FINDING OF NO SIGNIFICANT IMPACT

MARIN EQUESTRIAN STABLES PLAN

National Park Service, U.S. Department of the Interior
Golden Gate National Recreation Area

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INTRODUCTION

This Finding of No Significant Impact (FONSI) is prepared by the Golden Gate National Recreation Area (GGNRA, the Park), a unit of the National Park Service (NPS), for the Marin Equestrian Stables Plan, in accordance with the 1969 National Environmental Policy Act (NEPA) and NPS NEPA guidance in Director's Order 12 (2011). The FONSI combined with the Marin Equestrian Stables Plan Environmental Assessment (Plan/EA), comprise the full and complete NEPA record of the analysis of environmental impacts and the NPS decision-making process on selecting an implementation strategy. None of the modifications to the selected Plan (described below) alters the impact assessments contained in the EA or results in major changes to the alternatives or mitigations measures.

This document summarizes the alternatives considered in the Plan/EA and focuses on the Selected Alternative. It includes the decision rationale for modifying Alternative B, Option 2 (Alternative B2) from that presented in the Plan/EA and for selecting Alternative B2 for implementation. The primary modifications to Alternative B2 are the future relocation of the Park Horse Patrol stables to the Rodeo Valley stables rather than the Tennessee Valley stables as was described in the EA, and the addition of a covered ring at Rodeo Valley stables. Other changes included making specified uses of particular structures optional, allowing the future lessee more flexibility in their program. The FONSI lists the specific mitigation measures the NPS will follow when implementing the Plan/EA and explains the reasoning behind the statement that the Selected Alternative would result in no significant impacts to the environment as defined by the NEPA regulations (42 CFR pts. 1500-1508) and NPS NEPA guidance in Director's Order 12.

The FONSI, Mitigation Measures, and the Plan/EA (along with Errata attachment) will guide future actions for equestrian facilities on GGNRA lands in southern Marin County. With the signing of this FONSI by the Pacific West Regional Director, the modified Alternative B Option B2, is approved and adopted for implementation. Also, in keeping with 2006 Management Policies, a Determination of No Impairment (DNI) for the selected alternative was also prepared (Attachment C).

PURPOSE, NEED, and PLAN OBJECTIVES

The Plan/EA examines four alternative management strategies for the long-term operation of four equestrian facilities on GGNRA lands in southern Marin County. One of the four stables, Tennessee Valley stables, is privately-operated under a lease agreement with GGNRA. Two stables are privately operated under permits: Golden Gate Dairy, and Rodeo Valley stables. These stables were in operation when GGNRA was created in 1972. The 1980 General Management Plan (GMP), the primary guidance document for the Park, included the continued operation of the three stables but with more services to the general public and non-discriminatory membership policies. A fourth stable, operated by the NPS and known as the Lower Tennessee Valley stable, houses the Park Horse Patrol; future management of this site, along with the three privately-run stables, is addressed in the Plan/EA. The location of the stables is shown in Attachment A. Table-1 provides basic information on the operation of the four stables. GGNRA lands in southern Marin County constitute the planning area for the Plan/EA.

Table 1 -- Existing Equestrian Facilities on GGNRA Lands in Southern Marin County

Name	Operated by	NPS Authorization	Public Programs?	Horse Capacity (Year-round / Summer only/ Over-night stays)
Golden Gate Dairy	Ocean Riders of Marin	month to month permit	No	11/0/0
Tennessee Valley Stables	Miwok Stables Center	5-yr. permit till 2012, then month to month permit	Yes, boarding, classes, events, donated services, public may rent overnight stalls ("horse hotel")	42/10/4
Rodeo Valley Stables	Presidio Riding Club	month to month permit	Yes, horse hotel	19/0/8
Lower Tennessee Valley Stables	GGNRA Park Horse Patrol	Ranger run program with 30 volunteers	Yes, trained volunteers care for and ride NPS horses, provide visitor contacts	4/0/0

The Plan/EA builds on the guidance in the 1980 GMP by providing a comprehensive equestrian plan to guide the continued improvements to the operation, facilities and public programs of the stable sites. Each stable will have an individual site and operations plan to provide the framework for continued progress towards GMP goals including the protection of historic structures, improvement of water quality and conservation of site soils. The Selected Alternative of the Plan/EA would conform to the Preferred Alternative of the Draft GMP and Environmental Impact Statement (EIS) which is currently in the planning process. When completed, the updated GMP would supplant the 1980 GMP. The Draft GMP EIS was circulated to the public for comment in fall of 2011. The Final GMP EIS is in preparation and is expected to be published in winter of 2013.

Purpose: The purpose of the Plan/EA is to provide for comprehensive improvement of equestrian sites, facilities, programs and stables management on Park lands in southern Marin County. The Plan is designed to improve visitor services, and to preserve, protect and enhance Park natural and cultural resources in a manner consistent with NPS plans and policies.

When the planning process is complete, the NPS will conduct a request for proposals for a competitive selection of operators for the stables. Selected operators will be granted longer terms leases giving the stability and insurance to run a successful program and undertake the necessary improvements to the sites.

Need for the Plan: The Plan/EA is a comprehensive plan for stables management which addresses many of the long-standing issues that have impeded improvements to stables operations in the past.

- A comprehensive plan is needed to guide the management of the stables in GGNRA. Over the years, changes have been made incrementally to stables operations without benefit of a comprehensive review of each facility. The review will help determine the number of horses appropriate for each site, an important factor in planning future improvements.
- Short-term permits hinder business planning. The stables currently operate under month-to-month permits which does not encourage long-range planning by the operators, including decisions to make considerable capital investments in the stables or develop broader public programs.
- Opportunity for competitive bidding: There is a need to provide an opportunity for competitive bidding for the leasing of NPS lands and equestrian facilities.
- GGNRA stables are in poor condition and need restoration, repairs, upgrades and maintenance. These improvements would enhance the appearance of the stables and promote the expansion of

opportunities for public programs. Improvements will preserve historic landscapes and structures while providing the framework for safer and more functional sites..

- Public benefit and programs need to be broadened. Two privately operated stables are currently not permitted to provide programs for visitors to the Park other than to the stable program participants. There is an opportunity to broaden public outreach and programming at each stables site to benefit a greater number of the public, riders and non-riders alike.
- There is no defined approach to safety and emergency plans. The stables should be required to develop safety and emergency response plans including posting emergency procedures and cautionary signing. Repairs and upgrades to the stables will improve overall health and safety of the staff, program participants, visitors and the animals boarded there.
- There is a need for improved sanitation facilities. Upgrades to sanitation facilities need to be considered and sewage treatment systems need to be evaluated for relocation, redesign or replacement.
- There is a need for site-wide fire prevention programs. Fire safety plans, inspections and follow-up improvements will reduce the risk of fire damaging the historic structures or threatening staff, program participants and animals. Fire safety plans will require posting procedures, staging equipment and practicing response to fire which will improve overall safety. Site planning will support fire safety, for example, flammable feed storage would be separated from horse stalls.
- On-site management requirements for cultural resources are not clearly identified. The three privately-run stables operate in cultural landscapes, historic structures, and are near archeological sites that are protected by the National Historic Preservation Act (NHPA). Historic Structure Reports and Cultural Landscape Reports are needed to direct the future development of each site.
- Best Management Practices (BMPs) for resource protection are not clearly or uniformly defined. The stables operators have been working with NPS to mitigate environmental effects by changing existing practices or incorporating new practices into the management of the stables. Many of these Best Management Practices (BMPs) have focused on improvement of surface and ground water quality and minimizing soil erosion. The BMPs appropriate for each stable need to be evaluated and compiled and incorporated into terms of the long-term leases that would be granted to stable operators.
- The NPS in southern Marin has operational and storage needs. GGNRA operations, such as horse patrol, trail maintenance, volunteer stewardship, ranger offices, residences and areas for public contact, need adequate space in structurally sound facilities that are accessible and integrate successfully into the park environment. Storage space is needed for stewardship supplies and for maintenance equipment, vehicles, tools and materials. In areas with important cultural resources, efforts will be made to use existing contributing structures whenever operationally appropriate or economically prudent (NPS 2006, Policies 9.1.1.3 and 9.1.1.4).

Plan Objectives: The following objectives were developed to ensure that the Plan would fulfill its stated purpose. The Selected Alternative for the Plan will:

- Determine which sites are most appropriate for long-term stables based on environmental conditions, ability to protect natural and cultural resources, and transportation options.
- Establish the number of horses to be stabled at each site based on program potential, site constraints and resource protection.
- Identify facilities and improvements and develop desired resource conditions to guide improvements addressing accessibility and public and animal safety.

- Establish guidelines for equestrian uses and facility operations that protect or enhance Park resources and incorporate sustainable development as directed by NPS management policies.
- Provide guidance to the business office on competitive long-term leasing, leasing agreements, appropriate public programs, stewardship opportunities, promoting financial sustainability of the operators, NPS inspections of operations and administration efficiency.
- Enhance visitor experience and public benefit from the equestrian program by using outreach strategies and on-site interpretation to provide the riding and non-riding public, interpretation, training and information on horse husbandry and horsemanship experience.

SELECTED ALTERNATIVE

The Selected Alternative is a modification of Alternative B, Option 2 (described in the EA as Preferred), all changes are described below. There is no change in the determination of environmental effects (as documented in the EA) due to incorporation of these modifications.

NPS Long-Term Use of Balloon Hangar: Under Alternative B2 (Preferred in the Plan/EA) it was envisioned that the NPS may rehabilitate and use the Balloon Hangar at Rodeo Valley for approximately ten years for storage of heavy equipment to protect it from the elements and provide security. Due to NPS operation needs, use of this structure will continue for the long-term rather than temporarily for ten years. The Balloon Hangar will be rehabilitated for long-term use for NPS operations.

Park Horse Patrol: Prior to modification, Alternative B2 in the Plan/EA would have relocated the Park Horse Patrol, to Tennessee Valley stables. NPS determined to relocate the Park Horse Patrol to Rodeo Valley, a stable with fewer horses and a relatively flat, open site. The Park Horse Patrol Program will be relocated to the Rodeo Valley stables site, which will continue to accommodate up to 19 horses in stalls in a facility that will be shared with a lessee for equestrian programs. Therefore, the maximum number of horses for the lessee will be reduced from the current level. The maximum number of horses in stalls available to the future lessee will be described in the leasing opportunity (the Request for Proposals).

The Selected Alternative provides the strategy that would best meet the Plan Purpose, Plan Objectives, conform to the NPS Management Policies (2006) and NPS NEPA requirements. The Selected Alternative follows the guidance of the 1980 GMP to continue stable operations at the three equestrian centers within the Park in southern Marin County. Also, the Preferred Alternative presented in the Draft GGNRA General Management Plan EIS, as published August 2011, conforms with the Selected Alternative.

The Selected Alternative will continue the operation of three of the four existing stables in their current locations, while removing horses and horse facilities and the Park Horse Patrol program from the Lower Tennessee Valley site. The total number of horses in stalls will be reduced by 4 to 72 from 76 with room for 26 more horses for dry season programs or overnight stays. Facilities would be improved at three of the four stables as described in Chapter 2 Alternative B, Option 2 of the Plan/EA. A caretaker's residence would be provided at each of the sites that have horses in stalls through rehabilitation of existing structures or new housing - unless the lessee can provide NPS with an acceptable alternative to provide the safety that having an on-site person would provide. All stables would construct covered manure sheds for any manure stored on site, and would separate flammable hay storage from the stalls Additional facility changes listed in Chapter 2 of the Plan/EA would be planned for incremental implementation through lease agreements.

The Park Horse Patrol Program will be relocated to the Rodeo Valley stables site, which will continue to accommodate up to 19 horses in stalls in a facility that will be shared with a lessee for equestrian programs. Therefore, the maximum number of horses for the lessee will be reduced from the current level. Part of the West Motor Pool Building may be converted to a covered lunging ring and a residence. A portion of the

Building will be remodeled for offices and a residence. Manure storage will be moved to separate structures south of the West and East Motor Pool Sheds, and may also have hay and feed storage or a residence. An option of building a covered 60 foot diameter ring to the west of the Balloon Hangar is included (and described in the Errata attachment to the EA).

The Selected Alternative maintains the stables in their current locations with the exception of Lower Tennessee Valley. Specific actions for each site are presented below.

Site actions that are common to all stables sites include:

- The retention of all historic buildings and structures
- The removal of certain non-historic stalls, sheds
- The installation of emergency water supply for firefighting including a new water tank if needed, pump and generator
- The installation of toilet facilities that will either be new facilities or incorporated into existing structures
- The installation of manure sheds if manure is stored onsite.
- Repair and upgrade utilities.
- Interpretive signing will be posted at each stable site

Site actions that are unique to each property include:

Golden Gate Dairy Stables

- Add a trail segment along Route 1.
- Install amenities: tie ups, water, and mounting blocks.
- Install stalls, paddocks, and a new covered ring.
- Stabilize historic outhouse.
- Rehabilitate Main House for residence or office.
- Delineate visitor parking space(s).
- (Modification) Paddocks, but not stalls, can remain in front and adjacent to the turn-out.
- (Modification) The Creamery, if and when vacated by the Muir Beach Volunteer Fire Department, may be available as an option to the lessee for stables use such as for stalls, garage, storage or meeting room.
- (Modification) Trailer pads could be located on existing gravel paving.
- (Modification) The water tank, generator, pump and fire hose will be located for safe access for emergencies.
- (Modification) A short-term visitor parking space will be designated

Tennessee Valley Stables

- Install stalls, manure shed and hay shed.
- Rehabilitate Bunkhouse for residential or office use.
- Repair or upgrade plumbing and septic systems.
- Remove non-historic stall additions and rebuild historic shed for storage.
- Rehabilitate Main Residence for residential or office use.
- Add stalls in historic hay barn- option
- Install a turn-out
- (Modification) The relocation of Park Horse Patrol to Rodeo Valley stables instead of Tennessee Valley stables will result in no designated PHP stalls or paddocks; the Main Residence and the Red Barn will no longer be designated for Park Horse Patrol use. With the exception of the Main Residence, these elements will become part of the future lessee's leasehold. The Main Residence will be available as an option to lease.
- (Modification) The maximum number of horses will remain at 42 instead of 46 all year with the addition of 10 horses during the summer or dry season

- (Modification) If the Main House is utilized as the stables residence the Bunk House, shown as Residence on Figure 2-11, could have a changed use to non-residential (i.e., no plumbing or septic system) such as meeting or storage space.
- (Modification) Delete the four new stalls designated for PHP.
- (Modification) Water tank, generator, pump and fire hose will be located for safe access for emergencies.
- (Modification) The Manure shed could be located south east of the Office in the historic core area as shown in Alternative C. It will need fire separation from the stalls.
- (Modification) New stalls could be constructed north of the covered riding arena and existing stalls adjacent to, and east of, the cross-tie stalls as shown in Alternative C.
- (Modification) The Hay Barn could be used for storage of non-flammable materials or meeting space.
- (Modification) Hay/feed could be located in a structure in the secondary historic core area between the bunkhouse and the Hay Barn, as shown in Alternative C.

Lower Tennessee Valley Stables

- Remove stalls, manure shed, paddocks and hay shed.
- Revegetate those areas where facilities have been removed.

Rodeo Valley Stables at the Fort Barry Balloon Hangar and Motor Vehicle Sheds

- Relocate the NPS Park Horse Patrol program to the Rodeo Valley stables.
- Lease stables operations with certain designated facilities and certain shared facilities.
- Install turn-out
- Install ring or covered structure - option
- Install manure shed (required) and hay shed (option).
- Remodel East Motor Vehicle Sheds for stalls, storage, and/or office space.
- Remodel West Motor Vehicle Sheds for residence, storage, covered ring option, and/or office space.
- Replace/rebuild Utility Building on east side of paddocks- option
- (Modification) Relocating the Park Horse Patrol to Rodeo Valley stables will result in the need for enlarged hay storage, a 60 foot diameter pen which could be covered, and the installation of fences to separate certain lessee and PHP operational areas and paddocks. Shared use would occur in some facilities.
- (Modification) The West Motor Vehicle Shed will have two offices.
- (Modification) The residential unit could be located at the north end or south of the West Motor Vehicle Shed (per Alternative C) or in a residential trailer south of the West Motor Vehicle Shed.
- (Modification) Covered manure shed will be located south of the East Motor Vehicle Shed.
- (Modification) The fuel shed will be available as an option to rebuild for equestrian operator or Park Horse Patrol operations.
- (Modification) Fenced vegetated swales, per Appendix B-4, BMPs; would be installed to control erosion shown conceptually on the revised plan graphic.
- (Modification) Water tank (if determined necessary), generator, pump and fire hose will be located for safe access for emergencies.
- (Modification) The Balloon Hangar will be rehabilitated for long-term NPS use.

Alternative B2 provides the most advantages to the NPS for the factors of public benefit, public access, NPS operation needs, and cultural and historic resource protection when compared to the other action alternatives. The three historic stables sites -- Golden Gate Dairy, Tennessee Valley stables and Rodeo Valley stables -- continue as equestrian facilities, in conformance with the 1980 GGNRA GMP and the draft GGNRA

GMP currently in process. Also in conformance with the draft GGNRA GMP, the Park Horse Patrol stables would be relocated to Rodeo Valley allowing certain structures at the current Lower Tennessee Valley stables site to be razed and removed from the site. The ranger office, barns, the nursery, and the yurt would not be affected. An important benefit of Alternative B2 is that it preserves the current level of recreational riding in the Park while reducing the number of facilities.

ALTERNATIVES DEVELOPMENT

The development of alternatives to enhance and improve resource protection and equestrian facilities in southern Marin has a relatively long history, dating from 2004 where the idea for an equestrian plan for southern Marin was first developed in staff workshops. A project concept was developed in 2005, and an interdisciplinary team (IDT), with representatives from a range of specialties within the Park, was formed, and a Project Manager (PM) was selected. Public Scoping was conducted in 2006; the input from this and internal scoping provided the basis for developing a set of conceptual alternatives.

Realizing that more information on the resources at the stable sites was needed, NPS Cultural Resources staff researched and inventoried cultural landscape resources at each site to determine which held cultural landscape resources that are either already listed or would be eligible for listing on the National Register of Historic Places (NRHP) and in conformance with the NHPA. In consultation with the State Historic Preservation Officer (SHPO), it was determined that Golden Gate Dairy, Tennessee Valley stables and Rodeo Valley stables have cultural landscape resources either eligible for listing or previously listed on the NRHP. There are no NRHP-eligible resources at lower Tennessee Valley or Lower Redwood Creek; the Marincello site was assessed as part of the Tennessee Valley site.

During a Cultural Resource Workshop in 2010, NPS staff considered the eligibility of the cultural landscape resources at the Tennessee Valley, Golden Gate Dairy and Rodeo Valley sites. They developed rehabilitation and restoration recommendations for site layout, structures, landscape features, and for new construction and removal of non-historic features. This information was used in the development of the alternatives proposed in the EA. The IDT conducted a value analysis exercise that same year to assess the comparative merits and potential adverse effects of a set of preliminary alternatives for the Plan/EA. Factors considered for each site included the potential for public programming, equestrian recreation and trails, human and animal safety, effect on park operations, impacts to park resources and the potential for rehabilitation/reuse of historic structures. The IDT also considered the range of GGNRA sites in southern Marin County that could support new stables based on topography, adjacency to roads, and distance from wetlands, and selected Marincello and Lower Redwood Creek for consideration in an alternative that provided increased horseback-riding opportunities.

The preliminary alternatives were made available for public comment during a second scoping period in 2010. The comments received during scoping were used to finalize the set of five alternatives (Alternatives A, B1, B2, C and D), presented in the Plan/EA released for public review and comment in November 2011.

After the public comment period for the Plan/EA, certain changes were made to the preferred alternative. These changes modified Alternative B, Option 2 (Alternative B2). Due to reconsideration of NPS program needs for the Park Horse Patrol program, the modification would relocate the Park Horse Patrol stables and office at Rodeo Valley, co-locating with a privately-operated horse program instead of being located at the Tennessee Valley stables.

RANGE OF ALTERNATIVES CONSIDERED

The Plan/EA analyzes the No Action Alternative and four action alternatives. The alternatives are described in Chapter 2 of the Plan/EA, and the Selected Alternative is modified as noted above.

Alternative A, the No Action Alternative, is required in all NEPA analyses to provide a baseline against which the other alternatives can be compared. The NPS would continue current management practices at the four stables including short-term permits and leasing. The three existing privately run stables with a total of 76 horses and the NPS Horse Patrol stable with four horses would remain in operation in their current locations. The stables operations would continue without significant changes in the facilities but with incremental improvements and adjustments to meet policy or regulatory standards.

Elements Common to All Action Alternatives (B1, B2, C and D) are facility improvements, operational improvements and the Future Business Plan Strategy, and are included in each action alternative. As part of the Elements Common to All Alternatives, all alternatives for Golden Gate Dairy accommodate the new Dias Ridge Trailhead, provide tie-ups, water and mounts for equestrians. In addition, the three leased stables would install accessible toilets. The Business Plan Strategy provides the NPS and stable operators with information on changes in leasing and management requirements, stables operations, upgrades to site facilities and sewage systems, and new construction standards. It will be developed to guide the NPS in leasing and managing the equestrian facilities on GGNRA lands in southern Marin County.

The Common to All facility improvements are described in detail in Table 2-6 in the Plan/EA/Errata. Operational improvements are described in the Future Business Plan Strategy, which addresses:

Incorporation of the BMPs (Plan/EA Appendix B) into everyday stables operations.

Programs, Outreach and Use for the General Public

Structural Repairs and Improvements to Contributing Historic Structures

Sanitation Improvements

Safety and Emergency Plans

General Site Improvements to Non-historic Facilities

Sustainability

Muir Beach Volunteer Fire Department (MBVFD) location at Golden Gate Dairy

Alternative B, Option 1 (B1): Enhanced Existing. Alternative B1 would continue the operation of the four existing stables in their current locations. The total number of horses in stalls would stay the same at 76 with room for 22 more horses for dry season programs or overnight stays. Facilities would be improved at all four stables as described in Chapter 2 of the Plan/EA. A caretaker's residence would be provided at each of the sites that have horses in stalls through rehabilitation of existing structures or new housing (unless the lessee can provide NPS with an acceptable alternative to provide the safety that having an on-site person would provide). All stables would construct covered manure sheds for any manure stored on site, and would separate flammable hay storage from the stalls. At Rodeo Valley the Balloon Hangar would be used for hay and feed storage and as an indoor ring. Tennessee Valley stables stalls would be relocated a greater distance from the riparian corridor. Golden Gate Dairy includes the replacement of stalls and paddocks, and conceptual layouts will allow visitors to continue to interact with the horses in the turnout along the Highway. Certain structures at the historic sites of Golden Gate Dairy and Tennessee Valley that are not historic would be removed from the core center of the ranch and relocated. Additional facility changes listed in Chapter 2 of the Plan/EA would be planned for incremental implementation through lease agreements.

Alternative B, Option 2 (B2): See "Selected Alternative", above. Under Alternative B2, the three leased stables will continue to operate in their current locations. Alternative B2 reduces the number of horses in stalls from 76 (existing) to 72. The current total number of horses will remain the same at the three sites, Golden Gate Dairy, Tennessee Valley, and Rodeo Valley. The NPS Park Horse Patrol stables at Lower Tennessee Valley, will be relocated to Rodeo Valley. Equestrian stalls and manure sheds at Lower Tennessee Valley will be

removed. Land that was beneath turnouts or structures removed would be revegetated with native plants. The cluster of buildings at Lower Tennessee Valley was determined to not be eligible for the NRHP and is not considered significant cultural resources by the NPS. A list of the major actions under Alternative B2 is listed in Plan/EA /Errata.

Alternative C, Consolidated, would reduce the number of stables sites in southern Marin GGNRA lands by consolidating existing equestrian stables from four to two stable sites; Tennessee Valley and Rodeo Valley stables would remain. The Park Horse Patrol would move to Tennessee Valley stables. The stables at Golden Gate Dairy would be closed (requiring an amendment to the 1980 GMP) and historic structures there could be rehabilitated for other Park uses. The overall number of horses in stalls within the planning area would be reduced from the current 76 to 72 in Alternative C. As in Alternative B2 and D, Alternative C would allow the restoration of the vegetation at lower Tennessee Valley where stalls, paddocks and associated facilities would be removed. The use of the existing barn, where horses are now stabled, and the remainder of the developed site, will be determined in a future planning effort.

Alternative D, Dispersed and Expanded, would maintain the three stables at Tennessee Valley, Golden Gate Dairy, and Rodeo Valley -- and develop two new stables on GGNRA lands; Lower Redwood Creek (also known as the Banducci Flower Farm site), 0.6 miles north of the Golden Gate Dairy and the Marincello site roughly 0.2 miles upslope from Tennessee Valley. The Park Horse Patrol would be located at the 2-acre Marincello site. The maximum number of year-round boarded horses/stalls in Alternative C would increase to 88, although would decrease at Golden Gate Dairy from 11 to four horses.

As in Alternative B2 and C, Alternative D would allow the restoration of the vegetation at lower Tennessee Valley where stalls, paddocks and associated facilities would be removed. The use of the existing barn, where horses are now stabled, and the remainder of the developed site, would be determined in a future planning effort.

ALTERNATIVES CONSIDERED BUT DISMISSED FROM FURTHER ASSESSMENT

Table 2 summarizes the range of alternatives that were considered but were eliminated from further study in the Plan/EA. The alternatives in the table were recommended in public comments received during the scoping period or by internal NPS comment for the Plan/EA. After consideration these options were not carried forward as alternatives for full analysis in the EA based on their inability to meet project objectives, to conform to NPS Management Policies and the 1980 GMP, and due to issues and concerns raised by the public.

TABLE 2 -- ALTERNATIVES OR ELEMENTS CONSIDERED BUT ELIMINATED FROM FURTHER STUDY

Description	Reason Eliminated
Lower Redwood Creek: develop stables at north boundary area.	Restricts stables to small area; NPS policies promote the reuse of existing facilities.
Lower Redwood Creek: develop stables in the meadow below existing developed area.	NPS policies promote the reuse of facilities. Adverse visual impacts to meadow; inhibits future park planning.
Rodeo Valley: remove Motor Vehicle Sheds and build new stables facilities in an area that would be more compatible with the old airfield.	Adverse impacts to historic structures.
Balloon Hangar: develop sites as a public event venue per 1980 General Management Plan.	Selecting areas for public events is outside the scope of the Plan/EA which is focused on the stables. Implementation of the Selected Alternative would not limit the range of potential uses in the future for the Balloon Hangar.
Rodeo Valley: roof the entire large arena.	Visual impacts were determined to be unacceptable.
Golden Gate Dairy: develop trail connection across Highway 1.	Agency scoping is ongoing for this separate project.

Description	Reason Eliminated
Include equestrian trail use as part of the planning process.	Prior planning determined which trails equestrians can use. Trail planning was outside the scope of the Plan/EA.
Golden Gate Dairy, Lower Tennessee Valley, Marincello: eliminate the proposed BMP of a covered lunging ring facility.	Eliminating the covered ring would increase horse exercising on trails in wet season and exacerbate erosion.
Grazing pastures at all sites: revisit allowing horse grazing around stables.	Prior NPS decision eliminates grazing pastures at these Marin sites due to erosion and sediment impacts.
All existing sites: remove facilities w/in 100 ft. from top of stream bank per the proposed Marin County regulations.	This eliminates the footprint of these existing stables which are historically of national significance.
Tennessee Valley: relocate a multi-use trail which crosses the main stables site to a new location west of the large arena and provide a bridge.	Based on public comments, this would potentially frighten horses and distract students in the school rings and arena.
Tennessee Valley: Remove all stables facilities.	Popular site serves more than 1000 visitors per year. The existing location, its historic significance and other screening factors rate it high as a stables site to retain.
Rodeo Valley: Remove all stables facilities.	Weekend public transportation access, location and other screening factors rate it high as a stables site to retain.
Greatly increase or greatly reduce the number of horses at all stables.	NPS decision is the existing numbers are sustainable. Public comment supported no big increase in horse numbers.
Eliminate facilities for a Park Horse Patrol	NPS decision and public comment support keeping the PHP as a beneficial program.
Include detailed site planning.	Too restrictive to future business leases and operations, too detailed for master plan level.
Expand stables' footprints at existing sites to previously undisturbed lands.	NPS policy prioritizes reuse of previously disturbed land.
Locate PHP stables at Tennessee Valley Parking area.	Technically infeasible due to congestion and lack of space.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is defined by CEQ NEPA regulations as the alternative that causes the least damage to the biological and physical environment and best protects, preserves and enhances historic, cultural and natural resources (40 CFR 1500–1508). The CEQ NEPA regulations also indicate that the environmentally preferred alternative is the one that would promote the national environmental policy as expressed in NEPA's Section 101 (Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations 40 CFR 1500 – 1508; Question 6a).

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety or other undesirable and unintended consequences.
- Preserve important historical, cultural and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

- Achieve a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of unsustainable resources.

Using both the CEQ's interpretations of the Section 101 purpose statements and the comparison of environmental effects to natural and cultural resources expected under each alternative, Alternative C was identified as the environmentally preferred alternative. Taking all impacts together, the differences between the various alternatives are not great, but Alternative C is anticipated to have slightly reduced adverse impacts overall for the primary reason that activities will be restricted to two of the four existing stable sites. The impacts associated with horse operations would be geographically confined to two areas, Tennessee Valley and Rodeo Valley, and would not be contributing pollutants to the Redwood Creek drainage which supports three species listed under the federal Endangered Species Act: the California red-legged frog (threatened) a genetically distinct population of Coho Salmon (endangered) and Steelhead (threatened).

PUBLIC INVOLVEMENT

Scoping meetings were used to develop the basis for the Plan/EA, including the Plan Purpose and Need, and to receive comments on issues that should be addressed in the Plan/EA and alternative management strategies that should be considered. Public scoping occurred for the Plan/EA was conducted twice: first from May 24 to June 21, 2006, and again from February 3 to March 5, 2010. Between the two scoping periods, cultural landscape resources at the four stable sites were investigated to determine which facilities were eligible for listing on the NRHP. Both scoping periods included public meetings and open houses. The input from public and internal scoping in 2006 was used to develop conceptual alternatives that provided the basis for preliminary alternatives. These were presented at the public meeting and open house held during the scoping period on February 3, 2010.

In 2010, the NPS prepared scoping materials which were posted on the GGNRA website. The materials included descriptions of the conceptual alternatives, issues previously identified for study, a draft environmental checklist used to develop the scope of the EA, and information on scoping meetings. Consultation with the U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration Fisheries Service (NOAA-FS), the SHPO and the California Coastal Commission (CCC) were initiated. Agencies were notified about the scoping period for the Plan/EA. Communication with USFWS, the SHPO, and other agencies occurred on April 4, 2006, and February 27, 2012.

Public scoping resulted in 237 written comments. No agency comments were received during initial public scoping. Public comments, along with identified NPS project needs as described in the EA, were used to develop the range of issues addressed in the EA and to develop the alternatives for the site and operations. These issues were used to identify mitigation measures and Best Management Practices (BMPs) for stables site planning and operations, which were published in the EA.

The public comment period for the Plan/EA was from November 1, 2011 to December 16, 2011. An electronic version of the Plan/EA was made available on the NPS Planning, Environmental and Public Comment website (PEPC) at www.parkplanning.nps.gov/MESP. A public open house meeting was held in the evening on December 7, 2011 at the Tamalpais Valley Community Center. The NPS received over 242 public comments on the Plan/EA including three letters from public agencies. Comments were received by post and through the Park "PEPC" website. Responses to substantive comments are provided in an Errata prepared as a technical attachment to the EA (also provides documentation of EA text corrections).

AGENCY CONSULTATIONS

U.S. Fish and Wildlife Service

The Endangered Species Act of 1973 requires that each federal agency, in consultation with the USFWS and/or NOAA Fisheries, ensure that proposed agency actions do not jeopardize the continued existence of a listed species or result in destruction or adverse impact to designated critical habitat. A list of listed threatened and endangered species in the general area was obtained through the U.S. Fish and Wildlife Service website. The NPS initiated formal consultation with the USFWS with the submittal of a Biological Assessment (BA) on February 27, 2012. In the BA the NPS determined the selected alternative, including conservation measures, is likely to adversely affect the California red-legged frog (short-term, construction); and are not likely to adversely (NLAA) affect tidewater goby or designated critical habitat. On May 8, 2013 the USFWS provided NPS with a Biological Opinion, concurring with NPS's NLAA determination on tidewater goby; and concluding the selected alternative is not likely to jeopardize the continued existence of the red-legged frog. However, the USFWS determined there would be risk of harm, harassment, injury and mortality as a result of the proposed construction activities of the selected alternative on the red-legged from and therefore authorized Incidental Take. Terms of the Incidental Take are nondiscretionary and must be included in any NPS permits or authorizations done by NPS. The Terms of the Incidental Take are included in Attachment B.

National Oceanic and Atmospheric Administration Fisheries Service (NOAA FS)

The NPS initiated consultation with NOAA FS by letter on February 27, 2012 in conformance with Section 7 of the Endangered Species Act and the essential fish habitat provisions of the Magnuson Stevens Fishery Conservation and Management Act. Requests for additional information by NOAA FS and follow-up responses from the NPS took place between April and June 2012. The NPS requested the concurrence of NOAA FS with the NPS conclusion that implementation of the Selected Alternative of the Plan/EA is not likely to adversely affect Pacific salmonid species listed as threatened or endangered. The NPS also concluded that the Selected Alternative could adversely affect the essential fish habitat, but effects would be so minimal that no Conservation Recommendations would be necessary. The NPS also provided NOAA FS with mitigation measures and Best Management Practices that are incorporated into the Selected Alternative to avoid or minimize impacts to listed salmonid species known from the planning area (See Attachment B). On July 23, 2012, the NOAA FS concurred with the conclusions of the NPS by letter, concluding the consultation process with this agency.

California Coastal Commission (CCC)

The California Coastal Zone Management Act protects coastal environments and requires that federal actions be consistent with the state coastal management plans. Activities taking place within the coastal zone under the definition established by the California Coastal Management Plan require a federal consistency determination. Because this project will take place in the coastal zone, the NPS submitted a negative determination to the CCC for concurrence. The negative determination provides the CCC with information about the proposal, potential effects to resources within the purview of the CCC and mitigation measures that will avoid or minimize potential adverse effects. On August 2, 2012, the CCC replied by letter to the NPS concurring with the negative determination submitted by the NPS ending the consultation process.

California State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation

The NPS notified the California SHPO and Advisory Council on Historic Preservation of the project and the beginning of the public scoping process in October 2011. The NPS did not receive any comments from these agencies at the scoping phase. The NPS formally initiated consultation with the California SHPO and informed the Advisory Council by letter dated April 10, 2012. NPS staff met with the SHPO later that month to discuss the equestrian plan, and provided further documentation of historic properties by letter of August 6, 2012. The NPS received feedback on the project from the SHPO on January 8, 2013, and this feedback has been incorporated into the plan. NPS sent the SHPO a determination of no adverse effect for the final revised

undertaking by letter dated January 29, 2013. The SHPO concurred with the NPS determination by letter dated February 25, 2013 on condition that historic structure reports, cultural landscape reports, archeological assessments and site design development drawings for each property are submitted for final review.

Federated Indians of Graton Rancheria

The park will consult with the Liaison for Federated Indians of Graton Rancheria on the aspects of the project related to the potential for indigenous archeology. The NPS provided the information on the Areas of Potential Effect for each of the equestrian sites early in the NHPA consultation process. The Sacred Sites Protection Committee (SSPC) of the Federated Indians of Graton Rancheria replied by letter dated September 10, 2012, concurring with the configuration of the Areas of Potential Effect and expressing interest in reviewing the Plan/EA.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE QUALITY OF THE HUMAN ENVIRONMENT

The NPS used the following NEPA criteria and factors defined in 40 CFR §1508.27 to evaluate whether the Selected Alternative would have a significant impact on the environment.

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.

Whether taken individually or as a whole, the impacts of the Selected Alternative do not reach the level of significant adverse effect. Most adverse impacts of associated with implementation of the Selected Alternative would be temporary during structure razing, remodeling, and construction of new facilities. Mitigation measures and the newly compiled BMPs are incorporated into the Selected Alternative further reduce or avoid potential effects.

Potential adverse effects of the Selected Alternatives to site soils, water quality, soundscape, visitor experience, visual resources, archeological resources, wildlife, federally listed wildlife species and visitor parking availability from non-historic structure razing, debris removal, new facility construction and historic structure rehabilitation at the four sites would be short-term, minor to moderate adverse effects but with the application of the mitigation measures specific to these impacts, the level of short-term adverse effect would be reduced to negligible to minor levels. Effects on air quality and archeological resources would be short-term, minor and adverse with no long-term effect.

Overall, the long-term effects of the Selected Alternative are primarily beneficial with the exception of a minor adverse effect on park operations from the additional workload associated with implementing the business management plans. The project would have long-term, negligible to minor beneficial effects on soils at Lower Tennessee Valley and minor to moderate beneficial effects on soils at the other project sites. Long-term impacts to water quality, wildlife, cultural landscape resources and vegetation would be minor and beneficial. Impacts to cultural landscape resources would be short-term, moderate and beneficial. During the construction period, there would be short-term minor to moderate adverse effects to the Visitor Experience,

Wildlife, and Transportation, specifically from noise and access restrictions for public safety. Impacts to transportation would be negligible. Impacts to visual resources and the visitor experience would be less than significant during construction and over the long-term. The level of adverse impacts overall is less than significant, therefore, further analysis in an EIS is not required.

Degree of effect on Public Health or Safety.

Improvement of Public Health and Safety is a primary objective of the Plan/EA which states new facilities and improvements will include improved access and safety for both humans and animals. Many of the improvements included in the Selected Alternative address existing and sometimes long-standing health and

safety issues. Certain of the reasons leading to the development of the equestrian plan stem from the need to improve public health and safety conditions at the site:

1) Many of the structures at the stables are in need of rehabilitation, repair, upgrades and maintenance.
2) The stables lack a uniform, defined approach to safety and emergency plans and need to improve fire-fighting capabilities at the sites.
3) Hay storage within the same wooden barns or buildings that house horses creates a fire hazard that threatens the safety of the animals.
4) Overnight occupants would improve public and animal safety and security at each of the stables.
5) Sanitation and septic systems need to be upgraded. Hand washing facilities need to be provided at each site.
6) BMPs are needed to protect the soil and the quality of water resources that receive runoff from the stables.

The Marin Equestrian Stables Future Business Management Strategy also sets safety requirements for the future lessees to improve water quality by implementing measures that reduce pollutants in runoff that flow into streams and drainages, requiring the replacement of faulty septic systems and pit toilets, ensuring that manure is collected regularly and stored in a covered area.

The Selected Alternative for the Plan/EA would have a significant effect on public health and safety at the stables by relocating manure piles to covered structures, providing covered riding rings at the sites, installing safety signage in areas with general public access, providing traffic control plans for periods of construction, increasing safety by separating the hay storage areas away from residences and stalls. Water tanks, pumps and generators would be installed at the stables and would provide water for initial responders to a fire in or around the stables. Historic buildings proposed for reuse will be rehabilitated and brought up to code. Septic systems will be evaluated and repaired or replaced if needed.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas.

The Selected Alternative would rehabilitate or restore historic structures on three properties that either listed or eligible for listing on the NRHP; Tennessee Valley stables (Historic Ranch A/B), Golden Gate Dairy stables (Historic Ranch M) and Rodeo Valley stables (Fort Barry Balloon Hangar and Motor Vehicle Sheds).

The Golden Gate Dairy Stables (Ranch M) cultural landscape was built as a small-scale, family-owned dairy that was operated between 1898 and 1953 by a series of Azorean Portuguese companies and families. There are also two archeological sites on the property.

The Tennessee Valley Stables is also representative of a southern Marin County Azorean Portuguese immigrants' dairy ranch, and it retains the essential characteristics of agriculture in Tennessee Valley from 1903 to 1950.

At the Rodeo Valley stables site the Fort Barry Balloon Hangar is the only survivor of three balloon hangars built in the Bay Area by the U.S. Army in 1921 for observation balloons. Two frame vehicle sheds located in front of the balloon hangar are rare examples of Series 700 design structures erected by the Army during WWII. The vehicle sheds and balloon hangar are important elements of the story of defense of San Francisco Bay during the early 20th century and WWII.

No area of Marin County is rated by the State Department of Conservation as having prime farmland. The site does not have unique or locally important farmland. There are areas of wetland at Tennessee Valley and Rodeo Valley, and intermittent drainages at each site. Both the Tennessee Valley drainage and the Redwood

Creek support breeding habitat of the California red-legged frog, however these species are not found at the sites.

In addition, and again, off-site, the Redwood Creek drainage supports a genetically distinct population of Coho salmon, and steelhead trout. The Golden Gate Dairy site is across Highway 1 from a large scale GGNRA marsh restoration project, the Big Lagoon Project, which restored a more natural flow and created habitat for listed fish species at the mouth of Redwood Creek at Muir Beach.

Degree to which effects on the quality of the human environment are likely to be highly controversial.

The Preferred Alternative (Alternative B, Option B2 as presented in the Plan/EA) generated concern for public safety and congestion at the Tennessee Valley stables. The Selected Alternative has modified the Preferred Alternative to relocate the Park Horse Patrol to Rodeo Valley and has addressed other specific concerns as clarified in the Errata prepared as an attachment to the EA. One controversy, allowing the existing operators to continue at each site versus conducting future competitive bidding to determine future lessees/operators of the stables programs, is a business matter driven by federal requirements and does not involve environmental effects. The existing operators will be invited to respond to business leasing opportunities along with the general public. The project has a history of public contact and project development since 2004. Implementation of the Selected Alternative is not expected to generate public controversy or to be controversial.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The Plan/EA addresses a range of issues commonly associated with semi-rural older residences with livestock. The effects are well documented and procedures and BMPS are available to ensure potential effects are reduced or avoided. Projects under the Selected Alternative will involve wood-frame structures; remodeling, rehabilitating; evaluation and repairs to on-site sewage treatment systems and application of BMPs to manage stormwater runoff contaminated with manure. The degree or possibility that the effects on the human environment will be highly uncertain or will involve unique or unknown risks is remote.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Selected Alternative will not predetermine or establish a precedent for future actions with significant effects at the site or the parklands in the site vicinity. The actions that comprise the Selected Alternative are primarily rehabilitation to historic facilities, the addition of new utility sheds, stalls and rings, and BMPs to improve water quality. There is no component of the Selected Alternative that would be precedent setting with significant effects or represent a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The Plan/EA considered the cumulative impacts of the Selected Alternative with several past, present and future projects. The analysis for all impact topics indicated the effects of the Selected Alternative when considered with the projects of the cumulative scenario could result in effects that were both individually and cumulatively less than significant. Cumulative impacts were determined to be minor adverse effects or beneficial effects as inherently the Selective Alternative does not call for development, resource use, increase traffic or affect regional air quality. This selected action, when examined cumulatively with other actions in the project area, will have beneficial cumulative effects on soil erosion, soil compaction and soil nutrients, vegetation, wildlife, species listed under the Endangered Species Act (California red-legged frog, Coho salmon and steelhead), cultural landscape resources, visitor experience and visual resources.

Degree to which the action may adversely affect districts, sites, highways, structures or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources.

The NPS evaluated the affect of the selected action on historic structures and landscapes. NPS sent the California State Historical Office (SHPO) a determination of no adverse effect for the final revised undertaking by letter dated January 29, 2013. The SHPO concurred with the NPS determination by letter dated February 25, 2013 on condition that historic structure reports, cultural landscape reports, archeological assessments and site design development drawings for each property are submitted for final review.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.

The NPS conducted Endangered Species Act Section 7 consultation with both the USFWS and the NOAA FS for listed species that could be affected by the selected action. NOAA FS concurred with NPS determination that the selected action is not likely to adversely affect Central California Coast Coho salmon, Central California Coast steelhead, or the designated critical habitat for these species. The USFWS provided NPS with a Biological Opinion, concurring with NPS's NLAA determination on tidewater goby; and concluding the selected alternative is not likely to jeopardize the continued existence of the red-legged frog. The USFWS provide NPS with nondiscretionary terms to be implemented to minimize impacts of incidental take of the California red-legged frog. These terms are included in the Mitigation Measures (Appendix B).

Whether the action threatens a violation of Federal, state, or local environmental protection law.

Implementing the Selected Alternative would violate no federal, state or local environmental protection laws. Assessment of the proposed action has been performed pursuant to the National Environmental Policy Act, which requires consideration of environmental protection laws and regulations.

MITIGATION MEASURES

Responsibility for the mitigation measures will be determined in the leases. The lessee will have responsibility for those measures connected with their operations and site work. The National Park Service will have responsibility for those measures connected with NPS operations and site work. For example, at the Rodeo Valley site, the Balloon Hangar will be rehabilitated for NPS use by NPS and NPS will be responsible for construction mitigations. For areas or operations at the same site that are to be within sole control of the Lessee- those mitigations will be the Lessees responsibility. All mitigation measures are described in Attachment B.

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CONCLUSION

Implementation of the Selected Alternative for the Marin Equestrian Stables Plan Environmental Assessment will not have significant impacts on the human environment. The determination is sustained by the analysis in the Plan/EA, agency consultations, the inclusion and consideration of public review, and the capability of mitigations to reduce or avoid impacts. Adverse environmental impacts that could occur are negligible to moderate in intensity, duration, and, with would be less than significant. Beneficial environmental impacts range from negligible to moderate. As described in the Plan/EA, there are no highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects or elements of precedence. There are no previous, current or planned actions, which in combination with the Selected Alternative, would have significant effects on the human environment. Requirements of NEPA have been satisfied and preparation of an Environmental Impact Statement is not required. The GGNRA will implement the Selected Alternative as soon as practical.

Recommended: _____ 8/20/13

Frank Dean **Date**
Golden Gate National Recreation Area
National Park Service

Approved: _____ 9/25/13

Chris Lehnertz, Regional Director **Date**
Pacific West Region,
National Park Service

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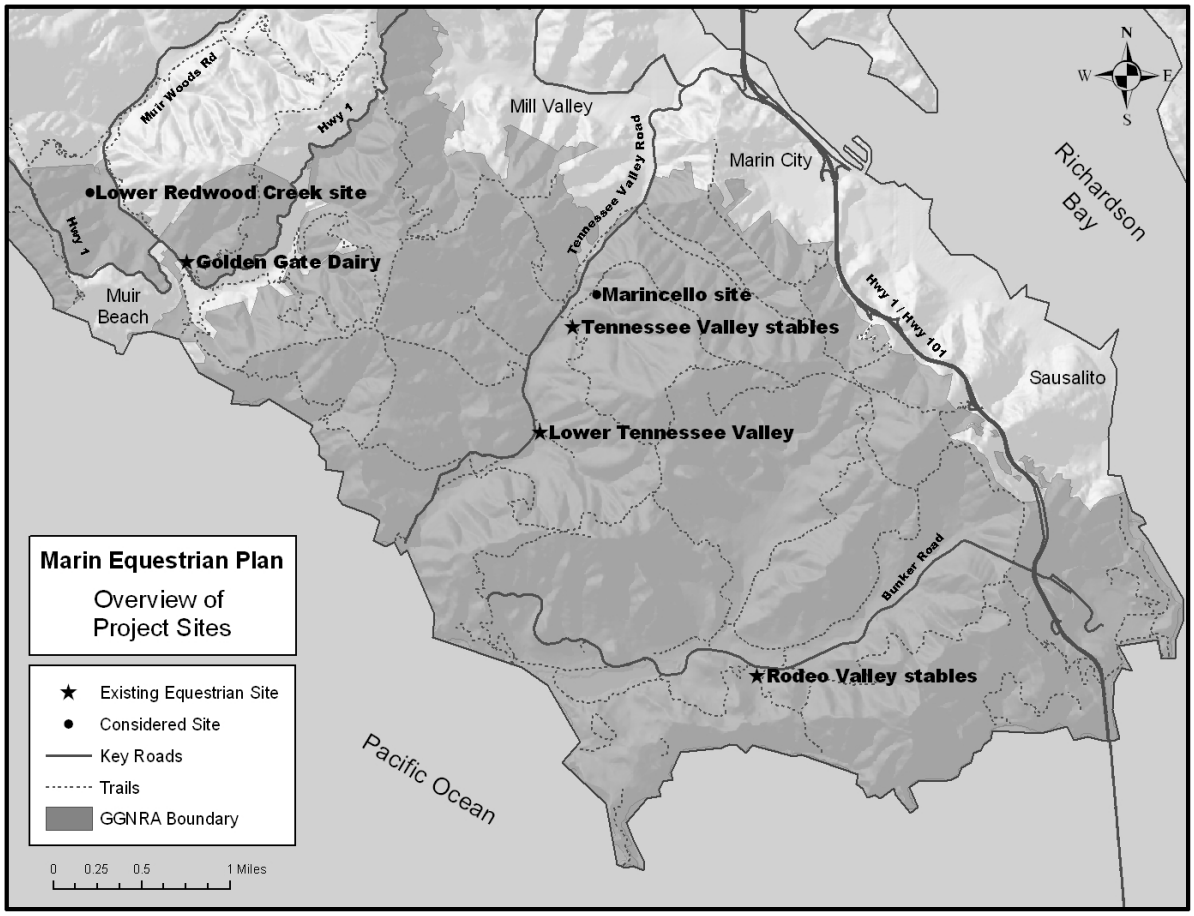
ATTACHMENT A – EXISTING STABLES & SITES CONSIDERED



ATTACHMENT B

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
	GEOLOGY AND SOILS	
GS-1	**Ground Disturbance Restriction**. The ground disturbing aspects of construction or maintenance will be limited to the dry season (typically between April 15 and October 15).	O,P
GS-2	**Soil Erosion Protection during Construction** • To the extent practical, all equipment, materials and construction personnel will limit movements to access roads, surface streets, or other disturbed areas that are already compacted. • All residual soils and/or materials will be cleared from the project site once activities are complete. • Building materials and other project-related materials will not be stockpiled or stored where they could spill or drain into water bodies or storm drains or where they will cover aquatic, riparian or other native vegetation. • Watering of dust-prone construction areas, especially during the dry season, will be used to reduce generation of fugitive dust and to control migration of sediment outside of the project area. • All stockpiled soils shall have properly installed and maintained erosion control to prevent soil loss, migration and contamination.	O,P
GS-3	**Construction Staging Areas**. Staging areas will be located in previously disturbed areas near project sites. Staging areas will be returned to pre-construction conditions or better once construction is completed.	O,P

GS-4	**Soil Reuse.**
	• Soils excavated during ground-disturbing activities will be reused to the extent that these locally-derived materials are found to be clean and weed-free. Any such reuse is subject to applicable NPS policies and guidance.
	• Wherever appropriate, soils and native plants affected by construction will be salvaged for use in site restoration. Any surplus soils and native plants may be used, as appropriate, for the restoration of other degraded areas in the park.
	• Surplus soils not used in this way will be stockpiled and managed to keep them clean and weed-free for future use.
	• Imported soils must:
	  • be compatible with existing soils;
	  • be free of undesired seeds and organisms; and
	  • fulfill the horticultural requirements of plants used for restoration.
	  • If the use of off-site soil to repair damaged sites is needed, parks are to select materials that are the best match for the original native soils.
		O,P

GS-5	**Control of Runoff.** Practices will be implemented to ensure that concentrated run-off is avoided that any discharged are redirected away from exposed slopes or stockpiled soils, including the placement of a vegetated buffer, straw wattles or bales, silt screens, or other materials to filter and reduce runoff velocity if needed.	O,P

[1] O = Stables Operator; P = National Park Service. In general, the party taking the action is responsible for ensuring mitigation measures are being adhered. For contracted work, each party must ensure these mitigation measures get incorporated into respective contracted Scope of Work.

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
GS-6	**Planting and Revegetation after Landscape Treatment**. • Sites where activities have exposed soils will be stabilized to prevent erosion and revegetated as soon as feasible after activities are complete. • Revegetation of disturbed sites will be done in accordance with an approved revegetation plan that provides protection to seeds, holds them in place and helps to retain moisture. • Tightly woven fiber netting or non-bound materials (e.g., rice straw) will be used for erosion control or other purposes at the work sites. This limitation will be communicated to contractors through use of Special Provisions included in the bid solicitation package. No plastic mono-filament matting will be used for erosion control.	O,P
WATER RESOURCES		
WR-1	**Stormwater and Runoff Management.** BMPs which address this objective will include: • **Storm water management:** Storm water shall be managed to protect water quality. It will be controlled to avoid polluting local streams such as by diverting runoff from animal areas and by covering manure collection containers. • **Runoff and drainage:** Drainage will be managed and to prevent water pollution by separating clean runoff from polluted runoff. Runoff from animal areas will not come in contact with, or drain directly into, all- year or seasonal streams. • **Stream setbacks:** The NPS shall maintain a 50-foot setback from seasonal streams that dry out in the summer, and a 100-foot setback from perennial streams. • **Implement filter strips, berms, swales and drain fields:** Bioswales, engineered drain fields, vegetated buffers and similar measures allow for uptake and absorption of nutrients and other contaminants to reduce pollutant loading on water resources. • **Interceptor ditch and conveyance:** An interceptor ditch for clean water collects water flowing toward the stable site and conveys it around rather than through the site. This keeps clean water from sweeping through the stable, picking up and carrying pollutants to a stream or other site. Within the stable site an interceptor ditch can also pick up seasonal treatment pond. • **A water quality monitoring plan** will be developed which outlines monitoring methods and schedules. Monitoring may include regular testing for temperature, pH, dissolved oxygen, coliform/bacteria, nitrates, ammonia, and total dissolved solids (conductivity). • **Monitoring** will be conducted monthly at monumented sampling sites. Sampling will occur upstream and downstream of each stable. Additional stormwater and runoff management measures could be triggered if monitoring results indicate water quality protection levels are not being met. • **A Stormwater Management Plan** will be required for each stable and will show the site drainage system on a site plan or aerial photograph; the separation and conveyance of clean and polluted waters, treatment areas, slope directions, along with activities such as for erosion control revegetation, vegetated strip maintenance, and will describe the minimum frequency of upkeep. It will show wells, creeks, drainage structures and septic systems. • **Contacts**. The plan will include the contact information for the person responsible and his or her title.	O
WR-2	**Manure Management**: Manure will be managed to avoid water pollution, airborne contaminants and dust, and to reduce pests such as fly infestations.	O

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
	• Manure and dirty bedding will be collected daily and be stored in a covered, waterproof enclosure. • Manure shall be stored on a contained (curbed) concrete slab that has at least three walls and a roof that fully protects the stored manure from blowing rain. • Manure and used stall bedding will be removed from the site weekly, and will be responsibly disposed of, preferably to a non-NPS composting facility. There will be no site composting and no open waste storage. • A Manure Management Plan will be required for each stable. The Plan will include an aerial site plan showing the location of the covered manure bin and shed or other storage techniques. It will state the frequency of manure maintenance, such as cleaning of stalls and grounds, and storage. It will explain the manure disposal technique including covered hauling, destination, and a statement about the disposal, treatment, or composting process and location. It will include the contact information for the person responsible and his or her title.	
WR-3	**Stables Management.** • Practices will be used to control and minimize the use of water, such as float valve type waterers or nose pumps activated by animal for stall watering bowls. • Revegetation will use native seed with low water use requirements. • Efficient (even water distribution) professionally designed sprinkler systems for dust control in arenas will be installed if required by NPS. • Rainwater collected via roof drains, gutters and downspouts is allowed for non-consumptive use. Water will be managed to control contaminated nutrient runoff. This may require diverting surface and roof drainage runoff water away from stalls, paddocks or turnouts. • Septic systems will be abandoned or replaced. Existing drain fields will be vegetated. Roof and surface water runoff will be diverted from drain fields. • Composting or vault toilets will be installed. • Management and maintenance plans will be required, and will be provided by the stable lessee to the park as a condition of their permit. These plans will provide for ongoing incorporation of new or future stables management practices and technologies to protect water resources as they become available.	O
WR-4	**Stables Chemical Management**. Stable products and chemicals will be used minimally, only as necessary for the health and safety of the animals and users, and that are safe for the environment. Runoff that may contain these products shall be treated as polluted runoff.	O
WR-5	**Equipment Inspections.** • Vehicles & equipment will be kept clean. Avoid excessive build-up of oil or grease. • All equipment used will be inspected for leaks each day prior to initiation of work. Action will be taken to prevent or repair leaks, if necessary. Vehicle and equipment maintenance activities will be conducted off- site or in a designated, protected area away from stream buffers where vehicle fluids and spills can be handled with reduced risk to water quality. If maintenance must occur on-site, designated areas will not directly connect to the ground, surface waters or the storm drainage system to prevent the run-on of stormwater and runoff of spills. • The service area will be clearly designated with berms, sandbags, or other barriers. Secondary containment, such as a drain pan or drop cloth, to catch spills or leaks will be used when removing or changing fluids. Fluids will be stored in appropriate containers with covers, and properly recycled or disposed of off-site.	O,P
WR-6	**Spill Prevention and Response Plan.** A Spill Prevention and Response Plan will be required for construction and operations prior to commencement of construction	O,P

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
	activities to contain and/or clean up any stored or spilled fuels or chemicals and prevent oil, grease or fuel leaks from equipment.	
WR-7	Groundwater testing will be done for groundwater adjacent to Balloon Hangar to determine if water is contaminated. If contaminated water is present, project design will minimize concentrating contaminated water.	P
	VEGETATION	
VEG-1	**Planting and Revegetation after Landscape Treatment** • Sites where activities result in exposed soil will be stabilized to prevent erosion and revegetated as soon as feasible after activities are complete. • Erosion control fabric, hydromulch or other mechanism will be applied as appropriate to provide protection to seeds, hold them in place and help retain moisture. Woven fiber netting materials (e.g., rice straw) will be used for erosion control or other purposes at the work sites to ensure that California red-legged frogs do not get trapped. This limitation will be communicated to the contractor through use of Special Provisions included in the bid solicitation package. No plastic monofilament matting will be used for erosion control.	O,P
VEG-2	**Noxious Weed Control.** Soils and vegetation contaminated with weed seeds from within the GGNRA will be segregated and disposed of or treated as appropriate. Similarly, soils heavily infested with noxious invasive plant material will be disposed of off- site.	O,P
VEG-3	Design of the drainage system for the Balloon Hangar will consider ways to minimize lowering local groundwater levels, including, but not limited to, use of underground retaining walls.	P
	WILDLIFE	
WL-1	**Pre-Construction Educational Training**. All personnel will participate in an educational training session conducted by a qualified biologist. Training sessions will include identification of NPS staff resource contacts; special-status plants, wildlife, or other sensitive resources in the work area; markings for the limit line of disturbance; thresholds that will trigger a change in implementation techniques or require a halt in project implementation; prohibitions on feeding resident wildlife; and proper disposal of food waste and garbage to discourage feeding by wildlife which may increase predation on native wildlife. Upon completion of training, employees or contracting crews will be required to sign a form stating that they attended the training and understand all the conservation and protection measures.	O
WL-2	**Nesting Bird and Raptor Protection Measures for Construction and Tree Pruning or Removal** • To the greatest extent possible, construction or tree work will be planned and conducted outside the bird-nesting season (January 1--July 31 raptors, and March 1--July 31 land birds). • In intensively managed landscapes, vegetation will be maintained at a height of less than 8 inches throughout the land bird nesting season to discourage the nesting of such bird species. Any vegetation taller than 8 inches that is not removed by the start of the nesting season will be subject to measures 3 and 4 below. • If work is conducted within the nesting season, prior to the onset of construction involving ground-disturbing activities using heavy machinery, a qualified wildlife biologist will be retained to conduct pre-maintenance surveys for raptors and nesting birds within suitable nesting habitat in a 300 foot radius of the construction area. If no active nests are detected during surveys, activities may proceed. If active nests are detected then measure 4 will be implemented. • If active nests are identified within the construction area, a biologist will establish	O,P

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
	a suitable nest buffer in coordination with NPS where no work can occur until the young have successfully fledged or the nests have been otherwise abandoned.	
WL-3	**Protection of Bat Populations during Construction and Tree Pruning or Removal.** Preconstruction surveys for bat species will be conducted by a qualified biologist in areas of suitable habitat within the project area. Suitable habitat includes, but is not limited to, buildings and trees. For tree-roosting bats, all potential roost trees to be removed or heavily pruned will be surveyed and identified in the field, and the following procedures will be applied prior to work: • Avoid removing or pruning trees from April 1 to August 31 to protect potential maternity roosts, • Remove or prune trees under the warmest possible conditions practical, • Sections of the exfoliating bark will be peeled off the tree gently to search for any roosting bats underneath, • Create noise and vibrations on the tree (e.g., striking the tree base) prior to removal or pruning. • When cutting sections of the bole, if any hollows or cavities (such as woodpecker holes) are discovered, a biologist will carefully check for the presence of bats in those areas.	O,P
WL-4	**Construction- Related Noise Control.** See full description in section 4.10.2.	O,P
	CULTURAL RESOURCES	
CR-1	**Pre-Construction Field Surveys and Training**. Where not already completed, professional archeologists will perform surveys prior to ground disturbance in areas previously undisturbed. In addition, NPS or the permittees will provide training for all personnel involved with ground disturbance activities to facilitate recognition of potential archaeological materials and to avoid impacts to deposits.	O
CR-2	**Archaeological and Native American Monitoring.** NPS or the lessees will ensure that there is an archaeological monitor and representative of the Federated Indians of the Graton Rancheria during ground disturbing activities in the vicinity of high archaeological sensitivity. While the goal of NPS is to preserve archaeological resources, this mitigation measure will ensure that if additional deposits associated with known sites are discovered, there will be an archaeologist and Native American representative on site to identify and assess the find and impacts immediately and to halt construction.	O,P
CR-3	**Previously Undiscovered Cultural Resources**, **Inadvertent Discoveries:** If buried cultural resources are inadvertently discovered during ground-disturbing activities, • Work shall stop in that area and within a 100- foot radius of the find until a qualified archaeologist can assess the significance of the find, OR • Alternatively, an archaeologist and Native American monitor may monitor ground disturbances in vicinity of the site to ensure that such discoveries are protected until they can be properly recorded and assessed, and management decisions can be made about their treatment. • Avoidance in place or no adverse effect from project actions is the preferred approach to all discoveries that are potentially eligible for listing on the NRHP. Inadvertent discoveries will be treated in accordance with 36 CFR 800.13 (Protection of Historic Properties: Post-review Discoveries). • The archaeological resource will be assessed for its eligibility for listing on the NRHP in consultation with the SHPO and (a Native American monitor from the Federated Indians of Graton Rancheria if it is an indigenous archaeological site) and a determination of the project effects on the property will be made. • If the site would be adversely affected, a treatment plan would also be prepared as needed during the assessment of the site's significance. Assessment of	O,P

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
	inadvertent discoveries may require archaeological excavations or archival research to determine resource significance. Treatment plans will fully evaluate avoidance, project redesign, and data recovery alternatives before outlining actions proposed to resolve adverse effects. **Discovery of Human Remains:** If human skeletal remains are encountered: • All work shall stop in the vicinity of the discovery, and the find will be secured and protected in place. • The Marin County coroner and Park Archaeologist will both be immediately notified. • If a determination finds that the remains are Native American, and that no further coroner investigation of the cause of death is required, they will be treated in accordance with the Native American Graves Protection and Repatriation Act Regulations at 43 CFR 10.4 (Inadvertent discoveries). The coroner will also contact the NAHC (pursuant to Section 7050.5[c] of the California Health and Safety Code) and the County Coordinator of Indian Affairs.	
CR-4	**A Cultural Resource Monitoring Plan** will be prepared to ensure that ground-disturbing activities within the project areas result in no adverse effects to buried resources. The monitoring program will include oversight of project schedules and excavation areas to ensure that important opportunities for archaeological discovery are realized, and that potentially buried archaeological deposits are recognized in the course of active excavation and restoration. If archaeological resources are found that could be adversely affected by the proposed project, NPS shall comply with Mitigation Measure CR-3.	O,P
CR-5	**Treatment of Historic Cultural Landscape.** • Building and landscape restoration and rehabilitation will conform to The *Secretary of the Interior's Standards for the Treatment of Historic Properties* and will be guided by the "Final Marin Equestrian Stables Plan Summary of the NPS Cultural Landscape Workshop, June 1 and 2, 2010 Memorandum". This memorandum provides guidelines that NPS should adhere to at all cultural landscapes within the Plan APE. • Prior to Plan implementation, Historic Structures Reports and Cultural Landscape Reports will be prepared by a historical architect and a historical landscape architect, respectively. Recommendations provided in these reports will be used to guide design work for the project areas. • Guidelines for compatible new construction will be prepared to ensure compatibility of new building construction and the introduction of other new elements into the historic setting and will be subject to review and approval	O,P
	VISITOR EXPERIENCE	
VE-1	**Construction Management Plan**. For each phase of work, a construction management plan will be developed to carefully sequence construction activities to minimize disruption to existing facilities and services. The plan shall be submitted and approved by NPS and will include information on days/hours of operation, times in which particularly loud or noisy operations could occur, how equipment will be maintained, how noise and disruption will be minimized, safety protocols, etc.	O,P
VE-2	**Construction Exclusion Areas**. During construction, supervision will be provided to ensure that all active construction, staging and stockpile areas are fenced to	O,P

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
VE-3	**Visitor Access Restrictions during Construction.** • To minimize visual intrusiveness, fencing will be designed and installed to blend into the surrounds as much as possible. • All construction, staging and stockpile access will be gated and kept locked except when in use. • Signs will be conspicuously posted to inform the public about the need for caution and to safely route visitors around construction areas. • Established and maintained walkways will be provided across the site, as well as barrier fencing along trails and paths.	O,P
VE-4	**Construction Related Noise Control.** See full description in Section 4.10.2.	O,P
VE-5	**Trail Etiquette Recommendations will be posted** at the stables/trailheads to increase equestrian awareness and consideration of other users and the leave no trace ethic. The signs could include recommended use of equestrian sanitation sack, noise kept to minimum, public safety around horses, protection measures concerning natural	O
VE-6	**Coordination of Equestrian Public Outreach Program**. The selection of specific public outreach programs should take into consideration the timing of the use of trails to minimize potential impacts to other recreationists. For instance, some programs could be restricted as to how many groups may visit and when they may	O
	TRANSPORTATION	
TR-1	**Construction Traffic Control Plan** will be developed in conjunction with the construction documents for review and approval by NPS. This plan will include information on construction phases and duration, traffic scheduling, staging area management, visitor safety, construction equipment travel routes, detour routes, parking area closures, and equestrian, pedestrian and bicyclist movements on	O
TR-2	**Parking Monitoring and Outreach.** NPS will require that lessees monitor parking to identify management issues in a timely manner and work with NPS and other partners to seek timely solutions. Lessees will provide information on alternative transportation and parking availability to all visiting groups and encourage groups to provide that information to their members.	O
	VISUAL RESOURCES	
VR-1	**Minimize Long- Term Visual Impacts.** New structures and remodels will be designed to be compatible with existing structures and landscape features to ensure visual continuity. The design and placement will take into account elements of massing, scale, materials and color. Site furnishings will be consistent with the Park-wide Site Furnishings Guidelines for similar features elsewhere in the park. New design elements will be sited so as not to compete with important views and	O,P
VR-2	**Prepare Visual Simulations During Design Phase.** For those alternatives that include new facility construction, the NPS (or lessee) will prepare visual simulations or other visual aids during the schematic design phase to assist in studying and communicating to others the proposals and to determine the visual impacts	O
VR-3	**Minimization of Construction- Related Visual Impacts.** Construction projects will be coordinated with other construction activities in the area to the greatest extent possible to minimize visual intrusion of construction equipment and activity in	O,P
	PARK OPERATIONS	
PO-1	**Utilities.** Utility and infrastructure work that requires interruptions in service will be coordinated at least 60 days in advance between NPS, lessees and appropriate park partners at each stable site.	O,P
	REGULATORY REQUIREMENTS	
USFWS-1	Implement the conservation measures as described in the preceding biological	O,P

ID #	CONSTRUCTION AND LONG-TERM MITIGATION MEASURES	Responsibility[1]
USFWS-2	All trenches and holes greater than 1 foot deep that are not filled the same day they are dug shall be covered at the end of each work day, or constructed in a manner that provides allows California red-legged frogs to escape.	O,P
USFWS-3	All trenches and holes shall be inspected for California red-legged frogs by a Service approved biologist prior to filling. [f a frog is found, it should be removed from the project area and relocated to the nearest aquatic feature.	O,P
USFWS-4	Any capture and relocation of California red-legged frogs shall be conducted by a Service-approved biologist.	O,P
USFWS-5	Relocation of California red-legged frogs will be conducted in a manner that results in the movement of the frog the shortest possible distance.	O,P
USFWS-6	NPS shall notify the Service within 24-hours of the finding and/or relocating of California red-legged frogs from the project site.	O,P

Attachment C

DETERMINATION of NO IMPAIRMENT
MARIN EQUESTRIAN STABLES PLAN

National Park Service, U.S. Department of the Interior

Golden Gate National Recreation Area

August 2013

NPS Management Policies 2006 (§1.4) requires analysis of potential effects to determine whether or not proposed actions will 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, mandates that NPS 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 NPS management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park, although 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, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values. Non-resource topics are generally not subject to impairment assessment. Whether an impact could lead to impairment depends on the particular resources that will 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 will 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 may be less likely to constitute 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.

An impairment determination is not made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for land use, socioeconomics, transportation and circulation, recreation and visitor use, public health and safety, and public services and utilities because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. The following consideration of impairment only applies to the following resource impacts evaluated in the EA which pertain to the selected alternative.

Special-Status Species

Impacts to special status species from ground disturbance, noise and activity during construction would be short-term, adverse, minor to moderate and local. With mitigation, impacts would be reduced, but some could remain moderate in the short-term. Gradually over the long-term, improved water management, fewer structures in the stream buffer, and revegetated areas, would provide minor to moderate local beneficial impacts to special status species. Impacts from construction and enhancement would ultimately benefit coho, steelhead, and tidewater goby. Implementation of identified BMPs would mitigate adverse impacts to fish to locally negligible. Cumulatively, impacts would be minor to moderate, and beneficial. As such, there would be no impairment to special-status species as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Vegetation

For the selected alternative the primary construction activities that would affect vegetation include removal of paddocks, stalls and other facilities at Golden Gate Dairy, Tennessee Valley, and Lower Tennessee Valley. New stalls, paddocks, lunging rings, manure sheds, and turn-outs would be constructed at these three stable sites. Some buildings would be remodeled and drainage facilities would be improved to conform to the enhanced BMPs. At Tennessee Valley and Lower Tennessee Valley, steep portions of turnouts would be fenced and revegetated. Portions of the southern turn-out would be reduced in size; and those in the stream buffer would be removed and a biofilter installed; the eastern side would be revegetated. Construction would have localized, negligible to minor, long-term adverse impacts on vegetation. However, as stated above, the long-term benefits of expanded BMPs, removal of several facilities out of the stream corridor, and vegetation restoration, would be beneficial. And, with implementation of mitigation measure Veg-2 (Noxious Weed Control) would reduce this impact to negligible. Overall impacts to vegetation from the selected alternative would be minor and beneficial. Therefore, there would be no impairment to vegetation resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Wildlife

A number of construction activities would occur under the selected alternative and would long-term would be beneficial to wildlife. These actions include improvements to drainage and wastewater management which would improve water quality and habitat for aquatic species (see EA Section 4.4)

and removing facilities from stream buffers, also a local long-term minor beneficial impact to wildlife using riparian areas.

For the selected alternative, overall impacts to wildlife from construction activities are still considered short term, localized and moderately adverse. Mitigation Measures WL-1 (Pre-Construction Educational Training), WL-2 (Nesting Bird and Raptor Protection Measures), WL-3 (Protection of Bat Populations), and WL-4 (Construction-Related Noise Control) would reduce certain impacts to negligible to minor levels, particularly to the focal species under Mitigation Measures WL-1 and WL-2. For other species, such as those for whom mitigation would not reduce or avoid impacts (such as wildlife which cannot migrate out of the project area), impacts would remain moderately adverse on a local level—although these impacts are considered only minor in the context of the larger GGNRA environment, given the extent of habitat and species abundance elsewhere.

Impacts to wildlife from ground disturbance, noise and activity during construction would be short-term, adverse, minor to moderate and local. With mitigation, impacts would be reduced, but some could remain moderate in the short-term. Gradually over the long-term, improved water management, fewer structures in the stream buffer, and revegetated areas, would provide minor to moderate local beneficial impacts to wildlife. Cumulatively, impacts would be minor to moderate, and beneficial. Therefore, there would be no impairment to wildlife resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Air Quality

Construction activities associated with the selected alternative would generate emissions. However, appropriate PM10 control measures as shown in EA Table 4-11 would be implemented. In general, construction would be phased such that the active construction area at any given time would generally be four acres or less resulting in a localized and regional short-term minor adverse impact. Odors during construction would be primarily limited to construction equipment exhaust; these would be anticipated to be barely detectible off-site and not offensive, and as such, impacts would be minor.

Because the number of additional vehicle trips is anticipated to be less than 100 per day for individual locations, implementation of the selected alternative would not approach the BAAQMD threshold of 2,000 vehicle trips per day, and none would degrade LOS, nor would the alternatives result in long-term impacts on air quality. Implementation of the selected alternative would result in short-term regional and local minor adverse impacts. Additional public programs at the stables would generate negligible adverse long-term emissions. Therefore, there would be no impairment to air quality resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Water Resources

The effects of the various cumulative projects on erosion, compaction, and loss of topsoil were discussed in section 4.3.4, which addresses the impacts of Option B1 and B2 on soils. To the extent that erosion reaches surface water bodies, this could lead to adverse impacts. However, the proposed site enhancements and revegetation would result in cumulative impacts which would be beneficial;

including reductions in sediment and nutrient transport, and improvements to drainage and wastewater management. Corresponding benefits to water quality would be experienced as the amount of pollutants reaching water bodies would be decreased. As previously stated, improvements to the riparian buffer would result in a reduction in pollutant loading to local streams. The incorporation of Best Management Practices during all construction, routine management, operation and maintenance activities associated with this alternative would protect water quality and the natural resources adjacent to equestrian facilities. Any impacts to water quality as a result of facility upgrade and enhancement activities would be temporary, but some of these actions would result in long-term localized beneficial impacts. Therefore, there would be no impairment to water resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Visual Resources

The selected alternative, at the historic sites (Golden Gate Dairy, Tennessee Valley and Rodeo Valley stables) any building rehabilitation and construction would be in compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and would be guided by the Marin Equestrian Stables Plan Cultural Resource Workshop Report. As a result, when completed, all historic sites and structures would continue to resemble the general construction techniques of the existing structures. At the non-historic sites (Lower Redwood Creek, Marincello, and Lower Tennessee Valley) buildings and structures would be carefully sited, and would be of scale, design and material compatible with the site and surroundings. Depending on a visitor's location and perspective, adverse effects to the park's visual resources could range from negligible to minor, long-term, direct, and localized.

Under the selected alternative, construction-related visual impacts would vary in intensity over the term of construction activity. The primary visual effects would be related to areas of disturbed ground, buildings and landscaping in various states of construction/rehabilitation, the presence/use of staging areas for equipment, vehicles and stockpiles, and the use/presence of heavy equipment throughout the project area. The majority of the building rehabilitation activities would involve interior work and would not be visible.

Over the long term negligible to minor localized impacts would result from the installation of new structures and the reduction in the number of stables sites. Mitigation would include measures CR-5: Treatment of Historic Properties and Landscape; VR-1: Minimize Long-term Visual Impacts; VR-2: Prepare Visual Simulations during Design Phase; and VR-3: Minimization of Construction-Related Visual Impacts, and would create minor benefits over the long term. Therefore, there would be no impairment to visual resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Cultural Resources

Long term effects to the park's archeological and cultural landscape resources under the selected alternative range from beneficial to minor adverse. Beneficial and negligible adverse effects would result from implementation of a business management strategy; historic building rehabilitation; and removal of non-contributing facilities. Minor adverse effects to cultural landscape resources would result from the construction of new buildings and facilities, from maintenance for sustainability, sanitation, safety,

and fire management, and from natural resource management actions. Negligible to minor, long term, adverse effects to archeological resources would result from ground disturbance related to landscape alterations (e.g., vegetation modification, new and remodeling construction activities, natural resources management, etc.). This alternative would not contribute to the overall adverse cumulative impact on cultural resources.

Due to the rehabilitation of the three historic sites, the selected alternative, was determined by NPS to be —Significantly Better for Conservation and rehabilitation of Historic Structures. Alternative B scored —Significantly Better for Financially and Operationally Sustainable Opportunities and for Provides for other NPS Management Objectives. Rehabilitating previously impacted stables sites lessens impacts to park resources (compared to creating new sites) and also helps historic preservation efforts by rehabilitating three cultural landscapes and 15 historic buildings. The selected alternative is intended to preserve the historic landscape and historic core areas to the greatest extent possible while protecting water quality by removing all non-historic facilities from the stream buffer zones. Certain non-historic features in the historic core areas would also be removed unless they are needed for stables operations (e.g., manure shed). Those modern equestrian facilities that must remain in the historic core area will be designed to be compatible with historic features. Mitigation would be employed to reduce potential impacts to unknown archaeological resources to a negligible level. Therefore, there would be no impairment to cultural resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Geologic and Soil Resources

Most soils found at each of the four sites can tolerate relatively high amounts of erosion before the long-term damage would result. In particular, the Blucher, Cole and Rodeo clay loams all have highly sustainable rates of erosion (see Chapter 3.2 for a description). These are found in the lower elevations of each of the four existing stable locations. However, some soils that are particularly susceptible to erosion are the Barnabe, Barnabe-variant and Tamalpais soils, prominent in the hillier regions of all four sites. Any potentially ground-disturbing activities on these slopes would exacerbate the soil erosion potential.

Although nearly all ground disturbances would take place in previously disturbed areas at the existing sites, activities such as digging, augering and short-term stockpiling of soils would all have increased potential for soil erosion. However, stockpiled soils would be subject to erosion from wind and rain. In addition, areas left un-vegetated or unstabilized could lead to erosion and soil loss. Implementation of Mitigation Measure GS-1 (Ground Disturbance Timeframe), GS-2 (Soil Erosion Prevention), GS-3 (Staging Areas), GS-4 (Soil Reuse), GS-5 (Runoff), and GS-6 (Planting and Revegetation after Landscape Treatment) would reduce these impacts to minor levels. See section 4.3.8 for components of these mitigation measures.

The selected alternative would have enhance and expanded Best Management Practices (BMPs)incorporated into routine management. For example, to protect water and soil resources at Rodeo Valley fenced vegetated strips, diversion ditches or other erosion control BMP would be added in

the sloping east paddocks to reduce erosion and run-off. To the extent these reduce erosion and secondary impacts to soils and vegetation from management, operation and maintenance, this would constitute a beneficial impact (minor, local, long-term). As such, there would be no impairment to geologic or soil resources resources as defined under NPS Management Policies 2006, Sections 1.4.5 and 1.4.6.

Conclusion

As guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected alternative.