><li>• Long-term, moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed on site; on-leash dog walking would be limited to a portion of the beach</li></ul>	<ul style="list-style-type: none"><li>• Long-term, minor to moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice and sight control would be limited to a portion of the beach</li></ul>	<ul style="list-style-type: none"><li>• Long-term, moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed on site; on-leash dog walking would be limited to a portion of the beach</li></ul>	<ul style="list-style-type: none"><li>• Long-term, minor, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice and sight control would be limited to a portion of the beach</li></ul>
Visitors who prefer not to have dogs at the park	<ul style="list-style-type: none"><li>• Long-term, moderate, adverse impact</li></ul>	<ul style="list-style-type: none"><li>• Visitors would still encounter dog walking throughout the site; site is moderate to high dog use area.</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed on site; a no-dog experience would be available on a large part of the beach</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice and sight control would be limited; a no-dog experience would be available on a large part of the beach</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice control would no longer be allowed on site; a no-dog experience would be available on a large part of the beach</li></ul>	<ul style="list-style-type: none"><li>• Beneficial impact</li></ul>	<ul style="list-style-type: none"><li>• Dog walking under voice and sight control would be limited in designated areas</li></ul>
Cumulative impacts	<ul style="list-style-type: none"><li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Long-term moderate adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Long-term moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Long-term minor to moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Long-term moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>		<ul style="list-style-type: none"><li>• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the beach</li><li>• Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park</li></ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Park Operations	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> <li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li> <li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li> </ul>	<ul style="list-style-type: none"> <li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li> <li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li> </ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Long-term, moderate adverse impacts	• Site experiences high use; a large number of violations including dog bites/attacks and pet rescues have been recorded	• Short-term moderate and adverse impacts on park staff during implementation	• Site has history of confrontations and violations of regulations	• Short-term, moderate, adverse impacts on park staff during initial education and enforcement period	• Site has history of confrontations and violations of regulations,	• Short-term moderate, adverse impacts on park staff during implementation	• Site has history of confrontations and violations of regulations	• Short-term moderate adverse impacts on park staff during implementation	• Site has history of confrontations and violations of regulations
			• Long-term, minor adverse, assuming compliance	• Continued opportunity would exist for visitors and park staff to encounter unruly or aggressive dogs placing their health and safety at risk	• Long-term, minor to moderate, adverse impacts, assuming compliance	• Chance of encounters with unruly or aggressive dogs would continue to place visitors and park staff at risk; site is moderate to high use, multiple use area	• Long-term, minor adverse impacts assuming compliance	• Opportunity would continue for visitors and park staff to encounter unruly or aggressive dogs placing their health and safety at risk	• Long-term, minor to moderate, adverse impacts assuming compliance	• Chance of encounters with unruly or aggressive dogs would continue to place visitors and park staff at risk; site is high use, multiple use area
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term minor to moderate adverse cumulative impacts		Long-term minor adverse cumulative impacts		Long-term minor to moderate cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance in the long term		Beneficial to no change assuming compliance in the long term		Beneficial assuming compliance in the long term		Beneficial to no change assuming compliance in the long term	
FORT FUNSTON										
Soil and Geology	• Long-term, major, adverse impacts	• Soil compaction, disturbance from digging and running would occur primarily on the main portion of the sensitive bluff tops and to a lesser degree on the beach; major impacts to soil chemistry expected from nutrient input; area experiences high dog use	• Long-term, minor, adverse impacts assuming compliance	• Soils along the trails have been previously disturbed; on-leash area, LOD area, and beach are only a portion of the entire site.	• Long-term, minor to moderate, adverse impacts assuming compliance	• Soils along the trails have been previously disturbed; on-leash area, LOD area, and ROLA are only a portion of the entire site.	• Long-term, minor to moderate, adverse impacts assuming compliance	• Soils along the trails have been previously disturbed; on-leash area, LOD area, and ROLA are only a portion of the entire site.	• Long-term moderate, adverse impacts assuming compliance	• Soils along the trails have been previously disturbed; on-leash area, LOD area, and ROLA are only a portion of the entire site.
Cumulative Impacts	Long-term, major, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts		Long-term, moderate, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Water Quality	• Negligible to long-term minor impacts	• Adjacent Pacific Ocean would be capable of diluting nutrients and pathogens due to volume of water and tidal flushing; Pollutants from dog waste are dispersed in high energy beach environment	• Negligible impact, assuming compliance	• Dog access would be restricted by leash; flushing tidal action and volume of ocean water would dilute any potential effects from pet waste	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Dog access would be restricted by leash; flushing tidal action and volume of ocean water would dilute any potential effects from pet waste	• Negligible impact, assuming compliance	• Physically restraining dogs and limiting the areas of on-leash dog walking would result in reducing dog access to the ocean waters adjacent to the beach at Fort Funston.	• Negligible to long-term, minor, adverse impacts, assuming compliance	• Flushing tidal action and volume of ocean water adjacent to the beach would dilute any potential effects from pet waste
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		No change assuming compliance		Beneficial to no change assuming compliance		No change assuming compliance	
Vegetation										
Coastal Community	• Long-term, major, adverse impacts	• A majority of the site is denuded of vegetation as a result of dog use at the site; the level of trampling and nutrient input may preclude (or inhibit) restoration at the recovery area; there is high visitor use and moderate to high levels of incidences related to dog activities at the site.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect dune vegetation; trails and the LOD area are a small portion of the entire site; site could potentially be restored and habitat corridor would be protected	• Long-term, minor to moderate impact assuming compliance	• Physical restraint of dogs would protect dune vegetation and reduce social trails; the upland ROLA could support dune vegetation that would be affected but potential for restoration would be limited, although the habitat corridor would be protected and restored	• Long-term, minor to moderate impact assuming compliance	• Physical restraint of dogs would protect dune vegetation and reduce social trails; however the ROLA supports dune vegetation that would be affected, limiting potential restoration	• Long-term, moderate, adverse impact assuming compliance	• The large, upland ROLA corridor is in coastal dune vegetation; in other areas, physical restraint of dogs would protect dune vegetation; trails and the LOD area are a small portion of the entire site but ROLA corridor is large; restoration potential is limited
Cumulative Impacts	Long-term, major, adverse cumulative impacts		Negligible cumulative impact		Long-term, minor to moderate, adverse cumulative impact		Long-term, minor to moderate, adverse cumulative impact		Long-term, moderate, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Wildlife</b>										
Coastal Community	<ul style="list-style-type: none"><li>Long-term, moderate to major, adverse impact</li></ul>	<ul style="list-style-type: none"><li>The voluntary seasonal leash restriction would continue to be often violated on the beach and dogs would continue to frequently disturb and/or harass shorebirds and potentially limit their use of preferred habitat and interrupt roosting or foraging behavior, which causes the expenditure of energy and could affect migration and breeding; shorebird numbers are high and visitor use is high at this site; marine mammals would continue to be occasionally subjected to impacts from dogs on the beach</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach; other wildlife such as birds and small mammals would also be affected by dogs; voluntary seasonal beach closure is currently in place during bank swallow nesting season</li></ul>	<ul style="list-style-type: none"><li>Long-term, moderate adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Shorebirds and marine mammals would be protected at the beach north of the Beach Access Trail, where dogs would be prohibited, but the beach ROLA encompasses about one-half of the beach habitat at the site and off-leash dogs could disturb shorebirds and marine mammals on the beach at this site as well as other wildlife in the upland ROLA; restoration would be precluded by dogs at the site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds and other wildlife by their presence; other wildlife use the upland ROLA, which supports coastal habitat; on-leash areas make up a large portion of the site; beach voluntary seasonal closure is currently in place during bank swallow nesting season</li></ul>	<ul style="list-style-type: none"><li>Long-term, moderate adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash at the beach north of the Beach Access Trail (with a seasonal closure) would protect shorebirds and marine mammals, although on-leash dogs could still disturb shorebirds and wildlife; the beach ROLA encompasses about one-half of beach habitat at the site and off-leash dogs could disturb shorebirds and marine mammals on the beach at this site as well as other wildlife in the upland ROLA; restoration would be precluded by dogs at the site</li></ul>
Cumulative Impacts	Long-term, minor to moderate, adverse cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Long-term, minor, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Species of Special Status</b>										
Bank Swallow	<ul style="list-style-type: none"> <li>Long-term, minor to moderate, adverse impact</li> </ul>	<ul style="list-style-type: none"> <li>Dogs have accessed the bluff and hazardous conditions/ pet rescues have occurred, which disturb the colony during the breeding season ; continuing impacts from dogs and/or humans would include digging at or collapsing the burrows, flushing birds from nests, and causing active sloughing and landslides that may block or crush burrows with the young inside</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>The beach seasonal closure would be in place during nesting season and the population/habitat would be protected by eliminating access to the breeding sites in the bluff face, which could increase nesting success</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>No dogs would be allowed north of the Beach Access Trail, where the bank swallows nest in the bluff face; the population/habitat would thus be protected by eliminating access to the breeding sites in the bluff face, which could increase nesting success; the ROLA would be situated away from the breeding site</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>No dogs would be allowed north of the Beach Access Trail, where the bank swallows nest in the bluff face and dogs would be physically restrained on leash south of the Beach Access Trail; population/habitat would thus be protected by eliminating access to the breeding sites in the bluff face, which could increase nesting success</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>On-leash dog walking would be allowed north of the Beach Access trail, with a seasonal closure in place during nesting season; the population/habitat would be protected by eliminating access to the breeding sites in the bluff face, which could increase nesting success; the ROLAs would be situated away from the breeding site</li> </ul>
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
San Francisco Lessingia	<ul style="list-style-type: none"> <li>Long-term, moderate, adverse impact</li> </ul>	<ul style="list-style-type: none"> <li>Dogs access coastal dune habitat and trails and traverse through habitat that could support this species at the site; dogs access restoration areas, despite fencing in place; species could be affected by trampling, digging, or dog waste; introduction of the species at the site would be precluded by the inability to protect reintroduced populations from unrestricted dog use</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would protect San Francisco lessingia and potential habitat and may allow the NPS to reintroduce the genotype at Fort Funston</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>The upland ROLA is within coastal dune vegetation that could support San Francisco lessingia; in other areas physical restraint to dogs would protect San Francisco lessingia and potential habitat; restoration potential is limited in upland ROLA</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>The upland ROLA is within coastal dune vegetation that could support San Francisco lessingia; in other areas physical restraint to dogs would protect San Francisco lessingia and potential habitat; restoration potential is limited in upland ROLA</li> </ul>	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>The large, upland ROLA corridor would be in coastal dune vegetation that could support San Francisco lessingia; in other areas, physical restraint of dogs on-leash would protect San Francisco lessingia and potential habitat; trails and the LOD area is small portion of the site but the ROLA corridor would be large; restoration potential would be limited in this area</li> </ul>
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Cultural Resources	<ul style="list-style-type: none"><li>• Negligible to long-term, minor, site-specific and localized adverse impacts to historic structures; and negligible to long-term minor localized adverse impacts to cultural landscapes.</li><li>• For purposes of Section 106 of the NHPA, the continuation of actions under the No Action alternative would result in <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Impacts related primarily to dog-related ground disturbance which increases erosion and potentially results in negative effects to historic structures and cultural landscapes</li></ul>	<ul style="list-style-type: none"><li>• Negligible to beneficial impacts for historic structures and cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative B would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures; and negligible to beneficial impacts to cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative C would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and negligible to beneficial impacts to cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative D would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li></ul>	<ul style="list-style-type: none"><li>• Benefits and Negligible to long-term, minor, site-specific, adverse impacts for historic structures and cultural landscapes</li><li>• For purposes of Section 106 of the NHPA, the assessment for alternative E would be <i>no adverse effects</i> to cultural resources.</li></ul>	<ul style="list-style-type: none"><li>• Outcomes are related primarily to the reduction in or prohibition of dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources</li></ul>
Cumulative impacts	Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.		Beneficial cumulative impacts related to preservation and enhancement efforts; Negligible to long-term moderate adverse cumulative impacts related to ground disturbance impacts to views and vistas associated with cultural landscapes, and historic structure demolition.	
Impact change compared to current condition	NA		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes		Beneficial to no change for historic structures and cultural landscapes	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impact	• Dog walking under voice and sight control would continue throughout the site.	• Long-term, moderate to major, adverse impacts	• Dog walking under voice control would no longer be allowed; on-leash dog walking would be restricted to certain areas	• Long-term, minor, adverse impacts	• Dog walking under voice and sight control would be allowed, but only in two areas	• Long-term, moderate, adverse impacts	• Dog walking under voice and sight control would be allowed in one area; area for dog walking would be reduced	• Negligible impact	• Dog walking under voice and sight control would be allowed in two areas
Visitors who prefer not to have dogs at the park	• Long-term, moderate to major, adverse impact	• Visitors would encounter high numbers of dogs throughout the site; especially off-leash; site is high dog use area.	• Negligible to long-term, minor, adverse	• Site experiences a high number of dog walkers; on-leash dog walking would be allowed on most of the trails and on the beach; off-leash dog walking would no longer be allowed	• Long-term, minor to moderate, adverse impacts	• Dog walking under voice and sight control would occur in two areas; site experiences high dog walking use, both on and off leash	• Long-term, minor, adverse impacts	• Dog walking under voice and sight control would be limited to one area; site experiences a high number of dog walkers	• Long-term, moderate, adverse impacts	• Dog walking under voice and sight control would be allowed in two large areas; site experiences a high number of dog walkers; dogs would be allowed on the entire beach
Cumulative impacts	<ul style="list-style-type: none"> <li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term moderate to major adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term moderate to major adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Negligible to long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term minor to moderate adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Long-term moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>		<ul style="list-style-type: none"> <li>• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park</li> <li>• Long-term moderate adverse cumulative impacts for visitors who would prefer not to have dog walking at the park</li> </ul>	
Impact change compared to current condition	NA		NA		NA		NA		NA	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Park Operations	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact</li></ul>	<ul style="list-style-type: none"><li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li><li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li><li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li><li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li><li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li><li>ROLAs would create short-term minor to moderate adverse impacts to park operations</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li><li>Continued need for enforcement activities, monitoring for compliance, sites with unfenced boundaries for ROLAs, and history of frequent incidents of noncompliance would affect park operations</li></ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	<ul style="list-style-type: none"><li>Long-term moderate adverse impacts</li></ul>	<ul style="list-style-type: none"><li>High use by a variety of user groups would continue; site experiences high use by dog walkers, including commercial dog walkers; site experiences high number of dog-related incidents and conflicts</li></ul>	<ul style="list-style-type: none"><li>Short-term, minor, to moderate, adverse impacts on park staff during implementation</li><li>Long-term, minor adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Site has history of confrontations and violations of regulations; continued rescues would be expected</li><li>Opportunity would continue for visitors and park staff to encounter unruly or aggressive dogs, placing health and safety at risk</li></ul>	<ul style="list-style-type: none"><li>Short-term minor to moderate adverse impact on park staff during implementation</li><li>Long-term, minor to moderate adverse impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Site has history of confrontations and violations of regulations; site is high use area for dog walkers.</li><li>Opportunity would continue for visitors and park staff to encounter unruly or aggressive dogs, placing their health and safety at risk; site is high use area for dog walkers</li></ul>	<ul style="list-style-type: none"><li>Short-term minor to moderate adverse impacts on park staff during implementation</li><li>Long-term, minor to moderate adverse</li></ul>	<ul style="list-style-type: none"><li>History of confrontations and violations of regulations; site is high use area for dog walkers</li><li>Opportunity would continue for visitors and park staff to encounter unruly or aggressive dogs, placing their health and safety at risk</li></ul>	<ul style="list-style-type: none"><li>Short-term minor to moderate adverse impacts on park staff during implementation</li><li>Long-term, minor to moderate adverse</li></ul>	<ul style="list-style-type: none"><li>Site has history of confrontations and violations of regulations</li><li>Opportunity would continue for visitors and park staff to encounter unruly or aggressive dogs, placing their health and safety at risk; site is high use area for dog walkers</li></ul>
Cumulative Impacts	Long-term, moderate, adverse cumulative impacts		Long-term, minor, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance in the long term		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance	
MORI POINT										
Soil and Geology	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Soil compaction, erosion, disturbance from digging and nutrient addition, would occur on the trails and beach; since some dogs would be off-leash previously undisturbed soils would also be impacted</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soils along the trails have been previously disturbed; on-leash area and LOD areas are a small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soils along the trails/road have been previously disturbed; on-leash area and LOD areas are only a small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would not be allowed in the site, so no soil would be disturbed.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soils along the trail/path have been previously disturbed; on-leash area and LOD areas are small portions of the entire site.</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Water Quality	• Negligible impact	• Dog waste would occur on beach; adjacent Pacific Ocean would be capable of diluting nutrients and pathogens due to volume of water and tidal flushing	• Negligible impact, assuming compliance	• Dog waste would occur on beach; dogs are restricted by leash restraint and the adjacent ocean provides flushing and dilution actions; exclusionary fences protect ponds	• Negligible impact, assuming compliance	• Dog waste would occur on beach; dogs are restricted by leash restraint and the adjacent ocean provides flushing and dilution actions; exclusionary fences protect ponds	• No impact	• Dogs would be prohibited at the site	• Negligible impact, assuming compliance	• Dog waste would occur on beach; dogs would be restricted by leash restraint and the adjacent ocean would provide flushing and dilution actions; exclusionary fences protect ponds
Cumulative Impacts	Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
Vegetation										
Coastal Community	• Long-term, minor, adverse impacts	• Site has beach area but no coastal dunes; off-leash dogs could gain access to rocky intertidal habitat and vegetation and cause impacts through trampling and dog waste	• Negligible impact assuming compliance	• It is unlikely that on-leash dogs could gain access to rocky intertidal habitat and cause impacts to vegetation through trampling, digging and dog waste	• Negligible impact assuming compliance	• It is unlikely that on-leash dogs could gain access to rocky intertidal habitat and cause impacts to vegetation through trampling, digging, and dog waste	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• It is unlikely that on-leash dogs could gain access to rocky intertidal habitat and cause impacts to vegetation through trampling, digging, and dog waste
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Coastal Scrub, Chaparral and Grassland Communities	• Long-term, minor, adverse impacts	• Impacts to vegetation from dogs would be caused through physical damage such as trampling, digging, and dog waste and these effects would continue to negate restoration efforts	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wetland and Aquatic Habitat	• Negligible impacts on freshwater wetlands	• Exclusionary fences have been placed around the ponds and wetland habitat; however, dogs have occasionally been observed in ponds	• Negligible impact assuming compliance	• Physical restraint of dogs, fewer on-leash walking areas, and existing fences would protect wetlands	• Negligible impact assuming compliance	• Existing fences and physical restraint of dogs would protect wetlands	• No Impact assuming compliance	• Dogs would be prohibited at site	• Negligible impact assuming compliance	• Existing fences and physical restraint of dogs would protect wetlands
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
Wildlife										
Coastal Community	• Long-term, minor, adverse impact	• Shorebirds on beach would occasionally be subjected to impacts from on-leash dogs (and off-leash dogs violating the leash law) through dogs barking at, chasing after, and being in proximity to roosting or feeding birds; shorebird numbers are low, visitor use is moderate, and beach habitat area is small at this site	• Negligible to long-term, minor adverse impact assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)	• Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach	• Negligible to long-term, minor adverse impact assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)	• Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach	• No impact assuming compliance	• Dogs would be prohibited at Mori Point	• Negligible to long-term, minor adverse impact assuming compliance (impact range is due to changing seasonal presence of the birds and level of activity at the site)	• Physically restraining dogs on leash would protect shorebirds and marine mammals on beach, although on-leash dogs could still disturb roosting and feeding birds through barking and by their presence on the beach
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Coastal Scrub, Chaparral and Grassland Communities	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife; wildlife may also be displaced from high quality habitat that is degraded by the presence of dogs; trails in this site generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site; fewer trails would be available to on-leash dogs compared to alternative A; trails generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site; fewer trails would be available to on-leash dogs compared to alternative A; trails generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; on-leash dog trails and the LOD area are a greater portion of the entire site compared to alternatives B, C, and D; trails generally receive low to moderate use</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Freshwater Wetlands and Estuarine Wetlands	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Dogs have occasionally been observed in fenced ponds; birds and other wildlife using pond habitat would infrequently be subjected to impacts from on-leash dogs (and off-leash dogs violating the leash law) barking at, chasing after, and being in proximity to wildlife; visitor use is moderate at this site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited in ponds; physically restraining dogs on leash would not allow dogs access to ponds or shorelines used by birds and other wildlife; on-leash dogs could still infrequently disturb roosting and feeding birds through barking and by their presence</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited in ponds; physically restraining dogs on leash would not allow dogs access to ponds or shorelines used by birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds through barking and by their presence</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited in ponds; physically restraining dogs on leash would not allow dogs access to ponds or shorelines used by birds and other wildlife; on-leash dogs could still infrequently disturb roosting and feeding birds through barking and by their presence</li></ul>
Cumulative Impacts	Negligible to long-term minor adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Species of Special Status</b>										
California Red-legged Frog	<ul style="list-style-type: none"> <li>Negligible to long-term, moderate, adverse impact</li> </ul>	<ul style="list-style-type: none"> <li>Dogs have occasionally been observed in fence ponds that support frog breeding habitat; eggs, juveniles, and adults could be affected by dogs through habitat and behavioral disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would prevent dog access to ponds and dogs would not be allowed on the Pollywog Path adjacent to the ponds</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would prevent dog access to ponds and dogs would not be allowed on the Pollywog Path adjacent to the ponds</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would prevent dog access to ponds although on-leash dogs would be allowed on the Pollywog Path which is close to the unfenced creek where frogs are frequently found</li> </ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
San Francisco Garter Snake	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impacts</li> </ul>	<ul style="list-style-type: none"> <li>Dogs have occasionally been observed in the ponds and snake behavior could be affected by dogs directly (through capture or digging) or indirectly (if preferred habitat is limited or changes in the California red-legged frog population occur)</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would reduce direct impacts to snakes through capture or trampling; dogs would be prohibited on the trail adjacent to the ponds that provide snake habitat.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would reduce direct impacts to snakes through capture or trampling; dogs would be prohibited on the trail adjacent to the ponds that provide snake habitat.</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would reduce direct impacts to snakes through capture or trampling, although on-leash dogs would be allowed on the trail adjacent to some of the ponds(Pollywog Path)</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Hickman's potentilla	<ul style="list-style-type: none"> <li>Long-term, minor, adverse impact</li> </ul>	<ul style="list-style-type: none"> <li>Off-leash dogs could affect suitable habitat for Hickman's potentilla through digging, trampling, and dog waste, but there are no mapped occurrences at this site.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would protect suitable habitat for Hickman's potentilla</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would protect suitable habitat for Hickman's potentilla</li> </ul>	<ul style="list-style-type: none"> <li>No impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Dogs would be prohibited at the site</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact assuming compliance</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs on-leash would protect suitable habitat for Hickman's potentilla</li> </ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Cultural Resources	NA		NA		NA		NA		NA	
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• No impact	• On-leash dog walking would continue throughout the site.	• Long-term, minor, adverse impacts	• Dog walking would be limited to one trail.	• Long-term, minor, adverse impact	• Dog walking would be limited to two trails.	• Long-term, moderate, adverse impact	• No dog walking would be allowed.	• Negligible impact	• Dog walking would be allowed on most trails and the beach.
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impact	• Visitors would still encounter dogs throughout the site.	• Beneficial impact	• On-leash dog walking would be limited to one trail; a no-dog experience would be available.	• Beneficial impact	• Dog walking would be limited to two trails; a no-dog experience would be available	• Beneficial impact	• No dog walking would be allowed; a no-dog experience would be available.	• Beneficial impact	• Some trails would prohibit dogs; a no-dog experience would be available
Cumulative impacts	• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Negligible cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Park Operations	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	• Negligible impacts	• Chance of pet-related incidents from unruly or aggressive dogs would continue to exist; site experiences a high number of leash law violations	• Negligible impacts assuming compliance	• Site receives moderate use by dog walkers; on-leash regulation would reduce opportunity for pet-related incidents	• Negligible impacts assuming compliance	• Site receives moderate use by dog walkers; on-leash regulation would reduce opportunity for pet-related incidents	• No impacts assuming compliance	• Dogs would be prohibited at the site	• Negligible impacts assuming compliance	• Site receives moderate use by dog walkers; on-leash regulation would reduce opportunity for pet-related incidents
Cumulative Impacts	Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
MILAGRA RIDGE										
Soil and Geology	• Long-term, minor, adverse impacts	• Soil compaction, erosion and nutrient addition, would occur on fire roads/trails; since some dogs would be off-leash, previously undisturbed soils would also impacted.	• Negligible impact assuming compliance	• Soils along the fire road/trails have been previously disturbed; on-leash area and LOD areas are a small portion of the entire site.	• Negligible impact assuming compliance	• Soils along the fire road/trails have been previously disturbed; on-leash area and LOD areas are a small portion of the entire site.	• No impact assuming compliance	• Dogs would not be allowed in the site, so no soil would be disturbed.	• Negligible impact assuming compliance	• Soils along the fire road/trails have been previously disturbed; on-leash area and LOD areas are a small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Scrub, Chaparral and Grassland Communities	• Long-term, minor, adverse impacts	• Impacts on vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste and these effects would continue to negate restoration efforts	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.	• No Impact	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wildlife										
Coastal Scrub, Chaparral and Grassland Communities	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails and fire roads would continue; disturbance includes physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife; wildlife may also be displaced from high quality habitat that is degraded by the presence of dogs; trails in this site generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site; fewer trails would be available to on-leash dogs compared to alternative A; trails generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site; fewer trails would be available to on-leash dogs compared to alternative A; trails generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; on-leash dog trails and the LOD area are a greater portion of the entire site compared to alternatives B, C, and D; trails generally receive low to moderate use</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Species of Special Status										
San Bruno Elfín Butterfly	<ul style="list-style-type: none"><li>Negligible impact</li></ul>	<ul style="list-style-type: none"><li>It is unlikely that direct impacts on individuals of this butterfly species would occur from dogs because of the relative inaccessibility of the habitat in relation to trails and because dogs would be required to be on leash</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>It is unlikely that direct impacts on individuals of this butterfly species would occur from dogs because of the relative inaccessibility of the habitat in relation to trails and because dogs would be required to be on leash</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>It is unlikely that direct impacts on individuals of this butterfly species would occur from dogs because of the relative inaccessibility of the habitat in relation to trails and because dogs would be required to be on leash</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>It is unlikely that direct impacts on individuals of this butterfly species would occur from dogs because of the relative inaccessibility of the habitat in relation to trails and because dogs would be required to be on leash</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Mission Blue Butterfly	• Long-term, minor, adverse impact	• Dogs could damage mission blue butterfly habitat in the trail beds and adjacent to the trails and roads	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would protect mission blue butterfly habitat off-trail; trails and the LOD area are a small portion of the entire site.	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would protect mission blue butterfly habitat off-trail; trails and the LOD area are a small portion of the entire site.	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would protect mission blue butterfly habitat off-trail; trails and the LOD area are a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
California Red-legged Frog	• Negligible to long-term, minor, adverse impact	• Eggs, juveniles, and adult life stages could be affected by trampling and suffocation by sediments coating the eggs and behavioral disturbance or causing injury or mortality to individuals	• Negligible impact assuming compliance	• Physical restraint of dogs would not allow access to pond and Milagra Creek, which provide breeding habitat for the frog	• Negligible impact assuming compliance	• Physical restraint of dogs would not allow access to pond and Milagra Creek, which provide breeding habitat for the frog	• No impact	• Dogs prohibited at site	• Negligible impact assuming compliance	• Physical restraint of dogs would not allow access to ponds or Milagra Creek, although on-leash dogs would be allowed on trails adjacent to water bodies
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
San Francisco Garter Snake	• Negligible to long-term, minor, adverse impact	• Snake behavior could be directly affected by off-leash dogs (capture or digging) or indirectly (if changes in the California red-legged frog population occur)	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would reduce direct impacts on snakes through capture and trampling	• Negligible impact assuming compliance	• Physical restraint of dogs would reduce direct impacts on snakes through capture and trampling (due to mobility of species)	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would reduce direct impacts on snakes through capture and trampling
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
<b>Cultural Resources</b>	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impact	• On-leash dog walking would continue throughout the site.	• Long-term, minor, adverse impacts	• Dog walking would be restricted to fire road.	• Long-term, minor, adverse impact	• Dog walking would be restricted to fire road.	• Long-term, minor, adverse impact	• No dog walking would be allowed throughout the site.	• Negligible impact	• Dog walking would be available on most trails.
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impact	• Visitors would still encounter dogs throughout the site	• Beneficial impact	• Dog walking would be limited to the fire road; a no-dog experience would be available.	• Beneficial impact	• Dog walking would be limited to the fire road; a no-dog experience would be available.	• Beneficial impact	• No dog walking would be allowed; a no-dog experience would be available.	• Beneficial impact	• A no-dog experience would be available; some trails would prohibit dogs.
Cumulative impacts	• No cumulative impacts for visitors who would prefer to walk dogs at the park  • Long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impact	• Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Negligible to long-term minor adverse impacts	• Site receives low to moderate dog use; no pet-related incidents have been recorded in recent years	• Negligible impacts assuming compliance	• Site receives low to moderate dog use; access to portions of the site would be limited; no pet-related incidents have been recorded in recent years	• Negligible impacts assuming compliance	• Site receives low to moderate dog use; access to portions of the site would be limited; no pet-related incidents have been recorded in recent years	• No impacts assuming compliance	• Dogs would be prohibited	• Negligible impacts assuming compliance	• Site receives low to moderate use by dog walkers; no pet-related incidents have been recorded in recent years
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		No change assuming compliance		No change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
SWEENEY RIDGE AND CATTLE HILL										
Soil and Geology	• Long-term, minor, adverse impacts	• Soil compaction and nutrient addition would occur on the trails and in the LOD	• No impact assuming compliance	• Dogs would not be allowed in the site, so no soil would be disturbed	• Negligible impact assuming compliance at Cattle Hill; no impact at Sweeney Ridge	• At Cattle Ridge, soils along the trails have been previously disturbed and on-leash area and LOD areas are a small portion of the entire site; dogs would not allowed at Sweeney Ridge	• No impact assuming compliance	• Dogs would not be allowed in the site, so no soil would be disturbed.	• Negligible impact assuming compliance	• Soils along the trails have been previously disturbed; on-leash area and LOD areas are a small portion of the entire site.
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Scrub, Chaparral and Grassland Communities	• Long-term, minor, adverse impacts	• Impacts on vegetation from dogs are caused through physical damage such as trampling, digging, and dog waste.	• No Impact	• Dogs would be prohibited at both sites	• Negligible impact assuming compliance at Cattle Hill; no impact at Sweeney Ridge	• Physical restraint of dogs would protect vegetation off-trail and trails and LOD area are a small portion of the site at Cattle Hill; dogs would be prohibited at Sweeney Ridge	• No Impact	• Dogs would be prohibited at both sites	• Negligible impact assuming compliance	• Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.
Cumulative Impacts	Long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts (Cattle Hill); beneficial cumulative impacts (Sweeney Ridge)		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wildlife										
Coastal Scrub, Chaparral and Grassland Communities	<ul style="list-style-type: none"><li>Long-term, minor to moderate, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails would continue; disturbance includes physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife; wildlife may also be displaced from high quality habitat that is degraded by the presence of dogs; trails in this site generally receive low to moderate use</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>No impact at Sweeney Ridge; Long-term, minor adverse impact at Cattle Hill</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited from Sweeney Ridge;</li><li>Cattle Hill: physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at site</li></ul>	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails at this site are long with high quality habitat directly adjacent to the trails, and on-leash dog trails are a greater portion of the entire site compared to alternatives B, C, and D; trails generally receive low to moderate use</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impact (Sweeney Ridge); Negligible cumulative impact (Cattle Hill)		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance at Sweeney Ridge; Beneficial to no change assuming compliance at Cattle Hill		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Species of Special Status										
Mission Blue Butterfly	<ul style="list-style-type: none"><li>Long-term, minor, adverse impact at Sweeney Ridge ; no impact at Cattle Hill</li></ul>	<ul style="list-style-type: none"><li>Dogs could damage mission blue butterfly habitat in the trail beds and adjacent to the trails and roads; Mission blue butterfly host plants are not present at Cattle Hill</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance (at both sites)</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at both sites</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance (at both sites)</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at Sweeney Ridge; no mission blue butterfly habitat exists at Cattle Hill</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance (at both sites)</li></ul>	<ul style="list-style-type: none"><li>Dogs prohibited at both sites</li></ul>	<ul style="list-style-type: none"><li>Negligible impact at Sweeney Ridge assuming compliance; no impact assuming compliance at Cattle Hill</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect mission blue habitat off-trail; trails and the LOD area are a small portion of the entire site; no mission blue habitat exists at Cattle Hill.</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impact		Negligible cumulative impact		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
California Red-legged Frog	• Negligible to long-term, minor, adverse impact	• Sites have no known breeding habitat but have mapped critical habitat; juveniles and adults could be affected by dogs through trampling as well as behavioral disturbance or causing injury or mortality to individuals	• No impact, assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance at Cattle Hill; no impact at Sweeney Ridge	• At Cattle Hill, physical restraint of dogs would prevent dog access to any water-bodies that support the frog; dogs would not be permitted at Sweeney Ridge	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs would prevent dog access to any water-bodies that support breeding habitat for the frog
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts (Cattle Hill); beneficial cumulative impacts (Sweeney Ridge)		Beneficial cumulative impact		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change assuming compliance at Cattle Hill; beneficial assuming compliance at Sweeney Ridge		Beneficial assuming compliance		Beneficial to no change assuming compliance	
San Francisco Garter Snake	• Negligible to long-term, minor, adverse impacts	• Snake behavior could be affected by off-leash dogs directly (capture or digging) or indirectly (if changes to the California red-legged frog population occur)	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance at Cattle Hill; no impact at Sweeney Ridge	• Cattle Hill: Physical restraint of dogs would reduce direct impacts on snakes through capture and trampling, although on-leash dogs would be allowed on numerous trails; dogs would not be permitted at Sweeney Ridge	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible to long-term, minor, adverse impact assuming compliance	• Physical restraint of dogs on-leash would reduce direct impacts on snakes through capture and trampling, but on-leash dogs would be allowed on numerous trails that support snake dispersal habitat and could occasionally affect the snake or its habitat
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts (Sweeney Ridge); negligible cumulative impacts (Cattle Hill)		Beneficial cumulative impact		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial to no change (Cattle Hill) and beneficial (Sweeney Ridge)		Beneficial assuming compliance		No change assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• No impact	• On-leash dog walking would continue throughout the site.	• Long-term, minor to moderate, adverse impacts	• No dog walking would be allowed throughout the site.	• Long-term, minor, adverse impact	• No dog walking would be allowed at Sweeney Ridge; limited dog walking would be allowed at Cattle Hill	• Long-term, minor to moderate, adverse impact	• No dog walking would be allowed throughout the site.	• Negligible impact	• On-leash dog walking would be available on trails at both sites.
Visitors who prefer not to have dogs at the park	• Long-term, minor to moderate, adverse impact	• Visitors would still encounter dogs throughout the site.	• Beneficial impact	• No dog walking would be allowed; a no-dog experience would be available.	• Beneficial impact	• No dog walking would be allowed at Sweeney Ridge and limited dog walking would be allowed at Cattle Hill; a no-dog experience would be available	• Beneficial impact	• No dog walking would be allowed; a no-dog experience would be available.	• Long-term, minor, adverse impact	• On-leash dog walking would be available on most trails.
Cumulative impacts	• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park • Long-term minor to moderate adverse cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor to moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Long-term minor to moderate adverse cumulative impacts for visitors who would prefer to walk dogs at the park • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible cumulative impacts for visitors who would prefer to walk dogs at the park • Long-term minor adverse cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impacts	• Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.	• Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management	• Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	<ul style="list-style-type: none"><li>Negligible impacts</li></ul>	<ul style="list-style-type: none"><li>Site receives low visitor use; no pet-related incidents have been recorded in recent years, though leash law violations have been documented</li></ul>	<ul style="list-style-type: none"><li>No impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited</li></ul>	<ul style="list-style-type: none"><li>No impacts at Sweeney Ridge, assuming compliance</li><li>Negligible impacts at Cattle Hill assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited</li><li>Site receives low use; no pet-related incidents have been recorded in recent years, though leash law violations have been documented</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Site receives low use; no pet-related incidents have been recorded in recent years, though leash law violations have been documented</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impact	
Impact change compared to current condition	NA		Beneficial assuming compliance		Sweeney Ridge: Beneficial assuming compliance Cattle Hill: no change assuming compliance		Beneficial assuming compliance		No change assuming compliance	
PEDRO POINT										
Soil and Geology	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Soil compaction, erosion, and nutrient addition, would occur throughout the site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soils along the trail have been previously disturbed; on-leash and LOD areas are a small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soils along the trail have been previously disturbed; on-leash area and LOD areas are a small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would not be allowed in the site, so no soil would be disturbed.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Soils along the trail have been previously disturbed; on-leash and LOD areas are a small portion of the entire site.</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Water Quality	NA		NA		NA		NA		NA	
Vegetation										
Coastal Scrub, Chaparral and Grassland Communities	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Impacts on vegetation from dogs would be caused through physical damage such as trampling, digging, and dog waste and these affects would continue to negate restoration efforts</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.</li></ul>	<ul style="list-style-type: none"><li>No impact</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trails and the LOD area are a small portion of the entire site.</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts		Beneficial cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wildlife										
Coastal Scrub, Chaparral and Grassland Communities	<ul style="list-style-type: none"><li>Long-term, minor to moderate adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Off-leash dog access to wildlife and associated habitat off trails would continue; disturbance includes physical damage to habitat or nests/burrows from digging or trampling, as well as chasing after and even capturing wildlife; wildlife may also be displaced from high quality habitat that is degraded by the presence of dogs</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trails and the LOD area are a small portion of the entire site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trail and the LOD area are a small portion of the entire site; trail generally receives low to moderate use</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at site</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physically restraining dogs on leash would protect habitat off trail as well as wildlife; chasing after wildlife would be eliminated but on-leash dogs could still disturb wildlife behavior; wildlife may avoid trail corridors that allow on-leash dog walking and be displaced from high quality habitat that is degraded by the presence of dogs; trail and the LOD area are a small portion of the entire site</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Species of Special Status										
California Red-legged Frog	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact</li></ul>	<ul style="list-style-type: none"><li>Site has no known breeding habitat but has proposed critical habitat; juveniles and adults could be affected by dogs trampling and causing behavioral disturbance, injury, or mortality to individuals</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would prevent dog access to potential frog habitat.</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would prevent dog access to potential frog habitat</li></ul>	<ul style="list-style-type: none"><li>No impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited at the site</li></ul>	<ul style="list-style-type: none"><li>Negligible impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would prevent access to any water-bodies that support breeding habitat for the frog</li></ul>
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
San Francisco Garter Snake	• Negligible to long-term, minor, adverse impacts	• Snake behavior could be directly affected by off-leash dogs (through capture or digging) or indirectly affected (if changes in the California red-legged frog population occur)	• Negligible impacts assuming compliance	• Physical restraint of dogs on-leash would reduce direct impacts on snakes through capture and trampling; dogs would be prohibited on all trails except Coastal Trail	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would reduce direct impacts on snakes through capture and trampling; dogs would be prohibited on all trails except Coastal Trail	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would reduce direct impacts on snakes through capture and trampling; dogs would be prohibited on all trails except Coastal Trail
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impact		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	
Hickman's potentilla	• Long-term, minor, adverse impact	• Off-leash dogs can affect suitable habitat for Hickman's potentilla through digging, trampling, and dog waste; it is unknown whether this species exists at Pedro Point	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would protect suitable habitat for Hickman's potentilla	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would protect suitable habitat for Hickman's potentilla	• No impact assuming compliance	• Dogs would be prohibited at the site	• Negligible impact assuming compliance	• Physical restraint of dogs on-leash would protect suitable habitat for Hickman's potentilla
Cumulative Impacts	Negligible cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance		Beneficial assuming compliance	
Cultural Resources	NA		NA		NA		NA		NA	
Visitor Use and Experience										
Visitors who prefer to bring dogs to the park	• No impact	• Dog walking would continue at the site.	• Negligible impact	• On-leash dog walking would be available at the site; no off-leash dog walking would be allowed	• Negligible impact	• On-leash dog walking would be available at the site; no off-leash dog walking would be allowed	• Long-term, minor, adverse impact	• No dog walking would be allowed at the site.	• Negligible impact	• On-leash dog walking would be available at the site; no off-leash dog walking would be allowed
Visitors who prefer not to have dogs at the park	• Long-term, minor, adverse impact	• Dog walking would occur at the site; dog walking use is low to moderate at the site	• Beneficial impact	• Dogs would be required to be on leash on the Coastal Trail	• Beneficial impact	• Dogs would be required to be on leash on the Coastal Trail	• Beneficial impact	• No dog walking would be allowed; a no-dog experience would be available.	• Beneficial impact	• Dogs would be required to be on leash on the Coastal Trail
Cumulative impacts	• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Negligible cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Negligible to long-term minor adverse cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park		• Beneficial cumulative impacts for visitors who would prefer to walk dogs at the park  • Beneficial cumulative impacts for visitors who would prefer not to have dog walking at the park	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Park Operations	<ul style="list-style-type: none"><li>Long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>	<ul style="list-style-type: none"><li>Short-term, moderate, adverse impacts to park operations – staffing, labor, enforcement, maintenance, monitoring, records keeping/management</li></ul>	<ul style="list-style-type: none"><li>Hiring of additional employees for dog management; a temporary increase in education and law enforcement activities, maintenance (signage placement, fencing, etc.), records management, court appearances, etc. would occur to enforce new dog management regulations during the initial education period.</li></ul>
Cumulative impacts	Long-term, minor, adverse cumulative impacts		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm		Negligible impacts as education, understanding, and compliance become the norm	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Health and Safety	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts</li></ul>	<ul style="list-style-type: none"><li>There would be safety concerns in the future due to predicted high use; site currently receives low to moderate local use; chance of park visitors and staff encountering an unruly or aggressive dog would exist</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>On-leash walking would be required, which would minimize opportunity for encountering an unruly or aggressive dog</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Limiting number of dogs walked per walker/owner and regulating on-leash walking would minimize opportunity for encountering an unruly or aggressive dog</li></ul>	<ul style="list-style-type: none"><li>No Impact assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Dogs would be prohibited</li></ul>	<ul style="list-style-type: none"><li>Negligible impacts assuming compliance</li></ul>	<ul style="list-style-type: none"><li>Limiting number of dogs walked per walker/owner and regulating on-leash walking would minimize opportunity for encountering an unruly or aggressive dog</li></ul>
Cumulative Impacts	Negligible to long-term, minor, adverse cumulative impacts		Negligible cumulative impacts		Negligible cumulative impacts		Beneficial cumulative impacts		Negligible cumulative impacts	
Impact change compared to current condition	NA		Beneficial to no change assuming compliance		Beneficial to no change assuming compliance		Beneficial assuming compliance		Beneficial to no change assuming compliance	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>NEW LANDS</b>										
<b>Soil and Geology</b>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect soil function off-trail; compaction and digging from dogs would be in a relatively small area at most new lands; undisturbed natural areas or serpentine soils would be more sensitive to disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance; No impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect soil function off-trail; compaction and digging from dogs would be in a relatively small area at most new lands; undisturbed natural areas or serpentine soils would be more sensitive to disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance; No impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect soil function off-trail; compaction and digging from dogs would be in a relatively small area at most new lands; undisturbed natural areas or serpentine soils would be more sensitive to disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance; No impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect soil function off-trail; compaction and digging from dogs would be in a relatively small area at most new lands; undisturbed natural areas or serpentine soils would be more sensitive to disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, moderate, adverse impact assuming compliance; No impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Compaction and digging from dogs would be in a relatively small area at most new lands; dogs in ROLAs could cause increased soil compaction and disturbance; undisturbed natural areas or serpentine soils would be more sensitive to disturbance</li> </ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Water Quality</b>	<ul style="list-style-type: none"> <li>Negligible impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>On-leash dogs would not be allowed access to water bodies and visitors would be expected to remove waste; if applicable, negligible impacts in ocean waters because of dilution of pollutants from dog waste by ocean tidal action</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact, assuming compliance; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>On-leash dogs would not be allowed access to water bodies and visitors would be expected to remove waste; if applicable, negligible impacts in ocean waters because of dilution of pollutants from dog waste by ocean tidal action</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact, assuming compliance; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>On-leash dogs would not be allowed access to water bodies and visitors would be expected to remove waste; if applicable, negligible impacts in ocean waters because of dilution of pollutants from dog waste by ocean tidal action</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact, assuming compliance; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>On-leash dogs would not be allowed access to water bodies and visitors would be expected to remove waste; if applicable, negligible impacts in ocean waters because of dilution of pollutants from dog waste by ocean tidal action</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance; No impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>On-leash dogs would not be allowed access to water bodies and visitors would be expected to remove waste; dogs in ROLAs could increase impacts in water bodies in and adjacent to the ROLAs</li> </ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Vegetation										
Coastal Community	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would occur in a relatively small area; undisturbed natural areas or dune plants would be more sensitive to disturbance</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would occur in a relatively small area; undisturbed natural areas or dune plants would be more sensitive to disturbance</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would occur in a relatively small area; undisturbed natural areas or dune plants would be more sensitive to disturbance</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would occur in a relatively small area; undisturbed natural areas or dune plants would be more sensitive to disturbance</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, moderate, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would occur in a relatively small area; undisturbed natural areas or dune plants would be more sensitive to disturbance; dogs in ROLAs could increase impacts in and adjacent to the ROLAs</li></ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Coastal Scrub, Chaparral, and Grassland Communities	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impacts; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would be in a relatively small area; undisturbed natural areas or sensitive plant species would be more easily disturbed</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would be in a relatively small area; undisturbed natural areas or sensitive plant species would be more easily disturbed</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would be in a relatively small area; undisturbed natural areas or sensitive plant species would be more easily disturbed</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would be in a relatively small area; undisturbed natural areas or sensitive plant species would be more easily disturbed</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, moderate, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs would protect vegetation off-trail; trampling, digging, and dog waste would be in a relatively small area; undisturbed natural areas or sensitive plant species would be more easily disturbed; dogs in ROLAs could increase impacts in and adjacent to the ROLAs</li></ul>
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current conditions	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Wetland and Aquatic Habitats	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect wetland and aquatic resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect wetland and aquatic resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect wetland and aquatic resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect wetland and aquatic resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, moderate, adverse impact assuming compliance; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect wetland and aquatic resources; undisturbed natural areas or sensitive plant species would be more easily disturbed dogs in ROLAs could increase impacts in and adjacent to the ROLAs</li> </ul>
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current conditions	NA		NA		NA		NA		NA	
Native Hardwood Forest/Douglas Fir-Coast Redwoods	<ul style="list-style-type: none"> <li>Negligible impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect native hardwood or Douglas fir-coast redwood vegetation resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect native hardwood or Douglas fir-coast redwood vegetation resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect native hardwood or Douglas fir-coast redwood vegetation resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>The physical restraint of dogs would protect native hardwood or Douglas fir-coast redwood vegetation resources; undisturbed natural areas or sensitive plant species would be more easily disturbed</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint of dogs would protect native hardwood or Douglas fir-coast redwood vegetation; undisturbed natural areas or sensitive plant species would be more easily disturbed dogs in ROLAs could increase impacts in and adjacent to the ROLAs</li> </ul>
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current conditions	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Riparian Forest and Stream Corridors	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs	• The physical restraint of dogs would protect riparian and stream resources; undisturbed natural areas or sensitive plant species would be more easily disturbed	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs	• Physical restraint of dogs would protect riparian and stream resources; undisturbed natural areas or sensitive plant species would be more easily disturbed	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs	• Physical restraint of dogs would protect riparian and stream resources; undisturbed natural areas or sensitive plant species would be more easily disturbed	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs	• Physical restraint of dogs would protect riparian and stream resources; undisturbed natural areas or sensitive plant species would be more easily disturbed	• Negligible to long-term, moderate, adverse impact assuming compliance; no impact at sites that prohibit dogs	• Physical restraint of dogs would protect riparian and stream resources; undisturbed natural areas or sensitive plant species would be more easily disturbed; dogs in ROLAs could increase impacts in and adjacent to the ROLAs
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current conditions	NA		NA		NA		NA		NA	
Wildlife										
Coastal Community Wildlife	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs (range depicts seasonal presence of birds and activity on site)	• The physical restraint of dogs would protect and shorebirds and marine mammals on beach; dogs barking and lunging at birds can cause fleeing or relocation, causing unnecessary energy loss and preferred habitat loss.	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs (range depicts seasonal presence of birds and activity on site)	• The physical restraint of dogs would protect and shorebirds and marine mammals on beach; dogs barking and lunging at birds can cause fleeing or relocation, causing unnecessary energy loss and preferred habitat loss.	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs (range depicts seasonal presence of birds and activity on site)	• The physical restraint of dogs would protect and shorebirds and marine mammals on beach; dogs barking and lunging at birds can cause fleeing or relocation, causing unnecessary energy loss and preferred habitat loss.	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs (range depicts seasonal presence of birds and activity on site)	• The physical restraint of dogs would protect and shorebirds and marine mammals on beach; dogs barking and lunging at birds can cause fleeing or relocation, causing unnecessary energy loss and preferred habitat loss.	• Negligible to long-term, moderate, adverse impact; no impact at sites that prohibit dogs (range depicts seasonal presence of birds and activity on site)	• The physical restraint of dogs would protect and shorebirds and marine mammals on beach; dogs barking and lunging at birds can cause fleeing or relocation, causing unnecessary energy loss and preferred habitat loss. Dogs could disturb marine mammals stranded in a ROLA.
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Coastal Scrub, Chaparral, and Grassland Wildlife Communities	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, moderate, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat; dogs barking and running in the ROLA would disturb birds and other wildlife</li> </ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Wetland and Aquatic Wildlife	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat</li> </ul>	<ul style="list-style-type: none"> <li>Negligible to long-term, moderate, adverse impact; no impact at sites that prohibit dogs</li> </ul>	<ul style="list-style-type: none"> <li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from high quality and preferred habitat; dogs barking and running in the ROLA would disturb birds and other wildlife</li> </ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	



Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Native Hardwood Forest/Douglas Fir-Coast Redwood Wildlife	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; dogs can displace wildlife from preferred habitat and affect wildlife by barking, chasing after, and proximity to roosting</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs would protect wildlife and would minimize access; dogs could still disturb roosting and feeding birds by barking and their presence</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs would protect wildlife and would minimize access; dogs could still disturb roosting and feeding birds by barking and their presence</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs would protect wildlife and would minimize access; dogs could still disturb roosting and feeding birds by barking and their presence</li></ul>	<ul style="list-style-type: none"><li>• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint of dogs would protect wildlife and would minimize access; dogs could still disturb roosting and feeding birds by barking and their presence; dogs in ROLAs could increase impacts in and adjacent to the ROLAs</li></ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Riparian Forest and Stream Corridor Wildlife	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>• Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>• Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds; ROLA location and compliance would protect riparian wildlife</li></ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Other coniferous communities	<ul style="list-style-type: none"><li>Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>Negligible impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint would reduce the likelihood of dogs disturbing and chasing after/harassing birds and other wildlife; on-leash dogs could still disturb roosting and feeding birds; ROLA location and compliance would protect wildlife in coniferous habitats</li></ul>
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Species of Special Status										
Federally and State-Listed Wildlife Species	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash should prevent access to listed wildlife, but dogs could still disturb species by barking and by their presence; off-leash dogs could damage habitat, nests, or burrows by digging or trampling as well as chasing or capturing listed wildlife species; loss of preferred habitat could occur.</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash should prevent access to many special status species, but dogs could still disturb species by barking and by their presence; dogs could cause loss of preferred habitat</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash should prevent access to many special status species, but dogs could still disturb species by barking and by their presence; dogs could cause loss of preferred habitat</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash should prevent access to many special-status species, but dogs could still disturb species by their barking and presence; dogs could cause loss of preferred habitat</li></ul>	<ul style="list-style-type: none"><li>Negligible to long-term, moderate, adverse impact assuming compliance; no impact at sites that prohibit dogs</li></ul>	<ul style="list-style-type: none"><li>Physical restraint of dogs on-leash should prevent access to many special status species, but dogs could still disturb species by barking and by their presence; dogs could cause loss of preferred habitat; dogs in a ROLA could increase impacts to listed wildlife in and adjacent to the ROLA</li></ul>
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Federally and State-Listed Plant Species	• Negligible to long-term, minor, adverse impact; no impact at sites that prohibit dogs	• Physical restraint of dogs on-leash would protect listed plants and would minimize access to areas where they are present; off-leash dogs could gain access to these areas	• Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs	• Physical restraint of dogs on-leash would protect listed plants; dogs could affect listed plant species through trampling, digging, and dog waste if plants are near trails	• Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs	• Physical restraint of dogs on-leash would protect listed plants; dogs could affect listed plant species through trampling, digging, and dog waste if plants are near trails	• Negligible to long-term, minor, adverse impact assuming compliance; no impact at sites that prohibit dogs	• Physical restraint of dogs on-leash would protect listed plants; dogs could affect listed plant species through trampling, digging, and dog waste if plants are near trails	• Negligible to long-term, moderate, adverse impact assuming compliance; no impact at sites that prohibit dogs	• Physical restraint of dogs on leash would protect listed plants; dogs could affect listed plant species through trampling, digging, and dog waste if plants are near trails or in a ROLA; dogs in a ROLA could increase impacts in and adjacent to the ROLA
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
Cultural Resources	• Negligible to possibly long-term, minor, adverse impact; no impact at sites that prohibit dogs	• Minimal adverse effects are expected as a result of compliance with cultural resource regulations and the restriction of dogs to on-leash walking which would result in reduction in off-trail dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.	• Benefits where dogs prohibited. Negligible to possibly long-term, minor, adverse impact where on-leash dogs allowed.	• Minimal adverse effects are expected as a result of compliance with cultural resource regulations and the prohibition of or restriction of dogs to on-leash walking, all of which would result in reduction in off-trail dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.	• Benefits where dogs prohibited. Negligible to possibly long-term, minor, adverse impact where on-leash dogs allowed.	• Minimal adverse effects are expected as a result of compliance with cultural resource regulations and the prohibition of or restriction of dogs to on-leash walking, all of which would result in reduction in off-trail dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.	• Negligible to possibly long-term, minor, adverse impact where on-leash dogs allowed.	• Minimal adverse effects are expected as a result of compliance with cultural resource regulations and the prohibition of or restriction of dogs to on-leash walking, all of which would result in reduction in off-trail dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.	• Benefits where dogs prohibited. Negligible to possibly long-term, minor, adverse impact where on-leash dogs allowed.	• Minimal adverse effects are expected as a result of compliance with cultural resource regulations, the restriction of dogs to on-leash walking in many areas, and the careful selection and design of off-leash areas, all of which would result in reduction in off-trail dog activity (trampling, ground disturbance, erosion) in areas of sensitive cultural resources.
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Table 5. Environmental Impact Summary by Alternative

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
<b>Visitor Use and Experience</b>										
Visitors who prefer to bring dogs to the park	• Negligible impact	• Provides an area for on-leash dog walking	• Negligible impact	• Provides an area for on-leash dog walking but on-leash restrictions would be strictly enforced	• Negligible impact	• Provides an area for on-leash dog walking but on-leash restrictions would be strictly enforced	• Negligible to long-term minor to moderate adverse impact	• May provides an area for on-leash dog walking if opened by the compendium; if so on-leash restrictions would be strictly enforced	• Beneficial impacts	• On-leash dog walking would be allowed and new lands may be opened to off-leash dog walking; the on-leash restriction and ROLA designation would be strictly enforced
Visitors who prefer not to have dogs at the park	• Negligible to long-term, minor, adverse impact	• Provides an area for on-leash dog walking. Visitors may not be able to have a no dog experience at the site	• Negligible to long-term, minor, adverse impact	• New lands dog walking on leash is more restrictive; Visitors may not be able to have a no dog experience at the site	• Negligible to long-term, minor, adverse impact	• New lands dog walking on leash is more restrictive; Visitors may not be able to have a no dog experience at the site	• Beneficial to long-term, minor, adverse impact	• No dog walking allowed unless opened by the compendium; may provides an area for on-leash dog walking if opened by the compendium; on-leash restrictions would be strictly enforced	• Long-term, minor to moderate, adverse impact	• Provides an area for on-leash dog walking and new lands may be opened to voice and sight control; These visitors could not enjoy park areas without dogs and may avoid park areas due to the presence of dogs
Cumulative impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	
<b>Park Operations</b>	• Long-term, minor, adverse impact	• Additional park operations staff and labor efforts would be needed to accomplish tasks related to dog management in addition to other job responsibilities	• Negligible to long-term, minor, adverse impact assuming compliance	• Increase in need for LE, administrative, and maintenance staff for enforcement and oversight of new regulations	• Negligible to long-term, minor, adverse impact assuming compliance	• Increase in need for LE, administrative, and maintenance staff for enforcement and oversight of new regulations	• Negligible to long-term, minor, adverse assuming compliance	• Increase in need for LE, administrative, and maintenance staff for enforcement and oversight of new regulations; increase even if dogs are prohibited at site	• Short to long-term, minor to moderate, adverse impact assuming compliance	• Oversight and enforcement of the regulation for on leash and ROLA dog walking; Increase in need for LE, administrative, and maintenance staff for enforcement and oversight of new regulations
Cumulative impacts	Long-term minor to moderate adverse cumulative impacts as a result of dog management efforts		Long-term minor to moderate adverse cumulative impacts		Long-term minor to moderate adverse cumulative impacts		Long-term minor to moderate adverse cumulative impacts		Long-term, minor to moderate, adverse cumulative impacts	
Impact change compared to current condition	NA		NA		NA		NA		NA	

Resource	Alternative A: No Action		Alternative B: NPS Leash Regulation		Alternative C: Emphasis on Multiple Use		Alternative D: Most Protective of Resource		Alternative E: Most Dog Walking Access Most Management Intensive	
	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale	Impacts	Rationale
Health and Safety	• Negligible impact	• Dog management regulations would be determined for each site prior to visitor access at the site and visitors would become immediately familiar with dog management regulations	• Negligible impact assuming compliance	• Dog management regulations would be determined for each site prior to visitor access at the site and visitors would become immediately familiar with dog management regulations	• Negligible impact assuming compliance	• Dog management regulations would be determined for each site prior to visitor access at the site and visitors would become immediately familiar with dog management regulations	• Negligible impact assuming compliance	• Dog management regulations would be determined for each site prior to visitor access at the site and visitors would become immediately familiar with dog management regulations	• Negligible impact for on-leash dog walking; long-term, minor, adverse impact in ROLA assuming compliance	• Visitors could encounter unruly or aggressive dogs on or off-leash; having dogs off-leash could increase occurrence of incidents, and hazardous conditions like pet/owner rescue
Cumulative Impacts	Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands		Results would be similar to the cumulative impact analysis that was completed for park sites that are located in proximately to the new lands	
Impact change compared to current condition	NA		NA		NA		NA		NA	

NOTES: NA = resource is not applicable at this site; No Impact = Dogs are prohibited from site and no impact to resource from dogs is expected.